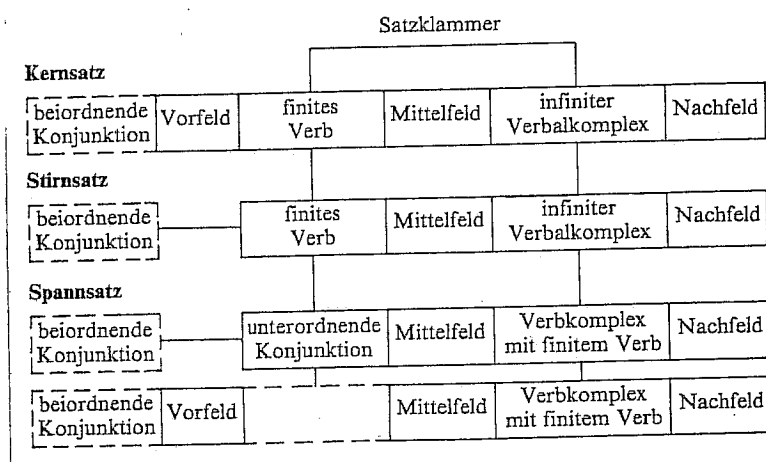


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## Per Bærentzen Word order patterns in German

### (A) A German stiff sentence model<sup>1</sup>



### (B) The fundamental relational topological description. Establishment of the zone of connectors and the zone of the finite-verb-phrase:

Hierarchy (head and modifiers) and Topology

The three principles for placing modifiers in relation to their head

Principle (a):  $M \leftarrow H$

Principle (b):  $H \rightarrow M$

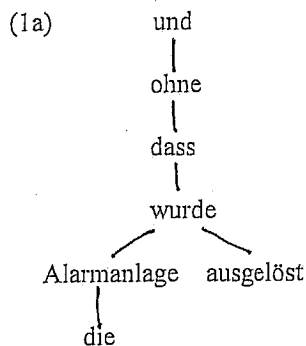
Principle (c):  $M \leftarrow H \rightarrow M$

Hudsons<sup>2</sup> 'Simple Adjacency Principle': "A modifier must not be separated from its head by anything except other modifiers of the same head".

- (1) Der Dieb gelangte ins Haus | ohne dass es jemand bemerkte | und ohne dass die Alarmanlage ausgelöst wurde.

<sup>1</sup> Duden Grammatik (1998). 6. ed., Mannheim. 818.

<sup>2</sup> Richard Hudson (1984): Word Grammar. Oxford. 99.



Connector phrases follow principle (b):

Table B.1

<i>und</i>	<i>ohne</i>	<i>dass</i>	<i>die Alarmanlage ausgelöst wurde</i>
H	H	H	M
		M	
	M		

Table B.2

zone of connectors			zone of the finite-verb-phrase
coordinator	preposition	subordinator	
<i>und</i>	<i>ohne</i>	<i>dass</i>	<i>die Alarmanlage ausgelöst wurde</i>

### (C) Finite-verb-phrases

The word order in finite-verb-phrases follows principle (c):

(α) If no subordinator is present, the finite verb can have only one modifier to the left and all other modifiers must be placed to the right of the finite verb:

- (2) Er | *besuchte* | mich | nie | in Berlin
- (3) Mich | *besuchte* | er | nie | in Berlin
- (4) Nie | *besuchte* | er | mich | in Berlin
- (5) In Berlin | *besuchte* | er | mich | nie

(β) If a subordinator is present, the finite verb can have only one modifier to the right (in the extra zone) and all other modifiers must be placed to the left of the finite verb:

- (6) (... weil) er | mich | nie | in Berlin | *besuchte*
- (7) (... weil) er | mich | nie | *besuchte*, | in Berlin

Table C.1

(2)	<i>er</i>	<i>besuchte</i>	<i>mich nie in Berlin</i>
(3)	<i>mich</i>	<i>besuchte</i>	<i>er nie in Berlin</i>
(4)	<i>nie</i>	<i>besuchte</i>	<i>er mich in Berlin</i>
(5)	<i>in Berlin</i>	<i>besuchte</i>	<i>er mich nie</i>
(6)	<i>er mich nie in Berlin</i>	<i>besuchte</i>	
(7)	<i>er mich nie</i>	<i>besuchte</i>	<i>in Berlin</i>

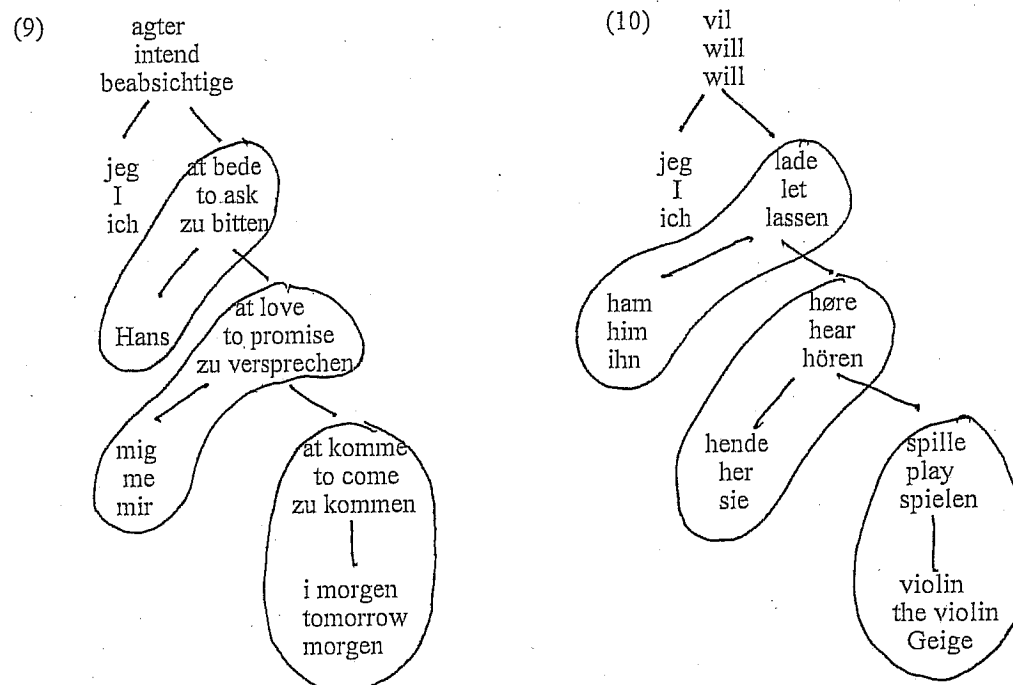
Table C.2

	zone of the finite-verb-phrase				
	front zone	finite-verb-place	middle zone	final zone	extra zone
(2)	<i>er</i>	<i>besuchte</i>	<i>mich nie in Berlin</i>		
(3)	<i>mich</i>	<i>besuchte</i>	<i>er nie in Berlin</i>		
(4)	<i>nie</i>	<i>besuchte</i>	<i>er mich in Berlin</i>		
(5)	<i>in Berlin</i>	<i>besuchte</i>	<i>er mich nie</i>		
(6)	÷	÷	<i>er mich nie in Berlin</i>	<i>besuchte</i>	
(7)	÷	÷	<i>er mich nie</i>	<i>besuchte</i>	<i>in Berlin</i>

**(D) Infinitive phrases**

(8) *ich will ihn sie Geige spielen hören lassen*

The verbal field<sup>3</sup> consists of a verb as a head and all the non-verbal modifiers of that head.



<sup>3</sup> The term "verbal field" is my translation of the German term "Verbälfeld" introduced in Gunnar Bech (1955): *Studien über das deutsche verbum infinitum*. 1. vol., Copenhagen. 43-47.

- (9a) (jeg agter) at bede Hans | love mig | at komme i morgen  
 (9b) (I intend) to ask Hans | to promise me | to come tomorrow  
 (9c) (ich beabsichtige) Hans zu bitten | mir zu versprechen | morgen zu kommen

- (10a) (jeg vil) lade ham | høre hende | spille violin  
 (10b) (I will) let him | hear her | play the violin  
 (10c) (ich will) { ihn | sie | Geige spielen | hören | lassen }
- 

For (9a-c) we can establish the following rules:

Rule 1: The verbal fields are treated as topological units placed one after the other.

Rule 2: The subordinate verbal field is placed at the right of the field with the superior verb.

Rule 2 can be seen as a combination of the more specific rules 2a and 2b

Rule 2a: The subordinate verbal field is placed to the right of the superior verb.

Rule 2b: The subordinate verbal field is placed to the right of all phrases that are its hierarchic equivalents, i.e. to the right of all non-verbal modifiers of the superior verb.

Internal difference inside the verbal field:

In Danish and English the internal word order of the verbal field follows the principle (b) with the modifiers to the right of the verb.

In German the internal word order of the verbal field follows the principle (a) with the modifiers to the left of the verb.

These rules also apply to the Danish and English sentences (10a-b) with Ø-infinitives:

- (10a) (jeg vil) lade ham | høre hende | spille violin  
 (10b) (I will) let him | hear her | play the violin

But the German sentence (10c) contains a violation of the rules 1 and 2a. Rule 2b is still valid.

Table D.1

zone of the finite-verb-phrase					
	front zone	finite-verb-place	middle zone	final zone	extra zone
(10c)	<i>ich</i>	<i>will</i>	<i>ihn sie Geige</i>	<i>spielen hören lassen</i>	

Changes inside the final zone:

- (11) (... weil ich ihn heute Abend in der Oper) singen<sup>3</sup> hören<sup>2</sup> werde<sup>1</sup>.  
 → (... weil ich ihn heute Abend in der Oper) werde<sup>1</sup> singen<sup>3</sup> hören<sup>2</sup>.  
 (12) \*(... weil ich ihn nie darüber) erzählen<sup>3</sup> lassen<sup>2</sup>/gelassen<sup>2</sup> habe<sup>1</sup>.  
 → (... weil ich ihn nie darüber) habe<sup>1</sup> erzählen<sup>3</sup> lassen<sup>2</sup>.

Changes inside the middle zone:

Establishment of the zone of light elements and the zone of normal elements.

- (13) (Die Mutter hat) | ihrer Freundin<sup>D</sup> das Buch<sup>A</sup> (gegeben).  
 (14) (Die Mutter hat) es<sup>A</sup> | ihrer Freundin<sup>D</sup> (gegeben).  
 (15) (Die Mutter hat) ihr<sup>D</sup> | das Buch<sup>A</sup> (gegeben).  
 (16) (Die Mutter hat) es<sup>A</sup> ihr<sup>D</sup> | (gegeben).  
 (17) (Gestern hat) | die Mutter<sup>N</sup> ihrer Freundin<sup>D</sup> das Buch<sup>A</sup> (gegeben).  
 (18) (Gestern hat) es<sup>A</sup> | die Mutter<sup>N</sup> ihrer Freundin<sup>D</sup> (gegeben).  
 (19) (Gestern hat) es<sup>A</sup> ihr<sup>D</sup> | die Mutter<sup>N</sup> (gegeben).  
 (20) (Gestern hat) ihr<sup>D</sup> | die Mutter<sup>N</sup> das Buch<sup>A</sup> (gegeben).  
 (21) (Gestern hat) die Mutter<sup>N</sup> es<sup>A</sup> ihr<sup>D</sup> | (gegeben).  
 (22) (Gestern hat) sie<sup>N</sup> es<sup>A</sup> ihr<sup>D</sup> | (gegeben).

The middle zone:

Table D.2

middle zone							
zone of light elements				zone of normal elements			
subj.	akk.obj.	dat.obj.	adv.	adv.	obj.	obj.	adv.
x			x	x	x		

The sign x indicates the possible places for a normal subject.

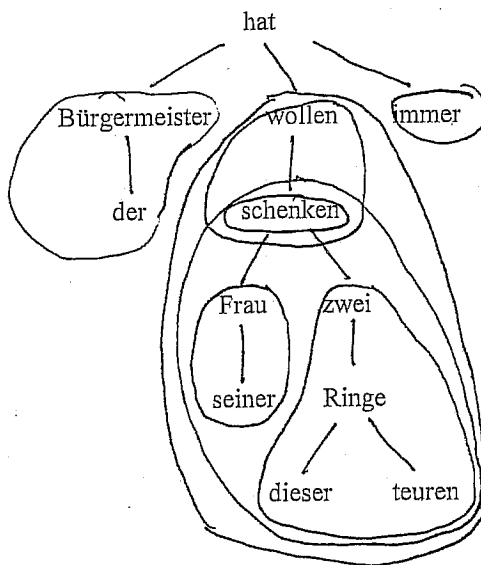
The stiff sentence model:

Table D.3

zone of connectors			zone of the finite-verb-phrase								
coord.	prep	subord.	front zone	finit-verb-place	middle zone					final zone	extra zone
					zone of light elements			zone of normal elements			
					subj x	akk obj	dat obj	adv	adv		
							x	x	x		

(E) The front zone

(23)



- (24) *Der Bürgermeister* hat seiner Frau immer zwei dieser teuren Ringe schenken wollen.
- (25) *Immer* hat der Bürgermeister seiner Frau zwei dieser teuren Ringe schenken wollen.
- (26) *Zwei dieser teuren Ringe* hat der Bürgermeister immer seiner Frau schenken wollen.
- (27) *Seiner Frau* hat der Bürgermeister immer zwei dieser teuren Ringe schenken wollen.
- (28) *Schenken* hat der Bürgermeister seiner Frau immer zwei dieser teuren Ringe wollen.

- (29) *Schenken wollen* hat der Bürgermeister seiner Frau zwei dieser teuren Ringe immer.
- (30) *Seiner Frau zwei dieser teuren Ringe schenken* hat der Bürgermeister immer wollen.
- (31) *Seiner Frau zwei dieser teuren Ringe schenken wollen* hat der Bürgermeister immer.

- 1) Each single modifier of the finite verb, cf. (24), (25), (31).
- 2) Each single modifier of a non-finite verb in the complex predicate, cf. (26), (27), (30).
- 3) The complete group of non-finite verbs in the complex predicate without their non-verbal modifiers, cf. (29).
- 4) The lowest non-finite verb in the complex predicate without its modifiers, cf. (28).

## (F) Conclusions

In syntax the description of the hierarchy must precede the description of the topology.

In topology the relational description must precede the establishment of the stiff sentence model with its zones and places.

When describing the placement of entities in each single zone of the sentence model you must find out, what sort of entities can be placed in a certain zone and what are the internal criteria in that zone:

- (a) In the final zone we have only verbs and they are placed one after the other in accordance with their hierarchic rank (with specific exceptions).
- (b) In the middle zone you have only non-verbal elements and they are placed primarily in accordance with their weight, i.e. depending on whether they are light elements or normal elements.
- (c) In the extra position, which I have not talked about, you can – with a few exceptions - have only connector phrases including subordinate sentences and infinitive sentences with a *zu*-infinitive (prepositional infinitive).
- (d) In the front zone you can have one modifier or even only a part of a modifier of the finite verb.