

Sentence Models

A functional and formal approach

Sandbjerg June 14th 2006

The aim of the project

- To study object positions from a formal and functional approach
- To investigate the possibility to learn from one another and move towards a unified syntactic theory, or at least reciprocal enlightenment

The aim of the project

- The project 'Object positions - comparative linguistics in a cross-theoretical perspective' intends to apply the formal and the functional approach in a parallel fashion to a concrete empirical area (object positions). By comparing the different accounts of the same empirical data offered by the two approaches, it will be possible to investigate what and how much the two different approaches have in common, and also what separates them.

The aim of the project

- It will furthermore be possible to see whether and to which extent one approach can be inspired and influenced by how the other approach goes about solving a particular problem. We are convinced that such synergy effects will be considerable.

The aim of the project

Related projects:

- ScanDiaSyn
- NORMS

The functional approach

- The need to choose a suitable approach into a functional theory

The functional approach

- An answer to this need was partly to revive the classical Diderichsen sentence model, while at the same time keeping in mind what kind of development it has undergone since it was established
- Another answer was to investigate HPSG as a base for functional explanations in Danish syntax

The functional approach

The data situation:

- We work mainly with Danish material in order to be as close as possible to a pragmatic evaluation of the constructions and examples involved
- However we also wish to incorporate data from (mainly) Mainland Scandinavian dialects

The functional approach

- The main reason for this is that many of the microsyntactic variation parameters seem to have quite comparable pragmatic interpretations throughout Mainland Scandinavia; hence the variation parameters may be used to test how the interface of syntactic functionalism with pragmatic interpretation may work
- Object shift as an important test case

The Diderichsen Model

- The classical version of the model is in the handout as no. 1

The Diderichsen Model

- The interest of the model: its commitment to both formal and functional aspects of syntactic theory

The Diderichsen Model

- Some disadvantages:
- It is narrowly connected to languages with a linear organisation of the actants of the verb
- It was originally not intended as a part of the study of *langue* but part of a *linguistique de la parole*

The Diderichsen Model

We can live with these drawbacks because:

- We study Mainland Scandinavian anyway, and hence need not take more free word order systems into account
- The model has a flexibility which allows it to be put to work on the structural aspects of syntax

The Diderichsen Model

Important influences:

- Viggo Brøndal (1887-1942)

Brøndal, one of the founding fathers of the Copenhagen School, built his linguistic analysis on philosophical concepts, viz. the Kantian categories and the concept of relation; an approach with strong relations to more recent functional approaches.

The Diderichsen Model

Important influences:

- Louis Hjelmslev (1899-1966)

Hjelmslev, a formalist hardliner, claimed that the structure is all-important in relation to linguistic substance and stressed questions of structure and dependency

The Diderichsen Model

Important influences:

- Aage Hansen (1894-1983)

Aage Hansen's book *Sætningen og dens led* from 1933 built its syntactic analysis upon a theme-rheme model, organised without references to the ancient lineage of this kind of theory.

The Diderichsen Model

Important influences:

- Otto Jespersen (1860-1942)

From Jespersen Diderichsen drew the concept of **nexus**, one of the important turning points in his organisation of syntax.

The Diderichsen Model

Some remarks on the way the model was first conceived in 1935

Before analysing you need:

- To analyse the sentence into constituents
- To make sure what kind of head the phrase has

The Diderichsen Model

The constituent analysis used by Diderichsen recognises 4 kinds of constituting elements ([2] on handout):

- The finite verb
- The infinite verb(s)
- Constructions with nominal heads
- Constructions with non-nominal heads

The Diderichsen Model

- The organisation of the classical model:

F	v	n	a	V	N	A
3	1	4	4	2	4	4

The Diderichsen Model

- This part of the model may be claimed to be formally oriented due to the way the analysis is conducted
- However the model also has a functionalist approach
- This is seen most clearly in the criteria for admission into the slots ([3] on the handout)

The Diderichsen Model

Slot of the finite verb

- The element here must be the finite verb of the clause

The Diderichsen Model

Slot of the infinite verb:

- The element(s) here must be whatever infinite verbs the sentence contains

The Diderichsen Model

Ahead of the finite verb:

- Fundamentfeltet - The open slot where every sort of constituent may go.
- This slot is only open to one single constituent at a time, but it may also contain elements that are smaller than one constituent.

The Diderichsen Model

- Between the two verbal slots we find one slot for nominal elements and one slot for adverbial elements
- The same two types of slot are found after the infinite verb slot

The Diderichsen Model

Important methodological aspects:

- This model is tied to an analytical tradition close to the groundwork of the generative tradition through the concept of constituency
- Another parallel is the head-oriented phrase structure, vaguely reminiscent of the X-bar syntax

The Diderichsen Model

Important functional points of orientation:

- The fundamentfelt, in principle a theme slot in the syntax
- The description of adverbial categories based on their capacity in respect to the two adverbial slots

The Diderichsen Model

Two important matters that the final version from 1946 did not utilise to any greater extend:

- The sentence as an act in a text
- Valency

The Diderichsen Model

- The main clue concerning the sentence as a speech act is found in the handout under [4]. The important factor in it is the idea that the individual sentence belongs to the text and in fact receives part of its grammatical structure, namely its mood, due to the kind of situation the text is drawing up.

The Diderichsen Model

- Valency is mainly traced down through his use of semantic notions in connection with the verb as structuring elements in the meaning dimensions of the sentence.
- More specifically he actually does distinguish between prepositional phrases bound by valency and truly adverbial prepositional phrases in his 1941 dissertation.

The Diderichsen Model

- - but these interesting attempts were given up in 1946, and all phrases with a preposition as its head were classed as adverbs.
- The reason for this may be pedagogical, but it may also play a role that the sequence of valency-bound and unbound PP's in the final slot is rather free.

The Diderichsen Model

- We may in fact have both of these:
- *Ole har spillet hele aftenen på violinen*
- *Ole har spillet på violinen hele aftenen*

'Ole has played on the violin the whole evening'

Empirical Issues

- Already Diderichsen himself discovered something odd about sentences like:
- *Han er rask, oppe og i god bedring*
- The three elements were either predicatives or adverbs, and the fact of coordination caused problems for constituency.

Empirical Issues

- Hansen's approach lead to the conception of a new slot, namely the **P** slot taking into it predicatives and verbal particles of different sorts. This **P** slot is part of the final **A** slot, in modern language only preceded by manner adverbs.

Empirical Issues

- Erik Hansen's most interesting venture was a reorganisation of the sentence model from 1970.
- In this paper the relation between the verb and the sentence model is stressed since a given level is supposed to be built from the valency of the verb. Hence the model may be seen as a construction with the verb as its head.

Empirical issues

- In the sentence models under [6] you find the two models postulated by Hansen, the independent and the dependent model.
- One important factor in them is the demand to put additional verb forms into extraposition right, a slot not included in the canonical model.

Empirical Issues

- This approach reduces any verb-verb relation to an object-object relation and obliterates the distinction between auxiliaries and full verbs.
- There may be different interesting points in this: e.g. recognition of phasal or aspectual auxiliaries. This approach also facilitates certain interpretations of the semantic category of objects.

Empirical Issues

- In general though the Hansen analysis becomes quite complex and hard to handle for 1st year students: see [7] on the handout!

Empirical Issues

- In a paper from 1983 Erik Hansen called attention to the apparent conjunction *at*. The spoken languages and the Sealand dialects tend to have this apparent pleonastic conjunction in all dependent clauses: adverbial *hvis at, når at* etc., relative *som at* *bur at der*. In nominal sentences *at* is present anyway.

Empirical Issues

- Lars Heltoft used this observation to conflate the two models: the main clause and the dependent clause.
- The result is in the handout under [8].
- The important matter here is the idea to layer the distinction between 'neksus' and 'indhold' with the distinction between modality and kernel.

Empirical Issues

- The consequence of these ideas is that one may develop the criterion tabel for the slots somewhat further. See [9] in the handout!
- This table supplies the former with a new series of necessary criteria drawn from the stock of relational observations.

Empirical Issues

- The third column remains – the textual criteria. These are still not obligatory criteria in this table. It is part of the enterprise at this meeting to develop them further.
- One such attempt is Ole Togeby in *Fungerer denne sætning?*

Functional Approach

- Finally a few words on the organisation of the model.
- Diderichsen did on purpose call it "feltskema" (field model), not "pladsskema" (slot model)
- This must be due to the fact that he was interested in the overall structures of a textual-functional kind.

Functional Approach

- A common perception of the pragmatic and textual sense of the model is in the handout under [10].
- This model has an iconic distribution of the pragmatic material.
- Its borderlines do not fit too well with distinctions in the constituency.

Functional Approach

- The same goes for the Heltoft model given in a reduced version in [11].
- This version includes a central zone of valency-bound elements into the model.
- This observation is esthetically appealing, but it does have empirical deficiencies. Certain sentences simply do not adhere to it.

Functional Approach

- However these overall functions in the sentence are important, even when they do not fit with constituency.