English and Dutch as SOV-Languages and
the Distribution of CP-Complements
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1. Introduction

This paper offers an interpretive explanation of the distribution of DP- and CP-complements in English and Dutch. It is argued that DP- and CP-complements have a different distribution because they bear different semantic relations to the selecting verb. The proposed analysis solves a number of problems for morphosyntactic analyses that derive the different distribution of DP- and CP-complements from case theory (Stowell 1981, Zwart 1993). The analysis is developed against the background of an SOV-analysis of English and Dutch.

2. The problem

The different distribution of CP- and DP-complements is illustrated in (1).1

(1)  a. John told (DP the story) to Mary (*DP the story).
    b. John told (*CP that I will come) to Mary (CP that I will come).
    c. Jan heeft (DP het verhaal) aan Marie verteld (*DP het verhaal).
       John has the story to Mary told the story
    d. Jan heeft (*CP dat ik kom) aan Marie verteld (CP dat ik kom).
       John has that I come to Mary told that I come

Existing analyses of these facts assume that DP- and CP-complements bear basically the same semantic relation to the selecting verb. This is expressed syntactically by generating both types of constituents as sisters of V. V governs the complement and assigns a θ-role to it. In Stowell’s (1981) analysis, the complementary distribution of DP- and CP-complements follows from case theory. DP needs case, case is assigned by a governing V, government is to the right in English, hence a DP-complement must be right adjacent to V. CP resists case and moves rightward to a position where no case is assigned. Similarly for Dutch, but here government is to the left, hence a DP-complement surfaces left-adjacently to V, whereas CP ends up to the right of V.2 Well-known problems
for this approach are: (i) It is unlikely that case assignment can be avoided by moving a phrase out of a case position, and (ii) Not all CP-complements are islands for extraction, which they should be if they were extraposed.

For Dutch, the case-theoretic analysis can be turned into an antisymmetric SVO-analysis that solves the two problems (Zwart 1993). Both types of complements start out as a right-hand sister of V. A DP moves leftward overtly to a position, say Spec,AgrOP, where case is checked, while a CP does not have case features and stays in situ. However, for English such a case-theoretic explanation does not work. In English too, both types of complements are base-generated as a right-hand sister of V. Since case is not checked or assigned in that position, DP moves up to Spec,AgrOP. The DP is not spelled out in its landing site, but in its base position, yielding SVO order. According to this analysis, then, DP- and CP-complements are in the same surface position, right adjacent to V, so they should have the same distribution in English, contrary to fact (cf. 1). This problem for the SVO-analysis is summarized in (2).

(2) I. English: \[ C \ S \ \text{DP}_i \ V \ \text{DP}_i \]
     \[ C \ S \ V \ CP \]

II. Dutch: \[ C \ S \ \text{DP}_i \ V \ \text{DP}_i \]
     \[ C \ S \ V \ CP \]

3. English and Dutch as SOV-languages

A first step toward a solution is to assume that English and Dutch are SOV underlingly and that non-scrambled arguments surface in their base-position. English and Dutch differ in the position of V. In English, V is spelled out in the position of V. In English, V is spelled out in the landing site of short V-movement, in Dutch V is spelled-out in its base-position. This captures the facts in (1):

(3) a. \[ C \ S \ V \ \text{DP} \ PP \ \varnothing \] (English; 1a)
    b. \[ C \ S \ V \ PP \ \varnothing \ CP \] (English; 1b)
    c. \[ C \ S \ \varnothing \ \text{DP} \ PP \ V \] (Dutch; 1c)
    d. \[ C \ S \ \varnothing \ PP \ V \ CP \] (Dutch; 1d)

Similar analyses have been proposed by Takano (1996) for Japanese and English, and Haider (1997) for English and German, to which I refer for ample discussion of the many advantages. I also adopt their hypothesis that rightward movement and right-adjunction do not exist (cf. Kayne 1994). The linear orders in (3) are built up by uniform leftward application of merge and move, starting with V. When the matrix V is merged with CP (which itself is built up by leftward
application of merge and move starting with the embedded V), matrix V and CP are sisters. Therefore, extraction out of CP-complements is sometimes possible, which was a problem for analyses in which CP-complements are extraposed.

The present proposal correctly describes the different distribution of DP- and CP-complements, but clearly does not yet explain why DP- and CP-complements are generated in different positions. If constituents that bear the same semantic relation to the selecting verb are generated in the same position, a crucial assumption in Stowell's and Zwart's analyses, then the present proposal implies that DP- and CP-complements do not bear the same semantic relation to the selecting verb. The next paragraph provides evidence that this is correct.

4. DP-complement position forces a quote interpretation upon CP

On closer investigation it turns out that there is an interpretation that makes it possible for a CP-complement to occur in O in the abstract underlying order SOV. This is particularly clear with the matrix verb say.

(4)  
a. Ed heeft gezegd [CP "dat ik kom"] tegen de leraar [V gezegd].
b. Ed has said [CP "that I come"] to the teacher [V said].
c. Ed heeft gezegd "hallo"/ "nee"/ "Ik ga" tegen de leraar [V gezegd].
d. Ed has said "hello"/ "no"/ "I quit" to the teacher [V said].

Though the CPs in (4a,b) cannot be interpreted as ordinary factive or propositional clauses (cf. Kiparsky and Kiparsky 1970, and section 5), they can be interpreted as quotes. For an embedded clause to be felicitous as a quote, a special context is required. For example, imagine a linguistics class in which Ed answered the teacher's question to mention the embedded clause in a given sentence. After class, one can report Ed's answer with the sentences in (4a,b).

The question now arises as to why position O in the abstract underlying order SOV forces a quote interpretation upon CP.

Before I answer this question, a brief note on the distribution of quotes. It has been argued that O in the underlying order SOVX is a marked, unnatural position for quotes; the unmarked position would be X. However, (4c,d) show that there is nothing unnatural in having a quote in O. Moreover, even if it were true that X is a more natural position for quotes than O, this would not weaken the claim that O forces a quote interpretation upon CP: the effect is quite clear, and the claim does not imply that quotes cannot occur in other positions.³

Let us go back to the question why CP in O must be interpreted as a quote. The effect that syntactic position determines part of the interpretation of a constituent is quite familiar. In *The dog bit John*, for example, *the dog* is the
agent and John is the patient, whereas in John bit the dog, John is the agent and the dog is the patient. The semantic relations that the arguments John and the dog bear to the verb bit are determined by their syntactic position. Given this, we expect a CP that occurs in O, the position of a DP-complement, to bear the same semantic relation to the verb as a DP-complement.

Following Hale and Keyser (1993), I assume that a DP-complement of V is the subject of the root of V, i.e. the root is a Small Clause predicate with the internal argument as its subject. If the root of V give is GIFT, then in John gave the book the book is said to be an element of the set of gifts. Some objects fit more easily into this set than others. For example, John gave the destruction is odd because it is hard to interpret an event as a gift. A way to make sense of this sentence is to interpret the destruction as a name, e.g. a book title.

Similarly, when a CP is generated in O, it must be interpreted as an element of the set denoted by the root of the verb. In the case of (4a,b), the CP must be interpreted as an element of the things said. An embedded CP is not an utterance, so it cannot easily be interpreted as an element of this set. Parallel to the marked interpretation of destruction in John gave the destruction, a way out is to interpret the CP as a quote. The same effect arises when an ordinary DP cannot be interpreted as an element of the things said, as in John said the victory. Here too, the sentence is felicitous if the victory is interpreted as a literal quote.

The fact that a CP in O can only have a quote interpretation, not the more common factive and propositional interpretation, shows that factive and propositional CP-complements do not bear the same semantic relation to the selecting verb as DP-complements. This raises the question what kind of semantic relation there is between a verb and its factive or propositional complement, and how this relation is expressed syntactically. Before answering this question, I discuss some differences between factive and propositional CPs.

5. Factive and propositional CPs

A CP is factive if its truth is presupposed and propositional if its truth is not presupposed (Kiparsky and Kiparsky 1970). A verb selecting a CP may have a preference for a propositional complement, e.g. think, for a factive complement, e.g. admit, or it may allow both types of complements, e.g. say. I concentrate on Dutch for the moment, returning to English in section 7. Dutch has a position, Y in the abstract underlying order SYOVX, that only allows factive CPs (5a,b). A propositional complement is ungrammatical in Y (5c,d), and a CP-complement of a verb that allows both types of CPs is disambiguated (5e,f).
(5)  

a. Jan zal nooit toegeven [\textsubscript{CP} dat ie gelogen heeft]. \hspace{1cm} \textit{factive}
John will never admit \hspace{0.5cm} that he lied \hspace{0.5cm} has
‘John has lied and he will never admit that.’

b. Jan zal [\textsubscript{CP} dat ie gelogen heeft] nooit toegeven. \hspace{1cm} \textit{factive}
John will \hspace{0.5cm} that he lied \hspace{0.5cm} has \hspace{0.5cm} never admit
‘John has lied and he will never admit that.’

c. Jan zal wel vinden [\textsubscript{CP} dat Piet geschikt is]. \hspace{1cm} \textit{propositional}
John will certainly find \hspace{0.5cm} that Pete eligible is
‘John will have the opinion that Pete is eligible.’

d. *Jan zal [\textsubscript{CP} dat Piet geschikt is] wel vinden. \hspace{1cm} \textit{propositional}
John will \hspace{0.5cm} that Pete eligible is \hspace{0.5cm} certainly find

I. ‘John will tell that he has seen her.’ \hspace{1cm} \textit{propositional}
\hspace{1cm} (which may or may not be true)

II. ‘John has seen her and he will tell that.’ \hspace{1cm} \textit{factive}

e. Jan zal vertellen [\textsubscript{CP} dat ie haar gezien heeft].
John will tell \hspace{0.5cm} that he her seen has

I. ‘John will tell that he has seen her.’ \hspace{1cm} \textit{propositional}
\hspace{1cm} (which may or may not be true)

II. ‘John has seen her and he will tell that.’ \hspace{1cm} \textit{factive}

f. Jan zal [\textsubscript{CP} dat ie 'r gezien heeft] niet vertellen.
John will \hspace{0.5cm} that he her seen has \hspace{0.5cm} not tell

I. *‘John will not tell that he has seen her.’ \hspace{1cm} \textit{propositional}
\hspace{1cm} (which may or may not be true)

II. ‘John has seen her but he will not tell that.’ \hspace{1cm} \textit{factive}

The claim that sentences like (5b) are acceptable is controversial. To be sure, (5b) is marked compared to (5a), but the vast majority of my informants (both linguists and non-linguists) has a sharp contrast between sentences like (5b) on the one hand and sentences like (5d) on the other. The markedness of (5b) may have to do with the often reported fact that center-embedding makes processing more difficult, leading to a tendency to extrapose longer constituents.\textsuperscript{4} A similar effect shows up with PP-adjuncts that may precede or follow \textit{V} in the order SOV, but preferably follow \textit{V} if the PP is long. Another factor playing a role in the disagreement about the judgements is that there are hardly any CP-selecting verbs that completely disallow factive CPs; the only one that I have found is Dutch \textit{vinden} ‘have the opinion’ (5d). Even verbs that strongly prefer propositional complements, such as \textit{think} and \textit{expect}, turn out to allow factive complements, provided the right context. This can easily be shown by placing the complement of \textit{think} or \textit{expect} in \textit{Y}:

(6) Sue had [\textsubscript{CP} dat ze zwanger was] nooit gedacht/verwacht.
Sue had \hspace{0.5cm} that she pregnant was \hspace{0.5cm} never thought/expected
‘Sue was pregnant, and she would never have thought/expected that.’
Linearly speaking, there is almost a one-to-one correspondence of position and interpretation. A CP is factive in Y in the order SYOVX, quotative in O, and either factive or propositional in X. In the next section, I show that the linear position X is syntactically ambiguous between a complement and an adjunct.

6. Factive CPs are adjuncts

A number of well-known properties of factive and propositional CPs strongly suggest that factive CPs are adjuncts and propositional CPs complements. First, extraction of HOW is good out of propositional CPs but degraded out of factive CPs (cf. e.g. Bennis 1986). This is expected if the latter are adjuncts. Secondly, ECM-constructions and that-deletion in English are impossible with factive complements (Kiparsky and Kiparsky 1970), but possible with propositional complements. ECM presumably involves movement of the embedded subject to the matrix Spec,AgrOP, which is impossible from an adjunct. An empty C is the result of abstract C-incorporation (Ormazabal 1995), or may require government by V, both unavailable for adjuncts. Thirdly, the Sequence of Tense effects illustrated in (7) (Ormazabal 1995) follow if factive CPs are adjuncts.

(7)  
   a. Marie erkende gisteren dat ze is zwanger is.  
   b. Mary admitted yesterday that she is pregnant is.  
   c. *Marie dacht dat ze is zwanger is.  
   d. *Mary thought that she is pregnant is.

If we interpret these facts as indicating that the Tense of the embedded CP is dependent on the Tense of the matrix clause with propositional CPs but not with factive CPs, the explanation is straightforward. A propositional CP, as a sister of the matrix V, is within the c-command domain of the matrix Tense. A factive CP is an adjunct to some extended projection of the matrix verb. If this is the matrix TP, then a factive CP is outside of the c-command domain of matrix Tense. A fourth piece of evidence comes from principle C effects: 

(8)  
   a. *Hij verborg voor ons dat Ed, gekozen was.  
   b. We verborgen voor 'm dat Ed, gekozen was.

   ‘He was holding back from us that Ed, had been chosen.’
   ‘We were holding back from him, that Ed, was chosen.’
c. *Hij vond dat Ed intelligent was.
   he found that Ed intelligent was
   'In his view, Ed was intelligent.'  
   propositional

d. *Ik vond van 'm dat Ed intelligent was.
   I found of him that Ed intelligent was
   'In my view, Ed was intelligent.'  
   propositional

Extraction from the PPs is possible in (8), so the PPs are VP-internal. The contrast between (8b) and (8d) follows if VP-internal PP c-commands propositional CPs, but not factive CPs. The sentences in (8a,c) show that the matrix subject c-commands both propositional and factive CPs. From this, we can conclude that the level of adjunction of a factive CP is between the subject and the PP-complement, presumably higher than matrix TP.

A new piece of evidence comes from topicalization. Topicalization in Dutch is possible for phrases, not for heads. If a factive CP is an adjunct to VP, this predicts that VP, being phrasal, can be topicalized, stranding CP. If a propositional CP is a sister of V, this predicts that V, being a head, can only be topicalized with pied-piping of the embedded CP. These predictions are borne out, as (9a–d) show. This is further supported by the sentences in (9e,f), which show that when a verb allows both a factive and a propositional CP-complement, the propositional interpretation disappears when the verb is preposed.

(9)  
a. Ed zal wel [V vinden [CP dat Piet de winnaar is]].
   Ed will find that Pete the winner is
   'Ed's view will certainly be that Pete is the winner.'  
b. *[V vinden] zal Ed wel [CP dat Piet de winnaar is].
   find will Ed find that Pete the winner is
   propositional

c. Ed zal wel [[V toegeven] [CP dat Piet de winnaar is]].
   Ed will admit that Pete the winner is
   'Ed will certainly admit that Pete is the winner.'  
d. [V toegeven] zal Ed wel dat [CP Piet de winnaar is].
   admit will Ed admit that Pete the winner is
   propositional

e. Ed zal wel zeggen dat Piet thuis is.
   Ed will mean that Pete at.home is
   I. 'Pete is at home, and Ed will certainly say that.'  
   II. 'Ed will certainly say that Pete is at home.'  
   propositional

f. Zeggen zal Ed wel dat Piet thuis is.
   say will Ed say that Pete at.home is
   I. 'Pete is at home and Ed will certainly say that.'  
   II. **Ed will certainly say that Pete is at home.'  
   propositional
When in Y, factive CPs are adjuncts too (e.g., they are islands for extraction). Hierarchically speaking, then, there is a one-to-one correspondence between hierarchical position and interpretation: factive CPs are adjuncts to an extended projection of V, propositional CPs are right-hand sisters of V, and quotative CPs are in the position of DP-complements, Spec,AgrOP, as I claim below.

7. How syntax determines semantics

It is hard to see how the distribution and interpretation of the different types of CPs could be derived from the interaction between θ-theory and case theory. I therefore adopt the alternative for θ-theory developed in Barbiers (1995). The basic idea of this theory is that semantic relations are established by X-bar structure in the way defined in (10), not by θ-role assignment. For an LF-structure to be fully interpretable, the lexical relational structures of the terminals in the tree must be compatible with the semantic relations defined independently by the tree. The PSI in (10) must now be applied to the structures in (11).

(10) **Principle of Semantic Interpretation** (PSI; Barbiers 1995)
I. A node Z establishes a Semantic Relation between a node X and a node Y iff X immediately c-commands Z and Z immediately c-commands Y.
II. A node Z is a Qualifier (or property) of a node X iff Z establishes a Semantic Relation between X and Y, and X and Y are coindexed (where coindexed means: Y is a copy of X, or Y is agreement coindexed with X).

(11) a. **Factive**

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XP
  CP  XP_i
  XP  CP
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b. **Propositional**

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VP
  CP
  C  IP
  V
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c. **Quotative**

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AgrOP
  CP_i
  AgrO
  VP
  V_root
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In factive constructions, CP is generated as a left-hand adjunct to XP, an extended projection of V. XP moves into spec,CP. When the moved XP is spelled out in its base-position, CP surfaces in position Y in the linear order
SYOVX. When the moved XP is spelled-out in its landing site, CP surfaces in position X. Thus, we explain that a CP-adjunct may occur to the right of V even though right-adjunction is not available. The fact that factives cannot surface in Y in English follows from the assumption that XP must be spelled out in its landing-site in English. This assumption is needed anyway to explain why phrasal adjuncts generally cannot occur in the Mittelfeld in English (*John will in the garden work) and why two rigidly ordered PPs in English must occur in the order corresponding to the Dutch order after extraposition (Ed kissed Sue on her cheek on the platform vs. *Ed kissed Sue on the platform on her cheek).

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The structure in (11a) satisfies the second clause of the PSI: the moved XP immediately c-commands CP and CP immediately c-commands the copy XP. Therefore, CP is interpreted as a predicate of XP, rather than an argument of V, similar to the semantic relation in [DP What John admitted] was [CP that he was sick], where CP is a predicate of DP. Since factives are generated as adjuncts to an extended projection of V, they are outside the domain of existential closure. Therefore their truth is presupposed. In this respect, factive CPs pattern with scrambled DPs in Dutch, having a presuppositional interpretation. However, factive CPs cannot be equated with DPs: in the order SYOVX, DPs may occur in O and Y, but not in X, while factive CPs may occur in Y and X but not in O.

The structure for propositional CPs in (11b) satisfies the first clause of the PSI: V immediately c-commands C and C immediately c-commands IP. Therefore, C establishes a Semantic Relation C (V, IP). Taking seriously the well-known observation that finite complementizers are often homophonous with a demonstrative and modifying Ormazabal's (1995) proposal, I assume that the complementizer is interpreted as a demonstrative, i.e. it establishes a pointer relation between the event denoted by the matrix V and the eventuality denoted by the embedded IP. Thus, in Ed thinks that Peter is here, that points from the think-event to the eventuality ‘Peter is here’. This pointer can be seen as a directional relation between a given and a new point. I take this to mean that the embedded eventuality originates from the matrix event, i.e. the embedded eventuality does not exist independently from and prior to the matrix event. This entails that the truth of the embedded CP cannot be presupposed and that it cannot occur in position Y in the order SYOVX. In this respect, propositional CPs differ from factive CPs, which are predicates of the extended VP and therefore exist independently from the event denoted by the matrix V.

Given the assumption of section 3 that structures are built up by uniform leftward application of merge and move starting out with V, a propositional CP can be a right-hand sister of V because its core is a V: first, the embedded clause is built up starting with the embedded V, then the matrix V is merged. However,
we still have to explain why leftward merger of a propositional CP is impossible. This follows from the present proposal. The semantic relation between matrix event V and the embedded eventuality IP is established by C in a local configuration that obeys clause I of the PSI: V immediately c-commands C and C immediately c-commands IP. With leftward merger of CP, no such local configuration arises: in \[ \text{VP [CP C [IP ... ]] V} \], V does not immediately c-command C (even if we allow leftward c-command, IP is a closer c-commander for C than V. Hence, C cannot be interpreted as a relation between matrix V and embedded IP. This analysis predicts that a language can only have a propositional CP to the left of V if this language has right-peripheral complementizers. As far as I know, this prediction is correct. Japanese is a case in point.

The configuration in (11c) is the ordinary structure for DP-complements. It is a further elaboration of Hale and Keyser’s idea that an internal argument is a subject of the root of V. Note that the configuration in (11c) satisfies clause II of the PSI: CP immediately c-commands \( V_{\text{root}} \) and \( V_{\text{root}} \) immediately c-commands \( \text{Agr}_i \), which is coindexed with CP. Thus, the configuration defines \( V_{\text{root}} \) as a property of CP, such that CP must be interpreted as an element of the set denoted by \( V_{\text{root}} \). It is also clear now why embedded clauses in spec,AgrOP need such a special context to be interpretable as a quote. Embedded clauses are bad quotes, because their head C must denote a relation but is missing the first argument of this relation when in Spec,AgrOP.

The proposed theory gives a principled and detailed explanation of the distribution and interpretation of CP-complements. What does not immediately follow is that a verb with a factive or propositional DP-complement cannot at the same time have a DP-complement.\(^9\) However, there are many cases in which the presence of one constituent blocks the presence of another, despite the fact that the two constituents are not competing for the same \( \theta \)-role, case or position:

(12)

a. We weten dat Ed langzaam/aan Marie denkt.  
   we know that Ed slowly/of Mary thinks  
   ‘We know that Ed thinks slowly/of Mary.’

b. We weten dat Ed denkt [CP dat ie zal winnen].  
   ‘We know that Ed thinks that he will win.’

c. *We weten dat Ed langzaam denkt dat ie zal winnen.  
   *‘We know that Ed slowly thinks that he will win.’

d. *We weten dat Ed aan Marie denkt dat ze zal winnen  
   we know that Ed of Mary thinks that she will win

The adverb \textit{langzaam} in (12a) does not need case or a \( \theta \)-role from the verb; it is in an adjunct-position. The PP \textit{aan Marie} in (12a) does not need case or the CP’s \( \theta \)-role either, and does not occupy the same position as the CP in (12). Still, the
adverb and the PP cannot cooccur with a CP-complement, even though there is a conceivable interpretation (12c,d). Neither traditional theories, nor the present proposal directly explain these blocking effects. I leave them for future research.

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Notes

1. Since infinitival CP-complements give rise to reordering processes that complicate matters considerably, this paper is restricted to finite CP-complements.

2. Another GB-analysis is Bennis and Hoekstra (1984), in which only case assignment, not theta-role assignment is directional. This captures the distribution of PPs and DPs, but not of CPs.

3. In fact, it is likely that O is the unmarked position of a quote, just like O is the unmarked position of a DP-complement. Unlike CPs and PPs, quotes and DPs in X must have their own complete intonational contour, which suggests that they constitute separate intonational phrases. In this respect, quotes and DPs in X pattern with e.g. parentheticals. In O, however, a DP or quote does not need to be a separate intonational phrase (cf. 4a-d), which is supported by the fact that a quote in O may trigger t-deletion in a consonant cluster, unlike a quote in X (Jeroen van de Weijer, p.c.). Nespor and Vogel (1986: 188) claim that independent intonational phrases are not attached to the syntactic tree at S-structure. It is plausible that DPs and quotes in X are not part of the syntactic structure of the sentence. They are more like afterthoughts, which show exactly the same prosodic effect. Assuming that right-peripheral DPs and quotes are afterthoughts, not part of the syntactic structure of the sentence, I will not discuss this type of constituents any further.

4. A comparable situation obtains in German (Katharina Hartmann, p.c.): a factive CP in Y is marked but reasonably acceptable, whereas a propositional CP receives two question marks.

5. For reasons that are unclear, variable binding gives rise to varying judgements. A further observation is that matrix negation can license an NPI in a propositional CP, but not in a factive CP. This would follow if factive clauses are adjoined higher than matrix NegP. However, factive CPs seem to be opaque for NPI licensing, on a par with adnominal relative clauses: even a negative subject c-commanding a factive CP cannot license a NPI in that CP. I have no insights to offer here.

6. The anonymous reviewer agrees with the contrasts in (9a–d), but does not accept preposability as a property that distinguishes between factive and propositional constructions, since the sentences in (i) are grammatical despite preposing of a propositional verb with stranding of its CP-complement.
Hopen zal ik nooit dat jij mij gelijk geeft.
'I will never hope that you agree with me.'

Verwachten zal ik nooit dat jij mij gelijk geeft.
'I will never expect that you agree with me.'

(i-a) is not a counterexample, as the verb *hopen* 'hope' belongs to a class of complex verbs of the type [er-P]-V-CP, in which CP is an adjunct and [er-P] can be silent: (erop) *hopen dat* 'hope for it that', (ervoor) *vrezen dat* ... 'fear for it that', (ervan) *schrikken dat* ... 'be shocked of it that'. Since CP is an adjunct in these cases, VP can be preposed. The adjuncthood of CP does not imply that it must have a factive interpretation; factive CPs are adjuncts, but the reverse need not be true. With *hopen*, the semantics is more complex: there are also semantic relations established by the (silent) PP. The verb *verwachten* 'expect' in (i-b) can have a propositional or a factive complement (cf. the examples in (6)). Therefore, the prediction is not so much that (i-b) is ungrammatical, but rather that it is disambiguated, i.e. factive. Moreover, there is interference with a third reading of *verwachten* 'expect', which can be made explicit with a PP with *van* 'from', as in / I expect from you that you will be on time. If the latter reading is filtered out, the result is unambiguously factive indeed:

Verwachten zal Jan wel dat ie erg intelligent is.
'I. 'John is very intelligent and he will expect that (as the outcome of the test).' II. *'John expects to be very intelligent (and we don’t know if that is the case).*'

Since the judgements of my informants on these preposing contrasts are quite systematic and robust, regardless of the matrix verb tested, they are strong evidence for the proposed analysis.

This equals the VP-Intraposition analysis of PP-Extraposition in Barbiers (1995). There, I show that VP-Intraposition is the only possible analysis of extraposition.

For reasons of space I cannot go into the technical details. The definition of c-command used is a modified version of Kayne (1994): a node X c-commands a node Y iff X and Y do not dominate each other and there is a (connected) path of left-branches from Z, the minimal node dominating X and Y, to X. See Barbiers (1995) for ample empirical motivation of this definition.

I do not take constructions like *I regret it that John is here* to be cases in which there is both a DP-complement and a factive clause. In such constructions, the *that*-clause must constitute its own intonational phrase, unlike constructions without *it*. I assume that right-peripheral constituents that must form a separate intonational phrase are afterthoughts and do not belong to the syntactic structure of the sentence. See also footnote 3.
References