Kommunikationsverben in OWID: An Online Reference Work of German Communication Verbs with Advanced Access Structures

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Abstract

Kommunikationsverben, an online reference work on German communication verbs and part of the dictionary portal OWID, describes the meaning of communication verbs on two levels: a lexical level, represented in the dictionary entries and by sets of lexical features, and a conceptual level, represented by different types of situations referred to by specific types of verbs. These two levels have each been implemented in special types of access structures. A first explorative access to the conceptual level provides the user with a list of the main classes of communication verbs, the subclasses of each of these, and the lexical fields pertaining to each subclass. Lexical fields are presented together with a characterisation of the situation type to which the verbs of that field are used to refer. Information about the conceptual level is additionally accessible by an advanced search option allowing the user to combine components of the characterisation of situation types to "create" any kind of situation and search for the verbs that correspond to it. Information about the lexical level of the meaning of communication verbs is accessible via the dictionary entries and by another advanced search option allowing the user to search for verbs with particular lexical features or combinations of these.

Key words: communication verbs, lexical fields, online dictionary, access structures, advanced search options

1. Communication Verbs

This contribution deals with the different types of information offered by *Kommunikationsverben*, the online version of the *Handbuch deutscher Kommunikationsverben* (cf. Harras et al., 2004; Harras, Proost & Winkler, 2007), which has recently been integrated into the dictionary portal OWID ('Online-Wortschatz-Informationssystem Deutsch' www.owid.de) of the Institut für Deutsche Sprache (IDS). *Kommunikationsverben* contains about 800 verbs, 241 of which are lemmatised and appear with an entry of their own. All other verbs are listed as synonyms of the verbs lemmatised and differentiated from these in extensive synonymy commentaries included in the entry of the corresponding lemmatised verb.

In *Kommunikationsverben*, communication verbs are understood to be verbs used to refer to situations in which a speaker (henceforth: S) utters something to a hearer (henceforth: H). In the default case, the speaker's utterance also contains a

proposition (henceforth: P). Examples of German communication verbs are *sagen* ('to say'), *sprechen* ('to speak'), *behaupten* ('to assert'), *bestreiten* ('to deny'), *mitteilen* ('to inform'), *versprechen* ('to promise'), *auffordern* ('to request'), *loben* ('to praise'), *klagen* ('to complain'), *schreien* ('to shout'), *unterbrechen* ('to interrupt'), and *mailen* ('to mail'). The term "speech act verbs" is used to refer to the much smaller set of verbs lexicalising speaker attitudes including the speaker's propositional attitude, i.e. the attitude of the speaker to the proposition of his/her utterance, the speaker's intention, and the speaker's presuppositions (cf. Proost, 2006: 65; 2007: 8–9). Of the communication verbs mentioned above, only *behaupten* ('to assert'), *bestreiten* ('to deny'), *mitteilen* ('to inform'), *versprechen* ('to promise'), *auffordern* ('to request'), *loben* ('to praise'), and *klagen* ('to complain') are speech act verbs. *Kommunikationsverben* focuses on speech act verbs.

Following a distinction made in two-levels-semantics (cf. Bierwisch & Lang, 1989; Bierwisch & Schreuder, 1992; Lang, 1994), *Kommunikationsverben* describes the meaning of German communication verbs as comprising two levels: a conceptual level, represented by different types of situations referred to by specific types of speech act verbs, and a lexical level, represented in the dictionary entries. As will be shown below, these different levels have each been implemented in special types of access structures.

2. The Conceptual Level of the Meaning of Communication Verbs

2.1 The General Resource Situation Type

All situations referred to by communication verbs are characterised by the presence of four features or situational roles: a speaker, a hearer, a set of speaker attitudes, and an utterance (mostly) containing a proposition. Since these four elements are part of any situation referred to by communication verbs, they constitute the unifying feature of the meaning of these verbs (cf. Verschueren, 1980: 51–57; 1985: 39–40; Wierzbicka, 1987: 18; Harras et al., 2004: Introduction; Proost, 2006: 651). The type of situation referred to by all speech act verbs is therefore called the 'general resource situation type'.

2.2 Specifications of the Role of the Speaker Attitudes and of the Propositional Content

Two of the roles of the general resource situation type, the role of the speaker attitudes and that of the utterance, may be specified in different ways. The role of the speaker attitudes may be specified as consisting of the speaker's attitude to the proposition of his/her utterance, the speaker's intention, and the speaker's presuppositions. The speaker's propositional attitude may be further specified as S taking P to be true, S knowing P, S wanting P, S evaluating P positively or negatively,

and so on. Specifications of the speaker's intention include S's intention to make H recognise S's propositional attitude (for example, to make H recognise that S knows P or takes P to be true) or to get him/her to do something. The speaker's presuppositions may concern an attitude of H (whether H takes something to be true, whether he/she knows something), the interests of S and H concerning P (whether P is in the interest of S or in the interest of H), or properties of P (for example, whether P is the case). The role of the utterance is specified by properties of the propositional content. These include the event type of P (whether P is an action, event, or state of affairs), the temporal reference of P (whether P precedes, coincides with, or follows the time of S uttering P) and, in the case that P is an action, the agent of P (S, H, S & H, and so on).

2.3 Methods Used

Following a procedure proposed by Baumgärtner (1977: 260–264), the different specifications of the role of the speaker attitudes and the role of the utterance as well as the lower-level specifications of each of these, are obtained from a comparison of sentences containing speech act verbs. The well-formedness of some of these and the ill-formedness of others show which elements are relevant to the meaning of the verbs they contain. For example, a comparison of the sentences in (1) and (2) shows that *to order* lexicalises the values 'future', 'action' and 'hearer' for the specifications of the temporal reference, the event type and the agent of P, respectively, while *to promise* lexicalises the values 'future', 'action' and 'speaker', respectively, for these specifications:

- (1) a. I order you, to PRO, leave the room.
 - b. *I order you, to PRO, have left the room.
 - c. *I order you, for me, to PRO, leave the room.
- (2) a. I_i promise you to PRO_i leave the room.
 - b. *I_i promise you to PRO_i have left the room.
 - c. *I_i promise you_j to PRO_j leave the room.

The introspective analysis exemplified in (1) and (2) has shown that the higher-level specifications of the speaker's propositional attitude, the speaker's intention, the speaker's presuppositions and the propositional content, are essential aspects of the meaning of speech act verbs. These four aspects correspond to five of the seven components of illocutionary force which Searle & Vanderveken (1985: 12–20) and Vanderveken (1990: 103–136) have argued to determine the conditions under which a particular type of speech act is both successful and non-defective. Particularly, the aspect of the speaker's propositional attitude corresponds to the component of the sincerity conditions, the aspect of the speaker's intention to the component of the illocutionary point, the aspect of the speaker's presuppositions to the components 'mode of achievement of the illocutionary point' and 'preparatory conditions', and the aspect of the propositional content to the component of the propositional content

conditions (cf. Harras, 2001: 26–31, Proost, 2006: 654–655).

While the higher-level specifications of the speaker's propositional attitude, the speaker's intention, the speaker's presuppositions and the propositional content are obtained from the type of analysis exemplified in (1) and (2), the lower-level specifications of each of these are calculated systematically, i.e. irrespective of any existing lexicalisations. For example, the specification 'temporal reference of P' is assumed to have the specifications 'past', 'present' and 'future', the specification of the event type of P, the specifications 'action', 'state' and 'event', and so on. The question of which values are lexicalised by a particular verb was decided on the basis of examples from the Mannheim German Reference Corpus DeReKo ("Deutsches Referenzkorpus"). Methodological issues are dealt with in detail in the introductions to both volumes of the *Handbuch deutscher Kommunikationsverben* (cf. Harras et al., 2004; Harras, 2007), which are also available in the online version.

2.4 Special Resource Situation Types

Different combinations of specifications of the different types of speaker attitudes and of the properties of the propositional content constitute special resource situation types. These are referred to by distinct types of verbs. For example, verbs like *behaupten* ('to assert') and *auffordern* ('to request') are used to refer to the situation types characterised by the specifications listed in Tables 1 and 2, respectively:

Special Resource Situation Type:				
Representatives.Assertives.behaupten				
Propositional Content (P)				
Event Type	not specified			
Temporal Reference	not specified			
Agent	not specified			
Speaker Attitudes				
Propositional Attitude	S takes to be true: P			
Intention	S wants: H recognise:			
	S takes to be true: P			
Presuppositions	H does not know: P			

Table 1: Situation type referred to by behaupten ('to assert')

The combinations of the specifications of the speaker attitudes and of the properties of the propositional content lexicalised by *behaupten*, *auffordern*, and *mailen*, respectively, may also be conceived of as the concepts lexicalised by these verbs. Thus, *behaupten* ('to assert') lexicalises the concept of a verbal action performed by a speaker who takes P to be true and assumes that H does not know P with the intention that the hearer recognise that he/she (i.e. S) takes P to be true, P being an

action, event or state of affairs preceding, co-occurring with or following the time of S's utterance.

Special Resource Situation Type:				
Directives.Request.auffordern				
Propositional Content (P)				
Event Type	action			
Temporal Reference	future			
Agent	Н			
Speaker Attitudes				
Propositional Attitude	S wants: P			
Intention	S wants: H do: P			
Presuppositions	in the interest of S: P			

Table 2: Situation type referred to by *auffordern* ('to request')

2.5 Lexical Fields

Verbs which are used to refer to the same special resource situation type constitute a "paradigm" or lexical field. For example, a situation in which a speaker who takes P not to be true and assumes that H does not know P tells a hearer that he/she takes P to be true, may be referred to not only by verbs like *lügen* ('to lie') and its prefixed forms *anlügen* ('to lie to sb.'), *belügen* ('to lie so sb.'), *erlügen* ('to lie about sth.'), *rumlügen* ('to tell lies') and *vorlügen* ('to lie to sb. about sth.'), but also by verbs like *schwindeln* and *flunkern* (both 'to fib') and the prefixed forms of these (*anflunkern*, *anschwindeln*, *beschwindeln*, *rumflunkern* etc.). The situation type referred to by these verbs may be characterised as follows:

Special Resource Situation Type:		
Representatives.Assertives.lügen		
Propositional Content (P)		
Event Type	not specified	
Temporal Reference	not specified	
Agent	not specified	
Speaker Attitudes		
Propositional Attitude	S does not take to be true: P	
Intention	S wants: H recognise: S takes	
	to be true: P	
Presuppositions	H does not know: P	

Table 3: Situation type referred to by *lügen* ('to lie'), *schwindeln* and *flunkern* (both 'to fib') and their prefixed forms

3. The Lexical Level of the Meaning of Communication Verbs

Verbs that differ from each other with respect to their lexical meaning appear with an entry of their own. Lexical meanings were differentiated on the basis of examples from the IDS-corpora of written German. All other verbs are listed as synonyms of the verbs lemmatised. With respect to the *lügen*-field, this means that *lügen* ('to lie') and schwindeln ('to fib') each appear with a separate entry. These verbs differ from each other in that schwindeln but not lügen expresses an evaluation by a discourse situation speaker, i.e. a speaker who uses this verb to comment on the utterance of the resource situation speaker. Particularly, a speaker who uses the verb schwindeln to refer to the resource situation speaker's act of lying thereby indicates that he/she does not consider S's act of lying to have serious consequences for H. In Kommunikationsverben, this difference in the lexical meaning of lügen and schwindeln is reflected by the meaning paraphrases of these verbs in their respective entries. Since the evaluation expressed by schwindeln is an evaluation by a discourse situation speaker, it is not an element of the resource situation referred to by this verb. Hence, within the framework of Kommunikationsverben, it is not part of the conceptual component of its meaning. Rather, it is an essential part of the lexical component of the meaning of this verb.

3.1 Information about Lemmatised Verbs

Apart from meaning paraphrases, the dictionary entries list additional information for each of the lemmatised verbs in the following units:

- (i) FELDZUGEHÖRIGKEIT ('FIELD POSITION'). This unit provides information about the special resource situation type referred to by the verb and its synonyms as well as the position it occupies within the hierarchy of resource situation types. This information is reflected by the name of the special resource situation type (e.g.: "Representatives.Assertives.behaupten" is meant to indicate that behaupten ('to assert') belongs to the group of assertives, which is a subclass of the class of representatives).
- (ii) Lexikalische Bedeutung ('Lexical Meaning'). This section of the dictionary entry includes a colloquial paraphrase of the lexical meaning of the verb as well as a paraphrase which explicitly makes reference to the elements of the corresponding special resource situation type. The meaning paraphrases given for *lügen* ('to lie'), for example, are: 'to say something which one does not believe to be true' and 'speaker S addresses one or more utterances with a propositional content P to a hearer H with the intention that H recognises that S takes P to be true; S does not take P to be true.'
- (iii) VERWENDUNGSSPEZIFIK ('SPECIFICS OF USAGE'). This unit lists the pragmatic properties of the lemmatised verb and includes information on whether it

belongs to a particular stylistic or regional register (whether it may be used performatively), as well as its contextual restrictions (whether the roles of S, H and P are realised optionally or obligatorily and whether they may be realised at all, the way in which these roles are realised syntactically, typical modifiers of the verb in question, its collocates etc.). For *lügen*, the section VERWENDUNGSSPEZIFIK lists the following information:

- The role of H may be realised by an adpositional phrase with *gegenüber* ('in front of', 'to') (*jemand hat jemandem gegenüber gelogen* ('someone lied to somebody')).
- The role of P cannot be realised.
- *lügen* is often used in semi-idiomatic expressions like *lügen wie gedruckt* (literally: 'to lie as if it were printed'), *lügen, dass sich die Balken biegen* (lit.: 'to lie until the beams bend') and *das Blaue vom Himmel* (*her*) *unterlügen* (lit.: 'to lie the blue down from heaven').
- *lügen* cannot be used performatively.
- (iv) Synonyme ('synonyms'). This section lists all verbs and fixed multiword expressions which may be used as synonyms of the lemmatised verb. Multiword expressions are mentioned in round brackets. For example, verbs mentioned as synonyms of *lügen* are *anlügen* ('to lie to somebody'), *belügen* ('to lie to somebody'), *vorlügen* ('to lie to somebody about something'), *rumlügen* ('to tell lies') and *erlügen* ('to lie about something').
- (v) Antonyme ('Antonyms'). In this unit, antonyms of the lemmatised verb are listed where present. Since there are no verbs with the meaning 'to tell the truth' (cf. *wahrsagen, *wahren) in German, no antonyms are mentioned for *lügen*. The entry for *loben* ('to praise'), for example, mentions *tadeln* ('to reprimand') as an antonym of *loben*.
- (vi) Kommentar ('commentary'). This section provides information about the restrictions on the range of contexts the non-lemmatised verbs may occur with. The section Kommentar in the entry for *lügen*, for example, mentions the following context restrictions for the prefixed verbs *anlügen*, *belügen*, *vorlügen*, *erlügen* and *rumlügen*:
 - anlügen, belügen and vorlügen differ from lügen in the syntactic realisation of their arguments: anlügen and belügen obligatorily realise the role of H as an NP in the accusative case; vorlügen realises the role of P obligatorily either as an NP in the accusative case or as a finite subordinate clause. With the exception of the differences in their argument structures, these four verbs may be used as synonyms as illustrated by the following examples:

- Der Ministerpräsident hat vor dem Untersuchungsausschuss gelogen. ('The prime minister lied to the commission.')
- Der Ministerpräsident hat den Untersuchungsausschuss angelogen/belogen. ('The prime minister lied to the commission.')
- Der Ministerpräsident hat dem Untersuchungsausschuss vorgelogen, dass er mit dem Fall nichts zu tun habe. ('The prime minister lied to the commission, telling them that he did not have anything to do with the affair.')
- rumlügen is often used in utterances like Lüg hier nicht so rum! ('Don't go about telling lies!'), which express a discourse speaker's criticism of the verbal behaviour of a resource situation speaker. It is also frequently used with reference to situations in which a speaker tells several lies to several hearers.
- *erlügen* is usually used in the perfect tense as in *Diese Geschichte ist erlogen* ('This story is a lie').
- (vii) Belege ('EXAMPLES'). This unit contains a selection of the examples from DeReKo which served as the empirical basis of the information in the dictionary entries.

3.2 Lexical Features

Each of the lemmatised and non-lemmatised speech act verbs (representatives, directives, commissives and expressives) and each of the communication verbs expressing a particular mode of speaking is characterised as having or lacking the following features: (i) the possibility of the realisation of the thematic roles of H and P¹, (ii) the syntactic realisation of the thematic roles, (iii) the possibility for the verb to be used in the passive voice, (iv) resultativity, (v) lexicalisation of an evaluation by a discourse situation speaker, (vi) polysemy, (vii) the possibility for the verb to be used performatively, and (viii) stylistic register. Information about lexical features is presented in the form of tables which the user may access by selecting the name of listed under resource situation types "Wortartikel/Paradigmen" ('entries/lexical fields'). The screenshot in Figure 1 shows the lexical features of *lügen* ('to lie') and its synonyms:

The situational roles of the speaker, the hearer and the propositional content correspond to the thematic roles 'Speaker', 'Hearer' and 'Propositional content' used in *Kommunikationsverben* to describe the argument structure of communication verbs. These thematic roles are similar to the roles of the Speaker, the Addressee, and the Message used to describe the meaning of communication verbs in FrameNet (cf. Boas 2010: 61–65). The roles of the Speaker, Hearer and Propositional content may be taken to be special instances of the more general roles 'Source', 'Target' and 'Theme', respectively.

Lexikalische Merkmale

Verben	Merkmale							
	Seman- tische Rollen	Argu- ment Struktur	Passiv	Resulta- tivität	Bewer- tung	Poly- semie	Performa- tivität	stilistische Markiert- heit
lügen	H (block)		+	-	-	-	-	-
anlügen	P (block) H (obl) P (block)	NP <akk></akk>	+	-	-	-	-	-
belügen	H (obl)	NP <akk></akk>	+	-	-	-	-	-
erlügen	H (block) P (obl)	NP <akk></akk>	+	-	-	-	-	-
rumlügen	H (block) P (block)		+	-	-	-	-	+
vorlügen	H (obl)	NP <dat> NP<akk> SE Inf</akk></dat>	+	-	-	-	-	-

Fig. 1: Lexical features of lügen ('to lie') and its synonyms

The argument structure properties of the verbs in Figure 1 are illustrated by the following examples from DeReKo (the verbs' arguments are indicated by square brackets, their syntactic realisations by round brackets; S: Speaker, H: Hearer, P: Propositional Content):

- (3) Anwalt Gregory Craig sagte, in der Anklageschrift gebe es keine konkreten Beweise, daß [der Präsident]_{S(NP-nominative)} gelogen habe. [Berliner Zeitung, 22.01.1999]
 - Attorney Gregory Craig stated that there was no concrete evidence in the indictment sheet that the President had lied.
- (4) Auch 2010 werden [die Politiker]_{S(NP-nominative)} [uns]_{H(NP-accusative)} wieder anlügen und uns Geschenke machen, die wir selbst bezahlen. [Mannheimer Morgen, 23.01.2010]
 - In 2010 too, politicians will once again belie us and give us presents that we have to pay for ourselves.
- (5) Tagelang belog [er]_{S(Pro-nominative)} [Trainer Erik Gerets]_{H(NP-accusative)} und bestritt seine Anwesenheit in dem Club. [Braunschweiger Zeitung, 28.03.2008]
 - For days he had lied to trainer Erik Gerets and denied his presence in the Club.
- (6) [Ich]_{S(NP-nominative)} habe gar keinen Vorteil davon, [diese

 $\label{lem:behauptung} Behauptung]_{P(NP-accusative)} \quad zu \quad "erl\"{u}gen". \quad \mbox{[Diskussion:Mikojan-Gurewitsch MiG-105, In: Wikipedia-URL:http://de.wikipedia.org/wiki/Diskussion:Mikojan-Gurewitsch_MiG-105: Wikipedia, 2011]}$

I gain no advantage from contriving an untruth.

(7) Kerstin Brandt braust auf. »Dann lüg hier nicht die ganze Zeit rum!«

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[Die Zeit (Online-Ausgabe), 29.11.2001; Der Prozess [S. 74]
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Kerstin Brandt flared up. "Then don't be lying the whole time."

(8) ..., daß [die Frau]_{S(NP-nominative)} [den Ärzten]_{H(NP-dative)} im Krankenhaus] *vorlog*, [im Haus eines Bekannten "einfach mal ausgeholfen" zu haben]_{P(infinitival clause)}.

[Frankfurter Allgemeine, 11.07.2001; Schwarzarbeit im Haushalt rächt sich nicht immer Razzien vor allem auf Baustellen und in Gaststätten / Bis zu 90 000 illegale "Dienstmädchen" in Hessen]

..., that the woman lied to the doctors at the hospital, saying that she only helped out in the house of an acquaintance.

4. Degrees of Synonymy

Verbs which are listed in *Kommunikationsverben* as synonyms of other verbs may be synonymous with these to different degrees. Verbs which are used to refer to the same special resource situation type such as, for example, *lügen*, *schwindeln*, *flunkern* and their prefixed forms are considered to be synonyms in a broader sense. Verbs which may be substituted in specific contexts such as, for example, *lügen*, *anlügen*, *belügen* and *vorlügen* (see section 3) are regarded as synonyms in a narrower sense.

5. Explorative Access

A first explorative access to *Kommunikationsverben* via the menu item "Wortartikel/Paradigmen" ('entries/lexical fields') provides a clustering of German communication verbs by main verb classes. These include the general communication verbs, the five main types of speech act verbs (representatives, directives, commissives, expressives and declaratives), and the different classes of communication verbs (verbs expressing a particular mode of speaking, verbs expressing a communication medium, verbs referring to conversational structure, ...).

By selecting one of the main classes, the user is presented with a window showing the different types of verbs subsumed under the larger class, for example, "Assertive" ('Assertives') and "Informationsverben" ('information verbs') for the class of representatives, "Auffordern" ('request'), "Verbieten" ('forbid'), "Erlauben" ('allow'),

"Fragen" ('ask') and "Raten" ('recommend') for the class of directives, "Lautstärke" ('sound intensity'), "Artikulation" ('articulation'), "Intonation" ('intonation'), "Stimmqualität" ('quality of voice'), "Rhythmus" ('rhythm') and "Iterativität" ('iterativity') for verbs expressing a particular mode of speaking, and so on. The different types of verbs of a larger class are shown together with characterisations of special resource situation types. These are the types of situations to which verbs of that type are used to refer. They are listed together with the corresponding lexical fields. The class of directives of the type "Auffordern" ('request'), for example, is presented together with the special resource situation types to which directives of that type may be used to refer. Figure 2 shows the information presented to the user for directives of the type "Anleiten":



Fig. 2: Resource situation type "Direktive.auffordern.anleiten" in the online presentation

The explorative access to verb classes makes *Kommunikationsverben* a useful instrument for university students interested in speech act theory and/or speech act verbs.

6. Extended Search Options

Apart from the explorative access via the list of main verbs classes, *Kommunikationsverben* provides its users with two more advanced search options: a search for situation types and the verbs matching them as well as a search for verbs with particular lexical features. Both search options are provided via the menu item "Erweiterte Suchen" ('extended search options').

6.1 Searching for Situation Types

By selecting the option "Paradigmen" ('lexical fields') under the menu item "Erweiterte Suchen" ('extended search options'), the user is presented with an input mask, which he/she may use to "create" any situation type he/she can think of and search for the verbs which may be used to refer to it. For example, to create a situation type in which a speaker tells a hearer that he/she does not approve of a past action of that hearer, the following values for the specifications of the different types of speaker attitudes and of the properties of the propositional content may be entered:

Propositional Content (P)				
Event Type	action			
Temporal Reference	past			
Agent	Н			
Speaker Attitudes				
Propositional Attitude	S considers: P bad			
Intention	S wants: H recognise: S			
	considers: P bad			
Presuppositions	P is the case			

Table 4: Search for verbs used to refer to situations in which S tells H that he/she disapproves of a past action of H.

After activating the search, the user is presented with the *vorwerfen*-Paradigma, i.e. the lexical field comprising the verbs *vorwerfen*, *vorhalten* (both: 'to reproach'/'to blame') and *zurechtweisen* ('to reprimand').

6.2 Searching for Verbs with Particular Lexical Features

Verbs with specific lexical features may be searched for by selecting the option "Lexikalische Merkmale" ('Lexical features') under the menu item "Erweiterte Suchen" ('extended search options'). A user interested in the use of, say, communication verbs in the double object construction may select the options 'H: optional/obligatory' and 'P: optional/obligatory' from the section "Semantic Roles", and the options 'H: NP<dative>' and 'P: NP<accusative>' from the section "Argument Structure" in the input mask to search for communication verbs which

appear in constructions of that type. A list of corresponding verbs appears to the right of the input mask.

Any of the lexical features mentioned in 3.2 or any combination of them may be searched for by selecting the relevant features from the input mask.

The searches for situation types and for lexical features may prove to be particularly interesting to linguists interested in lexicalisation phenomena (lexicalisation patterns, lexical gaps) or issues related to argument structure, respectively. Because of the inclusion of these two advanced access structures, *Kommunikationsverben* is an example of how the possibilities of the digital medium may be used to extend and accelerate access to the information provided by the print reference work. It is also likely to be of interest to university students learning German as a foreign language. These potential users may employ *Kommunikationsverben* to find out which verbs may be used to refer to a particular type of situation in German as compared to their native language, and to learn about the argument structure properties of these verbs from a contrastive perspective.

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