

What is Verb Second?

Josef Bayer

University of Konstanz
josef.bayer@uni-konstanz.de

ABSTRACT: Although the Verb Second (V2) property which is found in most of the Germanic languages belongs to the most stable and well described grammatical phenomena, the nature of V2 and its explanation continues to be a matter of debate among linguists. In this presentation it will be argued on the basis of German data that V2 is essentially an epiphenomenon which emerges from the the requirement of morphological integrity. The expression “V2” is partially misleading because the verb in the sense of the verb stem is only affected due to the fact that the associated inflectional features must move to C. In other words, the verb stem is affected by *generalized pied-piping*. The talk will concentrate on the following phenomena: periphrastic *tun* („do“), verb doubling, negative polarity, association with focus, verb and separable particle. It will be shown that in all these cases the verb itself is interpreted in its underlying clause-final position and not in the second position in which it is phonetically perceived, i.e. the verb is obligatorily reconstructed. The analysis does not only offer a consistent explanation of the data but also makes a strong point in favor of a syntactic theory in which movement leaves an inaudible copy, the so-called “copy-theory of movement”. The result of V2 is V2 only at the PF-side of the grammar; it is I2 (or T2) at the LF-side of the grammar because the lexical part of the inflected verb remains at LF in the base position. If time permits, the result will be placed in a larger typological context. Different, also weakly related or even unrelated languages of the world show V2-effects or related X2 phenomena. Comparisons offer room for speculations about the functionality of V2/X2.

1. The central phenomenon and a generalization

(1)	<u>ENGLISH</u>	<u>GERMAN</u>
a.	John bought socks	Johann kaufte Socken
b.	*Socks bought John	Socken kaufte Johann
c.	Who bought socks?	Wer kaufte Socken?
d.	*What bought John?	Was kaufte Johann?
e.	What did John buy?	?Was tat Johann kaufen?
f.	*Fortunately bought John socks	Glücklicherweise kaufte Johann Socken
g.	Fortunately, John bought socks	*Glücklicherweise Johann kaufte Socken
h.	... that John bought socks	*... daß Johann kaufte Socken
i.	*... that John socks bought	... daß Johann Socken kaufte

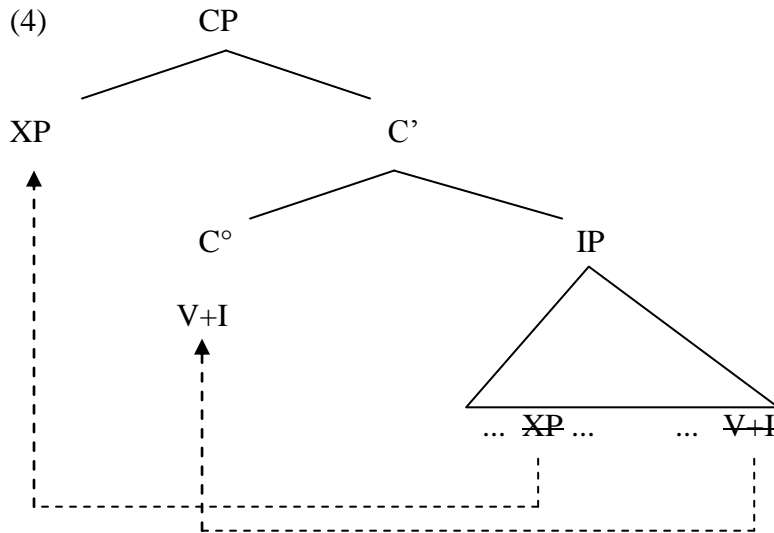
German has an SOV basis which in the embedded clause appears after the complementizer. V2 is derived from this basis by moving the finite verb to the C-position and moving an arbitrary phrase to SpecCP.

Modern English has an SVO-basis. V2-effects appear under wh-movement and negative inversion.

- (2)
- When did John buy socks?
 - Where did John buy socks?
 - How did John buy socks?

- (3) a. At no time did John buy socks
 b. In none of these shops did John buy socks
 c. Under no circumstances would John buy such ridiculous grey socks

Given a movement account, the standard structure of V2 is roughly as in (4).



► V-to-C (V2) concerns only the finite verb. Why is this so? Obviously, the features which matter are tense, number, person and mood, and not the lexico-semantic features of the verb stem.

► Morphological integrity prevents I to move without the stem. Ergo the V-stem has to follow I-to-C-movement (according to *Generalized Pied Piping*).

(5) Conjecture about V2

The finite verb that appears in 2nd position in a V2-language is in this position only for the reason of generalized pied piping. Even when it is perceived in V2-position, its lexical part is evaluated in its base position, i.e. in German in clause-final position..

The generalization in (5) amounts to an account by which the verb proper is „reconstructed“ into its base position. In the following I will present a number of empirical reasons for the correctness of this view. We will turn only later to the question why such a process should take place at all.

2. Periphrastic tun

Certain registers of German allow the verb *tun* („to do“) as the carrier of finiteness (cf. Abraham & Fischer (1998); Schwarz (2004); Bader & Schmid (2008) among others)

- (6) Ich glaube, dass der Klaus grade den Müll hinunter tragen tut¹
I believe that the Klaus now the garbage down carry does
 “I believe that Klaus is right now carrying the garbage down”

¹ *Tun* in the embedded clause is ok but it occurs far more often in the root clause, i.e. in 2nd position (cf, Schwarz, 2004).

- (7) Der Klaus tut grade den Müll hinunter tragen
“Klaus is right now carrying the garbage down”

Unlike English *do*, *tun* seems to retain a semantics of agentivity/volitionality. Stative predicates with a stage-level interpretation (SLP) are ok but not with an individual-level interpretation (ILP).

- (8) Die Clarissa tut den ganzen Tag auf dem Sofa liegen
the Clarissa does the whole day on the couch lie
“Clarissa is lying the whole day on the couch”

Tun is incompatible with an individual-level predicate (ILP) such as *own, resemble, be located at a lake* etc.

- (9) *Der Klaus tut einen guten Charakter besitzen
the Klaus does a good character own
“Klaus has a good character”

- (10) *Der Klaus tut seinem Vater ziemlich ähneln
the Klaus does his father much resemble
“Klaus resembles his father quite a lot”

- (11) *Konstanz tut am Bodensee liegen
Konstanz does at-the Bodensee lie
“Constance lies at the Bodensee (Lake Constance)”

According to (5), this semantic conflict arises due to the semantic interpretation of *tun* in its base position. Interestingly, the semantics of *tun* appears to be suspendable.

- (12) [Einen guten Charakter besitzen] tut der Klaus auf alle Fälle
a good character own does the Klaus in any cases
“Klaus has a good character in any case”

- (13) [Seinem Vater ähneln] tut nur der Klaus
his father resemble does only the Klaus
“Only Klaus resembles his father”

- (14) [Am Bodensee liegen] tut Stuttgart zum Glück nicht
at-the Bodensee lie does Stuttgart luckily not
“Luckily Stuttgart does not lie at the Bodensee (Lake Constance)”

In these cases, *tun* is neither part of a certain register nor does it trigger a semantic conflict with ILP. It is rather the *default* form to guarantee V2 even if the lexical part of the verb has already been „used up” in SpecCP.

Desemantization of *tun* is only possible under V2, never under V-end. The ungrammaticality of (9) through (11) can thus only be explained if *tun* is interpreted in its base position.

3. Verb-doubling

V-doubling is related with periphrastic *tun*. It occurs in certain German dialects as well as in Yiddish (cf. Fleischers (2008) who calls it *topikalisierte Infinitivverdoppelung*). Data from Fleischer, 2008.

- (15) Schaden schadet ihm das nichts
harm harms him that nothing
“This does not harm him”
PRUSSIAN (Reuter, 1967)
- (16) Schnifke schnûwe schnöffft hei nich, man Branntwîn sûpe söppt hei sêr
snuff snuff snuffs he not but brandy guzzle guzzles he very
“He does not snuff tobacco but he guzzles a lot of brandy”
PRUSSIAN (Frischbier, 1876)
- (17) aber ihr redet bloß und geben gebt ihr nichts
but you talk only and give give(2pl) you nothing
“You only talk and talk but never give anything”
PRUSSIAN (Bobrowski, 1964)
- (18) Syn bischt schoon albig der glych verdamt Schelm!
be are-you still always the same damned rogue
“You are still the same old rogue!”
ALEMANNIC (SPLÜGEN, DAVOS) (Dieth, 1939)
- (19) Weerchu weerschut=er weenig
work works =he little
“He works little”
ALEMANNIC (GRESSONEY, AOSTA VALLEY) (Zürner)

Reduplication as it occurs in certain languages (plural, intensification etc.) can be excluded. So why should V be doubled? Consider also the total absence of V-doubling in final position:.

- (20) *Ich glaube, dass ihm das nichts schaden schadet
I believe that him this nothing harm harms

V-doubling is straightforwardly explained if the copy in V2-position is nothing but the spell-out of the finiteness features. The V-stem is semantically irrelevant. V-doubling as well as the *tun*-examples in (12) to (14) are special cases in which the finite verb is base-generated in C-position for the visualization of the finiteness features and can as such not be reconstructed.

4. Negative Polarity

The German verb *brauchen* („to need“) is its modal use (cf. its counterpart *müssen*) a *negative polarity item* (NPI), comparable with *jemals*, *überhaupt*, *auch nur ein bisschen* etc.

- (21) Niemand / *Klaus hat den Kranken **jemals** besucht
nobody / Klaus has the patient ever visited
“Nobody ever visited the patient” / “*Klaus has ever visited the patient”

- (22) Nur die wenigsten / *die meisten haben **überhaupt** zugehört
only the fewest / the most have at all listened
 “Only the fewest people listened at all” / “*Most of the people listened at all”
- (23) Keiner / *jeder hat **auch nur ein bisschen** aufgepasst
no one / everyone has also only a little attended
 “Nobody paid even a little attention” / “*Everybody paid even a little attention”

The NPI is always in the scope of negation or another operator which triggers *downward entailment*. NPIs can hardly ever be topicalized.

- (24) ***Jemals** hat niemand den Kranken ~~jemals~~ besucht
- (25) ***Überhaupt** haben nur die wenigsten ~~überhaupt~~ zugehört²
- (26) ***Auch nur ein bisschen** hat keiner ~~auch nur ein bisschen~~ aufgepasst

Meinunger (2004: 54): „NPI licensing is known to be a very strong s-structure phenomenon“.³

Brauchen is clearly an NPI:

- (27) dass er sich nicht zu fürchten **braucht**
that he REF not to be-afraid needs
 “that he doesn’t need to be afraid”

Unlike under topicalization, however, *brauchen* in V2 position is completely normal.

- (28) Er **braucht** sich nicht zu fürchten ~~braucht~~
 “He doesn’t need to be afraid”

V2 would be a crude contradiction of the usual surface c-command licensing condition for NPIs. This problem disappears if it is recognized that the verb stem remains as a copy in its base position and displays its semantics only there.

Thus, the core syntactic or LF-representation of (28) is in fact as in (29).

- (29) Er ~~brauch~~ - t sich nicht zu fürchten **brauch** - t
 |_____↑

² Interpretation of *überhaupt* as sentence initial adverb is irrelevant to NPI.

³ A potential exception could be (iii).

- (i) I couldn’t find anyone
- (ii) *Anyone I couldn’t find **anyone**
- (iii) [A person [who knows anything about cholera]] could not be found ~~a person who knows anything about cholera~~

5. Association with focus

Focus particles like *nur* („only“) normally c-command a focus constituent (cf. Rooth, and Jacobs, 1983 for German)

(30) *dass er nur [mit CLARISSA getanzt hat]*
that he only with Clarissa danced has
“that he danced only with Clarissa”

(31) *dass er nur [mit Clarissa GETANZT hat]*
that he only with Clarissa danced has
“that he only danced with Clarissa”

(31) improves when *nur* immediately precedes the focal verb.

(32) *dass er [mit Clarissa] nur [mit Clarissa GETANZT hat]*
that he with Clarissa only danced has
“that he only danced with Clarissa”

Focus particles can form a constituent with the focal XP as the V2-construction suggests.

(33) [Nur mit CLARISSA] hat er getanzt

(34) [Nur GETANZT] hat er mit Clarissa

Deviation from the order *Prt* < *Foc* are possible but highly marked (M). Focus must be emphatically strengthened.

(35) ^M[Mit CLARISSA] hat er nur [~~mit CLARISSA~~] getanzt

(36) ^MGETANZT hat er [mit Clarissa] nur [~~mit Clarissa GETANZT~~ hat]

(37) ^M[Mit CLARISSA nur ~~mit CLARISSA~~] hat er getanzt

(38) ^M[GETANZT nur ~~GETANZT~~] hat er mit Clarissa

In (39), *nur* precedes the focus, the regular case. In (40), however, focus precedes *nur*. Interestingly, no markedness effect is observed in this case.

(39) *dass er [mit Clarissa] nur [~~mit Clarissa TANZTE~~]*
„that he only DANCED with Clarissa (he didn’t KISS her)“

(40) *Er TANZTE mit Clarissa nur ~~TANZTE~~*
„He only DANCED with Clarissa (he didn’t KISS her)“

The absence of any markedness effect is immediately explained if the focalized V-stem in V2-position remains in core grammar as a copy below the particle.

(41) Er ~~TANZ~~ - te mit Clarissa nur ~~TANZ~~ - te
 └───┬───┘
 ↑

6. Particle verbs

German is famous for its brace construction („Satzklammer“). It shows up when the fronted finite verb leaves a so-called separable particle. This particle is actually a preposition.

Two things are remarkable: (i) If V2 were an issue of the verb, why would the particle be left behind? (ii) Due to recursion in syntax, the distance between V2 position and the particle lacks an upper bound, i.e. it is infinite.

ad (i): The issue is very obviously not the verb as a lexico-semantic entity. German has radically non-compositional particle verbs. .

- (42) a. auf+hören (“to stop”)
up listen
- b. an+fangen (“to start”)
at catch
- (43) a. ab+hauen (“to leave rapidly”, next to “to chop off”)
off chop
- b. bei+bringen („to teach successfully“, next to “to injure” etc.)
at bring
- c. nach+stellen (“to chase” next to „to reset (e.g. an alarm clock)“)
after put

Nevertheless, V2 catches only the minimal phonological word i.e. [_ω hört] instead of [[_ω auf] [_ω hört]]. Thus, the meaning of these verbs can often be recovered only when the verb is interpreted in its reconstruction position.

- (44) Hört der Pianist ... noch vor der Probe {zu üben auf+hört / die Bänder an+hört}
„Does the pianist ... {stop practicing / listen to the tapes} before the rehearsal?”
Bierwisch (1983: 146 f.)

ad (ii): From a processing point of view, the brace construction seems to be hopelessly dysfunctional. [...] indicates recursive expansion. Nevertheless, German speaker/hearers do not seem to have special trouble with it although intermediate semantic representations may emerge which have to be revised later on.

- (45) a. Der junge Mann trug ein grünes Kleid ... ⇒
the young man wore a green female-dress
☹️ Travesty?carneval?
- b. Der junge Mann trug ein grünes Kleid durch den Laden
the young man carried a green female-dress across the shop
😊 ok. got it!

There are lots of similar examples. :

(46) a. Ich kann ihn nicht leiden ⇒
I can him not stand
„I can't stand him“

b. Ich kann ihn nicht leiden sehen
I can him not suffer see
„I can't see him suffer“ [M. Bierwisch, p.c.]

(47) a. Peter hat ein Buch ⇒
Peter has a book
„Peter has a book“

b. Peter hat ein Buch verloren
Peter has a book lost
“Peter has lost a book” [M. Salzmann, p.c.]

For experimental work cf. Frazier, Flores d'Arcais & Coolen (1993) on Dutch and Scheepers, Hemforth & Konieczny (2000) on German.

Obligatory reconstruction of the finite verb offers a way to explain the relative absence of parsing failures in this domain.

7. V2 / X2 outside Germanic

V2 is also found outside Germanic. Kashmiri (Dardic, Indo-Aryan, cf. Hook (1976), Wali & Koul (1997), Bhatt (1999) .

(48) a. *mye per yi kyitaab az*
I read this book today

b. *az per mye yi kyitaab*
today read I this book

O'odham (= Papago; Uto-Aztec, Arizona) has very free word order but places aux verbs regularly in 2nd position.

(49) a. *cipkan 'añ*
work COP-1
"I am working"

b. *pi 'añ cipkan*
not COP-1 work
"I'm not working"

c. **pi cipkan 'añ*

If in V2 the verb proper is moved only as a result of *generalized pied-piping* , it is not surprising to see languages with V-independent X2 structure. Warlpiri (Australia), cf. Hale (1983), seems to be such a language.

(50) Ngajulu-rlu ka rna- ngku nyuntu nya - nyi
I -ERG *PRES* *ISUBJ- 2OBJ* you see -NON- PAST
“I see you”

(51) Wita yangka kapi -rna ma -ni
small this *FUT-ISUBJ* *take* -NON-PAST
„(I) will take this small one“

(52) Maliki- rli ka wawirri wajilipi-nyi
dog -ERG *PRES* *cangaroo* *chase* -NON-PAST
mata -kariyinyanu
tired -RECIP
„The do chases the cangaroo, and they are tired“

Wackernagel (1892) deals mainly with clitics which take a 2nd position in the clause. Only at the end of his article does he consider the verb in V2 constructions (cf. section XII, pp. 425 ff.). Following Wackernagel, Anderson (1993) suggested independence of the verb and the features that are relevant in V2.

(53) “Realize the inflectional features of a clause by (a) locating its first constituent, and (b) copying the features of Tense, Mood, and Agreement onto a word immediately following this anchor point.”
Anderson (1993)

Wackernagel/Anderson converges with the German reconstruction effects according to which V2 is quasi an artifact of the verb’s morphology.

8. Movement in the Minimalist Program

Movement in the MP is something like *recycling*. V is used to build up the argument structure. This yields VP. The inflectional features (T,φ), abbreviated as "Fin", are used to temporalize the VP and establish agreement. This yields TP. Features of Fin are then used once again to create an utterance structure, a structure with illocutionary force. This step, which in Germanic is achieved by V-fronting, yields what we informally call CP. The relevant point is that Fin achieves access to the force layer of the clause so that its features can be interpreted in the grammar/discourse interface. In the MP, movement is *internal merge*, i.e. the repeated use of material that has a complex internal structure and as such fulfils more than one task. Movement leaves silent copies.

(54) a. [VP V-fin] PF-side of the grammar
b. [TP [VP ~~V-fin~~] V-fin]
c. [CP V-fin [TP [VP ~~V-fin~~] ~~V-fin~~]]

(55) a. [VP V-fin] LF-side of the grammar
b. [TP [VP V-fin] ~~V-fin~~]
c. [CP ~~V-fin~~ [TP [VP V-fin] V-fin]]

The finding about V2 in German are immediately captured within this model.

9. Why V2?

If we are right, V2 serves a semantic/pragmatic requirement. Working with Swedish, Wechsler (1990; 1991) was presumably the first to see this point. According to him, the syntactic features of the finite verb “*constitute an illocutionary force indicator for Germanic in the sense of Searle (1969)*”. Rizzi (1997) and subsequent cartographic work goes in the same direction, see also Bayer (2004) and Brandner (2004).

The relevance of the verb’s finiteness features can be seen in a comparison of V2-questions and V-end questions.

(56) Stefan: Ich habe seit Jahren nichts mehr von Peter gehört.
I have since years nothing more from Peter heard
“I didn’t hear from Peter for years”

Heiner: Ich auch nicht.
I also not
„Neither did I“

Stefan: a. #Mag er immer noch kubanische Zigarren?
likes he always still Cuban cigars
“Does he still like Cuban cigars?”

b. Ob er immer noch kubanische Zigarren mag?
if he always still Cuban cigars likes
“I wonder whether he still likes Cuban cigars

Truckenbrodt (2004)

According to Truckenbrodt (2004), (56b) is „deliberative“ and does not tap the knowledge background of the addressee. V2 as in (56a) is a question by which the speaker tries to acquire new knowledge from the addressee. The assumption is that ϕ -features of the verb in C are directly responsible for the establishment of a discourse anaphoric link to the addressee’s knowledge background.

Another example concerning (quasi) necessary versus contingent knowledge:

(57) a. Ob Peters Kinder schon 18 sind?
if Peters children already 18 are
[the addressee does not necessarily know that]

b. #Ob deine Kinder schon 18 sind?
if your children already 18 are
[the addressee can be assumed to know]

Truckenbrodt (2004)

(57b) is pragmatically inadequate because due to a lack of V-fronting the presupposed knowledge of the addressee is not tapped.

10. Conclusions

- V1/V2 – at least in German – shows sharp discrepancy between the phonetic and the semantic side of the grammar. The verb proper is active in its underlying i.e. clause final position.
- V moves to C exclusively in order to make its finiteness features available in C. The verb stem remains in its reconstruction position.
- Since finiteness cannot move by itself (morphological integrity), V is pied-piped along; as such V1/V2 is a morphological artifact.
- This is expected under assumptions of the Minimalist Program, especially the concept of internal merge and the copy theory of movement.
- Support comes from languages in which Fin is morphologically independent of the verb.
- The fact that it is Fin and not the verb as such which matters in V1/V2 squares well with the idea that verb-fronting serves the activation of features which are relevant for the establishment of illocutionary force.
- So far, this idea is confronted with much variation – especially in the Scandinavian languages but also in Romance – which needs to be integrated in a comprehensive theory of V2.

References

- Abraham, W. & A. Fischer (1998): Das grammatische Optimalisierungsszenario von *tun* als Hilfsverb. In: Donhauser, K. & Eichinger, L. M. (Hrsg.): *Deutsche Grammatik – Thema in Variationen*. Festschrift für Hans-Werner Eroms zum 60. Geburtstag (Heidelberg 1998). S. 35-47.
- Anderson, Stephen R. (1993), Wackernagel's revenge: clitics, morphology, and the syntax of second position. *Language* 69. 68-95.
- Bader, Markus & Tanja Schmid (2008), Wo *tun* im Deutschen optimal ist. Syntax colloquium talk, Konstanz 09.07.2008.
- Bayer, Josef (2004), Decomposing the left periphery: dialectal and cross-linguistic evidence. In: Horst Lohnstein & Susanne Trissler (eds.), *The Syntax and Semantics of the Left Periphery*. Berlin: Mouton de Gruyter. 59-95.
- Bhatt, Rakesh M. (1999), *Verb Movement and the Syntax of Kashmiri*. Dordrecht: Kluwer.
- Bierwisch, Manfred (1983), How on-line is language processing? In: Giovanni B. Flores d'Arcais & Robert J. Jarvella (eds.), *The Process of Language Understanding*. New York: John Wiley & Sons Inc. 113-168.
- Brandner, Ellen (2004), Head-movement in minimalism and V2 as FORCE-marking. In: Horst Lohnstein & Susanne Trissler (eds.), *The Syntax and Semantics of the Left Periphery*. Berlin: Mouton de Gruyter. 97-138.
- Fleischer, Jürg (2008), Zur topikalierenden Infinitivverdoppelung in deutschen Dialekten: *Trinken trinkt er nich, aber rauchen raucht er* (mit einem Exkurs zum Jiddischen)". In:

- Ernst, Peter, Franz Patocka (eds.): *Dialektgeographie der Zukunft: Akten des 2. Kongresses der Internationalen Gesellschaft für Dialektologie des Deutschen (IGDD) am Institut für Germanistik der Universität Wien, 20. bis 23. September 2006* (Zeitschrift für Dialektologie und Linguistik Beihefte 135): 243-268. Stuttgart: Steiner.
- Frazier, Lyn., G.B. Flores d'Arcais & E. Coolen (1993), Processing discontinuous words: on the interface between lexical and syntactic processing. *Cognition* 47. 219–249.
- Hale, Kenneth (1983), Warlpiri and the grammar of non-configurational languages. *Natural Language and Linguistic Theory* 1. 5-47.
- Hook, Peter (1976). Is Kashmiri an SVO Language? *Indian Linguistics* 37:133-142.
- Jacobs, Joachim (1983), *Fokus und Skalen: Zur Syntax und Semantik der Gradpartikeln im Deutschen*. Tübingen: Niemeyer.
- Meinunger, André (2004), Interface restrictions on verb second. In: Ralf Vogel (ed.), *Three Papers on German Verb Movement. Linguistics in Potsdam* 22.
- Rizzi, Luigi (1997), The fine structure of the left periphery. In: Liliane Haegeman (ed.), *Elements of Grammar*. Dordrecht: Kluwer. 281-337.
- Rooth, Mats (1985), *Association with Focus*. Ph.D. dissertation, University of Massachusetts, Amherst, Massachusetts.
- Scheepers, Christoph, Barbara Hemforth & Lars Konieczny (2000), Linking syntactic functions with thematic roles; psych-verbs and the resolution of subject-object ambiguity. In: Barbara Hemforth & Lars Konieczny (eds.), *German Sentence Processing*. Dordrecht: Kluwer. 95-135.
- Schwarz, Christian (2004), *Die tun-Periphrase im Deutschen*. Magisterarbeit, Universität München.
- Truckenbrodt, Hubert (2004), Zur Strukturbedeutung von Interrogativsätzen. *Linguistische Berichte* 199. 313-350.
- Wackernagel, Jacob (1882), Über ein Gesetz der indogermanischen Wortstellung. *Indogermanische Forschungen* 1. 333-436.
- Wali, Kashi & Omkar N. Koul (1997), *Kashmiri. A Cognitive-Descriptive Grammar*. London: Routledge.
- Wechsler, Stephen (1990), Verb second and illocutionary force in Swedish. In: Elisabeth Engdahl, Michael Reape, M. Mellor & Richard Cooper (eds.), *Parametric Variation in Germanic and Romance. Edinburgh Working Papers in Cognitive Science*, #6. 229-244.
- Wechsler, Stephen (1991), Verb second and illocutionary force. in: Katrin Leffel & Denis Bouchard (eds.), *Views on Phrase Structure*. Kluwer. Dordrecht.