

## Evidentiality and German Attitude Verbs

**Problem:** German attitude verbs usually embed that-clause complements (1). In addition, only certain verbs can also license clauses with matrix verb-second (V2) word order as their complements (2). These same verbs can also appear in slifting constructions (3). The main question addressed in this paper is why only some attitude verbs allow these additional constructions. I argue that in slifting, the attitude verb functions as an evidential parenthetical, elaborating on (Reis, 1997) and a suggestion in (Potts, 2007), but contra (Wagner, 2004). For V2-embedding, I show that the attitude verb syntactically and semantically embeds its complement. Still, the evidential semantics is the same as in slifting. What differs between the two cases is the distribution of the semantic pieces onto the semantic dimensions of assertion and conventional implicature. In both constructions, only verbs that contribute an upwards epistemic component without factivity are compatible with the evidential semantics.

**Slifting vs. V2-Embedding:** Both slifting (Ross, 1973) and V2-embedding are possible with verbs of saying and belief, verbs of imagination, and certain verbs of (dis)preference, such as ‘hope’ (Truckenbrodt, 2006) or ‘fear’. Factive verbs (‘know’) are disallowed in both constructions, as well as negative (‘doubt’, (4)) or negated verbs. Crucially, some verbs of preference like ‘wish’ and ‘want’ are also impossible. Truckenbrodt (2006) argues that they do not contribute an epistemic component and instead express pure preference. I draw the following generalization: Verbs are only allowed in slifting or V2-embedding in German if they have (i) an epistemic component which is (ii) “upwards”-directed (‘believe’; but not ‘doubt’), and (iii) is not factive. Despite the fact that the same class of verbs participates in both constructions, slifting and V2-embedding have at least one striking semantic difference: Slifted phrases are not semantically embeddable under operators like question-formation (indicated by the question-only particle ‘denn’) and ‘because’ (5), whereas V2-embeddings are embeddable under these operators (6), just like sentences with regular ‘that’-complements (7).

**Slifting:** The semantic unembeddability of slifting is expected if they are analyzed as parentheticals: The slifted phrase functions as an evidential (as suggested by Potts, 2007), lowering the epistemic threshold under which the matrix clause can be uttered. Typical slifted phrases are ‘I hear’, ‘I think’, ‘Peter says’—slifting is a way of expressing evidentiality in a productive way in languages like English or German. The meaning I propose for a sentence *p* with slifting verb *V* is two-dimensional (8): The main assertion of the utterance is *p*, after the epistemic threshold of the conversation has been lowered (the function of evidentials). The actual content of the slifting verb *V* is contributed as a side comment in the conventional implicature dimension (this distinguishes ‘I hear’ from ‘I hope’). Why, though, are only certain verbs able to participate in slifting? This, I propose, is a direct consequence of the verb’s semantic properties: (i) Only verbs with an epistemic component can affect the epistemic threshold (this rules out ‘wish’); (ii) the asserted content (matrix clause) and non-asserted content (slifted phrase) must not clash (this guarantees upwards epistemicity and rules out ‘doubt’); (iii) the point of the evidential is to manipulate the epistemic threshold—a factive verb does not lower the threshold and thus the construction does not feel like slifting (9).

**V2-Embedding:** V2-embeddings, as shown above by (5–7), are true embeddings in that the attitude verb contributes its meaning as asserted content. Still, I claim that the V2 (matrix) word order in the embedded clause contributes the meaning that the proposition *p* expressed by that clause is assertable given an epistemic threshold *T*. The indexical *T* is bound by the belief-world contributed by the matrix verb (see (10)). Thus, the meaning of V2-embeddings (10) is the same as the meaning of sliftings (8), although the semantic pieces are distributed differently onto the dimensions. This explains why the same class of verbs in German allows for both kinds of constructions. For V2-embeddings, (i) An epistemic component to the verb’s meaning is clearly needed to bind the epistemic indexical *T* (see also Truckenbrodt, 2006); (ii) a downwards-directed epistemicity again leads to a clash between the assertion and the non-asserted contribution that *p* is assertable given the epistemic threshold; (iii) factive verbs presuppose their complement *p*: it’s odd to add another side comment stating the assertability of *p* when the truth of *p* is already assumed to be known (compare (11)).

**Conclusion:** I have shown that an attitude verb that provides an upwards-directed, but non-factive, epistemic component can combine with its complement in a freer way, allowing for both a slifting construction as well as the licensing of a V2 complement in German. Although the semantic contributions are the same in both cases, the different distribution over semantic dimensions leads to slightly different semantic properties, e.g. with regard to embeddability.

### Examples:

- (1) Peter glaubt, dass Maria schwanger ist.  
Peter believes, that Maria pregnant is.  
'Peter believes that Maria is pregnant.'
- (2) Peter glaubt, Maria ist schwanger.  
Peter believes Maria is pregnant.  
'Peter believes that Maria is pregnant.'
- (3) Maria, glaubt Peter, ist schwanger.  
Maria, believes Peter, is pregnant.  
'Maria, Peter believes, is pregnant.'
- (4) \* Maria, bezweifelt Peter, ist schwanger.  
Maria, doubts Peter, is pregnant.  
Intended: 'Peter doubts that Maria is pregnant.'
- (5) a. \* Ist er, glaubst du denn, gefahren?  
Has he, believe you Q-PART, driven?  
Intd.: 'Well, do you think he has left?'  
b. Maria kommt nicht, weil es, denke ich, regnen wird.  
Maria comes not, because it, think I, rain will.  
'Maria won't come, because it will rain, I think.'
- (6) a. Glaubst du denn, er ist gefahren?  
Believe you Q-PART, he has driven?  
'Well, do you think he has left?'  
b. # Maria kommt nicht, weil ich denke, es wird regnen.  
Maria comes not, because I think it will rain.  
Only: # 'Maria won't come because of my belief that it will rain.' ≠ (5b)
- (7) a. Glaubst du denn, dass er gefahren ist?  
Believe you Q-PART, that he driven has?  
'Well, do you think he has left?'  
b. # Maria kommt nicht, weil ich denke, dass es regnen wird.  
Maria comes not, because I think that it rain will.  
Only: # 'Maria won't come because of my belief that it will rain.' = (6b)
- (8) **Semantic contributions of slifting** (slifted verb V, matrix clause p):  
Assertion:  $T \downarrow p$  (p; after the epistemic threshold T has been lowered)  
Conventional implicature:  $V(p)$
- (9) # Maria, I know, is pregnant. (vs.: Maria, I believe, is pregnant.)
- (10) **Semantic contributions of V2-embedding** (matrix verb V, embedded clause p):  
Assertion:  $V(p)$   
Conventional Implicature:  $T \downarrow p$
- (11) Sue knows that Maria is pregnant, # which by the way is true.

### Selected References:

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