

V2 Subordination in German and the RRG Theory of Clause Linkage

Dietmar Zaefferer

Ludwig-Maximilians-University Munich

0. Introduction

1. The problem: What exactly licenses V2 embedding?

In German there seems to be a neat division of labor among clauses according to word order: In general, initial position of the verb (VI: V1 or V2) indicates root clauses (sentences) and entails the presence of illocutionary force, whereas final position of the verb (VL) entails presence of a CLM and signals embedded clauses. Schematically:

	root clause (sentence)				subordinate clause
	jussive	interrogative		declarative	
		polar	constituent		
VI (verb initial)	+	+	+	+	-
V1	+	+	-	-	-
V2	-	-	+	+	-
VL (verb final)	-	-	-	-	+
Clause Linkage Marker	-	-	-	-	+
Illocutionary Force	+	+	+	+	-

This is the overall picture, but there are exceptions in both directions: There are unembedded VL-clauses, thus promoted to sentences, and there are embedded VI sentences and thus demoted to clauses. I will be focussing here on the latter, or, more specifically, on embedded V2.

These exceptions to the rule V2 entails root status have been thoroughly discussed e.g. by Reis (1997): Predicates of indirect perception, propositional attitude, cognition and indirect discourse can embed under certain conditions not only VL-clauses, but also V2-clauses. Here are some examples:

A. Indirect perception

- (1) a. *Ich habe gehört, dass man dafür viel Geld braucht.*
 I have heard that one that-for much money needs
 b. *Ich habe gehört, man braucht dafür viel Geld.*
 I have heard one needs that-for much money

B. Propositional attitude

- (2) a. *Peter befürchtet, dass Maria Fieber hat.*
 Peter worries that Maria fever has
 b. *Peter befürchtet, Maria hat Fieber.*
 Peter worries Maria has fever

C. Cognition

- (3) a. *Maria nahm an, dass das richtig ist.*
 Maria assumed that this correct is
 b. *Maria nahm an, das sei richtig.*
 Maria assumed this be correct

D. Indirect discourse

- (4) a. *John behauptet, dass in Amerika alles größer sei.*
 John claims that in America everything bigger be
 b. *John behauptet, in Amerika sei alles größer.*
 John claims in America be everything bigger

These should all be considered cases of daughter core subordination since the relevant verbs are transitive and require overt objects, but the filler of the object role is a clause in the a.-cases and a sentence in the b.-cases. However, the differences between the a. and the b. variants are subtle if present at all, and the same holds for the verbal mood variants: The subjunctives in (3) b. and (4) can be replaced by indicatives without problems.

The same does not hold for other clause embedding predicates, e.g., verbs of causation. In (5) the a.-variant is grammatical, whereas the b.-variant is not.

- (5) a. *Dieses Mittel bewirkt, dass Zigaretten nicht mehr schmecken.*
 This medicine brings-about that cigarettes not more taste
 b. **Dieses Mittel bewirkt, Zigaretten schmecken nicht mehr.*
 This medicine brings-about cigarettes taste not more

Exceptions to the exceptions.

Firstly, explicit and implicit negativity seems to block V2 subordination:

- (6) a. *Maria glaubt nicht, dass Peter sie verehrt.*
 Maria believes not that Peter her adores
 b. **Maria glaubt nicht, Peter verehrt sie.*
 Maria believes not Peter adores her
- (7) a. *Maria bezweifelt, dass Peter sie verehrt.*
 Maria doubts that Peter her adores
 b. **Maria bezweifelt, Peter verehrt sie.*
 Maria doubts Peter adores her

Secondly, extraposition is incompatible with V2- subordination and requires VL:

- (8) a. *Peter befürchtet es, dass Maria Fieber hat.*
 Peter worries that Maria fever has
 b. **Peter befürchtet es, Maria hat Fieber.*
 Peter worries Maria has fever

This distribution of phenomena raises several questions:

- What is the precise nature of the V2 licensing factors, are they primarily syntactic, semantic or pragmatic, or is it a combination of factors, and if yes, which combination?
- What is the precise nature of those factors which, where V2 is licensed in principle nevertheless rule it out, are they primarily syntactic, semantic or pragmatic, or is it a combination of factors, and if yes, which combination?

2. Embedding the phenomenon of V2 embedding

2.1. V2-Embedders

V2 subordinates are not only complements of verbs, but also of nouns and adjectives:

- (9) a. *Ich dachte, dass du dir einen Trainer ins Haus holst.*
 I thought that you yourself a coach into_the house call
 b. *Ich dachte, du holst dir einen Trainer ins Haus.*
 I thought you call yourself a coach into_the house
- (10) a. *der Gedanke, dass du dir einen Trainer ins Haus holst.*
 the thought that you yourself a coach into_the house call
 b. *der Gedanke, du holst dir einen Trainer ins Haus.*
 the thought you call yourself a coach into_the house
- (11) a. *Denkbar wäre auch, dass du dir einen Trainer ins Haus holst.*
 Thinkable be also that you yourself a coach into_the house call
 b. *Denkbar wäre auch, du holst dir einen Trainer ins Haus.*
 Thinkable be also you call yourself a coach into_the house

2.2. V2-clauses and relatives

2.2.1. Complementizer-marked clauses (CLM *dass, ob, W*)

1.1. Fully subordinated complement: CLM *dass, ob,*

- (12) *Ich hoffe, dass alles gut geht.*
 I hope that everything well goes

1.2. Insubordinates: CLM *dass, ob, W*

- (13) *Dass das alles gut geht!*
 That this everything well goes

2.2.2. Complementizer-less clauses (no CLM)

2.1. Free superordinates:

- (14) *Alles wird gutgehen.*
Everything will well_go

2.2. Quoted superordinates:

- (15) *Fritz beruhigte: "Alles wird gutgehen."*
Fritz reassured: Everything will well_go

2.3. Reported superordinates (slifting, roots with parenthetical evidentials):

- (16) a. *Diese Probleme, meinte sie, seien lösbar.*
Those problems remarked she be solvable
b. *Diese Probleme, so die Kanzlerin, seien lösbar.*
Those problems so the chancellor be solvable

2.4. Insuperordinates (sentences, allow left dislocation):

- (17) a. *Ich hoffe, alles wird gutgehen.*
I hope everything will well_go
b. *Ich mein, in bayern, da sind andauernd große fussballspiele*
I think in Bavaria there are permanently big football_games
b. *Ich denke so ein Auto, das ist etwas Feines.*
I think such a car that is something nice

Hermann Paul 'Prinzipien der Sprachgeschichte' (*Principles of the History of Language*):

§ 102. Gehört es nun zum Wesen aller Satzverknüpfung, dass auch die selbständig hingestellten Sätze eine Beimischung von Unterordnung erhalten, so ist es ganz natürlich, dass von hier aus eine **stufenweise Annäherung an gänzliche Unterordnung** möglich ist, indem der selbständige Wert eines Satzes mehr und mehr gegen die Funktion einem andern als Bestimmung zu dienen zurücktritt.

Given that it is part of the essence of every sentence juncture that also those sentences that are presented as autonomous show some degree of subordination, it is quite natural that from here a **stepwise approximation towards complete subordination** is possible in that the autonomous value of a sentence gives way more and more to the function of serving as a specification for another sentence.

(Emphasis mine, D.Z.)

3. Controversial cases

Truckenbrodt (2006) seeks a general semantic explanation for data like his (63) (cf. 6 above):

- (63) **Hans glaubt nicht, Peter geht nach Hause.*
 ‘Hans doesn’t believe Peter is going home.’

But V2 subordination not generally excluded in negative contexts:

- (18) a. *Wer glaubt schon, er sei krank, wenn er keine Beschwerden hat?*
 who thinks PARTICLE he be sick if he no afflictions has
 b. *damit der Koenig nicht denke, man wolle noch mehr verheimlichen.*
 that the king not think one want even more conceal

Differences between H. Paul and today:

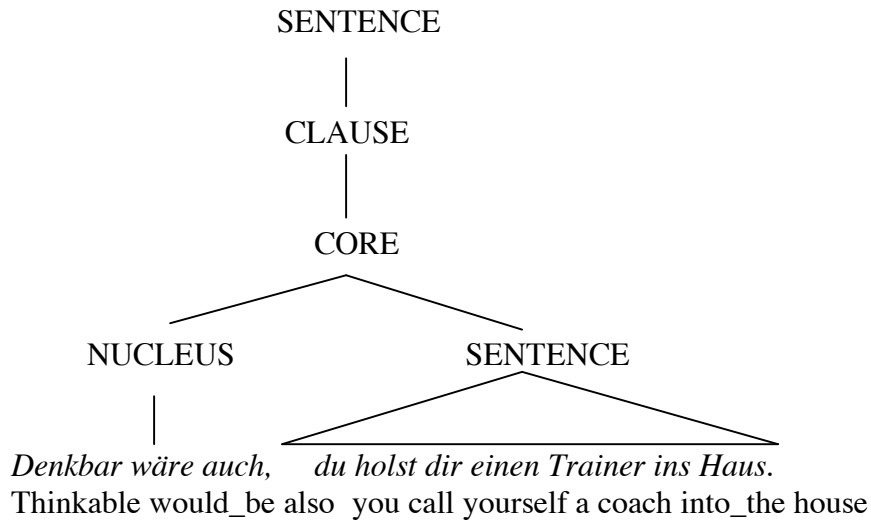
- (19) a. **Ich glaubte, du bist krank*
 I thought you are sick
 b. **Ich glaubte, du warst krank.*
 I thought you were sick
- (20) a. *Ich glaubte du bist ebenfalls eingeschlafen.*
 I thought you are also fallen_asleep
 b. *Ich glaubte du warst glücklich mit mir.*
 I thought you were happy with me

4. Correlations with *es* and *da*

4.1. Subjekt clauses without correlate *es*

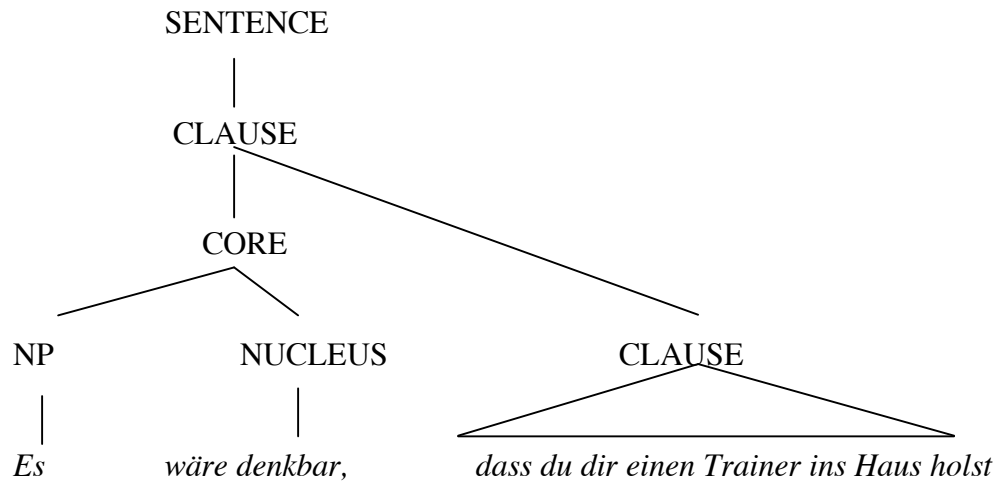
- (21) a.
-
- SENTENCE
 |
 CLAUSE
 |
 CORE
 / \
 NUCLEUS CLAUSE
 | / \
 Denkbar wäre auch dass du dir einen Trainer ins Haus holst.
 Thinkable would_be also that you yourself a coach into_the house call

(21) b.

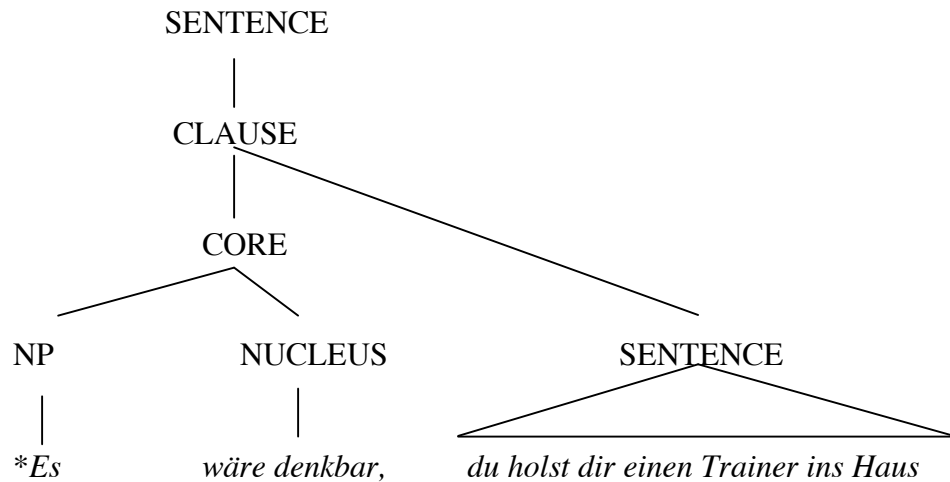


4.2. Subjekt clauses with correlate *es*

c.

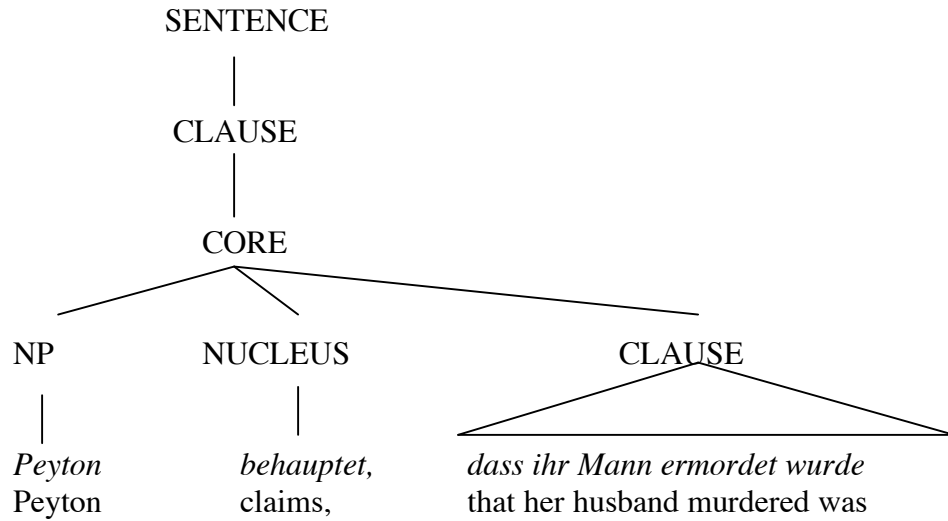


d.

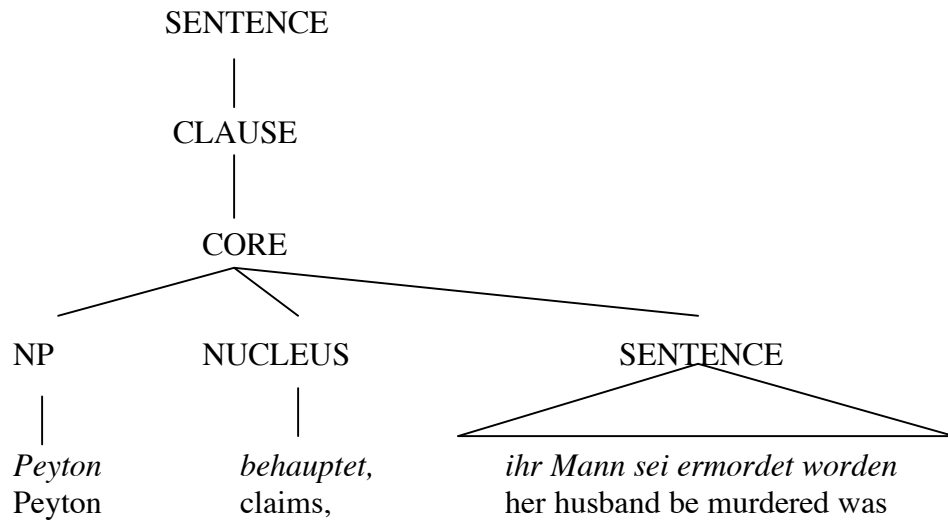


4.3. Objekt clauses without correlate *es*

(22) a.

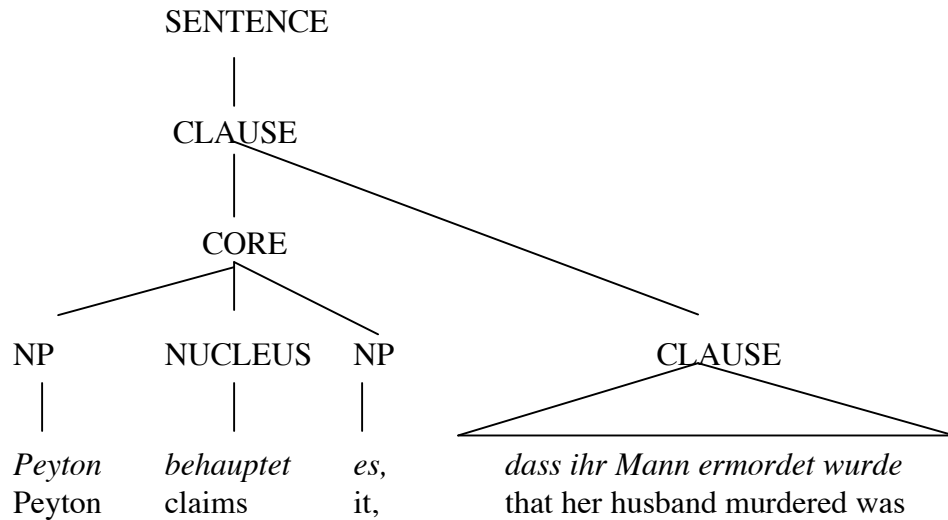


b.

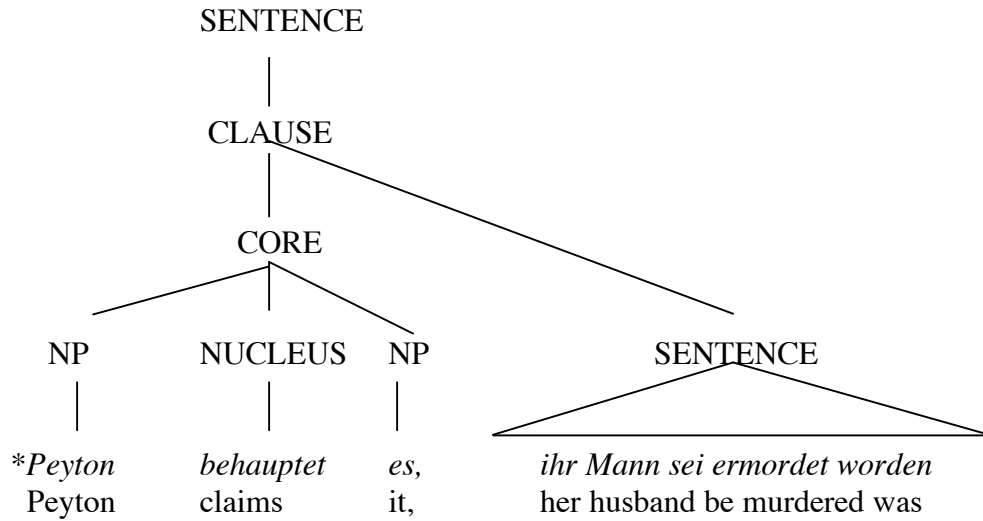


4.4. Objekt clauses with correlate *es*

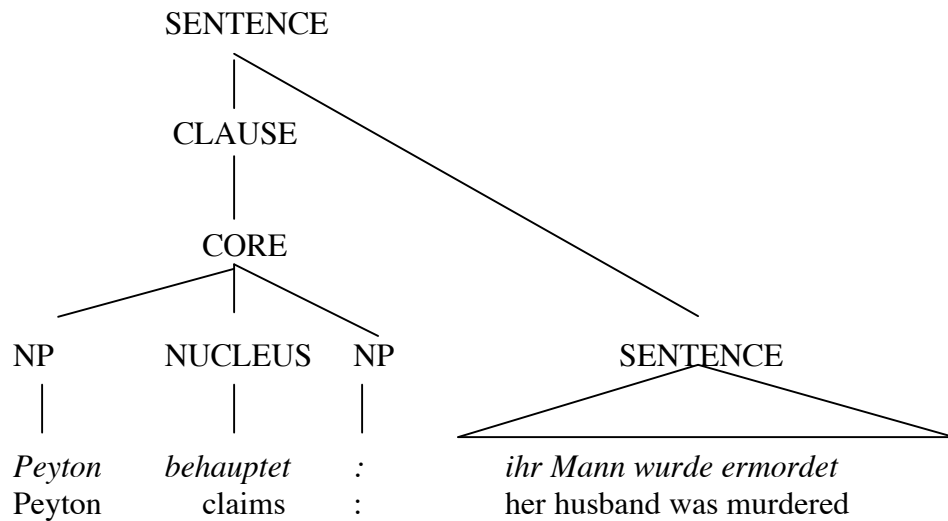
c.



d.



e.



4.5. Clauses with correlate *da*

The correlate *da* is obligatory with prepositional arguments, it imposes no analogous constraints:

- (23) a. *Jung jedoch beharrt darauf, es gebe keinen Krieg.*
Jung however insists it-on, it exist no war
- b. *Jung jedoch beharrt darauf, dass es keinen Krieg gebe.*
Jung however insists it-on, that it no war exist
- c. **Jung jedoch beharrt auf, es gebe keinen Krieg.*
Jung however insists on, it exist no war
- d. **Jung jedoch beharrt auf, dass es keinen Krieg gebe.*
Jung however insists on, that it no war exist

5. Truckenbrodt's challenge

5.1. The hypothesis

Zaefferer (2006: 347f.):

- (W) Weak epistemic inclusion theory of German verb-second subordinates
 A German verb-second embedded clause may replace a corresponding *dass*-clause iff the embedding matrix predicate semantically entails a weak epistemic attitude towards the proposition coded by the embedded clause.

Example (23) shows how (W) works with verb-second embedding matrices:

(24) a. entails b., therefore c. is predicted to be well-formed.

- (24) a. *Ich hoffe, dass das nicht wieder vorkommt.*
 I hope COMP DEM not again occurs
 b. *Ich schlieÙe nicht aus, dass das nicht wieder vorkommt.*
 I exclude not PART COMP DEM not again occurs
 c. *Ich hoffe, das kommt nicht wieder vor.*
 I hope DEM occurs not again PART

By contrast, (25) shows the blocking effect of (W) with V2-blocking matrices: (25) a. does not semantically entail b., therefore c. is predicted to be ill-formed.

- (25) a. *Ich bezweifle, dass das stimmt.*
 I doubt COMP DEM is_right
 b. *Ich schlieÙe nicht aus, dass das stimmt.*
 I exclude not PART COMP DEM is_right
 c. **Ich bezweifle, das stimmt.*
 I doubt DEM is_right

5.2. The challenge

(Truckenbrodt 2006a): “I present the examples in (34) as problematic for this alternative. If x considers p likely or possible, x does not exclude p. Yet these predicates do not embed V-to-C.”

- (34) a. **Hans findet es wahrscheinlich, es regnet.*
 ‘Hans considers it likely, it is raining.’
 b. **Hans hält es für möglich, es regnet.*
 ‘Hans considers it possible, it is raining.’

5.3. The solution

Multifactorial account of V2 subordination:

A. Semantic condition (only necessary)

- (WEI) Weak epistemic inclusion theory of German verb-second subordinates
 A German verb-second embedded clause may replace a corresponding *dass*-clause *only if* the embedding matrix predicate semantically entails a weak epistemic attitude towards the proposition coded by the embedded clause.

B. Syntactic condition

- (Sym) V2 subordination is strongly dispreferred if it involves asymmetric clause subordination.
 Corollary: *es*-correlates are incompatible with V2 subordinates.

C. Pragmatic condition

(Idf) V2 subordination is preferred if the speaker wants to increase liveliness by identifying with the doxastic subject: Given appropriate conditions it could say: "S".

5.3. The counterchallenge

The syntactic condition (Sym) predicts that V2 subordinators with *möglich* and *wahrscheinlich* occur if there is no correlate. In fact, (26) and (27) are ruled out by Truckenbrodt, but attested:

(26) *Möglich wäre auch, du verwendest deinen Akku zu ganz anderen Zwecken.* [Web]
 possible be also you use your battery for completely different purposes

(27) *eher wahrscheinlich ist aber sie hat einfach nicht aufgepasst* [Web]
 more probable is however she has simply not payed_attention

Counterexample?

(28) *Es wird behauptet, die Zeit der Wunder sei vorbei*
 it is claimed the time of miracles be over

No. This *es* is a prefield expletive, not a correlate.

6. Van Valin's iconicity observation

The closeness hierarchy of interclausal syntactic and semantic relations (Van Valin 2007: 84) entails that the phenomena discussed here (my boldface) are closely related.

Nuclear Cosubordination	Causative [1]
Nuclear Subordination	Phase
Daughter	Manner
Peripheral	Motion
Nuclear Coordination	Position
	Means
Core Cosubordination	Psych-Action
Core Subordination	Purposive
Daughter	Jussive
Peripheral	Direct Perception
Core Coordination	Indirect Perception
	Propositional Attitude
Clausal Cosubordination	Cognition
Clausal Subordination	Indirect Discourse
Daughter	Direct Discourse
Peripheral	Circumstances
Clausal Coordination	Reason
	Conditional
	Concessive
Sentential Subordination	Simultaneous Actions
	Sequential Actions
Sentential Coordination	Situation-Situation: Unspecified

7. Conclusions

In his 2007 summary of the RRG Theory of Clause Linkage Van Valin writes:

"The existence of asymmetrical linkage raises an important question with respect to the characterization of juncture: is the juncture type defined by the level at which the linkage occurs or by the size of the linked unit? [...] the answer must be the level at which the linkage occurs and not the size of the linked unit."

Whereas the first part of this claim seems unassailable, the phenomena discussed in this paper support a slight reformulation:

The juncture type is defined primarily by the level at which the linkage occurs and secondarily by the size of the linked unit.

8. Some open questions

- What explains the gradient acceptability of V2-subordination under some cases of explicit negation?
- Is the *es*-filter effect exclusively syntactic or is *es* only compatible with pure propositions?
- Is the compatibility of the *da* correlate sufficiently explained by its obligatoriness?

9. References

- Bolinger, Dwight (1968). 'Postposed main clauses: an English rule for Romance subjunctive', *Canadian Journal of Linguistics*, 14, 3-30.
- Coniglio, Marco (2007). 'German modal particles in root and embedded clauses', *University of Venice Working Papers in Linguistics*, 17, 109-41.
- Emonds, Joe (1970). Root and Structure-Preserving Transformations. Ph.D. Dissertation, Cambridge, MIT.
- Green, Georgia M. (1976). Main Clause Phenomena in Subordinate Clauses. *Language*, Vol. 52, No. 2 (Jun., 1976), pp. 382-397
- Heycock, Caroline (2006). 'Embedded Root Phenomena', in M. Everaert and H. van Riemsdijk (eds.), *The Blackwell companion to syntax, Vol. II* (Oxford: Blackwell), 174-209.
- Hooper, Joan B. and Thompson, Sandra A. (1973). 'On the applicability of root transformations', *Linguistic Inquiry*, 4, 465-97.
- Krifka, Manfred (2001). 'Quantifying into question acts', *Natural Language Semantics*, 9, 1-40.
- Potts, Christopher. 2005. *The logic of conversational implicatures*. Oxford: Oxford University Press.
- Reis, Marga (1997). 'Zum syntaktischen Status unselbständiger Verbzweit-Sätze', in C. Dürscheid and K.-J. Ramers (eds.), *Sprache im Fokus. Festschrift für Heinz Vater zum 65. Geburtstag* (Tübingen: Niemeyer), 121-44.
- Scheffler, Tatjana (2005). 'Syntax and semantics of causal *denn* in German', *Proceedings of the 5th Amsterdam Colloquium, Amsterdam*.
- Truckenbrodt, Hubert (2006). 'On the semantic motivation of syntactic verb movement to C in German', *Theoretical Linguistics*, 32, 257-306.
- Truckenbrodt, Hubert (2006a). 'Replies to the comments by Gärtner, Plunze and Zimmermann, Portner, Potts, Reis, and Zaefferer', *Theoretical Linguistics*, 32, 387-410.
- Van Valin, Robert D., jr. 2007. Recent Developments in the Role and Reference Grammar Theory of Clause Linkage. *Language and Linguistics* 8, 71-93.
- Zaefferer, Dietmar (2006). "Types, moods, and force potentials. Towards a comprehensive account of German sentence mood meanings." *Theoretical Linguistics*, 32/3, 335-352.
- Zaefferer, Dietmar. (To appear). "Deskewing the Searlean Picture. A New Speech Act Ontology for Linguistics." *Proceedings of the 32th Annual Berkeley Linguistic Society Meeting*.