## Sentence intertwining in Danish - a challenge to the RRG account?

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### 0. Introduction

The term *sentence intertwining* is used of complex constructions that form a subgroup within *extraction constructions* in which a constituent with syntactic function in a subordinate clause is placed initially in the matrix clause (the precore slot).

First I'll briefly present the four subcategories of sentence intertwining in Danish. In the second section, I'll apply the RRG-account to those subcategories and discuss whether they all can be adequately accounted for within that framework. In the third section, I'll present and discuss the features of Danish which determine the acceptability of the constructions in question.

Sentence intertwining is mainly used in spoken language. In written language it generally appears in interviews and other renderings of speech. Therefore, the empirical base for my research is spoken language, namely 9 conversational interviews (from a corpus of spoken Danish called *BySoc*, www.cphling.dk/BySoc), 2 conversations and a TV-programme about the last elections, a total of approximately 18 hours of speech. The total number of intertwining from this corpus is 230. Furthermore, I have included observations from my own daily life.

# 1. Four categories of sentence intertwining in Danish

The four categories of sentence intertwining are set up on syntactic and semantic criteria, as to the relation between the main clause and the subordinate clause.

In the first category, the subordinate clause is a complement to the verb in the matrix clause, you can see an example in (1), the underscore (\_) indicates the position of the initial element in a non-intertwined construction like the one in (2). Danish is a V2-language - so the finite verb must be in the second position in almost all main clauses:

- (1) det tror jeg bare (\_) er en gammel skrøne (BySoc) that think I just (\_) is an old cock-and-bull story 'that I think (\_) is just an old cock-and-bull story'
- (2) *jeg tror bare det er en gammel skrøne*I think just it is an old cock-and-bull story
  'I think it is just an old cock-and-bull story'

In the second category, the subordinate clause is a so-called relative clause in a presentational relative construction as in (3):

(3) og det var der sgu nogen der ikke forstod (\_) (BySoc) and that was there indeed somebody there not understood (\_) 'that there was indeed somebody that did'nt understand (\_)'

In the third category, the subordinate clause is an adverbial clause, as you can see in (4)-(5):

- (4) det tog jeg ned til Køge for at lære (\_) (observation) that went I down to Køge in.order to learn (\_) 'that I then went down to Køge in order to learn (\_)'
- (5) det blev hun smaddersur fordi jeg sagde (\_) (observation) that became she awfully.sour because I said (\_) 'that she went nuts because I said (\_)'

In the last category, the subordinate clause is a modifying clause, either a restrictive relative clause or an infinitival complement as shown in (6) and (7):

- (6) det hus kender jeg den mand som har købt (\_) that house know I DEF man that has bought (\_) 'that house I know the man that has bought (\_)'
- (7) det regnskab har hun påtaget sig opgaven at revidere (\_) those accounts has she undertaken REFL task.DEF to audit (\_) 'those accounts she has undertaken the task to audit (\_)'

The intertwinings in (3) and (5)-(7) cannot be adequately accounted for within a mainly syntactically based framework as for instance GB/Barriers (see Engdahl, 1982 for an interesting comment).

#### 2. The RRG-account

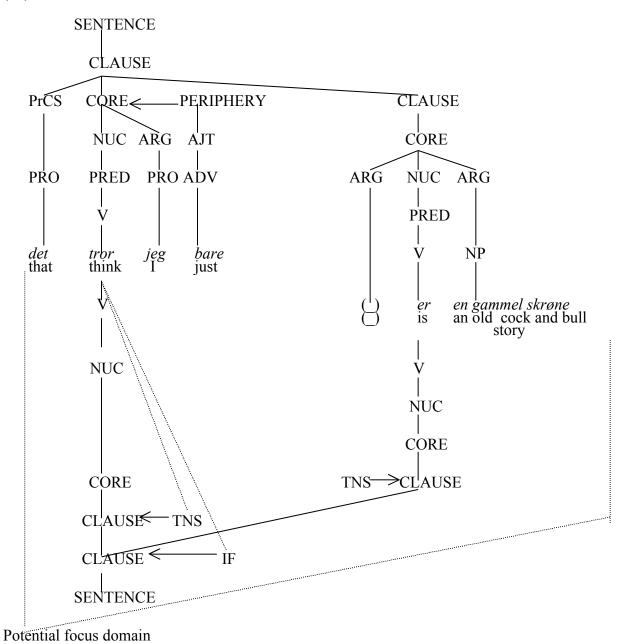
In the RRG account, constraints on so-called extractions are accounted for as an interaction of information (focus) structure and syntactic structure, i.e. the restrictions are neither exclusively syntactic, nor are they exclusively pragmatic. The restrictions are recapitulated in the two related principles in (8) and (9):

- (8) "The potential focus domain in complex sentences
  A subordinate clause may be within the potentional focus domain if it is a direct daughter of (a direct daughter of...) the clause node which is modified by the illocutionary force operator." (Van Valin, 1993: 121, Van Valin & LaPolla 1997: 619)
- (9) "Constraint on question formation...

  The element questioned...[and the "displaced" element in declaratives, AJ] must function in a clause which is within the potential focus domain of the sentence." (Van Valin, 1993: 143, Van Valin & LaPolla 1997: 621)
- In (10) I have given the RRG-representation of the Danish construction in (1). The construction is an instance of clausal subordination, and the embedded clause, i.e. the object complement, is a direct daughter of the clause node which is modified by the illocutionary force operator. According to the principle in (8), the subordinate clause is within the potential

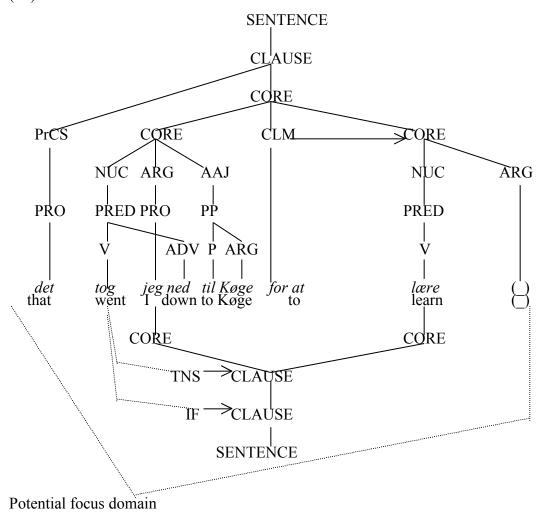
focus domain, hence the construction in (10) observes the principle in (9):

# (10) Clausal subordination:



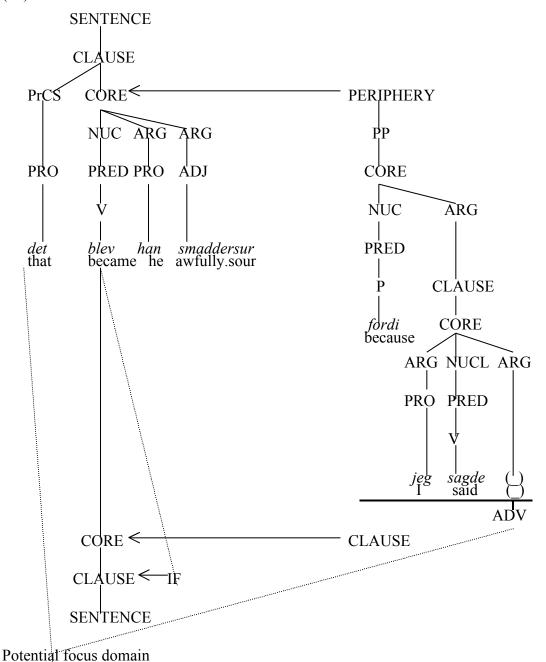
The sentence in (11) ( = (4)  $det tog jeg s_ned til Køge for at lære$ ) is an instance of clausal core cosubordination (Van Valin & LaPolla 1997: 481, 459ff). The element in the precore slot - the pronoun det - functions within a core that is part of the clause, hence the intertwining observes the principles in (8)-(9):

### (11) Clausal core cosubordination:



In (12) (= (5) det blev hun smaddersur fordi jeg sagde) the subordinate clause is an adverbial clause and is like (10) an instance of clausal subordination. As an adverbial clause it is an adjunct modifier modifying the core, and it is part of the periphery of the matrix clause. As opposed to the subordinate clause in (10), it is not a direct daughter of the clause node which is modified by the illocutionary force operator. Since the adverbial clause is a constituent of the periphery of the main clause, the adverbial clause as a whole is within the potential focus domain - as a single information unit. But the focus domain does not extend into the subordinate clause (1997: 486). Consequently, the element det in the precore slot is a constituent in a clause whose constituents are outside the potential focus domain, and apparently, the intertwining in (12) doesn't observe the principle in (9):

### (12) Clausal subordination:



The same is true of the sentences in (3) and (6), provided that the subordinate clause in the presentational relative construction in (3) is analyzed as a restrictive relative clause.

In RRG, a restrictive relative clause is analyzed as NP subordination. The clause is a restrictive modifier of an NP, and it is part of the periphery<sub>N</sub> of the NP since it is an optional modifier and no core<sub>N</sub> argument (Van Valin & LaPolla 1997: 497). Danish uses different types of relative clause formation, one is with a subordinator/clause linkage marker. Another way of forming relative clauses is by gapping.

In (13) I have given the RRG-representation of (6) (det (hus)  $kender jeg den mand som har <math>k \omega bt$  ). You can see that the relative clause is not a direct daughter of the clause node which is

modified by the illocutionary force operator. Thus the NP *det hus* in the precore slot doesn't function in a clause within the potential focus domain:

### (13) NP subordination

det hus kender jeg den mand som har købt () that house know I DEF man that has bought (\_)

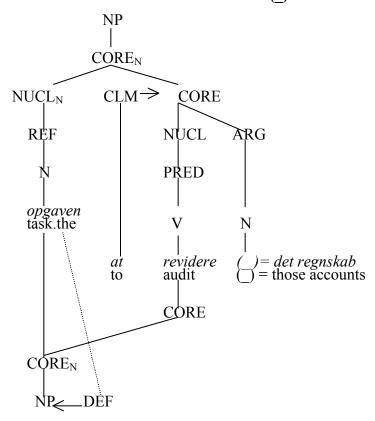
'that house I know the man that has bought ( )'

So far as I can judge, the NP with the infinitival complement in the sentence in (7) on page 2 - det regnskab har hun påtaget sig opgaven at revidere (\_) - is an instance of core<sub>N</sub> cosubordination. The representation of the NP is in (14); if my RRG-analysis is correct, the element in the precore slot, i.e. det regnskab, functions in a clause which is within the potentional focus domain hence the intertwining observes the principle in (9):

### (14) Core<sub>N</sub> cosubordination

det regnskab har hun påtaget sig **opgaven at revidere** ( ) those accounts has she undertaken REFL task.DEF to audit ( )

'those accounts she has undertaken the task to audit ( )'



Since it is explicitly stated in the RRG-account that neither an adverbial clause, nor a restrictive relative clause can be within the potential focus domain (Van Valin & LaPolla 1997: 622), some of the Danish categories of sentence intertwining violate the principles in (8) and (9). In the next section I'll try to outline a preliminary "solution" to some - but not all - of the problems.

## 3. Proposals inside and outside RRG

### 3.1 Sentence intertwining with adverbial clauses - a lexical issue

In RRG the constraint in (8) represents the default distribution of the potential focus domain in complex sentences, and it is mentioned in Van Valin and LaPolla (1997) that other factors interact with the constraint to reduce or extend the potential focus domain. One of these factors is lexical semantics (1997: 630). And that is exactly what is at issue in the intertwinings in (15) and (16) in which the subordinate clause is an adverbial clause.

If you compare the acceptable sentence in (15) (= (5)) with the one in (16), you'll see that the two sentences have the same syntactic structure, i.e. the adverbial clause belongs to the periphery of the main clause:

(15) *det blev han smaddersur fordi jeg sagde* (\_) that became he awfully.sour because I said ( )

(16) ??det gik han fordi jeg sagde (\_)
that went he because I said (\_)
'that he went because I said (\_)'

What distinguishes the two sentences is the semantics of the matrix predicate. In (15) the matrix predicate encodes a psychological (or physical) state, and the adverbial clause encodes the reason for that state or the stimulus that provokes the state. In (16) - by contrast - the matrix predicate doesn't encode a psychological (or physical) state, hence the sentence is unacceptable.

#### 3.2 Presentational relative constructions

Earlier, I assumed that presentational (relative) construction (Lambrecht 1988: 322) as the one in (3) has the same syntactic representation as constructions with a restrictive relative clause. Semantically and pragmatically, the constructions differ, however. The function of the main clause in the presentational relative construction is solely to introduce or anchor a new entity in the discourse while the subordinate clause encodes the state of affairs in which the introduced entity takes part. As Lambrecht writes, the matrix clause "...tends to loose its semantic autonomy as an existential (or presentational) assertion and has as its unique function the naming of the NP referent to be talked about in  $S_2$  [i.e. the subordinate clause, AJ]" (1988: 330). Furthermore, the propositional content of the relative clause in this construction is not presupposed, as it normally is in a restrictive relative clause.

In this case, the reason why the principle in (9) is overriden, and the focus domain is permitted to include structural configurations where it otherwise should be forbidden, cannot be ascribed to lexical semantics. Instead, it must be ascribed to the semantics and pragmatics of the entire construction, and to the discourse function of intertwining and some language specific features which I will touch upon in the last section. Before that I'll discuss the relative construction in (6) and (13).

#### 3.3 Relative constructions

It has been argued (Erteschik-Shir 1982, Erteschik-Shir & Lappin 1979) that the restrictions on extraction out of a relative clause in Danish are semantic, i.e. if the main clause is relatively empty semantically and the head noun is indefinite or generic, extraction is permitted. As you can see, this is not the case in examples (17)-(19) - the matrix clause is not semantically empty, and the head noun is neither indefinite nor generic (the relative clauses are in square brackets):

- (17) det forslag hørte jeg faktisk de socialdemokrater [der vil stemme for (\_)] that bill heard I actually DEF socialdemocrats [there will vote for (\_)] 'that bill I heard the socialdemocrats that will vote for (\_)'
- (18) det billede så jeg ham [der har malet (\_)] that picture saw I him [there has painted (\_)] 'that picture I saw him that has painted (\_)'
- (19) den kamp kender jeg den dommer [der dømte (\_)] that match know I DEF umpire [there refereed (\_)] 'that match I know the umpire that refereed (\_)'

According to the principle of *pragmatic aboutness*, the sentences in (17)-(19) should be unacceptable. This constraint forms part of the RRG-account and is given in (20):

(20) "Pragmatic-aboutness condition on topicalizations and relativization

The sentence fragment following a topical element in the precore slot or a restrictive relative clause must be pragmatically in terpretable as being about the precore slot element or the head noun." (Valin and LaPolla 1997: 627, based on Reinhart (1981))

In order for a sentence to be interpretable as being about the referent of an element, it must be possible to form another sentence with the same essential structure. And the element at issue must function as the focus of a possible assertion that the sentence can express. In the example given by Van Valin and LaPolla (1997: 627), i.e. those files Mulder believes Scully hid, the sentence fragment Mulder believes Scully hid can only be said to be pragmatically about the element in the precore slot, i.e. those files, if it is possible to construe a sentence in which those files is the focus of an assertion. The sentence Mulder believes Scully hid those files is that kind of sentence. Since only the asserted part of an utterance can be interpreted as being negated, we can test if those files actually is a possible focus expression, and it is - as demonstrated in (21):

(21) A: Mulder believes Scully hid those files B: No, the keys (cf. Van Valin & LaPolla 1997: 628)

By contrast, the sentence fragments in (17)-(19) do not meet the condition in (20) because – according to the negation test - they cannot be shown to be pragmatically interpretable as being about the element in the precore slot - this element is not a possible focus expression. For instance *den kamp* in (19) cannot - as you can see in (22) - be negated:

(22) A: jeg kender den dommer der dømte den kamp
I know DEF umpire there refereed that match
B: ?? nej, den første kamp
No DEF first match

In this case we cannot draw upon lexical semantics to explain the acceptability of the Danish intertwining. Again, we have to take some language specific features and the discourse function of intertwining into account.

### 3.4 Language specific features overriding the RRG-principles/constraints

I am unable to propose an explanation within RRG. Instead, I'll argue that the acceptability of the constructions in (3), (5)-(6), (17)-(19) and other constructions is due to the interaction of four features in Danish: 1. the extensive use of the precore slot in simple sentences, 2. the discourse function of intertwined constructions, 3. - as we already have seen in (15) - lexical semantics, and 4. the position of modal elements.

### 3.4.1 Extensive use of the precore slot

In Danish - and Swedish and Norwegian, as well - the precore slot is extensively used in simple sentences as a position for other arguments than the subject. In (23) and (24) dengang

'at that time' (temporal adjunct) and *ham der* 'him demonstrative' (object) respectively are in the precore slot, given that the finite verb almost always must be in the second position in the main clauses:

- (23) *dengang* havde hun også et barn (BySoc) at that time had she also a child 'at that time she also had a child'
- (24) ham der kan jeg ikke så godt lide (BySoc) him here can I not so well like 'him I don't like so very well'

Such constructions are thus normal in Danish and exploit the same position, i.e. the precore slot, as in intertwined sentences. This means that following a normal pattern within one clause, intertwinings are just extensions over two clauses (Falster Jacobsen 1995: 72). By comparing (25) and (26) you can see that the NP *højesteretssagfører*, i.e. 'advocate of the supreme court', is in the same position in the intertwining in (25) and the simple sentence in (26):

- (25) højesteretssagfører tror jeg da han var (\_) (BySoc) advocate think I he was (\_) 'advocate of the supreme court I think he was'
- (26) *højesteretssagfører* var han da advocate was he indeed 'advocate of the supreme court he was'

### 3.4.2 The discourse function of intertwined constructions

A pilot study of spoken language data revealed that intertwining predominantly is used to comment on a preceding utterance, be it the speaker's own or another speaker's. In (27) the speaker comments on her own utterance. *det* in the precore slot is an anaphor for the preceding proposition 'they haven't started any negotiations about (the formation of) a government':

(27) de er jo ikke begyndt på nogen regeringsforhandlinger they are not begun on any government-negotiations

det synes jeg \_ er meget betryggende that think I (\_) is very reassuring

'they haven't started any negotiations about formation of a government - that I think (\_) is very reassuring' (politician in a TV-programme on the elections)

Applying Lambrecht's (1994) theory about information structure, I claim that the information structure of the intertwining in (27) is topic-comment. Lambrecht's definition of topic is given in (28):

(28)

"A referent is interpreted as the topic of a proposition if in a given situation the proposition is construed as being about this referent, i.e. as expressing information which is relevant to and which increases the addressee's knowledge of this referent" (Lambrecht 1994: 131)

In (27) the demonstrative/pronoun *det* 'that' in the precore slot is the topic expression because the rest of the sentence is about the referent for *det*, namely the state of affairs 'de er ikke begyndt på nogen regeringsforhandlinger', i.e. 'they haven't started any negotiations about (the formation of) a government'.

The discourse function of an assertion with a topic-comment information structure is, according to Lambrecht "to pragmatically predicate some property of an already established discourse referent" (1994: 126). This entity ought to be cognitively accessible to the addressees in order for them to be able to identify the entity. According to Lambrecht (1994) and Chafe (1994), pronominal coding is the clearest evidence that an entity is assumed to be cognitively active. Thus the element *det* in the precore slot in (27) represents cognitively active and hence accessible information.

On this background, I'll return to the types of intertwining in (15) and (19) which don't observe the *pragmatic-aboutness condition* in (20), or rather the negation-test. In (29) and (30), I have construed the intertwinings as comments on a preceding utterance:

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(29) A: jeg sagde til personaledirektøren at vi vil afspadsere vores overarbejde I said to personnel mangager.DEF that we want counterbalance our overtime det blev hun smaddersur fordi jeg sagde () that became she awfully.sour because I said ()
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'I said to the personnel manager that we want to counterbalance our overtime - that she went nuts because I said ( )'

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(30) A: jeg tror det faldefærdige funkishus er blevet solgt I think DEF tumble-down cubisthouse is been sold

B: det kender jeg den mand som har købt _ that know I DEF man that has bought _

A: 'I think the tumble-down cubist house has been sold' B: 'that I know the man that has bought ()'
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The element in the precore slot, i.e. the two instances of *det* 'that', are anaphors for a proposition and an argument respectively, and the pronouns encode cognitively active entities. They are topic expressions and the propositional content of the sentence fragment predicates something about that entity.

The pragmatic-aboutness condition in (20) and Lambrecht's definition of topic in (28) seem to be quite similar, but the difference is that the pragmatic-aboutness condition only includes the function of the topic within the sentence, whereas Lambrecht's notion of topic includes the discourse function of the topic expression, i.e. the topic expression encodes an established discourse referent. And that is the determining point concerning intertwining in Danish because the element in the precore slot encodes such an entity.

### 3.4.4 Modal elements in the main clause

Another prevailing syntactic feature in Danish is the position of modal elements. As in English, modality can be expressed by means of modal verbs which are placed in the second position in the clause, as you can see in (31):

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(31) det skulle være i orden that should be in order(= OK)
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In the prototypical or most frequently used type of intertwining, the main clause expresses epistemic modality (i.e. the speaker's attitude to the propositional content of the sentence.) Hence the main clause can be analyzed as a modality-expressing grammatical element (Falster Jacobsen 1995), and the finite verb in intertwining is in the same position as the modal verb in simple sentences - as you can see by comparing (32) and (33):

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(32) det skulle være i orden that should be in order(= OK)
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(33) 
$$det tror jeg(\underline{\ }) er i orden$$
  
that think  $I(\underline{\ })$  is in order(= OK)

By using the intertwining, the speaker focuses on the modal element of her utterance, i.e. *jeg tror* 'I think' becomes the focal expression (or part of comment) in (33). The use of the precore slot for topic expressions, fx *det* 'that' in (33), is exactly - so to speak - urged by this focusing on the epistemic modality.

#### 4. Conclusion

Explanation of the fact that some instances of sentence intertwining in Danish do not observe the constraints within the RRG-account - and for that matter constraints in an exclusively syntactically based theory – is to find in language specific features, predominantly the interaction of the extensive use of the precore slot and the discourse function of intertwining.

In Danish, the intertwinings which do not observe the constraints in the RRG-account, are not very frequent. By using those intertwinings, the more creative and innovative Danish speakers employ the prototypical intertwining in (1) as a model. They transfer the syntax of that model, i.e. the use of the precore slot, and the discourse function of commenting on an entity in - or the whole of - the preceding utterance to another type of intertwined construction, thereby using the precore slot as a position for the topic expression. The syntax and the discourse function of the prototype give rise to the other types of intertwining, like the ones I have presented here.

Even though I haven't observed any intertwinings like the one in (16) or its equivalent observed in Norwegian, it cannot be precluded that some Danish speakers will use an intertwining like the Norwegian one in (34). The subordinate clause in (34) is an adverbial clause, and the matrix predicate *venta* 'wait' doesn't encode a psychological or physical state, which means that the semantic constraint discussed earlier isn't observed:

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(34) Den saka ventar vi her mens de ordnar (_) (Faarlund 1992: 117) that business wait we here while they manage (_)'
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The extensive use of the precore slot in Danish, Swedish and Norwegian is conventionally determined by the speakers in those speech communities. I do not believe it is possible always to make such language specific features fit into constraints with a universal application.

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