

# The Proleptic Accusative as an exceptional Exceptional Case Marking construction

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**Abstract.** This paper deals with discrepancies between thematically available argument slots and the actual number of case-marked constituents in a clause. Specifically, it presents a detailed analysis of the so-called *proleptic accusative*. This complex construction type is infrequent, but attested across different languages, and we think it to be a concealed option in more languages than previously thought. Here, we discuss data from Middle Dutch in particular, which enables us to shed new light on the matter. We show that the proleptic accusative is crucially different from complex cases of raising. Instead, we explore two novel and competing hypotheses about its structural properties. We first investigate an analysis in terms of clausal coordination and ellipsis, which straightforwardly solves a number of syntactic complications, but unfortunately leads to problems with semantic interpretation in various cases. We then propose that the seemingly additional accusative argument in the matrix can be base-generated as an embedded hanging topic of the finite complement clause involved. This requires exceptional case marking across a clause boundary by the matrix verb. Since the relevant constituent is in a phase edge, it can potentially be moved to a higher position. We illustrate both A- and A'-movement. All in all, the unusual combination of properties explains why the proleptic accusative is only sporadically found. Importantly, however, it is now clear how this complex construction type can be decomposed into more basic syntactic ingredients, voiding the need to enrich the model of grammar with construction-specific stipulations.

*Keywords:* prolepsis, aboutness, exceptional case marking (ECM), hanging topic left dislocation (HTLD), (copy) raising, resumptive pronouns, embedded topicalization, clausal ellipsis

## 1. Introduction

Prolepsis (from ancient Greek ‘anticipate’) is the phenomenon in which there is a constituent in a matrix clause that is thematically related to an element in a finite embedded clause. Consider the following examples:

- (1) a. I believe of/about the queen that **she** should abdicate. (English)  
b. een argument waar-van ik denk dat **het** belangrijk is  
an argument which-of I think that it important is  
‘an argument of which I think that it is important’ (Dutch)

In (1a), the subject *she* in the subordinate clause is necessarily coreferent with *the queen* in the matrix. This argument is embedded in a PP. *Of/about*-phrases of this kind are also used in relative constructions, as is shown in (1b). See Salzmann (to appear) for a literature overview and discussion of such periphrastic/prepositional proleptic constructions.

This paper aims to contribute to the debate on prolepsis by zooming in on a particularly intriguing form thereof, referred to as the *proleptic accusative*. (We maintain this name, although we will show later on that it is inaccurate in a few cases.) Crucially, in this construction there is a true ‘proleptic object’ that is *not* embedded in a periphrastic aboutness PP. As we will see, this aggravates the question where this argument is generated and how it gets case.

Let us begin with a few known examples. Although the proleptic accusative appears to be rare, it is attested in different and even unrelated languages, among which Classical Greek (see Fraser 2001), Latin (see Maraldi 1986), Japanese (Takano 2003) and Nahuatl (Higgins 1981)<sup>1</sup>; see (2) through (4):<sup>2</sup>

- (2) Katamathete ta krina tou agrou poos auxanousin.  
 consider the<sub>ACC</sub> lilies<sub>ACC</sub> the<sub>GEN</sub> field how grow<sub>3PL</sub>  
*lit.* ‘Consider the lilies in the field, how they grow.’  
 (Classical Greek, Fraser 2001, translation ours)
- (3) Lesbonicum hic adulescentem quaero in his regionibus ubi habitat.  
 Lesbonicum<sub>ACC</sub> here adolescent<sub>ACC</sub> ask<sub>1SG</sub> in these<sub>ABL</sub> regions<sub>ABL</sub> where live<sub>3SG</sub>  
*lit.* ‘Lesbonicus, a young man from these regions, I am asking where he lives.’  
 (Latin, from Plautus – D. Gary Miller, p.c., translation ours)
- (4) niki:nkayik i:n ta:kah (ke) wa:lankeh.  
 1SG.3PL.hear.PRET the men (COMP) 3.come.PRET.PL  
*lit.* ‘I heard the men, that they come.’  
 (Nahuatl, Higgins 1981, translation ours)
- (5) John-wa Mary-o tensai da to sinziteiru.  
 John<sub>TOP</sub> Mary<sub>ACC</sub> genius is that believe  
 ‘John believes of Mary that she is a genius.’  
 (Japanese, adapted from Takano 2003:781)

In each example there is a constituent that appears to be structurally part of the matrix clause (i.e. the underlined object), whereas it is semantically related to the contents of the complement clause following it. What is remarkable about such examples is that there appear to be *two* constituents eligible as the direct object of the matrix verb, namely the underlined noun phrase as well as the embedded complement clause. This raises questions about the status of either constituent: which one is the real internal argument of the verb, and then what is the other one? If the clause is a complement clause, where does the noun phrase find its origin and theta role, and where exactly does it surface? And how does it acquire accusative case? All in all, the apparently contradictory properties of the proleptic accusative provide an interesting challenge to the theory of grammar.

We will proceed by discussing in some detail the properties of the proleptic accusative, introducing data from Middle Dutch (~1200-1500 A.D.), based on a small corpus established by Stoett 1923 and Bouman 1918,<sup>3</sup> as well as some novel data from present-day German, which shed new light on the matter. A basic example is (6), from Middle Dutch:<sup>4</sup>

<sup>1</sup> Higgins (1981) shows that the object agreement on the finite verb in (4) can also be 3SG, displaying agreement with the complement clause. In this case the sentence does not have the same aboutness interpretation as the prolepsis example; we will come back to this in section 3. See also footnote 14.

<sup>2</sup> See also Davies (2005) and Kurniawan (2011) for a relevant discussion concerning Madurese and Sundanese, respectively. See Chen & Fukuda (2015) concerning some Formosan languages.

<sup>3</sup> Stoett (1923:246) provides a corpus of 22 sentences with proleptic accusatives from various Middle Dutch texts. Bouman (1918:106) provides an additional 5 sentences. The data are from different writers, different time frames and different areas in the Middle Dutch language area (nowadays The Netherlands and Flanders). See Appendix 1 for a complete overview of these sentences and the metadata concerning author, region of origin and year of publication of the data in the corpus.

<sup>4</sup> For clarity's sake, we use simple word translations in the glosses, only marking the most relevant grammatical features explicitly.

- (6) Maer die serjanten sijn kenden den coninc van Israël, dat **hi** niet was  
 but the sergeants his knew the<sub>ACC</sub> king of Israel that he<sub>NOM</sub> not was  
 harde fel.  
 very fierce

*lit.* ‘But his sergeants knew the king of Israel that he was not very fierce.’

‘But his sergeants knew about the king of Israel that he wasn’t very fierce.’

(Rijmbijbel, v.12643, translation ours)

In (6), the proleptic accusative noun phrase is *den coninc van Israël* ‘the king of Israel’; it is coreferential with a resumptive pronoun in the embedded clause, the nominative *hi* ‘he’. Generally, the verb *kennen* ‘know’ can take nominal or clausal complements.<sup>5</sup> This example, just like the ones in (2)-(5) above, shows a direct object (here, *den coninc van Israël* ‘the king of Israel’) that is within the matrix clause and gets case from the main clause verb, but is thematically related to the embedded clause. An important difference between the languages illustrated in (2)-(5) and the Germanic languages discussed in this paper is that the former are *pro-drop* languages whereas Middle Dutch and German are not. The advantage is that we can clearly detect that there is a resumptive pronoun (bold-faced) in the embedded clause, which we do not actually see in the other languages. As we will show, the pronoun is important for the analysis. Another advantage of looking at continental Germanic, is that these languages have a slightly more fixed canonical word order, which makes it easier to determine the syntactic status of the constituents involved.

At first blush, one might think that a proleptic object is generated in the subordinate clause and raised to the matrix, corresponding to the situation in regular raising constructions as in (7), where the theta role is provided in the base position and Case in the surface position.

- (7) *This man<sub>i</sub>* seems [ *t<sub>i</sub>* to come in peace].

However, this line of analysis is problematic for the proleptic accusative in (2)-(6) above, as it would require raising-to-object across a finite CP boundary; moreover, it leaves the question where the nominative resumptive pronoun in (6) comes from.

We will advance and investigate two alternative views on the structure of the proleptic accusative. We first explore an analysis in terms of clausal coordination and ellipsis, which straightforwardly solves a number of the syntactic complications mentioned. The basic idea is illustrated in (8), using English words, where both the relevant noun phrase and the complement clause are treated as the direct object of the verb *saw*. This is possible by doubling the matrix clause in a juxtaposed configuration, and apply some form of clausal ellipsis or gapping in the second conjunct.

- (8) [We saw this man]; [~~we saw~~ that he came in peace].

However, this analysis leads to problems with semantic interpretation in various cases. In particular, a proleptic object is understood as an aboutness topic rather than an internal argument of the verb. Therefore, we ultimately propose an entirely different analysis. This second analysis is syntactically more complicated, but appears to be more faithful to the perceived meaning of the construction. On this view, the seemingly additional accusative

<sup>5</sup> Note that the Modern Dutch verb *kennen* ‘be acquainted with’ is semantically more specialized than its Middle Dutch counterpart; it no longer includes certain meaning aspects of *weten* ‘have knowledge of’.

argument in the matrix is base-generated as an embedded hanging topic of the complement clause, as sketched in (9):<sup>6</sup>

(9) We saw [[this man], [that he came in peace]].

This requires exceptional (accusative) case marking of *this man* by the matrix verb across the finite clause boundary. Thus, we relate the proleptic accusative to aboutness left dislocation, embedded topicalization phenomena as well as exceptional case marking, illustrated in (10a/b/c), respectively:

- (10) a. [ This man, [we gave **him** a book]].  
b. We think [that *this man*<sub>i</sub>, we need *t*<sub>i</sub> for the job].  
c. We heard [**him** give a talk].

In addition, we will show that the embedded hanging topic in (9) can be moved to a higher position within the matrix.

It seems to us that the rather uncommon combination of structural mechanisms is the reason that the proleptic accusative is only rarely found. What is crucial, however, is that there is no need to stipulate construction-specific properties. In line with the general tenets of generative grammar, and in particular the minimalist program, we can decompose what appear to be complexities of the construction type at the level of human meta-analysis to the interaction of more basic functionalities of the syntactic system.

The article is set up as follows. In section 2, we elaborate on the Middle Dutch data, and show in more detail why analyses in terms of raising are inadequate. In section 3, we introduce the possibility of a biclausal structure accompanied by ellipsis. In section 4, we develop the alternative in terms of embedded dislocation, and offer some cross-linguistic considerations. Section 5 is the conclusion.

## 2. Syntactic properties of prolepsis

### 2.1. Overview of the Middle Dutch data

The pattern displayed by the basic example in (6) is repeated here abstractly in (11). A crucial question is: What is the empirical range of variation? At least four aspects of the proleptic accusative construction seem relevant: (i) the linear position of the proleptic ‘object’ in the matrix clause, (ii) the syntactic role and form of the resumptive element, (iii) the nature of the embedded clause, and (iv) the nature of the verbs involved. We discuss and illustrate these in turn.

(11) SU V OB<sub>prol.</sub> [CP that **RP**<sub>NOM</sub> ...]

As we have seen, the proleptic object, or acc-DP, may occupy the position after the matrix verb, immediately preceding the embedded clause. In an embedded environment it would require Heavy NP Shift – in a descriptive sense – to obtain the same linear configuration, considering that Dutch is superficially OV, and has verb second (V2) in main clauses but not subordinate clauses. Example (12) illustrates this pattern:

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<sup>6</sup> We are happy to note that independently of our work, Chen & Fukuda (2015) developed an analysis for apparent raising-to-object constructions in Puyuma, Amis and Seediq that is very much in line with this proposal.

- (12) ... als hy verstond den helighen man dat **hi** sceeden wilde  
 ... when he understood the<sub>ACC</sub> holy<sub>ACC</sub> man that he<sub>NOM</sub> depart wanted  
 van dan.  
 from there

‘... when he understood [about] the holy man that he wanted to leave.’

(Leven van Sinte Amand II, v.4676-4677, translation ours)

In addition, there are examples in which the noun phrase precedes the final verbal position (the ‘right sentence bracket’); see also (19) below. Here, we illustrate that the acc-DP can be a clitic in the higher middle field:

- (13) ... waer si-ne vernam dat **hi** in enighe lande quam.  
 ... where she-him<sub>ACC</sub> heard that he<sub>NOM</sub> in some countries came  
 ‘... where she heard [of] him that he came in some countries.’

(Der minnen loep, v.873-874, translation ours)

Even more interesting is the fact that the acc-DP can be topicalized (i.e., regularly fronted) in the matrix clause, which is in fact a more common configuration; see (14a) or (18) below. (Notice that *desen Tyberius* in (14a) is in the first sentence position, hence immediately followed by V2; it is not in a hanging topic position.) Moreover, the acc-DP can be a fronted relative pronoun in a subordinate clause; this is illustrated in (14b). See the Appendix for more examples of this type.

- (14) a. Desen Tyberius hor-ic liën dat **hi** tien tiden ontboot  
 this<sub>ACC</sub> Tiberius hear-I tell that he<sub>NOM</sub> that time summoned  
 menegen coninc ende heren groot.  
 many king and lord big  
*lit.* ‘This Tiberius I have heard that in that time he summoned many great kings and lords.’  
 ‘I have heard about this Tiberius that he summoned many great kings and lords in that time.’  
 (Spiegel historial I: VII-III, v.36-38, translation ours)
- b. Josephus, dien die scripture priset, dat **hi** recht ende wareid  
 Josephus who<sub>ACC</sub> the scripture praises that he<sub>NOM</sub> justice and truth  
 wiset.  
 teaches  
 ‘Josephus, [of] whom the scripture praises that he teaches justice and truth.’  
 (Rijmbijbel, 27121)

In each of the examples above, the resumptive pronoun is the nominative-marked subject of the embedded clause. This is the most common situation, but not the only one. In (15), the resumptive element is the object of the lowest clause:

- (15) Der Walewein claechde sijn swert dat hij-**t** daer niet en has.  
 the Walewein complained his<sub>ACC</sub> sword that he-it<sub>ACC</sub> there not NEG hevet  
 ‘Walewein complained [about] his sword that he didn’t have it there.’

(Roman van Walewein, v.8125-8127, translation ours)

A further example worth highlighting at this point is (16), in which the acc-DP is a coordinated phrase, and there are two resumptive pronouns, the subject and object of the embedded clause.

- (16) Wi vinden oec in den nieuwen testamente Christum ende sine apostele,  
 we find also in the<sub>ACC</sub> new<sub>ACC</sub> testament Christ<sub>ACC</sub> and his<sub>ACC</sub> apostles  
 dat **si** **hem** keerden ende overgaven in die doot.  
 that they<sub>NOM</sub> him<sub>ACC</sub> turned and over.gave in the death  
 ‘In the new testament, we also find [about] Christ and the apostles that they gave him  
 over in death.’ (Vanden gheesteliken tabernakel, p.19, translation ours)

We will return to this phenomenon below. Since *pro*-drop was highly marked in Middle Dutch, one expects an overt resumptive pronoun to show up, which is indeed what we found so far. But it is not completely impossible (cf. Van Helten 1883), and there is indeed one example that can be explained if we assume *pro*-drop, similarly to the situation in e.g. Greek and Latin.

- (17) ... ende doe hi there ons Heren sach, hoe dat in die tenten lach.  
 ... and when he there our<sub>ACC</sub> lord saw how that in the tent lay  
 ‘... and when he saw [of] our lord there, how [**he**] lay in the tent.’  
 (Rijmbijbel, v.6087-6088, translation ours)

In (17), an overt subject of the finite embedded clause is lacking; the silent pronoun is interpreted as coreferent with the object in the matrix (*ons Heren* ‘our lord’).

Another aspect of the proleptic construction that varies is the type of embedded clause involved. According to Verdam (1908), it is a complement clause introduced by *dat* ‘that’, as in the examples shown hitherto. However, we also found embedded clauses introduced by a *wh*-phrase, i.e., embedded questions; see (18), for instance:

- (18) Den inghel horden wi nochtan hoe **hi** sprac den wiven an.  
 the<sub>ACC</sub> angel heard we still how he<sub>NOM</sub> spoke the women to  
*lit.* ‘The angel we still heard how he spoke to the women.’  
 ‘We still heard of the angel how he spoke to the women.’  
 (Spiegelh historiael I: VII - XXXVI, v.17-18, translation ours)

Like (6) and (12) through (17), (18) has the prototypical features of prolepsis, with both an accusative marked noun phrase and a complement clause that seem to compete for the function of direct object of the matrix verb. The noun phrase also co-refers with a resumptive pronoun inside the embedded clause. Another relevant illustration is (19), where the proleptic object is not topicalized, but figures in the middle field. Note that the matrix clause must be an embedded clause itself, here, considering that it is verb-final. Another important thing to notice about (19) is that *den herten* ‘the hearts’ is in dative case; we will come back to this.

- (19) ... ende hi den herten conde besien, wat **si** binnen hadden bedect.  
 ... and he the<sub>DAT</sub> hearts could see what they<sub>NOM</sub> inside had covered  
 ‘... and he could see [of] the hearts what they had covered inside.’  
 (Sinte Franciscus leven, v.5784-5785, translation ours)

Finally, let us briefly address the lexical properties of the matrix verb. A question that needs to be answered is whether prolepsis is possible with just any transitive verb. This does not

seem to be the case. Although one cannot perform judgment tasks on extinct languages, our impression is that the relevant verbs are typically verbs of perception ('see', 'hear') or cognition ('think', 'know'). It is no coincidence, we believe, that these are the kind of verbs that cross-linguistically license Exceptional Case Marking (or *accusativus cum infinitivo*), illustrated for Middle Dutch in (20).

- (20) a. Die coninghinne hevet vernomen haren heren den coninc comen.  
 the queen has heard her<sub>ACC</sub> husband the<sub>ACC</sub> king come  
 'The queen heard her husband, the king, come.'
- b. Si vinden di te wesen een haven des vreden.  
 they find you<sub>ACC</sub> to be a haven the peace  
 'They consider you to be a haven of peace.'

(Stoett 1923:136-137, translation ours)

Here, the thematic external arguments of the embedded clauses are assigned accusative Case by the matrix verb, which takes an infinitival clause as its complement.

We return to the similarities between ECM and prolepsis in section 4. It is to be noted, however, that there are also clear differences. Most importantly, the embedded clause in the prolepsis construction is finite rather than infinite (also, the CP domain is lexically filled), and there is a Case-marked resumptive pronoun, which is lacking in the ECM construction. Thus, prolepsis cannot simply be equated with regular ECM. To wrap up the discussion so far, the properties of the prolepsis construction are summarized schematically in (21):

(21) *Properties of the proleptic accusative construction:*

- a. the linear position of the proleptic object:
  - (i) immediately preceding the embedded clause, and after the verb, *or*
  - (ii) topicalized, *or*
  - (iii) in the middle field;
- b. the nature of the complement clause:<sup>7</sup>
  - (i) finite *that*-clause, *or*
  - (ii) finite embedded *wh*-question;
- c. the syntactic function of the resumptive element:
  - (i) subject (usually), *or*
  - (ii) object;
- d. the lexical nature of the resumptive element:
  - (i) overt personal pronoun, *or*
  - (ii) covert *pro*, if *pro*-drop is allowed;
- e. the lexical nature of the matrix verb:
  - (i) usually verbs of perception or cognition (coinciding with ECM verb types);
  - (ii) the verb may select a clausal complement.

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<sup>7</sup> According to Fraser (2001), prolepsis in classical Greek often involves a *wh*-clause, whereas in Middle Dutch *that*-clauses are more frequent in our corpus. Since such differences reflect only tendencies in frequency of use, and do not correspond to differences in grammatical acceptability, we do not consider them relevant for the analysis.

## 2.2. Towards an analysis

With the empirical foundation settled, let us turn to potential analyses of prolepsis. Although the literature is scarce, a number of proposals – mostly sketchy or implied – have been made. They roughly fall into one of two categories: raising or base-generation. That is, either the proleptic object is generated in the embedded clause and raises to the matrix clause, leaving behind a pronoun (Stoett 1889, Van Gestel et al. 1992), or it is generated as an additional argument in the matrix clause (Higgins 1981, Maraldi 1986, Ura 1984).

The idea of raising (more specifically, ‘copy hyper-raising to object’) is sketched in (22). What it solves is the issue of theta roles: the proleptic object is thematically related to an argument position in the embedded clause, and this is now where it is generated.

- (22) a.  $[_{\text{matrix}} \dots V [_{\text{emb. clause}} \dots DP_{\text{prol.}} \dots]] \Rightarrow$   
b.  $[_{\text{matrix}} \dots V DP_{\text{prol.}} [_{\text{emb. clause}} \dots \text{res.pron} \dots]]$

But difficult questions need to be addressed: (i) where does the resumptive pronoun come from? It must be some kind of spelled-out trace; (ii) how can case assignment to the proleptic constituent in the higher clause overrule or prevent case assignment in the embedded clause?; (iii) what triggers movement, and what are the features and positions involved? It might be that the pronoun is the stranded head of a ‘Big DP’-structure (compare independent proposals by Boeckx 2003, among others). But even if technical solutions can be found, serious problems remain. For instance, we have seen that the embedded clause can be a *wh*-clause; recall (17) and (18). This would in principle make extraction from the embedded position ungrammatical for the same reason that (23) is out.

- (23) \* Which man<sub>i</sub> did you hear [how *t<sub>i</sub>* talked to the woman].

Furthermore, there does not seem to be any plausible way to derive the example involving constituent coordination in (16) in this way. We would either need to move a non-constituent, or lower a moved phrase into a coordination phrase, neither of which is possible.

Thus, we discard an analysis in terms of raising. Simple base-generation is not really an option either, because it is merely a restatement of the facts. That is, we want to refrain from postulating prolepsis as a *construction* in which the matrix verb exceptionally takes two internal arguments instead of one, while this is otherwise impossible. Notice, moreover, that if the proleptic argument is not resumed in the embedded clause, the construction is intuitively unacceptable (setting aside potential elaborations of the Loose Aboutness type, as in *Speaking about cancer, John doesn't smoke*). Compare for instance the nonsensical attempts in (24a/b) to (6) and (18), respectively:

- (24) a. \* But his sergeants knew the king of Israel, that Mary wasn't very fierce.  
b. \* The angel, we heard how John talked to the women.

There is, however, no straightforward way to exclude the derivation of such sentences from a simple base-generation analysis.

Having said that, we immediately want to point out that it is possible to improve on the basic ideas just sketched (cf. Massam 1985 for some discussion; see also footnote 21 concerning the possibility of a null preposition and other ideas). In what follows, we investigate potential solutions involving base-generation in different ways, as well as the possibility of movement being involved, though not of the raising type.



### 3. Prolepsis as ellipsis?

As we saw in the previous section, the core characteristic of the prolepsis construction is the presence of an additional argument for which a structural position seems to be lacking. This puzzling property is clearly a challenge for any explanation. In an attempt to resolve the issue, let us explore a direction not previously entertained in the literature, as far as we are aware.

Recall that the matrix verbs in the relevant examples are all transitive, can assign Case, and may select a clausal internal argument. The accusative noun phrase and the embedded clause involved can be seen as competitors for the object role in the matrix. From this, it may be concluded that in fact two available argument positions are necessary. Needless to say, we want to avoid stipulating that the relevant verb licenses an additional argument in this particular construction only. There is, however, an alternative and at first sight more plausible solution, which reverses the perspective: if there are two internal arguments, there must be two verbs. This can be effectuated by means of ellipsis: the two verbs are lexically the same, and for this reason only one needs to be spelled out. Thus, consider the bisentential (or biclausal) analysis sketched in (25), adorned with the hypothetical example repeated from (8):

- (25) a. [S<sub>1</sub> SU V DO<sub>DP</sub>]; [S<sub>2</sub> (SU V) DO<sub>CP</sub>].  
b. We saw this man; (we saw) that **he** came in peace.

There are two juxtaposed matrix clauses, abbreviated S1 and S2 here. In the first, the accusative noun phrase functions as the object, and in the second, the embedded complement clause does. Since the subject and the matrix verb remain constant, they can be deleted in sentence 2. The embedded clause survives as an ellipsis remnant.

From a syntactic viewpoint, it is reasonable to analyze both the DP and the CP as objects of the matrix verb. As was just commemorated, all verbs used in prolepsis constructions are in fact verbs that license both nominal and clausal complements independently. Below, we show that this solution straightforwardly accounts for the other syntactic properties of the prolepsis construction. But let us first add a few remarks on the overall configuration and the deletion at hand.

The proposal in (25) relates prolepsis to other instances of clausal ellipsis. Relevant examples include sluicing, fragment answers, contrastive left-dislocation, backgrounding right-dislocation, and afterthoughts (see Merchant 2001, Ott 2014, Ott & De Vries 2014/2015, among many others). Some examples are in (26):

- (26) a. Peter bought something, but I don't know *what* ~~Peter bought~~ *t*.  
b. A: What did Peter buy?  
B: *A book about linguistics* ~~Peter bought~~ *t*.  
c. Peter bought something interesting yesterday: *a book about linguistics* ~~Peter bought~~ *t* ~~yesterday~~.

It is often assumed that the remnant is fronted (by means of A'-movement) in the elliptical clause.<sup>8</sup> The given information following the focused remnant is phonologically deleted, but there is clear evidence that it is syntactically present (cf. Van Craenenbroeck & Merchant 2013 for discussion and references). Licensing of ellipsis as such is essentially semantic, but

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<sup>8</sup> Extended gapping around *in situ* remnants is a feasible alternative, but this has non-constituent deletion as a potential disadvantage. Such issues are tangential to the purpose of this paper.

may go hand in hand with syntactic feature checking (see, for instance, Aelbrecht 2010 on ‘*e*-givenness’, and Thoms 2010 for a different take on the issue).

Here, we do not have anything to add about the general theory of ellipsis; it suffices to note that the usual procedure with all the necessary constraints can simply be applied to a bisentential analysis of prolepsis as well; nothing new needs to be postulated. In (25), the two main clauses are completely parallel, apart from the internal structure of the focused objects, of course. After fronting of the complement clause in the second matrix clause, ellipsis can take place:

(27) ... [<sub>S2</sub> DO<sub>CP</sub> ~~SU~~-V<sub>t<sub>CP</sub>].</sub>

How the two juxtaposed sentences are syntactically related to each other is a separate question. One can easily imagine a structure in terms of (silent) coordination. As is clear from (26), *overt* coordination is not a formal prerequisite for clausal ellipsis. The only condition seems to be that the two clauses are adjacent to each other in discourse, and in some way pragmatically related. This is evidently the case in (25).

Let us now turn to some concrete examples, and see in more detail how the approach fares. In (28), the verb *ontrieden* ‘feared’ takes the noun phrase *den swerten here* ‘the black lord’ as its object in the first sentence. The second sentence can be understood as an elaboration or specification of the first. In S2, the verb takes a complement clause, *dat hi-ne soude te doet slaen* ‘that he would kill him’. This focused clause is fronted, and the verb and subject, which are *e*-given in S2, get deleted. For concreteness’ sake, we applied verb second (V2) in S2, but strictly speaking this is irrelevant in an elliptical context.

- (28) a. Si ontrieden den swerten here dat **hi**-ne soude te doet slaen.  
 they feared the<sub>ACC</sub> black<sub>ACC</sub> lord that he<sub>NOM</sub>-him would to death beat  
 ‘They feared [of] the black lord that he would kill him.’  
 (Ferguut, v.1724-1725, translation ours)
- b. [<sub>S1</sub> Si ontrieden den swerten here]; [<sub>S2</sub> [dat hi-ne soude te doet slaen]; ~~ontrieden si-t<sub>i</sub>~~]

We expect both sentences to have a full-fledged argument structure, and to be internally complete in a syntactic sense. The proleptic accusative object is *den swerten here* ‘the black lord’, which is visibly case-marked in S1. The resumptive pronoun is *hi* ‘he’, which is now the regular nominative subject of S2. There is no syntactic link between these two elements, and coreference is simply an instance of cross-sentential anaphora, similar to the situation in (29):

(29) They feared the black lord<sub>i</sub>. He<sub>i</sub> might kill someone.

In sum, the distribution of arguments and Case in (28) seems straightforward (but see below).

For examples like (30), we can say basically the same, with the proviso that the relevant juxtaposed clauses are not main clauses, but subordinated themselves (in this case, introduced by the complementizer *als* ‘dan’).

- (30) a. ... als hy verstond den helighen man dat **hi** sceeden  
 ... when he understood the<sub>ACC</sub> holy<sub>ACC</sub> man that he<sub>NOM</sub> depart  
 wilde van dan.  
 wanted from there  
 ‘... when he understood [about] the holy man, that he wanted to leave.’

(Leven van Sinte Amand II, v.4676-4677, translation ours)

- b. ... [S<sub>1</sub> dat hy verstond [den helighen man]] [S<sub>2</sub> [dat hi sceeden wilde van dan]<sub>i</sub> ~~verstond hy t<sub>i</sub>~~]

It is important to see that clausal ellipsis in embedded environments is more generally allowed; see the examples in (31), for instance. Here, we take the view that in the relevant cases, ellipsis can directly target embedded clauses, rather than repair islands, as explicated in De Vries (2013) for Right Dislocation (see also Ott & De Vries 2015).

- (31) a. I heard that Peter bought something but Mary doesn't know what ~~Peter bought~~.  
b. Because Peter bought something and I didn't know what ~~he bought~~, I asked what it was.  
b. I talked to a man who bought something interesting today: a book about linguistics ~~he bought~~.

Without going into detail, we simply observe that the proleptic accusative construction fits this general pattern.

Next, recall that the embedded object clause can be a *wh*-clause. Furthermore, the accusative noun phrase can be topicalized within the matrix. We show both properties at once in (32).

- (32) a. Den inghel horden wi nochtan hoe **hi** sprac den wiven an.  
the<sub>ACC</sub> angel heard we still how he<sub>NOM</sub> spoke the women to  
'We still heard [of] the angel how he spoke to the women.'  
(Spiegel historiael I: VII - XXXVI, v.17-18, translation ours)  
b. [S<sub>1</sub> *Den ingel*<sub>k</sub> horden wi nochtan t<sub>k</sub>]; [S<sub>2</sub> [hoe hi sprac den wiven an]<sub>i</sub> ~~horden wi nochtan t<sub>i</sub>~~].

The *wh*-character of the embedded clause is unproblematic: complement clauses can be embedded questions, and in this analysis nothing needs to be extracted out of it. In S<sub>1</sub>, the accusative object is topicalized. This too, is generally very common in Dutch, so it comes as no surprise that it is possible in a prolepsis construction.

Since the relationship between the proleptic accusative and the resumptive pronoun is only one of cross-sentential coreference on the current view, there does not seem to be a compelling reason why the resumptive pronoun should be the subject of the embedded clause. Indeed, examples are attested in which it is an object; see (33):

- (33) a. Der Walewein claechde sijn swert dat hij-t daer niet en hevet.  
the Walewein complained his sword that he-it there not NEG has  
'Walewein complained [about] his sword that he didn't have it there.'  
(Roman van Walewein, v.8125-8127, translation ours)  
b. [S<sub>1</sub> Der Walewein claechde sijn swert]; [S<sub>2</sub> [dat hij-t daer niet en hevet]<sub>i</sub> ~~claechde der Walewein t<sub>i</sub>~~].

An interesting example, impossible to explain under a raising account, is repeated in (34a). Here, the proleptic accusative related to the nominative resumptive pronoun is embedded in a coordinated phrase. As shown in (34b), this is no longer a problem in a bisentential analysis.

- (34) a. Wi vinden oec in den nieuwen testamente Christum ende sine apostele,  
 we find also in the new testament Christ and his apostles  
 dat **si** hem keerden ende overgaven in die doot.  
 that they him turned and over.gave in the death  
 ‘In the new testament, we also find [about] Christ and the apostles that they gave  
 him over in death.’ (Vanden gheesteliken tabernakel, p.19, translation ours)
- b. [<sub>S1</sub> Wi vinden oec in den nieuwen testamente [Christum ende sine apostele]]; [<sub>S2</sub>  
 [dat si hem keerden ende overgaven in die doot]; ~~vinden wi oec in den nieuwen  
 testamente *t<sub>i</sub>*].~~

Notice, however, that contrary to the traditional view, we now know that resumption can also involve a pronominal *object*, as was just illustrated in (33). If so, (34) probably involves resumption of both the subject and the object inside the embedded clause. The accusative antecedent, then, is not a subconstituent of the coordinated phrase, but the entire phrase, as shown in (30):

- (35) Wi vinden... Christum and sine apostele, dat **si hem** keerden...

We can illustrate the same phenomenon in English. In (36a), for instance, the coordinated object of the first sentence can be resumed by two pronouns in the next sentence, which is arguably *about* both Peter and Anne.

- (36) a. I saw Peter and Anne. **She** kissed **him** passionately.  
 b. I looked at the two lovers. **One/Anne** started kissing **the other/Peter**.

This general process of split pronominalization or split referencing is the reverse of the more familiar split antecedent taking, as in (37).

- (37) **Peter** met **Anne** in the supermarket. They/P.&A. decided to walk home together.

Since such possibilities are independent properties of the language system, they should not (and on our analysis do not) require a separate explanation within the context of the prolepsis construction.

A final example we like to highlight concerns the object agreement pattern in Nahuatl. In (38), there is a 3PL object marking on the matrix verb *niki:nkayik* ‘heard’, triggered by the plural object *i:n ta:kah* ‘the men’.

- (38) niki:nkayik            i:n ta:kah    (ke)    wa:lankeh.  
 1SG.3PL.hear.PRET    the men    (COMP) 3.come.PRET.PL  
 ‘I heard the men come.’ (Higgins, 1981)  
*lit.* ‘I heard the men, that they came.’ (literal translation ours)

In the absence of the proleptic object, however, the verb form would be *nikayik*, with default 3SG object agreement for the complement clause: *nikayik*<sub>1SG.3SG</sub> (*ke*) *wa:lankeh* ‘I heard that they came’.<sup>9</sup> This gets a natural explanation on the bisentential analysis, in which the overt

<sup>9</sup> To be complete, there is a third option in which *i:n ta:kah* ‘the men’ is interpreted as the actual object of the embedded clause: *nikayik*<sub>1SG.3SG</sub> *i:n ta:kah wa:lankeh* ‘I heard that the men came.’ This is irrelevant for our purposes. Note that we will have to revise the analysis in (39) in section 4; see especially footnote 14.

matrix verb agrees with the plural nominal object in S1, and the elliptical verb with the complement clause in S2. This is shown in (39).

(39) [<sub>S1</sub> niki:nkayik i:n ta:kah]; [<sub>S2</sub> [(ke) wa:lankeh] ~~nika:yik t~~].

More generally, ellipsis is insensitive to number agreement; see (40) in English, for instance. Here, the verb form *likes* takes the verb *like* as a licit antecedent.

(40) a. The boys like ice-cream and Anne (does), too.  
 b. [<sub>S1</sub> The boys like ice-cream] and [<sub>S2</sub> Anne ~~likes ice-cream~~, too].

This follows from what we mentioned earlier, namely that ellipsis licensing is essentially semantic.

All in all, it seems that an analysis in terms of ellipsis explains the full set of syntactic properties of the prolepsis construction. However, this should not conceal the fact that there are problems of interpretation, which we discuss now.

The most pressing problem for the ellipsis analysis is probably the meaning of these examples. Consider (28) again – *lit.* ‘They feared the black lord, that he would kill him.’ Here, the subjects feared that the black lord would kill a person. It is not implausible that they did not only fear such an event, but also the black lord himself. It might be, therefore, that the noun phrase is thematically related to the matrix verb. However, it is also feasible that fear of the black lord himself is merely a potential inference, and not to be directly encoded in the argument structure. If that is the case, the analysis presented is inadequate.

A paraphrase of the intended meaning is in fact that the subjects feared *about* the black lord that he would kill someone. It also holds for the other examples in our corpus that the aboutness interpretation is more likely than the meaning that is predicted by the ellipsis approach, in which the proleptic object is the internal argument of the matrix verb and hence a Patient/Theme. Consider for instance (41) (and see also (33) above). Here, the subject does not command the relevant statues themselves, but he orders about those statues that they be carried together.

(41) So heeft-i geboden die beelden van-den afgoden dat men-se  
 so has-he commanded the<sub>ACC</sub> statues of-the false.gods that one-them<sub>ACC</sub>  
 te samen droughe sciere.  
 together carry quickly  
 ‘Thus he commanded [of] the statues of the false gods that people carry them away together.’  
 (Spiegelh historiael III: XXXVIII, v. 21-22, translation ours)

Therefore, it is semantically odd to generate the statues as the internal argument of the matrix verb, even though it is syntactically fine. Other illustrations are (42) and (43):

(42) Scipliede, die-men waent vor waer dat-se ons Here ghinder sende.  
 Sailors who<sub>ACC</sub>-people think truly that-them<sub>ACC</sub> our Lord there send  
 ‘Sailors, [of] who one truly thinks that our Lord has sent them there.’  
 (Spiegelh historiael I, 65, 208, translation ours)

(43) Ende sine tonghe, doet hi weten, dat si es in twe ghespleten.  
 and his<sub>ACC</sub> tongue lets he know that she<sub>NOM</sub> is in two split  
 ‘And [about] his tongue, he explains that it is split in two.’  
 (Der naturen bloeme, v.11120-11121, translation ours)

In (42), it is obviously not the case that one thinks the sailors to be true (whatever this might mean), but it is the embedded proposition *about* the sailors that is considered true; in (43) it is not the case that the subject ‘lets know his tongue’, but he lets something know about his tongue. Such examples highlight a quite serious problem for an ellipsis account. Sometimes, it is the case that the predicted interpretation in S1 is not just inadequate, but even impossible. In other words, there are instances in which the proleptic object itself does not meet the semantic selection criteria of the matrix predicate. Consider (44) as a final example. Again, the subject did not ‘hear someone tell Tiberius’, but he heard something about Tiberius.

- (44) Desen Tyberius horic liën dat **hi** tien tiden ontboot menegen  
 this<sub>ACC</sub> Tiberius hear.I tell that he<sub>NOM</sub> ten times summoned many  
 coninc ende heren groot.  
 king and lords big  
 ‘I have heard [about] this Tiberius that he summoned many great kings and lords in that time.’  
 (Spiegelh historiael I: VII - IIII, v.36-38, translation ours)

The modern Dutch and English translations of the problematic parts of (43) and (44) respectively – at least, from the perspective of an ellipsis analysis – are clearly infelicitous, as (45) and (46) illustrate:

- (45) # zijn tong laten weten  
 his tongue let know  
 # ‘to let know his tongue’
- (46) # Tiberius (horen) vertellen (aan iemand)  
 Tiberius (hear) tell (to someone)  
 # ‘to (hear) tell Tiberius (to someone)’

Although we cannot be absolutely sure, it is very likely that phrases like this were similarly infelicitous in Middle Dutch. Also, we were not able to find any such combinations in the Middle Dutch dictionary ([www.gtb.inl.nl](http://www.gtb.inl.nl)).

The problem at hand is of course parallel to the situation in exceptional case marking (ECM) constructions. Consider (47a/b):

- (47) a. I heard Peter fall down the stairs.  
 b. I found Peter gone.

What the subject hears in (47a) is not Peter himself, but the sound that the falling event makes; in (47b), the subject does in fact *not* find Peter, but finds out that he is gone. The standard analysis is therefore that the internal argument of the matrix verb corresponds to a (small) clausal complement that originally includes the accusative-marked noun phrase. This phrase thus receives its theta-role but not its case-marking in the embedded clause.

In the next section we take the parallel between prolepsis constructions and ECM further. The challenge is how we can maintain the advantage of the ellipsis analysis that the proleptic accusative is generated independently of the resumptive pronoun, and still prevent it from being thematically related to the matrix verb.

#### 4. Prolepsis as the combination of an embedded hanging topic and exceptional case marking

The previous section discussed prolepsis in terms of ellipsis. A major advantage of this analysis is that it solves the most pressing descriptive problem posed by this construction, namely the question how a verb can have two direct objects at once, a DP and a CP. The answer provided by the ellipsis analysis is that this is only apparently so: underlyingly, there are two verbs present (in separate clauses), one of which has been elided. The DP and the CP object each belong to one of these verbs, and hence there is no problem of double selection. However, as discussed, this also raises new difficulties. The most challenging one is that the semantics corresponding to the assumed structure does not convey the right meaning. In particular, the DP cannot always be interpreted as a thematic internal argument; rather it is perceived as an aboutness phrase with respect to the embedded clause.<sup>10</sup> Another problem that is left unexplained is why the DP-argument *has* to be related to one of the arguments inside the embedded clause, and why that embedded argument has to be a pronoun.

This section aims to solve these issues by taking a different stance on the data. We argue that the proleptic DP is not an argument of the matrix verb at all, but related *indirectly* to the embedded verb. We claim that it is a left-peripheral topic doubled by a resumptive pronoun in the embedded clause. More precisely, we argue that prolepsis results from the interplay between embedded Hanging Topic Left Dislocation (HTLD) on the one hand and a form of Exceptional Case Marking (ECM) on the other. The proleptic ‘object’ is then a hanging topic exceptionally assigned accusative case by the matrix verb. It is coreferential with a resumptive pronoun within the embedded clause. The resumptive pronoun is the actual argument of the embedded verb.

This section is organized as follows. We start by introducing the required background for the analysis, namely the more general properties of HTLD. Section 4.2 provides a detailed analysis of the Middle Dutch prolepsis data. Section 4.3 compares the pattern from Middle Dutch to modern German and Dutch.

##### 4.1. A few notes about Hanging Topic Left-Dislocation

HTLD, not to be confused with Clitic Left-Dislocation (CLLD) or Contrastive Left-Dislocation (CLD), is familiar from various languages, including Italian, Greek, and English. There is a prosodically isolated topic in the left periphery of the clause that is resumed by a pronoun within the clause. A simple example in English is (48):

(48) The angel<sub>i</sub>, I heard him<sub>i</sub> speak.

The characteristics of HTLD have been described extensively in the literature (see among others Van Riemsdijk 1997, Grohmann 2003, Shaer & Frey 2004, Benincà & Poletto 2004, Alexiadou 2006, De Vries 2009). We will briefly review the most relevant ones here.

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<sup>10</sup> See also Chen & Fukuda (2015), and various other authors. Massam (1985:181) explicitly compares proleptic objects to *of*-NPs in English; see (i). A (colloquial) Dutch example is (ii):

- (i) I read *of* Carroll that **she** was painfully shy.
- (ii) [Van welk boek] denk je dat alle studenten **het** interessant vinden?  
of which book think you that all students it interesting find  
*lit.* ‘Of which book do you think all students find it interesting?’

See also the introduction to this paper for an illustration of periphrastic/prepositional prolepsis.

A hanging topic (HT) is pragmatically an aboutness topic. It comes in tandem with a sentence-internal resumptive pronoun, which agrees with it in  $\phi$ -features but not (necessarily) in case. This becomes clear if we look at the examples in (49) and (50) from German and Icelandic, respectively. The HT appears in the default nominative case (see also Schütze 2001), whereas the resumptive pronoun displays the case that is in accordance with its syntactic function in the clause.

- (49) Der Hans, ich kenne **ihn** schon seit zwölf Jahren.  
 the<sub>NOM</sub> Hans I know him<sub>ACC</sub> already since twelve years  
 ‘As for Hans, I’ve known him for twelve years.’  
 (German, adapted from Van Riemsdijk 1997: 5)

- (50) Þessi hringur, Ólafur hefur lofað Maríu **honum**.  
 this ring<sub>NOM</sub> Olaf has promised Maria it<sub>DAT</sub>  
 ‘This ring, Olaf has promised it to Maria.’ (Icelandic, Van Haaften, Smits & Vat 1983:135)

Furthermore, a HT is base-generated in the outer left-periphery and not derived by movement. Boeckx & Grohmann (2005), for instance, show that German HTLD is not sensitive to islands. This is illustrated in (51): the HT *der schöne Mann* ‘the handsome man’ is separated from the resumptive pronoun *ihn* ‘him’ by a complex NP island.

- (51) Der schöne Mann, Martin haßt [die Tatsache, [dass die Frau **ihn**  
 the<sub>NOM</sub> handsome man Martin hates the fact that the woman him<sub>ACC</sub>  
 geküßt hat]].  
 kissed has ‘The handsome man, Martin hates the fact that the woman kissed  
 him.’  
 (German, Boeckx & Grohmann 2005:141)

Another argument for base generation is that a HT does not reconstruct into the base position of the resumptive pronoun. For instance, in (52) a potentially expected Principle C effect does *not* occur, and coreference between the subject *ze* ‘she’ and the possessor *Mieke* contained within the object-related HT is fine.

- (52) (Wat betreft) Miekes<sub>i</sub> schoonvader, ik geloof dat ze<sub>i</sub> **hem** zelf niet zo mag.  
 as concerns Mieke’s father-in-law I believe that she him self not so likes  
 ‘(As for) Mieke<sub>i</sub>’s father-in-law, I think that she<sub>i</sub> doesn’t really like him herself.’  
 (Dutch, adapted from De Vries 2014: 353)

Even clearer is the impossibility of variable binding by a quantified phrase. In (53), the possessor *zijn* ‘his’ cannot covary with the quantified subject *niemand* ‘nobody’. Of course an unbound reading would be fine.

- (53) \*Zijn<sub>i</sub> zuster, niemand<sub>i</sub> wilde **haar** verraden.  
 his sister nobody wanted her betray  
 intended: ‘(As for) his<sub>i</sub> sister, nobody<sub>i</sub> wanted to betray her.’

These judgments contrast sharply with those for corresponding examples with CLD; see also De Vries (2009, 2014), and see Grohmann (2003) for a discussion of German data.



Crucially, it is possible in some languages to also have *embedded* hanging topics. This is illustrated in Italian in (54), where the HT *questo libro* ‘this book’ is resumed by the pronoun *ne*. It is to be noticed that the HT precedes the complementizer *che* ‘that’.

- (54) Sono certa, [questo libro, che non **ne** abbia mai parlato nessuno].  
 I.am certain this book that not of.it has ever spoken nobody  
 ‘I am sure that nobody has ever talked about this book.’  
 (Italian, Benincà & Poletto 2004:65, markings ours)

Considering the above facts as well as the prosodic isolation of hanging topics, we must conclude that they occupy a position outside the regular clause. In line with Benincà (2001) and Benincà & Poletto (2004) we therefore assume that a HT is generated in a discourse-related projection (a ‘high CP’ shell) above the regular CP-domain (say, Rizzi’s 1997 ForceP).<sup>11</sup> For reasons that will become clear shortly, we do not assign a true parenthetical status to embedded HTs.

#### 4.2. *Prolepsis in Middle Dutch as HTLD plus ECM*

With this information about HTLD in mind, reconsider a regular example of prolepsis, such as (55a). Presupposing that embedded HTLD is possible in Middle Dutch (we return to this below), we now analyze the sentence as in (55b), omitting irrelevant details.

- (55) a. Si ontrieden den swerten here dat **hi-ne** soude te doet slaen.  
 they feared the<sub>ACC</sub> black<sub>ACC</sub> lord that he-him would to death beat  
 ‘They feared [of] the black lord that he would kill him.’  
 (Ferguut, v.1724-1725, translation ours)
- b. [<sub>main.clause</sub> Si ontrieden [<sub>CP-high</sub> [<sub>DP</sub> den swerten here] C<sub>high</sub> [<sub>CP-low</sub> dat hine soude te doet slaen]]]

The embedded clause is selected by the matrix verb *ontrieden* ‘feared’.<sup>12</sup> The proleptic object is a hanging topic of the lower clause, base-generated in the higher CP shell. It is coreferent with the resumptive pronoun, which is the real external argument of the embedded main verb. Comparable to the situation in other ECM configurations, e.g. (56) in English, the HT (‘the black lord’) is ‘exceptionally’ assigned accusative case by the matrix verb.<sup>13</sup>

<sup>11</sup> More concretely, Benincà (2001:62) proposes the following cartography of the left periphery:

[<sub>DiscP</sub> Hanging Topic [<sub>Disc</sub> (*che*) [<sub>ForceP</sub> (excl wh-) [<sub>Force</sub> (*che*) [<sub>TopP</sub> (CLLD) Top [<sub>Top</sub> (*che*) [<sub>FocP</sub> wh-/Foc [<sub>Foc</sub> ∅ [<sub>FinP</sub> [<sub>Fin</sub> (*che*) TP ]]]]]]]]]]

Remaining theory-neutral about the ‘cartographic program’ as such, we will simply assume that generalizations along these lines are at least descriptively correct. The figures below are in *bare phrase structure* notation. We provisionally dub the head of the higher CP shell C<sub>HT</sub>, and refrain from postulating more structure than necessary.

<sup>12</sup> The situation might be somewhat more complex than this. Koster (1999) argues that object clauses are in fact specifications of empty nominal objects, right-attached to a lower projection of the spine of the clause; see also De Vries (2010) for relevant discussion. However, such issues are tangential to the purposes of this paper, and we will represent embedded CPs as (right-hand) complements of the lower V, as is customary.

<sup>13</sup> ECM can be described as follows: if the complement of a case-assigning predicate is non-nominal, the first nominal argument within the complement will be targeted (subject to locality constraints). In what follows, we will not be concerned with the exact syntactic mechanism of case marking. We will assume that it involves feature valuation under c-command as the result of an AGREE operation, but nothing crucially hinges on this; see also footnote 15.

(56) I heard [him<sub>ACC</sub> sing].

A relevant difference between (55a) and (56) is that the embedded clause is finite in the former, but non-finite in the latter. We would expect that case assignment to all regular arguments should be possible within the embedded clause in (55a). This is correct, and, crucially, it is the resumptive pronoun that receives nominative, being the subject. Being dislocated, the HT is not syntactically an argument of the predicate itself; hence, it does not receive case within the embedded clause. Since it is located in the highest projection, and hence in the ‘edge’ of the phase/cycle, it is visible from above. Therefore it is quite plausible that it can be accusative-marked by the matrix verb, without any conflict in case features. Thus, because of the HT configuration, the proleptic accusative can be analyzed as involving ‘exceptional ECM’.

Let us spell out this last point in a little more detail. We claim that a hanging topic of an embedded clause can be assigned case by the matrix verb. Since case marking is usually done within one and the same phase, this might seem strange at first glance, but it is not upon closer scrutiny. The exceptional instance of ECM is made possible by a number of interacting factors. Recall from the discussion in section 4.1 above that HTs normally appear in the default case. In line with Schütze (2001), we take this to mean that they have not been assigned a value for case syntactically, and simply receive the default value in the morphological component as a last-resort strategy. However, for *embedded* HTs the situation is different: for these, the default strategy does not need to be invoked, but the starting point is the same. Namely, they are not case-marked within their own clause for the simple reason that they are not directly selected for or c-commanded by a case-marking predicate. Being generated in the leftmost specifier of the embedded clause, i.e., the edge of the embedded C<sup>o</sup>-phase, they are not yet sent off to spell-out (and hence to the morphological component) when the matrix v<sup>o</sup> is merged. For practical purposes, the edge of a phase can be considered to be part of the next-higher phase – in this case, that of the matrix v<sup>o</sup>. Consequently, the HT may be assigned a value for case by the matrix verb in principle: it is caseless upon merger of the verb and it is in the right domain (locally c-commanded by the relevant verbal head).<sup>14</sup> See the somewhat more detailed structure of (55a) in (57), where the relevant case-valuation under c-command is indicated by a double arrow. In addition, the figure shows subject movement in the matrix (i.e., remerge of the external argument in SpecT), and V2 (head

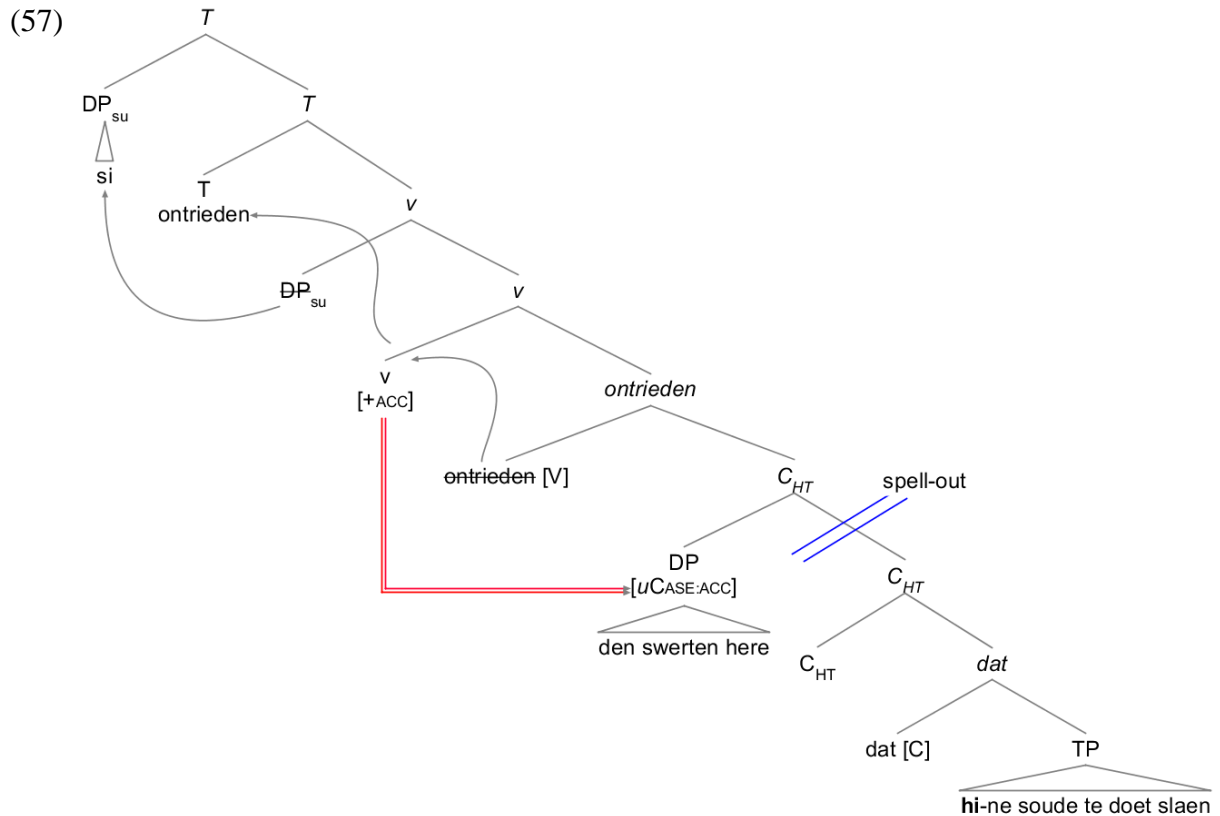
<sup>14</sup> It is worth noting that Polinsky & Potsdam discuss a related phenomenon in Tsez, which also bears immediate relevance to the agreement issue in Nahuatl we illustrated above. Consider the examples in (i) and (ii), from Polinsky & Potsdam (2001:584):

- |      |   |            |               |                  |               |
|------|---|------------|---------------|------------------|---------------|
| (i)  | enir                                      | <b>užā</b> | <b>magalu</b> | <b>bāc’ruli</b>  | <b>r-iyxo</b> |
|      | mother                                    | [boy-ERG   | bread.III.ABS | III-ate-NMLZ].IV | IV-knows      |
|      | ‘The mother knows the boy ate the bread.’ |            |               |                  |               |
|      |   |            |               |                  |               |
| (ii) | enir                                      | užā        | <b>magalu</b> | bāc’ruli         | <b>b-iyxo</b> |
|      | mother                                    | [boy-ERG   | bread.III.ABS | III-ate-NMLZ]    | III-knows     |
|      | ‘The mother knows the boy ate the bread.’ |            |               |                  |               |

In Tsez, transitive main verbs agree with their objects. In (i), *iyxo* ‘know’ agrees with the object clause *užā magalu bāc’ruli* ‘the boy ate the bread’, indicated by the prefix *r-* for class IV. In (ii), on the other hand, the verb agrees with an argument *inside* the embedded clause, namely the object *magalu* ‘bread’, indicated by the prefix *d-* for class III. Polinsky & Potsdam (2001:609ff) convincingly argue that agreement between the main verb and the embedded object is only possible, and in fact obligatory, if the embedded object is the topic of its own clause (and is either overtly or covertly moved to a peripheral topic position).

We can now reinterpret the analysis of Nahuatl object agreement in prolepsis constructions (38) in terms of an ECM-like configuration: DP object agreement takes place even if the relevant noun phrase is not the complement of the matrix verb, provided that it resides in an accessibly high position – the phase edge – within a clausal complement of V.

movement of the finite verb to the second position). The lower phase boundary is also indicated.

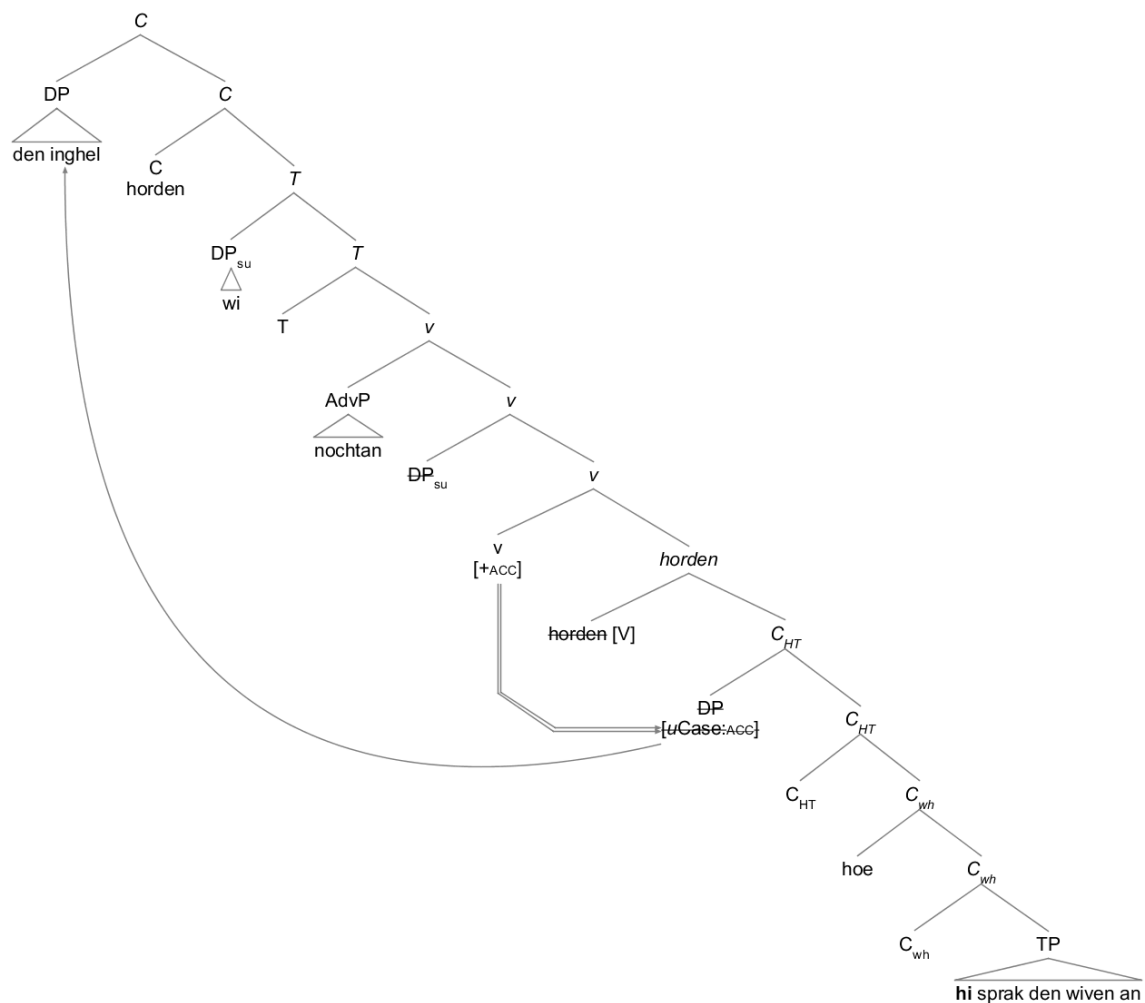


In some cases the situation is slightly more complex due to movement of the proleptic object. Consider the repeated example in (58), which we now analyze as in (59) below.

- (58) Den inghel horden wi nochtan *hoe* **hi** sprac den wiven an.  
 the<sub>ACC</sub> angel heard we still how he spoke the women to  
 ‘We still heard [of] the angel how he spoke to the women.’  
 (Spiegelh historiael I: VII - XXXVI, v.17-18, translation ours)

Again, the proleptic object, here *den inghel* ‘the angel’, is a HT base-generated in the left periphery of the embedded clause. In this position it gets assigned accusative case by the matrix verb *horden*, or more precisely the transitive  $v^0$  head. Later, it is remerged in the first position of the main clause; this is regular A'-movement to the CP layer. The subject pronoun *hi* ‘he’ within the embedded clause is a resumptive pronoun, co-indexed with *den inghel*. What is different from (57) is that the proleptic object has undergone further topicalization into the left periphery of the matrix clause in this particular sentence. Recall that in Dutch, basically any constituent of the clause can be topicalized for reasons of highlighting or discourse linking. This linearly first constituent is then followed by the finite verb in the second position (V2), resulting in linear inversion with the subject, which is in SpecTP.

(59)



Even though the HT is part of an embedded finite clause, it is important to see that it is in principle available for further movement simply because it is in the highest specifier, hence in the edge of its phase.

We have encountered not only topicalization into the matrix, but also examples in which the proleptic object surfaces in the middle field of the matrix. All of these involve positions in which regular objects can appear as well, cf. (13) or (19).<sup>15</sup>

<sup>15</sup> The exact position of ECM-marking is irrelevant to the point we want to make in this paper. Nevertheless, if we were to assume, following Lasnik 1999, that the proleptic object has to move to some specialized ECM-position inside the matrix clause, then examples like (19) may show the object in its ECM-licensing position (i.e., in the middle field in front of the base position of the finite verb). If so, the examples in which the proleptic object is *not* in this position, but either clause-initial or clause-final, have to be derived via additional topicalization or right-extrapolation, respectively. We thank Martin Salzmann and an anonymous reviewer for raising this issue.

Although extraposition of direct objects is not possible in standard Dutch, it is rather common in Middle Dutch (see Stoett 1923). Since there is no clear way to empirically prove or falsify the alternative analysis at this point, we will stick to the one in the main text because it is less complex. Martin Salzmann further suggests (p.c.) that a possible way to distinguish between the analyses would be to topicalize the entire embedded clause and see if the proleptic object can move along. Unfortunately (and unsurprisingly) we did not find any examples of this type in our corpus.

On a final note, if we were to assume an ECM-analysis that involves raising of the proleptic object into the matrix clause, it would move from an A'-position to an A-position and then back to an A'-position in the cases with topicalization or extraposition. At first blush, this seems to be improper movement (in Government & Binding terminology). However, the Principle of Unambiguous Binding does not prohibit movement from an

The analysis provides a natural explanation for several properties of the prolepsis construction discussed above. First of all, recall that the proleptic object seems to act as an aboutness topic. The sentence in (55a), for instance, presumably means that the subjects feared something *about* the black lord (rather than the black lord himself), namely that he would kill someone. This is exactly the meaning that is expected under the present analysis, since HTs are aboutness topics (cf. the references in section 4.1).<sup>16</sup>

Secondly, from the assumption that we are dealing with HTLD in these sentences it also follows that the relevant argument in the embedded clause is necessarily a pronoun and that this pronoun is coreferent with the proleptic object.

Thirdly, we have seen many examples where the proleptic DP agrees in  $\phi$ -features with the resumptive pronoun, but not in case. This is expected if the proleptic DP is a HT: a HT acquires case by another means than the related resumptive pronoun (as discussed above), and they are not part of the same movement chain.

Fourthly, a HT may be in a non-local configuration with respect to the corresponding resumptive pronoun, i.e., the pronoun can be contained within an island; recall (51), for instance. This is also seen in several of the Middle Dutch examples of resumptive prolepsis, as well as in classical Greek (2). Consider (59) again from this perspective. In this example, the proleptic DP *den inghel* ‘the angel’ and the resumptive pronoun *hi* ‘he’ are separated from each other by a *wh*-island boundary (note the question word *hoe* ‘how’). The same phenomenon can be observed in examples (17) and (19), not repeated here.

Fifthly, from the assumption that the proleptic object gets accusative case via an ‘exceptional’ case of ECM, it follows that (i) that the case on the proleptic object is normally accusative (but see the next subsection for a principled exception in passive constructions), and (ii) the class of verbs that appear in this construction overlaps with the class of known ECM-verbs. Since we are dealing with embedded finite clauses here, and not with non-finite subordination, we do not necessarily expect that the verb classes coincide *exactly*.

In short, we have shown that the current analysis accounts for both the syntactic and semantic properties of prolepsis without introducing any theoretical stipulations.

#### 4.3. *A comparative Germanic view on prolepsis*

This final subsection touches upon some comparative issues of the prolepsis construction. First, it is remarkable that the proleptic accusative construction is not possible in modern Dutch. Consider the examples in (60a/b), which directly correspond to (55a) and (58) in Middle Dutch. Neither is acceptable – contrary to periphrastic solutions cited in (1) and footnote 10 (see footnote 21 for further discussion).

- (60) a. \* *Zij vreesden de zwarte heer, dat **hij** hem zou doden.*  
 they feared the black lord that he him would kill  
*intended:* ‘They feared [of] the black lord that he would kill him.’

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A'-position to an A-position *per se*, but the sequence of A'-movement followed by A-movement (see Müller & Sternefeld 1993). In the case at hand we do not have a sequence of A'-movement followed by A-movement because the HT does not move into its lowest A'-position: it is base-generated there.

<sup>16</sup> Even the apparently problematic example (16) makes sense from this perspective. Here, the coordinate DP sets the stage for two pronouns in the embedded clause. The resulting situation is reminiscent of multiple hanging topics, which are rare but acceptable in German; see e.g. Grohmann (2003). With coordination, a similar effect can be obtained in Modern Dutch or English periphrastic aboutness constructions (provided a plausible context, etc.): e.g., *As for John and his many children, it was rumored that he had not actually fathered them all.*

- b. \* De engel hoorden wij hoe **hij** de vrouwen toesprak.  
 the angel heard we how he the women spoke.to  
*intended*: '[As for] the angel, we heard how he talked to the women.'

This can be explained straightforwardly, since modern Dutch does not allow embedded dislocation or even topicalization in general. Consider (61a/b), for instance:

- (61) a. \* Peter zag (in de tuin)<sub>i</sub> dat (in de tuin)<sub>i</sub> de meisjes *t<sub>i</sub>/er<sub>i</sub>* zaten.  
 Peter saw in the garden that in the garden the girls *t/there* sat  
*intended*: 'Peter saw that in the garden, the girls were sitting (there).'
- b. \* Peter zag (de meisjes)<sub>i</sub> dat (de meisjes)<sub>i</sub> Joop *t<sub>i</sub>/ze<sub>i</sub>* aansprak.  
 Peter saw the girls that the girls Joop *t/there* addressed  
*intended*: 'Peter saw that the girls, Joop addressed (them).'

Whether there is a resumptive pronoun or an unpronounced trace/copy, and whether the displaced constituent is put before or after the complementizer, all examples are unacceptable.<sup>17</sup> Why this is so is an issue that is orthogonal to the purposes of this paper (see Zwart 1997:245ff for a partial explanation). What is relevant is that such possibilities are a prerequisite for the proleptic construction under the proposed analysis. If these requirements are not fulfilled, it is correctly predicted that prolepsis is impossible.

Returning to Middle Dutch, we expect it to be more liberal than modern Dutch with respect to embedded displacement. This is indeed what we find. A relevant illustration of embedded dislocation is cited in (62). Here, the constituent *in sine nuesegeten* 'in his nostrils' is related to the pronoun *re* 'there' in the embedded clause.

- (62) Men pleghet in sine nuesegeten dat me-**re** eenen ring in doet.  
 one is.used.to in his nostrils that one-there a ring in does  
*lit.* 'One is used to the fact that in his nostrils, one puts a ring therein.'  
 (Stoett 1923:246, translation ours)

<sup>17</sup> The illustrations in the main text are not to be confused with the phenomenon of focus scrambling, which is allowed:

- (i) ... dat ZO'N AUTO zelfs DE JONGENS niet mooi vinden.  
 ... that such.a car even the boys not nice find:PL  
 '... that not even the boys like such a car.'

According to Neeleman (1994), Zwart (1997), and others, scrambling of this type – or in fact any type, we would say – does not involve embedded topicalization into the left periphery; rather, the object is moved up in the middle field, potentially leaving the subject behind in a lower position.

There is one more complication of (colloquial) Dutch we will ignore here, which is the possibility of restarting a sentence 'below' the complementizer, which leads to a kind of apparently embedded main clause phenomena. In particular, it is possible to construe cases of contrastive left-dislocation for some speakers; see (ii), taken from Zwart (1997:251). Here, *Marie* is the proposed object of the lower clause.

- (ii) Jan zei dat Marie (die) kuste hij niet.  
 John said that Mary that-one kissed he not  
 'John said that Mary, he did not kiss.'

Within the embedded domain after the complementizer, the finite verb *kuste* 'kissed' is in the second position, as if it concerns a main clause. If the verb is positioned final, as in regular embedded clauses, the example becomes completely unacceptable. This is expected, considering (60) in the main text. From the perspective of our analysis, (ii) is irrelevant for various reasons. Most importantly, in these cases the relevant displaced material is still below the complementizer, whereas in the proleptic construction, the domain above C is involved.

The example provides an instance of ‘regular’ embedded left-dislocation rather than prolepsis proper, since the fronted phrase is preceded by a preposition, which is a case assigner itself (see also Benincà & Poletto 2004).

Interestingly, we find a similar phenomenon in variants of modern German (which is also more liberal than modern Dutch with respect to scrambling across the subject).<sup>18</sup> Example (63) illustrates embedded left-dislocation according to Grohmann (1997):

- (63) Der Bauer glaubt, diesen Frosch, daß sie **den** gestern geküßt hat.  
 the farmer believes this<sub>ACC</sub> frog that she it<sub>ACC</sub> yesterday kissed has  
*lit.* ‘The farmer believes this frog that she kissed it yesterday.’

(adapted from Grohmann 1997:13)

In fact, (63) may already be an instance of prolepsis. Note that we found examples in Middle Dutch where the resumptive pronoun has an object role rather than a subject role; see (15), for instance. Moreover, and this is crucial, a regular hanging topic would have nominative case; cf. (49). In (63), however, the HT is accusative-marked, as in the prolepsis construction.

In order to confirm if the proleptic accusative really exists in modern German, we performed a small survey. The outcome confirms our first impression based on (63) – again, for a subset of speakers.<sup>19</sup> Consider the example in (64), which is similar to (58) in Middle Dutch:

- (64) Den Engel hörte ich wie **er** zu der Frau sprach.  
 the<sub>ACC</sub> Angel heard I how he to the woman spoke  
*lit.* ‘The angel I heard how he spoke to the woman.’  
 ‘I heard of the angel how he spoke to the woman.’

Here, the topicalized accusative phrase *den Engel* ‘the angel’, is related to the resumptive subject *er* ‘he’ in the embedded clause. As before, we propose that the proleptic object is generated as a hanging topic of the embedded clause, and receives accusative case from the matrix verb in this position (prior to further topicalization into the left periphery of the matrix).

Interestingly, German provides us with the opportunity to check whether the accusative case of the proleptic object is indeed assigned by the matrix verb. To this end, we can use passivization as a test. We predict that if the matrix clause is passivized, the proleptic object will be promoted to the subject position, and consequently receives nominative case. Although we have not yet discovered such examples in Middle Dutch, this is indeed what we find in modern German; see (65):

- (65) a. Der Engel würde gehört wie **er** zu der Frau sprach.  
 the<sub>NOM</sub> Angel was heard how he to the woman spoke.  
 ‘It was heard how the angel spoke to the woman.’  
 b. \* Den<sub>ACC</sub> Engel würde gehört wie er zu der Frau sprach.

<sup>18</sup> According to Grohmann (1997), this is possible in those dialects of German that also allow extraction out of embedded *daß*-clauses.

<sup>19</sup> Four out of seven speakers we consulted accepted the relevant sentences to some degree. We will leave a more comprehensive description of the distribution of the proleptic accusative construction in the Germanic language area as a topic for further research.

In (65a), *der Engel* ‘the angel’ has nominative case; (65b) shows that an accusative is not acceptable in this passive configuration. This implies that the accusative cannot be viewed as a default case in the proleptic construction, and hence that its presence in (63) and (64) must be due to ECM marking.

To summarize, this section has provided an explanation of why modern Dutch lacks the prolepsis construction attested in Middle Dutch, given the analysis proposed in section 4.2. Furthermore, we showed that the proleptic accusative is still found acceptable in (varieties of) modern German. Although more cross-linguistic research remains to be done, our initial investigation provided empirical results that clearly confirm the proposed analysis.<sup>20</sup>

## 5. Conclusion

We presented an empirical and theoretical analysis of the so-called proleptic accusative construction. This puzzling phenomenon involves two constituents, a noun phrase and a clause, that apparently compete for the object status in the matrix clause. The relevant noun phrase, or ‘proleptic object’, appears to be accusative-marked by the matrix verb, but it is thematically related to the embedded clause, and obligatorily coreferent with a resumptive pronoun within that clause. For these reasons alone, it is highly unlikely that a proleptic object is generated in the matrix.<sup>21</sup>

Often, the syntactic function of the resumptive pronoun (possibly *pro*, depending on the agreement system in the particular language) is subject, but it can also be object. The proleptic constituent is usually marked with accusative case (possibly abstractly, depending on the morphological properties of the particular language). But its location in the sentence is variable. Two common positions are the one directly preceding the embedded clause, or the one topicalized within the main clause. As for the type of embedded clause, it can be a regular declarative complement introduced by *that*, but it can also be an embedded question introduced by a *wh*-constituent.

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<sup>20</sup> Roberta D’Alessandro (p.c.) suggests that further cross-linguistic evidence for the link between prolepsis and embedded HTLD can be found in variants of Italian.

<sup>21</sup> Salzmann (2006, to appear) argues that the prepositional/periphrastic prolepsis construction illustrated in (1) does involve base-generation of the PP in the matrix (accompanied by an operator in the left periphery of the embedded clause). Would it be possible to assume a *silent preposition* for the proleptic accusative under discussion (also suggested to us by an anonymous reviewer)? If so, the proleptic object were assigned case by the preposition, and the aboutness PP could be base-generated in the matrix as an adjunct or an additional argument of the verb. However, there are strong arguments against such an analysis. First, as the example in (65) shows, the hanging topic can become the subject of a passive sentence, getting nominative rather than accusative case. If there were a silent preposition, we would not expect passivization to be possible at all. Secondly, we would expect case-assignment to be invariantly the same. However, the proleptic object appears in the dative case in one of the examples in our corpus; see (19) above. Thirdly, if the covert preposition would correspond to *van/von/of*, which we find in various Dutch/German/English periphrastic proleptic constructions, then we would expect the default case to be dative rather than accusative (since e.g. *von* assigns dative in German). Fourthly, if we take the data from Nahuatl into account (see example (4) above), we note that the finite verb in this language agrees with the proleptic object. This is unexpected if it were embedded in a PP, since PP-objects normally do not result in agreement on the finite verb.

Similar arguments go against a potential analysis in terms of an *applicative transformation* (thanks to Lisa Cheng, p.c., for bringing this up). If the proleptic object were an additional ‘applicative object’, we do not understand why it appears in accusative case rather than dative. Furthermore, it then remains mysterious why there has to be a coreferent resumptive pronoun in the subordinate clause, and why the proleptic object has an obligatory aboutness interpretation. Besides that, we consider it unlikely that Middle Dutch would have a silent applicative morpheme for a particular subset of verbs that it not overtly found in any related language.



We discussed the proleptic accusative in Middle Dutch in some detail, making use of a small corpus of examples established by Stoett (1923), complemented by data from Bouman (1918) and a small-scale survey in modern German. Thereby, we expanded the knowledge of the properties of the construction type, building on a small body of literature that mainly addresses ancient Greek and Latin, Nahuatl and Japanese. Based on empirical descriptions so far, the impression one gets is that prolepsis is rare – both in terms of cross-linguistic distribution and frequency. This may well be related to the fact that its derivation requires an uncommon combination of syntactic mechanisms. But it is probably also the case that prolepsis is a slumbering possibility in a number of languages, and as such empirically underexposed. We found it to exist in modern German, whereas reference to this is lacking in grammars or other linguistic literature, as far as we are aware. Contrary to the situation in (varieties) of modern German, the phenomenon is absent in modern Dutch. We related this to the loss of embedded topicalization and dislocation, which was still possible in Middle Dutch.

Theoretically, we argued that the proleptic accusative cannot be explained in terms of (copy) raising for a variety of reasons. To rehearse just one problem, the alleged base-position of the proleptic object, where the resumptive pronoun resides, can be inside a (*wh*-)island, which makes movement highly unlikely. Furthermore, we showed an example from Middle Dutch involving a coordinated object and split coreference via two separate resumptive pronouns with differing syntactic functions inside the embedded clause. Such cases cannot easily be explained in terms of a movement chain. As an alternative, we worked out a novel analysis involving clausal coordination and ellipsis, such that the ‘competing objects’, DP and CP, are distributed over the two separate matrix clauses, each selected by an instance of the selecting matrix verb. Although this straightforwardly solves the syntactic complications discussed, it leads to problems with semantic interpretation in various cases. The core issue here is that the proleptic constituent is usually not interpreted thematically as an internal argument of the matrix verb,<sup>22</sup> but rather as an aboutness phrase with respect to the embedded clause.

Taking seriously the aboutness meaning aspect of the proleptic accusative, which is also reflected explicitly in periphrastic variants thereof, we developed a final analysis in section 4 of the paper.<sup>23</sup> We link aboutness to hanging topic left-dislocation being involved, considering, among other things, that hanging topics are always aboutness topics. What is somewhat unusual from a cross-linguistic perspective is that HTLD then targets the embedded clause. There are however good reasons to assume that it is correct, nevertheless. It is also to be noted that the type of matrix verbs involved (often verbs of perception and cognition) facilitates pragmatic plausibility for a discourse in which an entity within the embedded environment figures as a sentence topic. Moreover, we showed that the syntactic possibility of embedded topicalization and dislocation in a particular language is a necessary prerequisite for prolepsis.

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<sup>22</sup> There is no reason to assume that the ellipsis analysis is excluded across-the-board, as it might coexist with the – generally preferred – alternative in terms of HTLD for those examples (and only those) in which it reflects a semantically adequate structure. The grammar, as an automatic system, does not choose between analyses, it only provides possibilities, and individual examples can in principle be structurally ambiguous, with corresponding meanings.

<sup>23</sup> At first sight, we run into a somewhat paradoxical situation. The analysis with the most straightforward syntactic solution leads to semantic complications, but the semantically correct alternative requires a more involved syntax. On closer inspection, however, the situation is far from symmetrical, as explained in the main text: the required syntax in the latter option is actually well-founded, but the semantic complications in the former are a serious drawback that cannot easily be explained away.

Thus, the proleptic object, i.e., the seemingly additional accusative argument in the matrix, is base-generated as an embedded hanging topic (HT) of the complement clause involved. We argued that this has a series of welcome consequences. First, it explains the presence of a resumptive pronoun in the embedded clause. This pronoun necessarily occupies an argument position within that clause. In principle, it can be any argument, but of course there is a clear preference for subjects to be topical. Secondly, the relationship between the proleptic HT and the pronoun is one of coreference, not movement. Therefore no locality constraints are expected to play a role. Again, this is in line with empirical findings. Furthermore, the HT and the pronoun may differ in case. Thirdly, since the embedded HT is in the edge of the lower clause, it is expected to be available for further movement into the matrix. Indeed, various such cases are attested. As already commemorated, a relatively frequent configuration is one where the proleptic HT is further topicalized into the left periphery of the matrix. Fourthly, the embedded HT must receive case via exceptional case marking. We argued that this is possible in principle because there is no phase boundary between the matrix verb and the topic high up in the left edge of the lower CP. Consequently, the case marking on the proleptic HT will normally be accusative. If we are correct, this implies that the phenomenon of ECM is more general than thought so far, an interesting conclusion that seems to open up future directions of research. Apart from that, we showed that there is a systematic exception to marking with accusative. Namely, if the matrix is passivized, promotion to subject is triggered, and consequently nominative case marking.

To conclude briefly, we argued that prolepsis is the interesting result of interacting syntactic processes, namely embedded HTLD combined with an exceptional form of ECM. Importantly, there is no need to invoke construction-specific stipulations: as one would expect, the properties of the proleptic accusative can be derived from more basic ingredients of the grammar.

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## Appendix Corpus Prolepsis data in Middle Dutch

[All translations are ours.]

### A. Corpus from Stoett (1923:45, 246)

#### *Proleptic object topicalized/fronted; embedded declarative clause*

- (1) Ende sine tonghe, doet hi weten, dat **si** es in twe ghespleten.  
and his<sub>ACC</sub> tongue lets he know that she<sub>NOM</sub> is in two split  
‘And [about] his tongue, he explains that it is split in two.’ (Der naturen bloeme, v.11120-11121)
- (2) Desen Tyberius hor-ic liën dat **hi** tien tiden ontboot  
this<sub>ACC</sub> Tiberius hear-I tell that he<sub>NOM</sub> that time summoned  
menegen coninc ende heren groot.  
many king and lord big  
*lit.* ‘This Tiberius I have heard that in that time he summoned many great kings and lords.’  
‘I have heard about this Tiberius that he summoned many great kings and lords in that time.’  
(Spiegel historial I: VII - VIII, v.36-38)
- (3) Gode, wies dienst du heves benomen, waens-tu dat **hi** di helpen sal.  
God whose service you have taken think-you that he<sub>NOM</sub> you help will  
‘God, whose service you have taken, you think that he will help you.’  
(Rijmbijbel, v.33087-33088)
- (4) Bi den here ... , dien ic gheloeve al openbaer, dat **hi** mi  
by the lord ... who<sub>ACC</sub> I believe PART publically that he<sub>NOM</sub> me  
noch verledighen sal.  
yet liberate will  
‘By the lord..., [of] whom I believe openly that he will yet liberate me.’  
(Roman van Heinric en Margriete van Limborch, v.1790-1793)
- (5) ...wat dat daer Merlijn in doet, dien-t Walsch seget, dat **hi** dystorie  
...what that there Merlin in does who<sub>ACC</sub>-the Welsh says that he<sub>NOM</sub> the.history  
scriven dede.  
write did  
‘...what Merlin is doing in there, [of] whom the Welsh text says that he has written the story.’  
(Spiegel historial III: III-IV, v.85-87)

- (6) Sente Remijs, dien een heilech man te voren voersach,  
Sint Remijs who<sub>ACC</sub> a holy man to before foresaw  
dat **hi**<sub>NOM</sub> soude sijn geboren.  
that he would be born  
'Sint Remijs, [of] whom a holy man already foresaw that he would be born.'
- (7) God, Here, Jhesus Cristus alleene dien mijn wijf pleghet mi te segghen,  
God Lord Jesus Christ all.one that<sub>ACC</sub> my wife uses me to say  
dat **hi** Gods sone si.  
that he<sub>NOM</sub> God's son is  
'God, the Lord, Jesus Christ united in one [of] whom my wife tells me that he is the son of God.'
- (8) Josephus, dien die scifture priset, dat **hi** recht ende wareid wiset.  
Josephus who<sub>ACC</sub> the scripture praises that he<sub>NOM</sub> justice and truth teaches  
'Josephus, [of] whom the scripture praises that he teaches justice and truth.' (Rijmbijbel, 27121)

***Proleptic object not clause-initial; embedded declarative clause***

- (9) Doe waren lieden van zeet comen, die Cayms dochtre  
then were people of Seth come who Caym's daughters  
hadden vernomen, dat **si** scone waren van live.  
had heard that they<sub>NOM</sub> beautiful were of body  
'Then people of Seth had come, who had heard [about] Cayms daughters that they were beautiful.'  
(Rijmbijbel, v.1085-1087)
- (10) Sinen II sonen hi gheboot Arams dochtre, die was doot, dat  
his two sons he commanded Aram's daughters who was dead that  
si-se te wive nemen souden.  
they-them<sub>ACC</sub> to wife take would  
*lit.* 'His two sons he commanded Aram's daughters, who was dead, that they would take them as their wives.'  
'About the daughters of Aram, who was dead, he commanded his two sons that they would take them as their wives.'  
(Rijmbijbel, v.1510-1512)
- (11) Maer die serjanten sijn kenden den coninc van Israël, dat **hi** niet  
but the sergeants his knew the<sub>ACC</sub> king of Israël that he<sub>NOM</sub> not  
was harde fel.  
was very fierce  
'But his sergeants knew [about] the king of Israël that he wasn't very fierce.'  
(Rijmbijbel, v.12643)
- (12) Wi vinden oec in den nieuwen testamente Christum ende sine apostele,  
we find also in the new testament Christ<sub>ACC</sub> and his<sub>ACC</sub> apostles  
dat **si** **hem** keerden ende overgaven in die doot.  
that they<sub>NOM</sub> him<sub>ACC</sub> turned and over.gave in the death  
'In the new testament, we also find [about] Christ and his apostles that they gave him over in death.'  
(Vanden gheesteliken tabernakel, p.19)
- (13) ... als hy verstond den helighen man dat **hi** sceeden wilde van dan.  
... when he understood the<sub>ACC</sub> holy<sub>ACC</sub> man that he<sub>NOM</sub> depart wanted from there  
'... when he understood [about] the holy man that he wanted to leave.'

- (14) ... waer si-ne vernam dat **hi** in enighe lande quam.  
... where she-him<sub>ACC</sub> heard that he<sub>NOM</sub> in some countries came  
'... where she heard [of] him that he came in some countries.'  
(Der minnen loop, v.873-874)
- (15) Si ontrieden den swerten here dat **hi-ne** soude te doet slaen.  
they feared the<sub>ACC</sub> black<sub>ACC</sub> lord that he<sub>NOM</sub>-him would to death hit  
'They feared [of] the black lord that he would kill him.'  
(Ferguut, v.1724-1725)
- (16) Symoen sach sine sone Yan, dat **hi** was goet orloegsman.  
Symoen saw his<sub>ACC</sub> son Yan that he was good warrior  
'Symoen saw [of] his son Yan that he was a good warrior.'  
(Rijmbijbel, v.20064-20065)
- (17) So heeft-i geboden die beelden van-den afgoden dat men-se  
so has-he commanded the<sub>ACC</sub> statues of-the false.gods that people-them<sub>ACC</sub>  
te samen droughe sciere.  
together carry quickly  
'Thus he commanded [of] the statues of the false gods that the people would quickly carry them  
away together.'  
(Spiegel historiae III: XXXVIII, v.21-22)
- (18) Der Walewein claechde sijn swert dat hij-t daer niet en hevet.  
the Walewein complained his<sub>ACC</sub> sword dat he-it<sub>ACC</sub> there not NEG has  
'Walewein complained [about] his sword that he didn't have it there.'  
(Roman van Walewein, v.8125-8127)
- (19) Doe wart hi te rade das den joncsten sone, die edel was,  
then became he to council that the<sub>ACC</sub> youngest<sub>ACC</sub> son who noble was  
dat hi-ne met Brunilden sire moeder in Borgounyen senden soude.  
that he-him<sub>ACC</sub> with Brunilde his mother in Burgundy send would  
'He then considered [about] his youngest son, who was noble, that he would send him with  
Brunilde's mother to Burgundy.'  
(Spiegel historiae III: IX, v. 9-13)

***Proleptic object topicalized/fronted; embedded wh-clause***

- (20) Den inghel horden wi nochtan hoe **hi** sprac den wiven an.  
the<sub>ACC</sub> angel heard we still how he<sub>NOM</sub> spoke the women to  
'We still heard [of] the angel how he spoke to the women.'  
(Spiegel historiae I: VII - XXXVI, v.17-18)

***Proleptic object not clause-initial; embedded wh-clause***

- (21) ... ende hi den herten conde besien, wat **si** binnen hadden bedect.  
... and he the<sub>DAT</sub> hearts could see what they<sub>NOM</sub> inside had covered  
'... and he could see [of] the hearts what they had covered inside.'  
(Sinte Franciscus leven, v.5784-5785)
- (22) ... ende doe hi there ons Heren sach, hoe dat in die tenten lach.  
... and when he there our<sub>ACC</sub> lord saw how that in the tent lay  
'... and when he saw [of] our Lord there, how [he] lay in the tent.'  
(Rijmbijbel, v.6087-6088)

## B. Corpus from Bouman (1918)

### *Proleptic object topicalized/fronted; embedded declarative clause*

- (23) Scipliede, die-men waent vor waer dat-**se** ons Here ghinder sende.  
 sailors who<sub>ACC</sub>-people think truly that-them<sub>ACC</sub> our Lord there send  
 ‘Sailors, [of] who one truly thinks that our Lord has sent them there.’  
 (Spiegelh historiael I, 65, 208)
- (24) Mijn ziele weet-ic wel dat **sij** verloren es.  
 my<sub>ACC</sub> soul know-I good that she lost is  
 ‘[Of] my soul I well know that she is lost.’  
 (Marialegende 2, 126)

### *Proleptic object not clause-initial; embedded declarative clause*

- (25) Du sies den aermen in meneger stonde ... dat **hi** blidelikere levet  
 you see the<sub>ACC</sub> poor in many times that hi<sub>NOM</sub> happier lives  
 ‘You see [of] the poor one that he lives more happily.’  
 (Spiegelh historiael I, 72, 53)
- (26) ... dat wi hem lijen, dat **hi** geboren was van Marien.  
 ... that we him<sub>ACC</sub> testify that he<sub>NOM</sub> born was of Maria  
 ‘... that we testify [of] him that he was born from Mary.’  
 (Spiegelh historiael III, 5, 21)
- (27) Gi wet wale die blumen die ten irsten en die somere ontsprengen,  
 you know well the<sub>ACC</sub> flowers that the first in the summer arise  
 dat **se** hebben meer saeps.  
 that they<sub>NOM</sub> have more juice  
 ‘You know well [of] the flowers that arise first in the summer that they have more juice.’  
 (Limburgse sermoenen 252, 16)

## C. Location, Region and Year of Origin of the texts

	<b>Period</b>	<b>Writer</b>	<b>Region</b>
Der minnen loep	1370-1428	Dirc Potter	Holland
Der nature bloeme	1271-1272	Jacob van Maerlant	Brugge
Ferguut	1250	<i>unknown</i>	<i>unknown</i>
Leven van Sinte Amand	1366	Gillis de Wevel	<i>unknown</i>
Limburgse sermoenen	1300	<i>unknown</i>	Limburg
Marialegende	1490-1510	<i>unknown</i>	Holland/Brabant/ Vlaanderen
Rijmbijbel	1275-1300	Jacob van Maerlant	Brugge
Roman van Walewein	13th century	<i>unknown</i>	<i>unknown</i>
Sinte Franciscus leven	13th century	Jacob van Maerlant	Brugge
Spiegelh historiael	1288	Jacob van Maerlant	Brugge
Vanden gheesteliken tabernakel	1293-1381	Jan van Ruusbroec	Brussel
Roman van Heinric en Margriete van Limborch	1291-1317	<i>unknown</i>	Brabant