

On the semantics of German root and complement clauses

Apart from their use as complement clauses of certain matrix predicates, German complement clauses can also occur independently, either as the second part of an question/answer pair as in (1) *Was weiß Hans? Dass/ob Anna morgen kommt / wer morgen kommt* (What does Hans know? That/whether Anna will come tomorrow / who will come tomorrow) or as solitaires, this means without any linguistic context as in (2) *Ob Hans kommt?* (Whether Hans is coming?).

As to the independent use of German complement clauses, we can observe the following: i. adjacent and solitaire *dass*-V-finals cannot be used as assertions and ii. *ob*-solitaires and *wh*-solitaires do not determine that the addressee knows the answer – cf. Truckenbrodt (2003).

We will show that all these observations can be explained by the different semantics of verb-final and main clauses. The main difference is that declarative and interrogative V2 clauses create a proposition p or a question q as worldly objects. They do this by the help of illocutionary force, which introduces illocutionary conditions that determine that p or q emerge by uttering the sentence and that p or q are related to the utterer as well as to the addressee. V-final clauses, on the other hand, represent propositions or questions that already exist as worldly objects. These objects are introduced as discourse referents via certain matrix predicates. This means that these objects exist independently of the utterance of the sentence. They are part of a description that refers to a situation that is characterized by a predication (matrix predicate) on a proposition or question.

Both, *dass*-clauses and declarative V2-clauses have in common that their IP is interpreted as a set of propositions (a singleton) that is characterized by a set of situations (3ai and 3bi) – cf. Kratzer (2003). If the IP is the argument of the complementizer *dass*, the latter introduces a variable for the matrix predicate thus indicating the dependency of the *dass*-clause on a matrix predicate – cf. (3bii-iii). The matrix predicate determines that there is a proposition p that is a member of the singleton and that this proposition is related to the matrix subject (3biv-v). The matrix predicate further determines whether there is a situation s that exemplifies the set of situations and of what ontological kind this situation is.

If there isn't any complementizer, assertive illocutionary force is attached to the IP (3aai-iii). This force determines illocutionary conditions such that a proposition \mathbf{p} emerges as a worldly particular that is a member of the singleton and that \mathbf{p} is exemplified by a situation that is given in the context of the person who utters the sentence. Since this \mathbf{p} doesn't belong to the descriptive content of the sentence, it cannot be within the scope of negation. It can, however, be related to anaphorically.

- (3) a. *Hans kommt.*
Hans is coming.
- i. IP: $\lambda p [p: \lambda s [\text{come}(\text{hans})(s)]]$
 - ii. C^0 : $\lambda \Pi [ass(\langle \mathbf{p}, \Pi \rangle)]$
 - iii. CP: $ass(\langle \mathbf{p}, \lambda p [p: \lambda s [\text{come}(\text{hans})(s)]] \rangle)$
- b. *Anna behauptet, dass Hans kommt.*
Anna claims that Hans is coming
- i. IP: $\lambda p [p: \lambda s [\text{come}(\text{hans})(s)]]$
 - ii. C^0 : $\lambda \Pi \lambda M [M(\Pi)]$
 - iii. CP: $\lambda M [M(\lambda p [p: \lambda s [\text{come}(\text{hans})(s)]])]$
 - iv. V^0 : $\lambda \Pi \lambda x \lambda s' \exists p [\text{claim}(\langle p, \Pi \rangle)(x)(s') \wedge R(x)(p)]$
 - v. CP': $ass(\langle \mathbf{p}', \lambda p' [p': \lambda s' \exists p [\text{claim}(\langle p, \lambda p [p: \lambda s [\text{come}(\text{hans})(s)]] \rangle)] \rangle)(anna)(s') \wedge R(x)(p) \rangle \rangle)$

Assertive illocutionary force cannot be attached to a *dass*-clause because *ass* determines that p is not introduced independently of the utterance and because the attachment of *ass* to a *dass*-clause would lead to a type clash.

A similar story can be told with respect to interrogative V2-clauses and interrogative V-final clauses. Both, they have in common that the IP is represented as a set of questions that are characterized by a function – cf. Krifka (2001a). As to interrogative V2-clauses, they exhibit interrogative illocutionary force (4aai-iii) that determines that a question \mathbf{q} emerges as a worldly particular, that \mathbf{q} is

related to the utterer as well as to the addressee and that the addressee should map the function, which characterizes q , to its (short) answer. V-final clauses, on the other hand, indicate that the function depends on a matrix predicate. The function can either be the representation of a question q that is an argument of an interrogative matrix predicate (4b) or it constitutes the background of a structured proposition that is an argument of a matrix predicate like *know* – cf. the underlined form in (4c).

- (4) a. *Kommt Anna?*
Does Anna come?
- i. IP: $\lambda q [q : \lambda f \lambda s [f(\text{come}(\text{anna})(s))]]$
- ii. C^0 : $\lambda \Phi [int(\langle \mathbf{q}, \Phi \rangle)]$
- iii. CP: $int(\langle \mathbf{q}, \lambda q [q : \lambda f \lambda s [f(\text{come}(\text{anna})(s))]] \rangle)$
- b. *Anna fragt, ob Hans kommt.*
Anna asks whether Hans will come.
- i. IP: $\lambda q [q : \lambda f \lambda s [f(\text{come}(\text{anna})(s))]]$
- ii. C^0 : $\lambda \Phi \lambda M [M(\Phi)]$
- iii. CP: $\lambda M [M(\lambda q [q : \lambda f \lambda s [f(\text{come}(\text{anna})(s))]])]$
- iv. CP': $ass(\langle \mathbf{p}', \lambda p' [p' : \lambda s' \exists q [\text{ask}(\langle q, (\lambda q [q : \lambda f \lambda s [f(\text{come}(\text{hans})(s))]]) \rangle) (\text{anna})(s') \wedge R(x)(q)]] \rangle)$
- c. *Anna weiß, ob Hans kommt.*
Anna knows whether Hans will come.
 $ass(\langle \mathbf{p}' : \lambda s' \exists p \exists a [\text{know}(\underline{p : \langle \lambda f \lambda s [f(\text{come}(\text{hans})(s))], a \rangle}) (\text{maria})(s') \wedge R(x)(p)]] \rangle)$

This approach implicates that complement clauses are not speech acts by themselves. Thus, it contrasts with Krifka (2001b) who argues with respect to interrogatives with an universal quantifier and a pair-list answers such as (5) *Anna asks which dish every guest made. Al made a pasta, Bill made a pizza, Carl made a pudding* that these interrogatives are conjoined speech acts. We suggest that such interrogatives are not ambiguous with respect to their possible answers and that the pair-list answer is derived by a pragmatic principle.

The approach further implicates that a complement answer as in (1) cannot be considered to be an *assertion* that asserts that Anna will come tomorrow. It is the ellipsis of the full answer to the question. The claim that a fragmentary answer is reconstructed as a question/answer pair with the illocutionary function *ass* can be confirmed by the facts that only the full answer can be denied, that it can be asked for, and that such clauses can occur together with a sentential adverbial as in *Leider, dass Anna morgen kommt. (Unfortunately that Anna will come tomorrow).*

The approach allows to find an explanation for the behavior of declarative V2-clauses if they seem to occur as complements of certain matrix predicates.

It also results that *dass-*, *ob-* and *wh-* clauses, if they occur as solitaires, cannot be interpreted as *assertions* or *direct questions*. Their semantics determines that the p or q they characterize must be introduced by a matrix predicate that is given by the situative context. This implicates that neither *ass* nor *int* can be attached to them. Since *int* cannot be attached, the condition that the addressee knows the answer need not be fulfilled. That solitaire *wh-* and *ob-* clauses, however, can be interpreted as indirect questions is due to their intonation and the fact that they describe a discourse given unanswered question.

References

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