

# Pseudocoordination in Danish

## 1 Introduction

Danish has no (systematic) morphological means of expressing aspect. Instead aspectual differences may be expressed by certain verbal constructions. Such aspectual constructions have not received much attention in the Danish literature, but cf. Diderichsen (1946, p. 156), Hansen (1967, vol. 3, pp. 30–31), Jensen (1985, p. 113), Brandt (1992) and Jørgensen (2001). (1) is an example of such an aspectual construction which is used to express imperfective aspect, and which we will henceforth refer to as the *sidder og* construction.

- (1) Peter *sidder og* synger.  
*Peter sits and sings*

Apart from being interesting from a semantic point of view, the *sidder og* construction is syntactically interesting, as it behaves differently than ordinary coordinated constructions wrt. a series of syntactic phenomena. The syntactic properties of constructions like the *sidder og* construction have been dealt with in the Nordic literature under the header *pseudocoordination*. The discussion is, among other things, concerned with whether the construction is really a coordination or whether it may better be treated as some kind of subordinated construction, cf. e.g. Johnsen (1988), Josefsson (1991), Johannessen (1998), Lødstrup (2002), Vannebo (2003) and Wiklund (2005).

This paper is concerned with the syntactic properties of the *sidder og* construction, cf. e.g. Bjerre and Bjerre (2006) for a semantic treatment of the *sidder og* construction. Contrary to the above-mentioned proposals, the analysis presented in this paper rests on the assumption that the construction is both a coordination and a subordination at the same time. The main idea is based on a further development of a constructional approach to phrasal types, as presented in Ginzburg and Sag (2000).

## 2 Syntactic properties of *sidder og*

In this section we would like to point out that the Danish *sidder og* construction shares many of the syntactic properties discussed in the above-mentioned literature on pseudocoordination. Here we will discuss its behaviour wrt. extraction, the observation that the second conjunct cannot have an overt subject and its behaviour wrt. there-constructions. Other phenomena which are interesting in this context are adverbial placement and negation placement. We will also point out the properties that the construction shares with ordinary coordinated constructions.

### 2.1 Extraction

According to the Coordinate Structure Constraint, Ross (1967), a conjunct cannot contain a gap except in ‘Across-the-Board’ cases where each conjunct has a gap that refers to one and the same filler. (2a) is an example of the *sidder og* construction clearly violating this constraint, whereas the constraint is obeyed in the coordinated VP without *sidder*, (2b).

- (2) a. Dette er pigen<sub>*i*</sub> Peter sad og kyssede *e<sub>i</sub>*.  
*This is girl-the Peter sat and kissed*

- b. \*Dette er pigen<sub>i</sub> Peter dansede og kyssede e<sub>i</sub>.  
*This is girl-the Peter danced and kissed*

That the *sidder og* construction does not obey the constraint suggests that it is not an ordinary coordinated construction.

## 2.2 No overt subject in second conjunct

In pseudocoordinations, the second conjunct cannot have an overt subject, cf. (3). In ordinary coordinations the overt expression of the second subject is optional, cf. (4).

- (3) a. Peter sidder og blinker.  
*Peter sits and blinks*  
 b. \*Peter sidder og han blinker.  
*Peter sits and he winks*
- (4) a. Peter synger og danser.  
*Peter sings and dances*  
 b. Peter synger og han danser.  
*Peter sings and he dances*

In some cases the subject of the second conjunct may be overtly expressed in what may look like a *sidder og* construction, but in that case it loses its characteristic aspectual meaning and is not a *sidder og* construction, but an ordinary coordination. Again the data suggests that pseudocoordinations are not ordinary coordinations.

## 2.3 There-constructions and the *sidder og* construction

Typically transitive verbs do not appear in there-constructions. A subset of intransitive verbs, on the other hand, do appear in there-constructions, including the verbs that may appear in the first conjunct in the *sidder og* construction. *Sidder og* constructions with a transitive verb in the second conjunct can occur in there-constructions. This is not the case for ordinary coordinations, as shown in (5).

- (5) a. Der sidder en mand og læser en bog.  
*There sits a man and reads a book*  
 b. \*Der danser en mand og synger en sang.  
*There dances a man and sings a song.*

The fact that a transitive verb in the pseudocoordination may appear with a *der*, ‘there’, subject suggests that pseudocoordinations are not ordinary coordinations.

## 2.4 Coordination properties of the *sidder og* construction

Firstly, the construction contains a coordinating conjunction. It is, however, restricted to *og*, ‘and’, as shown in (6).

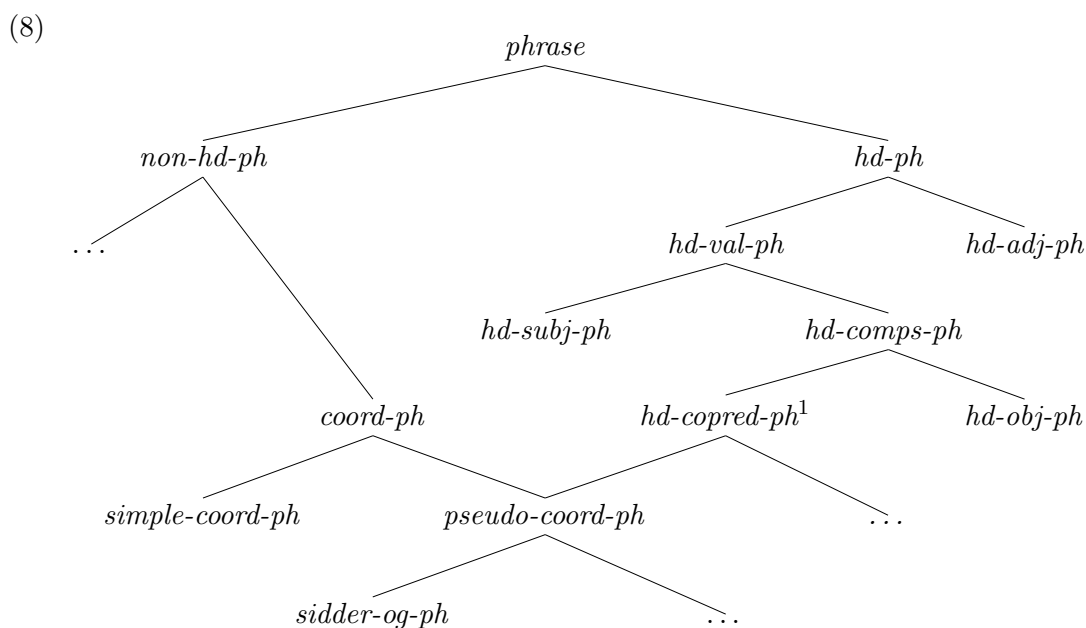
- (6) a. Peter sidder og sover.  
*Peter sits and sleeps*  
 b. \*Peter sidder eller/men sover.  
*Peter sits or/but sleeps*

Secondly, the verbs in the two conjuncts must have the same morphological form. This is shown in (7).

- (7) a. Peter sidder og sover.  
*Peter sits and sleeps*  
 b. \*Peter sidder og sov.  
*Peter sits and slept*

### 3 Analysis

To account for an analysis of the *sidder og* construction as both a coordinated and a subordinated construction, the *sidder-og-ph* is assumed to be a subtype of *pseudo-coord-ph* which has as supertypes both *coord-ph* and *hd-copred-ph*, as shown in (8).



The behaviour wrt. extraction is explained by the formalization of the coordinate structure constraint imposed here on *simple-coord-ph* phrases, exempting *pseudo-coord-ph* phrases, cf. (9).

- (9) 
$$\left[ \begin{array}{l} \textit{simple-coord-ph} \\ \text{SYNSEM} \mid \text{NONLOC} \mid \text{SLASH} \boxed{\square} \\ \text{DTRS}^2 \left\langle \left[ \begin{array}{l} \text{SYNSEM} \mid \text{NONLOC} \mid \text{SLASH} \boxed{\square} \\ \text{SYNSEM} \mid \text{NONLOC} \mid \text{SLASH} \boxed{\square} \end{array} \right] \right\rangle \end{array} \right]$$

<sup>1</sup>The *hd-copred-ph* is a type representing phrases typically consisting of verbal heads and predicative complements.

The constraint expresses that if a coordination contains gaps, they must be identical, this is represented by having the two conjuncts structure-share their SLASH value.

That no overt subject may appear in the second conjunct, and that transitive verbs may appear in the second conjunct of pseudocoordinations in there-constructions are explained by the constraint in (10).

$$(10) \left[ \begin{array}{l} \textit{hd-copred-ph} \\ \text{DTRS} \left\langle \left[ \begin{array}{l} \text{SYNSEM} \mid \text{LOC} \mid \text{CAT} \mid \text{ARG-ST } \textit{list} \oplus \langle [\text{NP}_i] \rangle, \\ \text{SYNSEM} \mid \text{LOC} \mid \text{CAT} \mid \text{SUBJ} \langle [\text{NP}_i] \rangle \end{array} \right] \right\rangle \end{array} \right]$$

(10) expresses that in a *hd-copred-ph*, the SUBJ list of the second daughter, the co-predicate, is non-empty, i.e. the co-predicate is unsaturated. The non-realized subject of the co-predicate is instead co-indexed with the last (and, in the case of pseudocoordination, the only) element on the ARG-ST list of the first daughter. This element will appear either on the SUBJ list of the phrase, or in the case of there-constructions, on the COMPS list, and *der*, ‘there’, will instead be inserted on the SUBJ list.

In ordinary VP-coordination, the SUBJ lists of the conjuncts will be co-indexed, ruling out there-constructions with transitive verbs. In pseudocoordination, the element on the SUBJ list of the co-predicate is co-indexed with an element that ends up on the COMPS list of the phrase, and in this case a there-construction is not ruled out. The transitive verb appears ‘parasitically’ on the first verb in the phrase in there-constructions with pseudocoordination.

On the other hand, the coordination properties associated with the pseudocoordination are expressed by the constraints in (11), (12) and (13).

$$(11) \left[ \begin{array}{l} \textit{coord-ph} \\ \text{DTRS} \left\langle \begin{array}{l} \textit{synsem}, \\ \text{SYNSEM} \mid \text{LOC} \mid \text{CAT} \mid \text{MARKING } \textit{conjunction} \end{array} \right\rangle \end{array} \right]$$

$$(12) \left[ \begin{array}{l} \textit{pseudo-coord-ph} \\ \text{DTRS} \left\langle \begin{array}{l} \textit{synsem}, \\ \text{SYNSEM} \mid \text{LOC} \mid \text{CAT} \mid \text{MARKING } \textit{and} \end{array} \right\rangle \end{array} \right]$$

Firstly, coordinated phrases contain a conjunction, expressed in (11). Secondly, in pseudocoordinations the conjunction is restricted to *and* expressed in (12). Here we assume that the second conjunct has been marked by a conjunction, and that *and* is a subtype of *conjunction*.

$$(13) \left[ \begin{array}{l} \textit{coord-ph} \\ \text{SYNSEM} \mid \text{LOC} \mid \text{CAT} \mid \text{HEAD } \mathbf{1} \\ \text{DTRS} \left\langle \left[ \begin{array}{l} \text{SYNSEM} \mid \text{LOC} \mid \text{CAT} \mid \text{HEAD } \mathbf{1}, \\ \text{SYNSEM} \mid \text{LOC} \mid \text{CAT} \mid \text{HEAD } \mathbf{1} \end{array} \right] \right\rangle \end{array} \right]$$

Finally, the verbs in ordinary and pseudocoordinations must have the same morphological form, expressed in (13), by structure-sharing the value of HEAD between the two daughters and the mother in the construction, cf. Sag (2003) for a discussion of the HEAD feature in connection with coordination.

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<sup>2</sup>Note that we assume that the daughters are represented as a list which is the value of the DTRS feature. This generalization is necessary if we want such hybrid phrase types as assumed in this analysis. This also means that *The Head Feature Principle* requires reformulation.

## 4 Conclusion and further research

In this paper we have proposed an analysis of pseudocoordinations as a hybrid phrase type. This is achieved by setting up a phrasal type hierarchy, where the type *pseudo-coord-ph* is a subtype of both *coord-ph* and *hd-copred-ph*, and consequently inherits properties from both types. The analysis explains why, on the one hand, pseudocoordinations contain conjunctions and the conjuncts must have the same morphological form, and on the other, allow extraction out of the second conjunct, do not allow overt subjects in the second conjunct and allow transitive verbs to appear in there-constructions.

The analysis hinges on us not using specific features for daughter types, e.g. HD-DTR, NON-HD-DTR, CONJ-DTR etc. Instead the more general list-valued feature DTRS is used. This generalization allows the treatment of various hybrid phenomena as instances of hybrid phrasal types in a phrasal hierarchy along the lines proposed here. Other examples of phrase types that may be treated as hybrid phrases include certain noun and verb phrases. In noun phrases containing prenominals like e.g. *many*, the prenominal has both specifier and adjunct properties. And in verb phrases like e.g. *lives in Denmark*, the post verbal constituent has both complement and adjunct properties.

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