

Remarks on Parentheticals

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1 Introduction

An assumption which has often been made in the linguistic literature is that the logical objects of verbs of saying (knowing, believing, etc.) are literally their syntactic direct objects, i.e., complements. For example,

(1) Fred said that he would come

has the structure¹

(2) Fred [_{VP} said [_{CP} that he would come]]

There are other cases in which the proper structure is not as clear. For example, in German certain cases of reported speech exceptionally have V-2 (i.e., main clause) word order in the ‘subordinate’ clause:

(3) Hans meinte, er würde zu spät kommen
Hans opined he would too late come

These appear to allow extraction from the ‘subordinate’ clause, as in

(4) Welche Studentin, meinte er, wollte gestern einen Vortrag halten?
which student, opined he, wanted yesterday a lecture to-give

and there has been a long debate in the literature as to whether such sentences have the same structure as ordinary (long-distance) extraction or whether ‘meinte er’ is a parenthetical, similar to

(5) Welche Studentin wollte gestern, meinte er, einen Vortrag halten?

Reis (1995) differentiates between two classes of parentheticals, integrated, as in (5), and unintegrated, as in

(6) Jetzt wohnt sie --- wen wundert's? --- in Bonn [her (6)]
Now lives she whom amazes-it in Bonn

She argues on the basis of numerous properties that the ‘embedded’ verb-second cases such as (4) fall together with the ‘integrated’ parentheticals (5), rather than true WH-extraction (which exists for certain speakers of German with ‘daß’ complements) and that the apparent subordinate clause is in fact the main clause.

This leaves us with the question as to what the proper structure of these constructions really is. By investigating this we hope to shed some light on what the structure of ‘integrated’ parentheticals in general is. In this paper we have nothing more to say about unintegrated parentheticals such as (6), assuming that they are truly an ‘aside’ and devote our attention to the integrated sort, which interact with the rest of the sentence with respect to several syntactic phenomena, suggesting that they are structurally integrated syntactically with the rest of the sentence. We distinguish two sorts, following Reinhart (1983) as developed in Corver (1994), subject- and speaker-oriented (the latter with two sub-types), and claim that they have different syntactic structures, accounting for their differing properties.

To account for this, we adopt the theory of adjunct (modifier) licensing from Kolb & Thiersch (1991) and employ the strategy used to account for asymmetrical coordination in Thiersch (1993/94), analyzing them as adjuncts. This is briefly summarized in section 2. In section 3 we review the evidence, chiefly from Dutch; in section 4 we discuss cross-categorial attachment of parentheticals and their internal structure, and in section 5 we suggest how the structure could be integrated into the sentence and discuss some problems for our treatment.

2 Licensing of Adjunct Structures

The basic traditional assumption about coordination is that it is the joining of ‘like’ entities. This has been challenged by data like the much discussed

(7) Fred is a Republican and proud of it.

These and other examples have made it less clear precisely what ‘like’ means. Höhle (1990) and others have discussed examples of another sort, namely

(8) Wenn jemand nach Hause kommt und da steht der Gerichtsvollzieher vor der Tür,...
If someone to house comes and there stands the bailiff before the door
‘If someone comes home and the bailiff is standing there in front of the door, ...’

Höhle shows that both clauses are under the scope of the subordinator ‘wenn’, hence one expects both to have verb-final word-order, and not, as in the example, verb-second (main clause) order. Under the usual assumptions, it would appear an IP has been conjoined with a CP. A related phenomenon, much discussed in the Germanic literature, occurs in main clauses:

(9) Gestern kamen [ein paar Studenten], und verteilten e_i Flugblätter

yesterday came a few students and distributed *gap?* pamphlets

Here both conjuncts, being main clauses, have verb-second order. Hence it cannot literally be a conjunction of two VPs with a shared subject, under the usual assumptions, namely that the finite verb has moved out of the VP to a higher (clause second) position. Höhle shows that the adverb *gestern* in (9) is *not* shared, precluding an analysis of, say, two Cs. In any case, the second clause has an unexplained subject gap. These constructions have a number of additional remarkable properties, such as allowing extraction from the first but not the second conjunct, violating the ‘Across-the-Board’ restriction.

We will not go into the extensive literature and alternative analyses here; for discussion see Thiersch (1993/4) or Büring & Hartmann (1998). For our purposes here, it suffices to outline the general approach of the analysis in Thiersch (1993/4). Assuming that ‘adjuncts’ in the sense of modifiers are always licensed semantically by having at least one unsaturated position and that, aside from some problematical cases which we return to below, this position is ‘made available’ as the top Specifier position, visibly in the case of relative pronouns, invisibly in the case of moved operators or phonetically empty pronominals. Such structures can be integrated into a larger structure by coindexing the specifier position with some element in the larger structure, for example the head of the larger structure (the default) or with another element by predication. Vice versa, a structure of this type, an XP with an empty element in the Spec,XP position is a candidate for an adjunct (modifier) if the other appropriate conditions are met.

In the case of the ‘asymmetrical’ coordination discussed by Höhle, it was assumed in Thiersch (1993/4) that 1. coordinating elements are functional heads (as is common nowadays) which percolate certain features of their satellites (i.e., the elements in ‘Spec’/‘Comp’ positions), 2. the similarity requirement for the satellites of the coordinator involves identity of semantic status (argument, predicate, or assertion) and bar-level, but not category, and 3. that the second clause was actually an adjunct: a coordinate structure with an empty left satellite, coindexed in the usual manner with the head of the larger projection. For example, (8) would have the structure

(10) [Wenn [jemand nach Hause kommt]_i [e_i und da steht der Gerichtsvollzieher vor der Tür]]

where is a coordination of two propositions, the first empty. Hence it is per definition an open predicate on e_i and can function as a sentential modifier of the clause [jemand ...kommt]_i. From this follow all of the observed properties (verb-second, opacity for extraction, the semantics, etc.) of the construction in (8) as well as, *mutatis mutandis*, those of the subject-gap construction in (9). Our suggestion is to analyze the various integrated parentheticals along similar lines, with certain crucial differences. For example, we might tentatively assume the structure of the parenthetical in (5) above to be

(11) [OP_i [meinte er e_i]]

This would qualify it as a potential adjunct, i.e. a sentential modifier in (5) and possibly (4), following the same reasoning as above for coordinate cases. This gives the correct semantic reading,² as well as allowing the question *Welche Studentin wollte gestern einen Vortrag halten?*

the status of main clause.³

While it might seem that one could integrate parentheticals of saying in this way directly into the sentence, the situation seems to be somewhat more complex. As Corver (1994) noted, these parentheticals have different properties depending upon whether they are ‘subject oriented’ or ‘speaker oriented’ in the sense of Reinhart (1983). In the next section we will discuss these two sub-types of parentheticals, giving an overview of the major characteristics.

3 Two types of parenthetical clauses

3.1 Subject-oriented vs. Speaker-oriented Parenthetical clauses

As was first pointed out in Reinhart (1983), a distinction should be made between two types of parenthetical clauses: (i) Subject oriented Parenthetical CLauses (SU-PCL) and (ii) Speaker oriented Parenthetical CLauses (SP-PCL). The distinction between the two types can be best explained on the basis of an illustrative pair of examples from Dutch (‘A’ stands for Speaker A, ‘B’ for Speaker B).

- (12) a. Jan is gezakt, vrees ik
John has failed (the examination), fear I
- b. A: Wat vrees jij?
What fear you?
B: Jan is gezakt, vrees ik. SU-PCL
- c. A: Waarom huult Jan?
Why cries John?
B: Jan is gezakt, vrees ik. SP-PCL

The sentence in (12a) contains two propositions, namely *Jan is gezakt* and *ik vrees X*, where X is the object argument of the verb. The pragmatic ambiguity of this isolated bi-propositional sentence becomes clear when we consider its use in the small discourse-fragments (12b) and (12c). In (12b), the proposition *Jan is gezakt* is an indirect assertion attributed to the subject of the PCL. The ‘main’ assertion of the clause is [I fear X], and the proposition *Jan is gezakt* is in a sense subordinate to the other proposition. The subordinate relationship is also clear from the fact that it is paraphrasable by a *dat*-clause.

- (13) A: Wat vrees jij?
What fear you
B: Dat Jan gezakt is, vrees ik.
That Jan failed has, fear I

In (12c), we seem to have a pragmatic structuring which is the reverse of that in (12b). The main assertion of the sentence is *Jan is gezakt* and the proposition expressed by the PCL functions as the speaker's commentary to his assertion, e.g. to weaken or strengthen the assertion, to characterize his or someone else's attitude towards the assertion, and so forth. So, in (12c), the speaker asserts that Jan has failed, and to further qualify his assertion he adds 'I fear.' That the relationship between the two propositions is not characterizable as subordinate is clear from the fact that it is not paraphrasable by a *dat*-clause.⁴

- (14) A: Waarom huilt Jan?
Why cries John?
B: * Dat Jan gezakt is, vrees ik
That John failed has, fear I

Thus far we have seen that SU-PCLs differ from SP-PCLs as far as their pragmatic structuring is concerned. In what follows we will present several phenomena which demonstrate the different behavior of SU-PCLs, on the one hand, and SP-PCLs, on the other.⁵ From these differences in behavior we may conclude that the two types of parenthetical clauses probably involve different structural representations.

A first contrast concerns the possibility of *backward pronominalization* (see Reinhart 1983). As shown by the following examples, backward anaphora is obligatory with SU-PCLs. Coreference between *Jan* and the pronoun *hij* is impossible if the former precedes the latter.

SUbject-oriented:

- (15) A: Wat vreesde jouw broer?
What feared your brother
- a. B: * Jan_i was gezakt voor het tentamen, vreesde hij_i
Jan had failed for the exam, feared he
- b. B: Hij_i was gezakt voor het tentamen, vreesde Jan_i
- (16) A: Wat zei jouw broer tegen de dokter?
What said your brother to the doctor
- a. B: * Jan_i voelde zich niet lekker, zei hij_i
Jan felt himself not well, said he
- b. B: Hij_i voelde zich niet lekker, zei Jan_i

Constructions containing a SP-PCL behave differently with regard to backward pronominalization. As shown by (17) and (18) forward pronominalization is (strongly) preferred in Dutch.⁶

SPeaker-oriented:

- (17) A: Waarom huilde jouw broer zo?
Why cried your brother so
- a. B: Jan_i was gezakt, vreesde hij_i
- b. B: ?? Hij_i was gezakt, vreesde Jan_i
- (18) A: Waarom bibberde jouw broer zo?
Why shivered your brother so
- a. B: Jan_i voelde zich niet lekker, zei hij_i
- b. B: ?? Hij_i voelde zich niet lekker, zei Jan_i

Another asymmetry between a SU-PCL and a SP-PCL is that in the former a pronoun contained in the matrix (i.e. non-parenthetical) clause can get a reading as a variable bound by the quantificational noun phrase contained in the PCL. Thus, in (19), the pronoun *hij* can be interpreted as a variable bound by the quantifier *iedereen*. As exemplified by B's answer in (20), a bound variable reading is excluded if the quantifier is contained within a SP-PCL.

- (19) A: Wat verwachtte iedereen eigenlijk?
What expected everyone really
B: Hij_i zou worden ontslagen, verwachtte iedereen_i
He would be fired, expected everyone
- (20) A: Is de sfeer goed in dit bedrijf?
Is the atmosphere good in this firm
B: ?* Nee, hij_i zou worden ontslagen, verwachtte iedereen_i
No, he would be fired, expected everyone

Another difference between SU-PCLs and SP-PCLs relates to the scope of the negative element *niet* in the expression *of toch niet* ('or yet not'), which expresses doubt on the part of the speaker with respect to the proposition uttered. Whereas in the SU-PCLs the entire sentence falls within the scope of the negation: in (21) the string in small caps falls within scope of negation. A SP-PCL falls outside: that is, in Speaker B's utterance in (22), *niet* negates only the proposition *Marie maakt een goede kans*; the proposition *Jan said X* falls outside its scope.

- (21) A: Wat heeft jouw broer tegen Marie gezegd?
what has your brother to Marie said
B: Hij vond haar aardig, zei Jan, of toch niet
he found her nice said Jan, or yet not
Reading: 'Or didn't he say after all that the liked her'
- (22) A: De sollicitatiegesprekken zijn begonnen

The (employment-)interviews are begun
B: Marie maakt een goede kans, zei Jan, of toch niet
Marie makes a good chance said Jan, or yet not
Reading: 'Or doesn't she have much of a chance'

The two constructions also have rather different phonological contours. The subject-oriented cases are pronounced similarly to direct quotes, whereas the speaker-oriented cases have the intonation of a sentence with an adverb. Due to space limitations, we refer the reader to results of M.-L. Kean, discussed in Reinhart (1983), p. 178-79. Similar remarks apply to the intonation difference in Dutch.

On the basis of the various asymmetries discussed above and others in Reinhart (1983), it seems fair to conclude that a distinction should be made between two types of Parenthetical Clauses, viz. Subject oriented ones (SU-PCL) and Speaker oriented ones (SP-PCL). This distinction in grammatical behavior is arguably related to a difference in the external syntax (i.e. their syntactic integration/attachment) of the two types of parenthetical clauses. Before becoming more specific on the issue of the syntactic integration of the parenthetical clause, we would like to review arguments for a grammatical property which the SU-PCL and the SP-PCL share, namely that both involve operator movement, i.e. A-movement to Spec,CP. (Cf. endnote 3)

3.2 A-movement within the parenthetical clause

Let us first motivate the application of Operator movement within the SU-PCL. First of all, as exemplified in (23), there is obligatory inversion of the subject and the finite verb. This phenomenon is characteristic of clausal structures involving A-movement of an operator to Spec,CP, e.g. movement of a [+WH] direct object-DP to Spec,CP (as e.g. in Speaker A's utterance in (23)).

- (23) A: Wat zei Jan?
What said Jan
B: Hij was bang voor honden, zei Jan/*Jan zei
He was afraid of dogs, said Jan/*Jan said

Secondly, as with other A-dependencies, the relation between the A-operator and the gap appears to be unbounded (cf. Chomsky 1977).

- (24) A: Wat hoopte Marie dat Piet zou zeggen?
What hoped Marie that Piet would say
B: [Hij hield van haar]_i hoopte Marie dat Piet *e_i* zou zeggen
He loved of her hoped Marie that Piet *e.c.* would say

Thirdly, the relation between the gap and the element in Spec,CP displays island-sensitivity. The following ill-formed examples exhibit violations of the Complex NP constraint (25a) and the Wh-island constraint (25b).

- (25) a. A: Wat had jij gehoord?
 What had you heard
 B: *[Jan hield niet van lever]_i, hoorde ik [het gerucht dat Marie *e_i* had geroepen]
 John liked not of liver, heard I the rumour that Mary *e.c.* had shouted
- b. A: Wat vroeg Jan zich af?
 What wondered Jan *refl prt*
 B: *[Hij hield niet van lever]_i, vroeg Jan zich af [waar hij *e_i* gehoord had]
 He liked not of liver, wondered Jan *refl prt* where he *e.c.* heard had

Finally, an adjunct clause which is part of the parenthetical expression may contain a parasitic gap. Under the assumption that parasitic gaps are licensed in A-movement contexts, we can conclude that Operator movement has applied within the parenthetical clause.

- (26) A: Wat deedde Jan mee aan zijn hoogleraar?
 What announced Jan PRT to his professor
 B: [Hij was een Minimalist]_i, deedde Jan [na lang *e_i* verzwegen te hebben] *e_i* mee aan zijn hoogleraar
 He was a Minimalist, announced Jan [after long *p.g.* kept-silent to have] *e.c.* PRT to his professor

Turning now to the SPEAKER oriented parenthetical clauses we see that the same A-diagnostics hold. This is shown by the utterance of speaker B in the examples in (27)-(30). Importantly, the discourse context provided by speaker A's question indicates that the parenthetical clause is not part of the main assertion. The proposition expressed by the PCL functions as the speaker's commentary to his assertion. (27) illustrates the obligatory inversion of the subject and the finite verb in sentence final SP-PCLs, which indicates that they involve operator movement.⁷ (28) illustrates the apparent unbounded relationship between the gap and the moved operator. The examples in (29) show that the parenthetical clause displays island effects (i.e., Complex NP effect (29a)) and Coordinate Structure Constraint effect (29b)), which suggests that (wh-)movement is involved. Finally, (30) exemplifies the occurrence of parasitic gaps in adjunct clauses contained within a speaker oriented parenthetical clause.

- (27) A: Het licht is al vroeg uit.
 The light is already early out
 `The light has been turned off early.' B: Jan en Marie zouden vroeg naar bed gaan, zeiden ze/*ze zeiden
 Jan and Marie would early to bed go, said they/*they said
- (28) A: Waarom huilde jouw broer?
 Why cried your brother
 B: [Jan was van streek geraakt door het ongeluk]_i, geloof ik dat ie *e_i* zei
 Jan was upset got by the accident, believe I that he *e.c.* said
 `Jan got upset by the accident, I believe he said.'

- (29) a. A: Houdt jouw broer van klassieke muziek?
Loves your brother of classical music
B: *Nee, [Jan luistert liever naar Jazz],_i geloof ik [de bewering dat ie me ooit e_i heeft verteld]
No, Jan listens preferably to Jazz, believe I the claim that he me once *e.c.* has told
- b. A: Wordt hier veel naar klassieke muziek geluisterd?
Is here much to classical music listened
'Does one listen much to classical music here.' B: *Ja, [Jans kinderen zijn dol op klassieke muziek],_i [[stond hij op] en [zei hij e_i]]
Yes, Jan's children are fond of classical music, stood he up and said he *e.c.*
- (30) A: Gaat jouw broer graag in dienst?
Goes your brother willingly in army
B: Nee, [*Jan* is een pacifist],_i (zo,) gaf *hij* laatst [na lange tijd e_i verzwegen te hebben] e_i
toe
No, J. is a pacifist, (so) gave he recently after long time *p.g.* kept-silent to have *e.c.* to
NB: *gave ...to* = 'admitted'

We hence conclude that SP-PCLs and SU-PCLs do have one important syntactic property in common: the application of operator movement (to Spec,CP).

This observation is important, as another recent study of parentheticals, Steinbach (1999) assumes that some of these cases involve a *pro* generated in place. In his article, Steinbach makes a distinction between verb-initial integrated parentheticals (VIPs) with an interrogative host, like (5), and those with a declarative host, like most of those we have been discussing. He assumes, as we do, movement and dropping of a W-word (via 'Topic-drop') in VIPs with interrogative hosts. He notes that it would be preferable to have a uniform analysis of the two sorts, but argues against extending this analysis to those with declarative hosts. His arguments are threefold:

1. Semantics: it is natural to interpret the host clause as an restriction on the moved W-word, unlike a putative moved D-word.
2. Those with declarative as opposed to interrogative hosts allow *so* and *wie* parentheticals, but one would not expect these words to be subject to 'Topic-drop', because they are not in 'sentence-initial' position [*sic.*]
3. Thirdly, they share the restriction of embedded V-2 clauses, that the embedded V-2 clause must be [- propositional] and hence cannot be a topic, again ruling out 'Topic-drop' as a source for the construction.

We agree with the last point, namely that the verb of the parenthetical must be one that takes non-factive complements. In fact, this is crucial to our analysis; see the discussion in the next section. However, the above evidence shows that, at least in Dutch, the inverted cases involve A-movement. Presumably this carries over to German; it is easier to test for A movement in Dutch, as long-distance movement is decidedly marked for some, but not all, speakers of German. In view of this, one needs to reconsider the first and second of Steinbach's points. With regards to the second, it could be that the *so* and *wie* are subject to a more general 'Vorfeld-drop' of which

sentence initial ‘Topic-drop’ is a more restricted sub-case. Or that the moved empty element has other properties, being an empty *so* instead of an empty D-word or W-word (see discussion below). As to the first, it will turn out that the semantics is going to be more complicated in any case, as we can see by the non-CP hosted parentheticals discussed below in section 4.1. Unfortunately a detailed discussion of this last point goes beyond the scope of this paper (but see remarks on the interpretation at the examples in section 4.2.1, page 17 and section 5.2, page 22).

Nevertheless, there are cases in which the only solution is apparently an *in situ* phonologically empty pronoun (although not necessarily *pro*, namely the host-final cases discussed in section 4.1 and 5.2).

3.3 The syntactic integration of Parenthetical Clauses

Having pointed out an important similarity between the two types of parenthetical clauses, let us now return to the question of how they are integrated in the syntactic representation of which they are a part.

In the late sixties and early seventies, two major analyses were proposed concerning the syntax of sentences containing parentheticals. Ross (1973) suggests for English that a sentence like (31b) is derived from a sentence with an embedded ‘*that*’-clause. A transformation, called *Slifting*, chops the *that*-clause, deletes *that* and Chomsky-adjoins the clause to the left of the matrix S. Thus, starting from (31a), we end up with a structure like (31b):

- (31) a. [S₁ John said [S₂ that Bill was sick]]
 b. [S₁ [S₂ Bill was sick] [S₁ John said]]

An alternative analysis was proposed by Bresnan (1968) and Jackendoff (1972). They claim that parentheticals originate as sentence adverbs (in sentence final position). Thus:

- (32) [[S₁ John will be late] [ADV he said]]

Reinhart (1983) argues that the *Slifting* analysis is correct for those constructions containing SU-PCLs, whereas the adverbial analysis is correct for those constructions containing SP-PCLs. This difference between SU-PCLs and SP-PCLs with regard to their structural placement within the entire clausal construction is illustrated, using their terminology, in (33)--(34) for the (pragmatically ambiguous) Dutch example in (12a):

- (33) A: Wat vrees jij?
 What fear you?
 B: [S₁ [S₂ Jan is gezakt] [S₁ vrees ik]] (SU-PCL)
 Jan has failed, fear I

- (34) A: Waarom huil Jan?

Why cries John?

B: [[_{SI} Jan is gezakt] [_{ADV} vrees ik]] (SP-PCL)

Intuitively, if we translate these structures into more recent frameworks, the asymmetries between SU-PCLs and SP-PCLs as regards the Binding and scope of negation phenomena that we discussed in section 3.1 (cf. (15) through (20)) follow from these structural representations. Let us illustrate this for those constructions in which the PCL contains a quantified noun phrase which binds a pronominal contained within the non-parenthetical clause; for example, (19) and (20), repeated here as (35) and (36):

(35) A: Wat verwachtte iedereen eigenlijk?

What expected everyone really

B: Hij_i zou worden ontslagen, verwachtte iedereen_i (SU-PCL)

He would be fired, expected everyone

Structure: [_{CP_k} [_{CP_j} Hij_i zou worden ontslagen]_j [_{CP_k} verwachtte iedereen_i e_j]]

(36) A: Is de sfeer goed in dit bedrijf?

Is the atmosphere good in this firm

B: ?* Nee, hij_i zou worden ontslagen, verwachtte iedereen_i (SP-PCL)

No, he would be fired, expected everyone

Structure: ...[_{CP_j} hij_i zou worden ontslagen, [_{CP_k} OP_j verwachtte iedereen_i e_j]]

In (35), the proposition *hij zou worden ontslagen* originates as the complement to the verb *verwachtte*. Consequently, in its D-structure position, the (subordinate) direct-object clause is within the c-command domain of the quantifier *iedereen*, which is the subject of the main clause. If we assume, in line with current assumptions, that the preposed direct-object clause is reconstructed in its D-structure position (in terms of the Minimalist framework, leaves a layered trace), we get the right configuration (i.e. c-command) that is required for assignment of a bound-variable reading to a pronominal element.

In (36) the SP-PCL is base-generated as an adjoined phrase containing a moved empty operator OP, as suggested in section 2 above. Being an open predicate on OP, the operator OP in the Spec position is coindexed with the element it is predicated of, in this case the clause which it modifies. There is no reconstruction and hence the quantifier *iedereen* does not have the pronoun *hij* within its c-command domain. Consequently, a bound variable reading of the pronoun is excluded.

There are several potential objections (or qualifications) to such an analysis which we need to mention. Firstly, with regard to the direct extraction in (35), we would expect to have an intermediate step in the derivation like

(37) verwachtte iedereen [hij zou worden ontslagen]

If the subject *iedereen* is raised instead of the object clause, this would result in the surface form:

(38) iedereen verwachtte [hij zou worden ontslagen]

Some speakers find such embedded V-2 clauses less than optimal. We note however that these do occur freely in spoken Dutch, just as in spoken German:

- (39) Jeder erwartete, er würde ein Mädchen küssen
 every expected he would a girl kiss
 'Everyone expected he would kiss a girl.'

They are of course restricted to certain non-factive matrix verbs; for example, *vermoeden* 'assume', but not *betreuren* 'regret'. And these same differences in judgement are reflected in the inverted (SU-PCL) sentences:

- (40) a. Jan is ziek, vermoed ik
 Jan is sick, assume I
 b. Ik vermoed Jan is ziek
- (41) a. *Jan is ziek, betreur ik
 Jan is sick, regret I
 b. *Ik betreur Jan is ziek

A second potential objection is that if one entertains an analysis of fronted constituents involving an intervening operator, e.g.,

- (42) *Subject-oriented*
 [[*Hij* zou worden ontslagen]_i [_{CP} OP_i verwachtte_k *iedereen* *e_i e_k*]]

on analogy with left dislocations

- (43) [De man met de groene jas]_i, die_i ken ik
 the man with the green jacket that know I

then the structure is *formally* identical to that for the adjunct (SP-PCL) cases.⁸ We maintain, however, that both structures, the one in (35) and in (42), in fact exist for fronted constituents and can be distinguished, following a suggestion of H.-U. Block (*pers. comm.*). For example, bare quantifiers can only undergo direct extraction:

- (44) Direct extraction (no pause):
 a. Alle Äpfel hat er gegessen
 all apples has he eaten
 b. Alle hat er gegessen.

- (45) Extraction mitigated by OP/die (slight pause):

- a. Diese Äpfel, die hat er alle gegessen
these apples, D-word has he all eaten
- b. *Alle, die hat er gegessen.
- c. *Alle, OP hat er gegessen.

Furthermore, whether or not reconstruction takes place is a more complicated issue, which we also return to in section 5.1 below.

Before trying to resolve these issues, however, we note that there is a further kind of SP-PCL, namely one which occurs clause-internally, and can be ‘attached’ to hosts other than CP.

4 Parentheticals and cross-categorial attachment

4.1 Parentheticals hosted by projections other than CP

Corver (1994) pointed out that SP-PCLs can also combine with phrasal categories (XPs) other than CPs (henceforth: non-CP PCLs). Furthermore, the PCL can appear on both sides of the phrasal host. Finally, obligatory inversion applies within the PCL, if and only if it follows the phrasal host. In what follows, we will illustrate each of these characteristics. The first two characteristics are illustrated by the examples in (46), where the PCL is attached to a phrasal category that functions as an independent utterance. In each example, we have indicated the categorial nature of the phrasal host.

- (46)
- a. Waar is het boek? [Ik geloof op tafel] / [Op tafel geloof ik] (PP)
Where is the book? I believe on table / On table believe I
 - b. Wie heeft hij gezien? [Ik geloof de oude vrouw / De oude vrouw geloof ik] (DP)
Who has he seen? I believe the old woman / The old woman believe I
 - c. Wat heeft Jantje gedaan? [Ik geloof de TV gemold] / [De TV gemold, geloof ik] (VP)
What has Jantje done? I believe the TV broken / The TV broken, believe I
 - d. Wat is Jan volgens Marie? [Ik geloof slim] / [Slim geloof ik] (AP)
What is Jan according-to Marie? I believe smart / Smart believe I
 - e. Wat zei Jan? Ik geloof [dat hij zich niet lekker voelde] / [Dat hij zich niet lekker voelde] geloof ik (CP)

What said Jan? I believe that he self not well felt / that he self not well felt believe
I

One might object that in these examples the PCL is not attached to PP, DP, etc., but rather to an entire clause which is elided. In (46a), for example, the ellipsis would be the following (ellipted part indicated by capital letters: *Ik geloof [HET BOEK IS op tafel]; [HET BOEK IS op tafel] geloof ik*. This way, one could restrict attachment of PCLs to clausal constituents. As we will see below, however, there are structural contexts in which such an ellipted reading is not possible and which therefore strongly suggest that PCLs can take various phrasal categories as their host.

Importantly, the PCL forms a constituent with the phrasal host to which it is attached. This is shown by various empirical facts. First of all, the PCL can be part of a conjunct of a coordinate structure, as in (47). In (47a), for example, the PCL *geloof ik* is part of the left conjunct of the coordinate structure.

- (47) a. Waar stond deze stoel? [Tussen [de tafel geloof ik en de deur]]
Where stood this chair? Between the table believe I and the door
- b. Waar hebben zij een hekel aan? [Aan [fietsen geloof ik] en [aan kaarten]] hebben zij een hekel
What have they a dislike to? [To [cycling believe I] and [to playing-cards]] have they a dislike

Secondly, the PCL can be part of a left dislocated constituent. Observe the cross-categorical attachment of the PCL (the category of the host is given in parentheses).

- (48) a. [Op de tafel, geloof ik], daar liggen jouw sleutels (PP)
On the table, believe I, there lie your keys
- b. [Jan, geloof ik zei ze], die begreep er niks van (DP)
Jan, believe I said she, that (=he) understood there nothing of
- c. [Gedanst, geloof ik] dat had ze nog nooit (VP)
Danced, believe I, that had she thus-far never

Thirdly, the PCL can be part of the clefted constituent in cleft constructions:

- (49) a. Het was [(ik geloof) Jan (geloof ik)] die er niks van begreep
It was (I believe) Jan (believe I) who there nothing of understood
- b. Het was [(ik dacht) in Tilburg (dacht ik)] dat Jan onwel werd
It was (I thought) in Tilburg (thought I) that Jan sick got

Fourthly, the PCL can be part of the phrase moved to [Spec,CP] in relativization constructions:

- (50) de man [wiens moeder geloof ik] jij verpleegd hebt

the man [whose mother believe I] you nursed have

Notice finally that it can be attached to a modifying phrase internal to a prepositional or adjectival construction:

- (51) a. [(Ik geloof) tamelijk diep (geloof ik) onder de grond] leven van die enge beesten
(I believe) rather deep (believe I) under the ground live of these creepy animals
- b. [(Ik geloof) tamelijk goed (geloof ik) daarmee bevriend] is zijn zusje vroeger geweest
(I believe) rather well (believe I) there-with friendly has his sister formerly been

Thus both the pre-host PCL and the post-host PCL forms a constituent with the hosting phrase. The fact that SU-PCLs display cross-categorial attachment explains the existence of such examples as (52), in which we have multiple PCLs (hosts in boldface):⁹

- (52) Ik moet [**Jan** verwacht ik] [ik denk **morgen**] [**een plaatje** zeiden ze] overhandigen
I must [Jan expect I] [I think tomorrow] [a record said they] give

Consider, finally, the examples in (53) and (54). The former illustrate that inversion of the Subject and the finite verb is impossible if the PCL precedes its host; the latter show that inversion is obligatory if the PCL follows its host.

- (53) a. [Tussen [[*ik dacht* Tilburg] en [Amsterdam]]] wordt de weg opengebrouwen
Between I thought Tilburg and Amsterdam is the road open-broken
- b. *[Tussen [[*dacht ik* Tilburg] en [Amsterdam]]] ...
- (54) a. [Tussen [[Tilburg *dacht ik*] en [Amsterdam]]] ...
- b. *[Tussen [[Tilburg *ik dacht*] en [Amsterdam]]] ...

4.2 The internal structure of non-CP hosted Parenthetical Clauses

4.2.1 Host-initial cases

Having determined that SU-PCLs display cross-categorial attachment, let us next consider the internal syntax of these PCLs, starting with the inversion pattern. The crucial question here is: Which element is moved in these host-initial (i.e. XP-initial) parentheticals? One hypothesis would be to say that it is the host (i.e. XP) itself that is moved within the parenthetical clause. Schematically:

(55) [_{CP} XP_i [_C V_j [_{IP} Subj e_i e_j]]]

This hypothesis clearly cannot be maintained, as the whole constituent including the CP functions as an NP (DP), PP, etc., rather than a CP.

Before we consider alternatives, however, we should note several potential problems facing all similar solutions. The first problem concerns the Case carried by the host. In (56), for example, the pronominal host, *zij*, bears nominative case. If the host had originated within the parenthetical clause, such case assignment would be totally unexpected: Within the parenthetical clause, nominative case has already been assigned (say, by Tensed Infl) to the subject (i.e. the clitic-pronominal *ie*) following the inverted finite verb. Since nominative case cannot be assigned twice by Infl, it is unclear where the pronominal host *hij* gets its nominative case from. It cannot be assigned by the category V (*dacht*), since V assigns accusative rather than nominative.

(56) A: Wie begreep er niks van?
Who understood there nothing of
'Who didn't understand anything of it?' B: Zij dacht ie
She thought he
'She, he thought'

This can also be seen in German, where the case (here Dative) is that assigned by the elided verb; cf.

(57) A: Wem hat sie geholfen?
Whom-**dat** has she helped?
B: Dem Hans, dachte ich. (*Der Hans/*Den Hans ...)
The-**dat** Hans, thought I

This clearly shows the case is that which would have been assigned in the elided clause:

- (57)' Sie hat nur dem Hans, dachte ich, geholfen
she has only the-**dat** Hans, thought I, helped

A second potential problem for an analysis in which the host XP is considered to be the fronted element within the parenthetical clause comes from the following Binding facts:

(58) ?[*Jans_i moeder, dacht Jan_i], die zal 't nooit kunnen begrijpen
Jan's mother, thought Jan, that/she will it never be-able-(to) understand*

If *Jans moeder* were the fronted phrase, as depicted in (59), we would expect the representation to be out because of a violation of Principle C of the Binding Theory: in its reconstructed position, i.e. the complement of *dacht*, the name *Jan* would c-command the possessor *Jan* in *Jans moeder*.¹⁰

(59) ? [_{CP} [Jan_i's moeder]_k [_C dacht_j [_{IP} Jan_i e_k e_j]]]

A final problem for this analysis comes from Subcategorization. An analysis in which the host originates as a complement to the verb of the PCL faces the problem that the categorial status of the host is often incompatible with the subcategorization requirements of the verb within the PCL. This is exemplified in (60): If the PP *op Marie* were the fronted phrase, one would expect the verb *denken* to be able to select a PP (headed by *op*) as its complement. This verb, however, is not subcategorized for a PP headed by *op*.

(60) Op wie heeft Jan gerekend? [Op Marie denk ik]
On whom has Jan counted? On Marie think I

In conclusion, the hypothesis that the host XP is literally the fronted phrase within the PCL must be rejected. A more plausible analysis is the one depicted in (61):

(61) [_{XP} XP_i [_{CP} OP_i V_j [_{IP} Subj e_i e_j]]]

(where XP is the host, and OP the fronted operator)

Here, as in the clausal case, the parenthetical is an adjunct modifier. In this structure, a null operator has been moved to [Spec,CP]. Interestingly, this operator sometimes surfaces, namely as the pronominal form *zo* ('so'):¹¹

- (62) a. Jan heeft zich goed vermaakt, (zo) hoorde ik
Jan has himself well amused, (so) heard I
- b. Jan, (zo) hoorde ik, die heeft vreselijk hard gewerkt
Jan, (so) heard I, that/he has terribly hard worked
- c. [In Tilburg (zo) weet ik en in Amsterdam] heb je leuke kroegen
In Tilburg (so) know I and in Amsterdam have you nice pubs
- d. [Volgende week (zo) hoorde ik], dan komt er een nieuwe serie op TV
Next week (so) heard I, then comes there a new serie on television

We note in passing, that there is a potential (semantic) problem here. Namely the relation between *hij* and *zo*. Evidently, not literally one of coindexing; rather the *zo* is interpreted as referring to elided material:

- (63) Wie heeft het gedaan?
- a. Hij, denk ik
- b. *Zo, denk ik
- cf. ok: Hij, zo denk ik.

Note that this is consistent with the separate indexing in Steinbach (1999). As to the nature of the interpretation, see discussion on page 22 in section 5.2 below.

4.2.2 Host-final cases

Let us now turn to the internal syntax of those constructions in which the PCL precedes the phrasal host:

- (64) A: Wie heeft het gedaan?
Who has it done
B: Ik denk Jan
I think John

Here as well, an analysis according to which the phrasal host is a complement to the Verb of the PCL should be rejected immediately. It faces the same problems as the first analysis discussed above for the host-initial PCLs. For example,

- (65) A: Wie heeft hier 't meest verstand van?
Who has here the most knowledge of
B: [Ik denk, zij]
I think she

If the DP *zij* in (65) were a complement to the verb *denk*, we would expect the pronoun to carry accusative case and to be morphologically realized as *haar*.

A second potential piece of evidence against an analysis according to which the phrasal host is base-generated as a complement to the verb of the parenthetical clause comes from Binding Theory. Consider the following examples:

- (66) A: Wie heeft hier 't meest verstand van?
Who has here the most knowledge of
`Who has most knowledge of this?' B: ? *Jan_i* dacht [*Jans_i* moeder]
Jan thought Jan's mother

If *Jans moeder* were the complement to the verb *dacht*, we would expect this sentence to be out because of Principle C of the Binding Theory: the Name *Jan* would c-command the nominal possessor *Jan*. The relative well-formedness of (66) indicates that *Jans moeder* occupies a structural position which does not fall within the c-command domain of the subject *Jan*.¹²

In view of the above empirical problems we can conclude that the phrasal host should not be analyzed as a constituent internal to the parenthetical clause. Along the lines assumed for the host-initial cases, we will rather assume, with Corver (1994), that there is some sort of empty pronominal element (plausibly *pro_{zo}*) present within the complement position to the verb,

leaving the problems with this approach noted above for future investigation. Schematically:¹³

- (67) a. [[Ik denk *pro_zo*] zij]
b. [[Jan_i dacht *pro_zo*] [Jans_i moeder]]

Finally, we note another argument that the empty element is a sort of *pro_zo*: the normal ‘referential’ *pro* is that the normal ‘referential’ *pro* is not normally licensed in Dutch, especially not in the direct object position.

5 Integrating the parentheticals

Summarizing up to this point; we have distinguished two types of parentheticals: SUBJECT oriented (which are always linked to the entire clause), and SPEAKER oriented which may be linked semantically to the entire clause, but which may also be attached to another XP host. Hence there may be more than one non-CP SP-PCL per clause, and they may occur after the host, in which case inversion is obligatory, or before the host, in which case there is never inversion. While reconstruction with the non-CP hosted SP-PCLs is not an issue, with the clausal hosts it occurs only with the SUBJECT oriented cases.

5.1 Host-initial cases

We return to the question as to what structure these PCLs have, and how they are integrated into the sentence. The original suggestion of Corver (1994) was that the (non-CP hosted) SP-PCLs were also like the coordinate constructions, namely:

- (68) [_{XP} XP_i [_? K⁰ [_{CP} *pro*_i V_f NP_{subj}]]]

This was inspired in part by the existence of cases where the both the coordinate conjunction and *zo* surface:

- (69) Jan wil terug naar de hippytijd, [en zo denken er nog veel meer]
Jan wants back to the hippy-time, and so think there still a-lot more
‘Jan would like to go back to the days of the hippies, and there are a lot of other people who have that opinion’

This cannot be maintained for these non-CP hosted SP-PCLs. Firstly, it can't be coordination since strongly unlike categories (in the sense of section 2) are conjoined, e.g., an argument with an open predicate, unlike true coordinate structures, in which both satellites and the coordination as a whole must have the same function.

Secondly, there would be no reason for the coindexing under the coordination analysis: in the Höhle cases discussed in section 2, it's the (empty) left conjunct which is coindexed with the head of the host clause by means of the normal default rule for any adjunct-modifier. In (68), however, the specifier of the right element is coindexed with the left conjunct. One might propose that the functional head K^0 is of some other kind, on the analogy of relativizers or comparatives, but then we have too much structure: we would expect V-final order in the parenthetical, which is in fact never the case (unless this hypothetical functional category K is radically different from the relativizer or comparative elements).

Lastly, there is no coordinating element *en* possible in non-CP hosted (CP) cases, unlike the clausal cases:

- (70) Jan wil zijn zus, (* en) zo denk ik, als medewerkster aanstellen
 Jan wants his sister (and) so think I as co-worker to-hire
 'Jan wants, (*and) so I think, to hire his sister as co-worker'

Hence we provisionally adopt the structure in (61), namely a bare modifier similar to the structures for the second conjunct in the asymmetrical coordinations, with the difference that there is not obviously a mitigating functional head (other than the C containing the finite verb itself), and with the caveats noted above.¹⁴

The issue of reconstruction is probably the most vexed, as noted above. Although it seemed that the differences could be a result of focusing, as in Corver & Delfitto (1998), the host clause is focused in both cases, so this will not work. Some data tentatively suggest that we adopt Block's solution of ambiguous structures:

- (71) *[die foto van Jan_k] wil hij_k e_i gebruiken tijdens de vergadering
 that photo of Jan wants he *e.c.* to-use during the meeting
- (72) [die oude foto van Jan_k], (die) wil hij_k e_i gebruiken tijdens de vergadering
 that old photo of Jan (that) wants he *e.c.* to-use during the meeting

While coreference between *Jan* and *hij* seems impossible with continuous intonation, it seems possible with the Left Dislocation structure, or with the comma intonation, so we might adopt the solution that there is a direct extraction structure available in the SU cases.

Assuming that the problem of obligatory reconstruction of Topics can be solved (which it has to be in any case, independently of our proposal for parentheticals), the reconstruction facts and semantic interpretation follow immediately, as described above. If this is correct, however, there is then a strong prediction, namely, that there are no clause internal SU-PCLs.

This would seem to be the case in the Dutch examples; if we re-phrase examples (15--16), putting the parenthetical sentence internally, the result is quite peculiar with backward pronominalization (SUBject oriented interpretation):

- (15)' A: Wat vreesde jouw broer?

B: ?? Hij was gezakt, vreesde Jan, voor het tentamen.

- (16)' A: Wat zei jouw broer tegen de dokter?
B: ?? Hij_i voelde zich, zei Jan_i, niet lekker.

Cf. (17b):

- (17)' A: Waarom huilde jouw broer zo?
B: Hij was gezakt, vreesde Jan, voor het tentamen.

These judgements are more subtle than one might expect if the construction is impossible with the S**U**bject interpretation, hence this needs to be more thoroughly tested.¹⁵

5.2 Host-final cases

We return now to the problem of the structure of host-final SP cases, including the sentence initial cases discussed in Corver (1994). Let us first consider the non-CP hosted SP-PCLs. Are they really 'integrated' parentheticals in the sense of Reis (1995)? Reis's criteria are: (i) Verb-first

(ii) interpretational dependence on the host clause

(iii) prosodic integration into the host clause: a) no focus-background structure of their own
b) no stress/focus

c) no intonational breaks (i.e., no 'common intonation')¹⁶ Although they fail (i), they are clearly dependent on the host main clause, the crucial test is then (iii). Although they may have a focus, it is a focus peak for the main clause which, indeed, is nonsensical without the XP phrase, hence we have decided in favor of regarding them as integrated.

Assuming they are integrated parentheticals, the question is then how we can license a modifier structure of the sort XP where the empty category is *not* in Spec,XP; cf. structure (67) as opposed to (61). Recall that there cannot have been any movement in Dutch and German, otherwise the verb and subject would be inverted.) Structure (67) with the empty element internal to the adjunct is not a typical adjunct/modifier structure. We would like to suggest, without much discussion, that there is a precedent for this type of adjunct, namely so-called deletion-type relative clauses in languages like Japanese. While there has been much discussion in the literature claiming that there is some (covert) movement in these cases, there is also evidence suggesting that these are bare IP's and hence cannot host movement to Spec,CP. Kubo (1992) argues that N in Japanese can only take IP complements, hence if a real CP is required as in complement clauses, a dummy verb (meaning 'to say') is inserted:

- (73) [[[Hanako-ga hannin da] to] i-u] suisoku [her (56)]
H.-nom criminal be Comp say-pres guess
'a guess that Hanako is a criminal'

A relative clause, on the other hand, is a bare IP:

- (74) [Taro-ni/ga toranpetto-ga fuk-e-ru] tokoro [her (60a)]
 T.-dat/nom trumpet-nom play-pot.-pres. place
 ‘a place where Taro can play the trumpet’

Since there is no CP for extraction, the coreferential element in the relative clause is ‘deleted’; we suggest that it is an empty pronominal (which Japanese makes extensive use of), and that the conditions under which both the ‘deletion’ relatives and XP final parentheticals (67) can function as identity operators are the same.

This of course raises two issues, which go beyond the scope of this article: one is the status of the host-final cases with CP hosts, often viewed as normal clausal argument:

- (75) Mary thought surrepticiously, John really couldn't sing.

Is the extraposition analysis alluded to at the beginning in the first footnote actually a structure similar to what we have been assuming for integrated parentheticals?

Secondly, the literature on head-internal relative clauses (cf. Thiersch (2000) and references therein) suggests that in a number of languages, including Japanese, adjunct clauses are *not* necessarily licensed by direct indexing with another part of the syntactic structure; cf. (76) and numerous similar examples in the literature on Japanese and Korean:

- (76) John-wa [[[Mary-ga oranje-o sibottekureta] no] -o [e]] hitoiki-de nomihosita
 John+Top Mary+Nom orange+Acc squeezed Comp Acc in-a-gulp drank-up
 ‘John drank up [(the juice)]_i in a gulp which Mary squeeze the oranges (for *e_i*)’

Here the modifying clause is related to the (understood) direct object indirectly in the semantics, rather than by syntactic co-indexing. Examples such as these make the non-syntactic interpretation suggested above for the non-CP hosted parentheticals, where the *pro_{z0}* is related to the totality of the elided material, more plausible.

While this is suggestive, it goes beyond the scope of this paper, and such questions are a topic for future investigations.

6 Summary

In this essay, we have attempted to show that one can distinguish two structurally different types of ‘parentheticals’ subject- and speaker-oriented, building on earlier insights of Reinhart and others. We suggest that both involve (long-distance) movement in the clause. The former are closely related, if not identical, to cases in which the ‘host’ is the direct object of the verb of saying, the later are analogous to adverbs (note this coincides with the intonation facts discussed by Kean and Reinhart), accounting for the lack of reconstruction in the latter. Being licensed in a

manner similar to adverbs, the latter can occur multiply within clauses, non-initially, and with various non-CP hosts. In addition, these occur in non-inverted form, which does not involve movement of an OP. We assume there is a *pro_{zo}* generated *in situ* in these cases. We leave the exact nature of the ‘indexing’ which licenses the speaker-oriented parentheticals (as noted in the text) as a more general problem regarding adverbial in general.

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¹ Possibly with the CP 'extraposed', as is clear in languages like Dutch and German:

- Fritz hat e_i gesagt, [_{CP} daß er kommen wollte]_i
F. has said that he to-come wanted

² Actually this is not entirely straight-forward, especially in (4): it is unclear whether the adjunct (SP-PCL in our analysis) modifies the whole question or just *welche Studentin*, like the non-clausal SP-PCLs in discussed section 4.1 or is ambiguous between the two interpretations.

³ In their analysis of English quotative inversion (e.g. 'When on earth will he be fishing again?', asked Harry), Collins & Branigan (1997) propose a structure which is quite similar to the one in (11), cf. their (24)a-c. In their analysis, they assume (without discussion) that there is an empty operator in Spec,CP which binds a variable in A-position; cf. arguments

from Dutch below, which unfortunately cannot be duplicated in English, as we are dealing with two very different constructions, despite surface similarities. The English is exceptional short movement of a main verb in the overt syntax (as they show), whereas the Dutch (and German) parentheticals involve normal long movement of the verb (presumably to C⁰), which has quite different properties (see below).

⁴ In our analysis, because it *is* the main clause and hence cannot be a *dat*-clause.

⁵ See Reinhart (1983) for similar and additional tests showing a difference in behavior between the two types of parenthetical clauses.

⁶ In Reinhart (1983), it is implied that English only allows forward pronominalization in SP-PCLs, which contrasts with the Dutch judgements; upon further consideration, however, this seems not to be so. Cf. for example p.175: problem is that pronominalization is not separated from change of tense, and she doesn't use the labels SU/SP in examples (16)-(19) [her numbers]:

- (16) He_i would be late, John_i said. [SU -ct]
-
- (17)* He_i will be late, John_i said.
-
- (18)* John_i would be late, he_i said.
-
- (19) John_i will be late, he_i said. [SP -ct]
-

We note that the English 'sequence of tenses' is violated in the starred examples. Her (17) shows that one cannot change the tense if the sentence is to remain a report of what John said, nor the order of pronominalization (18). Both are possible however in (19), however, which is a SP parenthetical. But it seems that the *order* in (17) is fine as a SP oriented sentence: 'A: Where's John? B: He'll be late, John said, because his car is being repaired.' If I understand R's footnote 6 (continued on p.182) correctly, (viii) is Speaker oriented: (viii) She was the best student in the class Rosey said, but she isn't.

Note also that she has 'backward obligatorily' in her table under Subject oriented, but only 'forward' under the column Speaker.

⁷ Below we discuss a third type: clause internal parentheticals. Some of these do not invert, and hence do not involve operator movement. Neither do the clause initial parentheticals discussed in Corver (1994).

⁸ In their analysis of English quotative structures (e.g. 'When on earth will he be fishing

again?', asked Harry), Collins & Branigan (1997) propose a structure which is quite similar to the one in (42). In their analysis, the quote is a left-peripheral phrase which is plausibly base-adjoined to the main clause CP; they also assume that there is an empty operator in Spec,CP which binds a variable in A-position.

⁹ Note that this example needs a lot of help, intonationally, to be processable, but this does not detract from the theoretical point.

¹⁰ Actually, this is somewhat less than clear cut, as indicated by the '?'. Speakers differ, but roughly the cases with full noun-phrases seem to be better than those involving a pronoun:

- **[Jans_i moeder, dacht ie_i], die zal 't nooit kunnen begrijpen*
-

Similar remarks obtain for German, as well as (58). The same goes for the cases parallel to (66). Oddly, (66) itself seems less problematical than (58). However, whatever is going on with the full NP cases (perhaps the second serving as a pseudo-anaphor getting discourse reference), the hard condition-C cases involving pronoun C-commanding the (reconstructed) name seem to be out. We defer clarifying these judgements to future research.

¹¹ In their discussion of quotative inversion constructions in English, Collins & Branigan (1997) also observe the relationship between the overt pronominal element *so* and the fronted empty operator in quotative inversion constructions.

¹² Regarding the judgements, see discussion above in footnote 10. However, this case is different: the DP appears to be *in situ* and there is no reconstruction, hence the exception to Condition C is all the more surprising. This is, of course, predicted by our structure; cf. (67). This is another indication that the coindexing of the empty pronominal (67) is probably wrong and the *pro*-element is *zo*-like. (Cf. remarks in the previous section and at the end of the article.)

¹³ In certain constructions, this pronominal comes to the surface: E.g.

- Ik denk maar (*zo*): Morgen is er nog een dag
I think PRT *so*: tomorrow is there yet a day
-

The appearance of this pronominal at the surface is much more limited, however, than in host-initial constructions.

¹⁴ There remains the question of whether the clausal (CP) SP-PCLs are coordinate-like. If so, we then have radically different structures for the CP SP-PCLs and the non-CP (XP) SP-PCLs, not obviously a desirable result.

¹⁵ NB: The same goes for the English examples: although this is hard to test, since most important criterion is binding, and they are out with pronouns: ‘*said he’, and furthermore, real quotes (the examples in C+B) are not subject to binding, but rather discourse co-reference. Thus

- ‘She_i is lovely,’ said John of Mary_i

doesn't indicate lack of structural C-command between *she* and *Mary* but rather that the co-reference is semantic and not sentence internal; cf.

- ‘You_i are quite lovely,’ said John to Mary_i.

Note however, that quotative inversion does occur with indirect quotes (which Collins & Branigan do not discuss); pronouns in the quoting clause again are completely impossible (‘*...said he’; *pace* Reinhart; her example from e.e.cummings is a poem, intended to be archaic!), but Backwards Pronominalization is possible:

- He_i would come early, said John_i, if we needed him.

which, according to the criterion in the text, might be indicate a SU orientation. If we use uninverted parentheticals in English, we get the following.

- What did John really say? (SU)
 - a. *?John could come early, he said, if we needed him.
 - b. He could come early, John said, if we needed him.

looking as if it admits a subject-oriented interpretation. In the inverted case, the result is quite peculiar,

- What did John really say? (SU)
 - a. # He_i could come early, said John_i, if we needed him.

although it is not that good as an answer to the SP question either, probably because of a register clash:

- How can we start without John? (SP)
 - - a. ??He_i could come early, said John_i, if we needed him.

¹⁶ See discussion of intonation above page 7 and in Reinhart (1983).