

# Semantic and syntactic properties of verbs of communication

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## Zusammenfassung

This essay is concerned with the event structure of verbs of communication. Some verbs of communication cannot easily be classified as belonging to a particular type of event structure, while others are basically Activity predicates. We show that this difference with respect to event structure depends on the lexicalization of speaker attitudes. Those verbs of communication which do not express any particular speaker attitude can be assigned an Activity event structure, which can then be expanded to yield an Accomplishment. However, genuine speech act verbs, i. e. verbs which are specified with respect to speaker attitudes, do not correspond to any event structure type and do not allow a similar expansion of their argument structure.

## 1 Introduction

This paper is concerned with variation in verb meaning as well as with the variation in syntactic context that correlates with it. Both types of variation have often been attributed to properties of the event structures that verbs are associated with (cf. [WUNDERLICH 1997, 1997a], [PARSONS 1994], [PUSTEJOVSKY 1995], [RAPPAPORT HOVAV/LEVIN 1998], [CARRIER/RANDALL 1992]). Most studies about event structure have concentrated on a few specific verb classes such as movement verbs and psych-verbs. In this paper we shall show that verbs of communication (i. e., verbs referring to communicative acts) behave differently from these well-studied verb classes, not only with respect to their event structure, but also regarding the possibilities of expansion (to, e.g., resultative constructions, cf. Goldberg 1995) that their argument structure allows.

## 2 The Event Structure of Verbs of Communication

The structure of events denoted by verbs is commonly described by means of time schemata like the ones proposed by Vendler (State, Activity, Achievement, Accomplishment). Predicates like movement verbs (as, e. g., *arrive*) or psych-verbs (as, e. g., *love*) are mostly assigned an event structure of the following type *arrive*: [ [ BECOME ] [ x<STATE> ] ] (viz., *arrive* is classified as an achievement) or *love*: [ x<STATE> ] ] (viz., *love* is classified as a state).

However, any attempt to analyse the event structure of verbs of communication by means of Vendler's time schemata turns out to be problematic (this applies also to, e. g., [Dowty 1979]). This will here be exemplified by the verb *versprechen*. The verb *versprechen* denotes an event to which neither the structure of a state nor that of an activity can be attributed. Temporal extension is a common property of states and activities, but VERSPRECHEN-events show no temporal extension in this sense; *versprechen* is a punctual verb. Accordingly, it is not possible to combine *versprechen* with durative adverbials (\**Ich habe ihm zwei Stunden lang versprochen, heute beim*

*Italiener zu essen.*). However, *versprechen* does not fit into the Accomplishment schema either, because, e. g., it cannot be combined with a time frame adverbial (*\*Max versprach ihr in einer Stunde, am Donnerstag zum Italiener zu gehen.*). One test Vendler relies on to differentiate between Accomplishments and Achievements is the possibility of combining a verb with an adverbial referring to one specific point of time: *Um Punkt 12 Uhr hat Max ihr versprochen, zum Italiener zu gehen* vs. *\*Um Punkt 12 Uhr lief Max einen Kilometer.*

But *versprechen* cannot be classified as an Achievement verb, because contrary to predicates as *ankommen* or *erreichen*, it does not allow an inference with respect to a specific resulting state. Though we can say that the act VERSPRECHEN implies a change of state in some sense, namely that it introduces a kind of obligation, this is not part of its lexical meaning. However, it is not valid to infer that that obligation did not exist before this particular type of speech act was performed. Therefore, the classification of verbs of communication like *versprechen* by means of Vendler's time schemata seems to be very problematic. But not all types of verbs of communication behave in the same way as *versprechen*.

## 2.1 The Event Structure of Perlocutionary Verbs

Though Vendler's time schemata can be more easily applied to perlocutionary verbs as *überreden*, *überzeugen* or *beibringen* than to verbs like *versprechen*, not all perlocutionary verbs behave in the same way.

Telic predicates as, e. g., *überreden* and *überzeugen* denote events, which show characteristics of a process, and allow to draw an inference concerning a resulting state (a specific mental state of the addressee): *Max hat ihn in 20 Minuten überredet, zum Italiener zu gehen* vs. *\*Max hat ihn Punkt acht Uhr überredet, zum Italiener zu gehen.* These verbs do not lexicalize an initial state. Therefore, *überreden* and *überzeugen* show some characteristics of Accomplishment and of Activity verbs.

Events denoted by predicates as, e. g., *beibringen* also show temporal extension and allow an inference on a resulting state (again a mental state of the addressee). Moreover, *beibringen* also lexicalizes an initial state. Summarizing we can say that *beibringen* is an Accomplishment verb.<sup>2</sup>

## 2.2 The Event Structure of Verbs of Communication which are not Specified with respect to Speaker Attitudes

Verbs of communication, which are specified with respect to the speaker's attitude, behave like activity verbs, and therefore the following structure is assigned to them:

*flüstern*: [x ACT<MANNER> ], *faxen*: [x ACT<CHANNEL> ].

The terms enclosed in angle brackets refer to constants, a set which is open-ended, but drawn from a fixed set of types. The basic meaning of a verb is, according to [RAPPAPORT HOVAV/LEVIN 1998], the result of the insertion of a constant into a specific event structure template. The set of event structure templates, which are provided by Universal Grammar, is fixed. The ontological type of the constant determines in which event structure template the respective constant is inserted. Within their event structure template constants function either as modifiers

or arguments of predicates. For example, *flüstern* serves as a manner constant and modifies an activity. Therefore, it is combined with the predicate ACT. The same applies to instrument constants as in the case of, e. g., *faxen*. The constants are inserted into the event structure templates by means of so called canonical realization rules, e. g.:

*manner* → [x ACT<MANNER>], *channel* → [x ACT<CHANNEL>].

Thus, canonical realization rules associate ontological types with event structure templates. The outcome of this association is an event structure. Therefore, *flüstern* and *faxen* show the following event structure: *flüstern*: [x ACT<FLÜSTERN>], *faxen*: [x ACT<FAXEN>].

### 3 The Argument Structure of Verbs of Communication

#### 3.1 Basic Meaning vs. Derived Meaning

The meaning which arises from the association of a constant with an event structure template is the basic meaning of a verb. In addition to this basic meaning, many verbs have meanings derived from this. A verb like *wischen*, for example, is basically an activity predicate: *Peter wischte* vs. *Peter wischte drei Stunden lang* vs. *Peter wischte den Boden drei Stunden lang*.. However, *wischen* can also be part of a more complex predicate: *Peter wischte die Krümel vom Tisch*. The meaning of *wischen* is represented by a constant which specifies surface contact through motion. Since this type of surface contact involves motion, the constant WISCHEN is associated with an activity event structure template. A predicate like *vom Tisch wischen* not only lexicalizes an activity, but also a resulting state. In *vom Tisch wischen*, *wischen* preserves its basic activity predicate meaning, and this is then expanded to yield an Accomplishment. *Wischen* represents the activity part of the event structure of *vom Tisch wischen*, while *vom Tisch* signals the resulting state, in this case predicated of the non subcategorized object *die Krümel*: *vom Tisch wischen*:

[ [x ACT<WISCHEN> y ] CAUSE [ BECOME [ y <VOM TISCH> ] ] ].

[RAPPAPORT HOVAV/LEVIN (1998)] call the procedure that allows complex event structure templates to be built on simpler ones ‘Template Augmentation’. This procedure ensures that the derived meanings are consistent with the basic inventory of event structure templates provided by Universal Grammar.

#### 3.2 Expanding the Argument Structure of Verbs of Communication

Those verbs of communication which can be associated with an activity event structure template allow their argument structures to be expanded in the following way:

1. *Er brüllte ihn unter den Tisch/an die Wand/in die Ecke/zu Tode*
2. *Er brüllte sich den Frust von der Seele*
3. *Er telefonierte ihn zu Tode/schwindelig/in Grund und Boden*
4. *Er telefonierte ihm ein Plastikohr*

The verbs of communication in these examples have activity event structures which are expanded by Template Augmentation to yield Accomplishments: *Er telefonierte ihn zu Tode*:

[ [x ACT<TELEFONIEREN>y ] CAUSE [ BECOME [ y<TOT> ] ] ].<sup>3</sup> However, verbs of communication which do not seem to correspond to any type of event structure do not allow their argument structures to be expanded in this way: \**Er versprach ihn dumm und dusselig/zu Tode.*

## 4 Verbs of Communication and Speaker Attitudes

Verbs of communication can be divided into two groups:

1. Genuine speech act verbs, i. e., verbs which are specified with respect to speaker attitudes.
2. Verbs of communication which can be distinguished from genuine speech act verbs in that they are not specified with respect to speaker attitudes.

There are two types of speaker attitudes which are relevant to the description of the semantic core of verbs of communication:

1. the propositional attitude of the speaker;
2. the intentional attitude of the speaker (intention);

Apart from these genuine speech act verbs, there are also verbs of communication which are not specified with respect to the speaker's propositional and intentional attitudes. This is true of verbs like *sprechen*, *reden*, *schreien*, *flüstern*, *telefonieren*, *schreiben*, etc. These verbs are not associated with a specific speaker attitude but rather express the fact that he/she utters something (P) (in the case of *reden* and *sprechen*), the manner in which something is being uttered (in the case of *schreien* and *flüstern*) or the channel which the speaker uses to perform the corresponding speech act (*telefonieren* and *schreiben*).

There seems to be a relation between a verb's properties with respect to the speaker's attitudes on the one hand and its behaviour concerning event structure on the other: those verbs of communication which are specified with respect to the speaker's attitudes (i. e., genuine speech act verbs) cannot be assigned an event structure, while those which are not specified in this respect behave like Activities, i. e., they can be assigned an event structure, and this can be expanded to yield an Accomplishment. However, as has already been mentioned, there are two exceptions to this rule: declaratives and perlocutionary verbs.

## 5 Lexical Entries of Verbs of Communication

How then shall we proceed if we are to represent the meaning of verbs of communication?

The following issues are crucial to the representation of the meaning of verbs of communication:

1. properties of the proposition
2. configurations of speaker attitudes
3. the speaker's presuppositions

Consequently, the lexical entry of any given verb of communication has to include information on each of these topics. This may be exemplified with respect to the verbs *tadeln* ('reprimand'), *auffordern* ('request') and *flüstern* ('whisper'). The former two are genuine speech act verbs, while the latter is a verb of communication which is not specified with respect to speaker attitudes.

*tadeln*

properties of the proposition	configurations of speaker attitudes	the speaker's presuppositions
Typ: Mitteilungsgehalt: P Geschehenstyp: Handlung Zeitbezug: vergangen Rollenbezug: Hörer oder Dritte	Einstellung des Sprechers zu P: S findet: P schlecht Sprecherabsicht: H erkennt: S findet: P schlecht	P ist der Fall

*auffordern*

properties of the proposition	configurations of speaker attitudes	the speaker's presuppositions
Typ: Mitteilungsgehalt: P Geschehenstyp: Handlung Zeitbezug: zukünftig Rollenbezug: Hörer	Einstellung des Sprechers zu P: S will, daß P Sprecherabsicht: S will, daß H P tut	H ist in der Lage, P zu tun

*flüstern*

properties of the proposition	configurations of speaker attitudes	the speaker's presuppositions
Typ: Mitteilungsgehalt: P oder Fragegehalt P' Geschehenstyp: unbestimmt Zeitbezug: unbestimmt Rollenbezug: unbestimmt	Einstellung des Sprechers zu P: unbestimmt Sprecherabsicht: unbestimmt	unbestimmt

## 6 Conclusion

Whether a given verb of communication can be assigned an event structure or not depends on whether that verb is specified with respect to speaker attitudes: those verbs which are not specified regarding the propositional and the intentional attitude of the speaker can be assigned an Activity event structure which can then be expanded to yield an Accomplishment event structure. Genuine speech act verbs, with the exception of declaratives and perlocutionary verbs, differ from those verbs which are not specified relative to speaker attitudes in that they cannot be associated with any type of event structure at all.

## Notes

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2 As a second class of genuine speech act verbs, declarative verbs too fit in more easily with Vendler's time schemata than other verbs of communication. Due to limitations of space we will not talk about this verb class.

3 Where  $\gamma$  is a participant licensed by the constant, whereas  $\alpha$  is licensed by the Activity event structure template.

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