

*Beiträge zu  
Sprache & Sprachen 2*

VORTRÄGE DER 5. MÜNCHNER  
LINGUISTIK-TAGE, 1995

KARIN PITTNER  
& ROBERT J. PITTNER (Hg.)

Functions of metaphor

Hans-Jörg Schmid, München

0. Introduction<sup>1</sup>

This paper falls into three sections. In the first section, a survey of functions of metaphor is given. In the second section, some pertinent terminological and methodological issues are explained. The third section, which makes up the main part of this paper, is devoted to cognitive functions of metaphor.

1. Functions of metaphor: a survey

A number of diverse functions have been attributed to metaphor, depending on the perspective taken on this phenomenon. The following figure gives a survey of the major types, which is based on a synopsis of important publications on metaphor (e.g. Lakoff & Johnson 1980, Paproté & Dirven 1985, Kittay 1987, Warren 1992, Dirven 1993, 1994, Ortony 1993, Lipka in press).

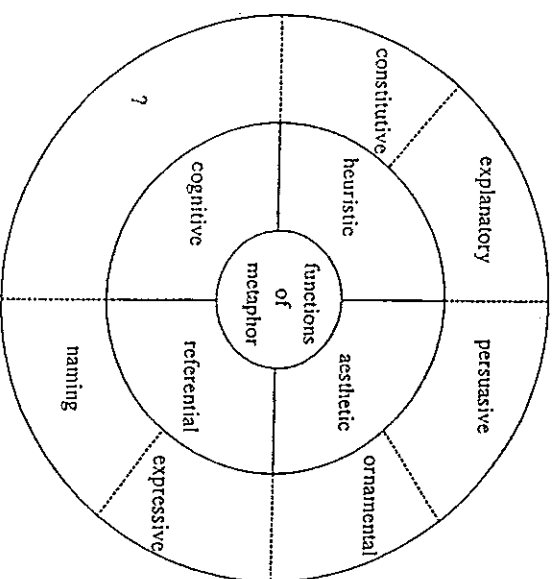


Figure 1: A survey of functions of metaphor

1998  
LINCOM EUROPA

The figure should be read in clock-wise direction starting from twelve o'clock. The four superordinate functions given in the inner circle are closely associated with specific types of metaphors and with the disciplines which have traditionally shown an interest in them: the AESTHETIC FUNCTION is related to poetic metaphors as studied in rhetoric and literary analysis; the REFERENTIAL FUNCTION to the lexicalized metaphors studied by lexicologists; the COGNITIVE FUNCTION to the conceptual metaphors studied by cognitive linguists and psychologists; and the HISTORIC FUNCTION to scientific metaphors studied and used by social, political and natural scientists.

In the outer circle more specific subordinate functions are suggested. These functions are not clearly separable from each other because most instances of metaphor can be said to fulfill several functions. In fact a multiplex network of lines would provide a more realistic representation of the interrelations between the functions, but the one given in figure 1 has been preferred since it is clearer and still reflects the major connections through the order in which the functions have been arranged.

To describe the transitions and overlaps between the functions in the outer circle of figure 1 we start again from the top of the diagram. When metaphors are used as rhetorical or stylistic devices they predominantly serve the aims of persuasion or decoration or a combination of the two. While the PERSUASIVE FUNCTION highlights the effects of a metaphor on the hearer, the EXPRESSIVE FUNCTION on the other side of the ORNAMENTAL FUNCTION focuses on the speaker's desire to express his or her feelings, emotions and attitudes in a special way (Warren 1992: 91, Lipka in press). If the expressive function is understood in a more general sense as comprising the expression of any kind of experience (cf. Dirven 1993: 25), it blends into the NAMING FUNCTION. Often motivated by the expressive function, metaphors can provide alternative names for already named entities, but they also supply names which are necessary for unnamed phenomena (Warren 1992: 87ff, Lipka in press). It is especially in the latter case (which is sometimes called 'catachresis'; cf. e.g. Kitay 1987: 296ff) that the cognitive functions of metaphor come into play. Among others, organizing systems of abstract concepts, supporting the understanding and constituting the ontology of abstract concepts have been identified as cognitive functions in the literature (cf. Lakoff & Johnson 1980: 10, Lakoff 1987: 406). However, as indicated by the question mark in figure 1, the situation in this area is still far from clear. It will therefore be the concern of the main section of this paper to suggest some ideas for a systematic approach to cognitive functions of metaphor.

The fact that metaphors can support the conceptualization of abstract notions is exploited in science when metaphors are used either to express and define abstract theories (CONSTITUTIVE FUNCTION) or to explain them (EXPLANATORY FUNCTION) (cf. Boyd 1993, Kuhn 1993, Mayer 1993). Finally, explanatory metaphors are also used as rhetorical devices in the service of the general aim of *do-*

*cere* ('teach'), for example in order to open the reader's eye for a new perspective on an issue. Here we return to the persuasive function at the top of figure 1 and have thus come full circle.

As was already mentioned, it is in the field of cognitive functions that some explanatory work is most badly needed. However, before we can go about this task it is necessary to clarify the terminology that will be used.

## 2. Definitions and working assumptions

a. In line with the cognitive-linguistic view of METAPHOR, a metaphor is understood as a MAPPING FROM A COGNITIVE SOURCE MODEL TO A COGNITIVE TARGET MODEL (Lakoff 1993: 203, Dirven 1994: 8ff, Ungerer & Schmid 1996: 124).

b. A COGNITIVE MODEL is the sum of the contexts related to a concept or conceptual field, which have been experienced and stored individually by a person or collectively by the members of a society or social group (Ungerer & Schmid 1996: 54).

c. A MAPPING is the transfer of the cognitive structure, or parts of it, from one cognitive model (the SOURCE MODEL) to another (the TARGET MODEL). Note that although both the terms MAPPING and COGNITIVE MODEL refer to aspects of our cognitive system, they are not intended to capture the cognitive processes of the on-line interpretation of metaphors, but function as analytical and descriptive tools in the cognitive theory of metaphor.

d. Whereas METAPHORS, as defined above, are cognitive phenomena, METAPHORICAL EXPRESSIONS are their linguistic manifestations (Lakoff 1993: 203).

e. There are two ways of identifying METAPHORICAL EXPRESSIONS, both of which depend on the observation of an overt semantic incongruity (Leisi 1985: 208ff, Kitay 1987: 64ff, Jaekendorf & Aaron 1991: 325). This incongruity can either arise between cooccurring linguistic elements (e.g. *the bling cold*), or between an expression and the specific knowledge about the extra-linguistic situation referred to or general knowledge about the world (e.g. *They had a big fight*, when someone talks about a marital row, or *He exploded*, in any context).

As can be seen from the references given, these five points have been compiled from various sources. The crucial aspects to keep in mind for this paper are that METAPHORS are seen as cognitive phenomena which are linguistically manifested by METAPHORICAL EXPRESSIONS which can be identified by the observation of a co-textual or contextual INCONGRUITY.

### 3. Cognitive functions of metaphors

Which cognitive functions a particular metaphor manifests depends essentially on the ontological nature of the two cognitive models involved. Thus mappings from one concrete cognitive model onto another, as for example from the metaphorical expressions (1) *They camped at the foot of the Kilimanjaro* or (2) *They climbed the north face of the Eiger*, are cognitively much less complex than mappings from concrete onto abstract models, as in (3) *They demolished his whole theory* (the incongruities giving rise to the metaphorical interpretation are marked by bold face types in these and the following examples). In the former case, we have a simple structural transfer from our cognitive model of the human body (the source model) to our cognitive model of a mountain (the target model). In the latter case, however, the mapping is less straightforward, because in isolation the abstract concept *theory* does not really evoke a tangible cognitive model at all. Here one can argue that we only get a cognitive handle on the concept by means of the mapping from the source model of concrete objects to the abstract target model. Because of this contrast in the nature of mappings, it is necessary to distinguish between the types of cognitive models associated with different ontological classes of entities.

The classification I want to use here is derived from Lyons (1977). He builds his proposal, which aims at providing a semantic basis for the major word classes, on a view of the world characterised as naive realism, according to which "the external world contains a number of individual persons, animals and other more or less discrete physical objects" (1977: 442). Lyons distinguishes between three classes of entities: first-order entities are persons and physical objects; second-order entities are "events, processes, states-of-affairs, etc., which are located in time and which, in English, are said to occur or take place, rather than to exist"; and third-order entities are "such abstract entities as propositions, which are outside space and time" (1977: 442f). In what follows I will use the terms OBJECTS, EVENTS and ABSTRACT NOTIONS as shorthand equivalents for the three types of entities. Similarly, formulations like 'concrete cognitive model' and 'OBJECT model' are shorthand ways of expressing the notions 'cognitive model related to our experience of concrete entities' and 'cognitive model related to our experience with OBJECTS' respectively.

The bulk of the ensuing discussion of cognitive functions of metaphors will be devoted to metaphors with ABSTRACT NOTIONS as target models, because here the full cognitive potential of metaphors can be observed. Four cognitive functions will be identified and explained. Due to the limited space it will then only be possible to show very briefly that the functional potential of metaphors with EVENTS and OBJECT target models is more restricted.

ABSTRACT NOTIONS are not tangible, in the literal as well as in the figurative sense of the word. Extremely general abstract concepts like *idea*, *theory* and *notion*

itself, and 'private' concepts like the emotions *anger*, *pride* and *love* (cf. Kövecses 1986) are very hard to pin down conceptually. However, when we listen to people talking about such concepts, we find that they make ample use of metaphors. Everyday utterances like (4) *I could not grasp his notion of truth* or (5) *I was struggling with my anger* suggest that metaphors seem to play an important role in what we say and think about ABSTRACT NOTIONS.

To identify the four major cognitive functions of metaphor we can start by analyzing examples (4) and (5) with regard to their source models. In example (4), the source model must be determined on the basis of the verb *grasp* because the meaning of this word gives rise to the incongruity with the abstract concept *notion*. Strictly speaking, the source model suggested by this verb is the model GRASPABLE OBJECTS, but since all objects are somehow graspable, we can extend the source model to the domain of CONCRETE OBJECTS in general. What the metaphorical use of the verb *grasp* achieves is the mapping of our knowledge and experience with concrete objects onto the domain of ABSTRACT NOTIONS, which is as if it was a concrete object which can be touched and grabbed. The cognitive process behind the metaphor is thus a concretisation, the metaphor here serves a CONCRETISING FUNCTION. Other examples of metaphors with this function are expressions like (6) *The plan was dropped* or (7) *Can you see the point I am trying to make?*

In a different type of metaphorical expression the concretisation is not performed by means of a verb, but by the use of locative relations, as for example in (8) *the idea behind the project ...* or (9) *There was no substance in his words*. In the cognitive-linguistic tradition, such expressions have either been treated as so-called ORIENTATIONAL METAPHORS (Lakoff & Johnson 1980: 14ff) or as metaphorical mappings of image-schemata (Johnson 1987: 65ff, Ungerer & Schmid 1996: 164). If we stick to our functional perspective, all we need to know is that the main effect of these expressions is the concretisation of abstract notions or states of affairs.

Returning to the second example above, example (5), a more specific source model is suggested by the verb *struggle*. Although in principle one can of course struggle with a variety of things, the prototypical scene denoted by this verb is a fight with an animate opponent, typically a physically superior person, or with adverse physical circumstances. The cognitive source model can therefore be characterised as OPPONENT (cf. Lakoff 1987: 391), which is more specific than the model CONCRETE OBJECTS above. In this way, *anger* is not just conceptualized as some kind of object, but as an animate opponent in a fight. Similar examples are discussed extensively in the cognitive-linguistic literature (e.g. in Lakoff 1987 and Kövecses 1986, 1990). So it will suffice if two more instances of metaphorical expressions which rely on more specific source models are briefly mentioned. In the expression (10) *His plan backfired*, the source model is some sort

of SHOOTING INSTRUMENT, typically perhaps the model associated with the concept GUN, and in (11) *The theory collapsed*, the source models STRUCTURED OBJECT, BUILDING or most prototypically HOUSE are mapped onto the abstract model THEORY. Although strictly speaking only the more general source model STRUCTURED OBJECT is warranted by the verb *collapse*, the strong psychological and collocational links between this process verb and the concept HOUSE tend to suggest this more specific model.

We have seen that depending on the given metaphorical expression the specificity of source models can range from the very general model CONCRETE OBJECTS over more specific models such as STRUCTURED OBJECT or BUILDING to models associated with so-called basic-level concepts like *gun* or *house*. Basic-level concepts are concepts on a middle level in conceptual hierarchies which are specific enough to be characterized by a larger number of attributes and to be visualized as one holistic perceptual gestalt (Rosch et al. 1976, Ungerer & Schmidt 1996: 65ff, Schmidt 1996). These two properties of basic-level concepts allow basic-level metaphors (Lakoff 1987: 406) to serve two other important cognitive functions.

For one thing, the conceptual structure defined by the attributes and other structural characteristics of the source model related to the parts of objects and their relations can be mapped onto the target model. In this way, basic-level metaphors can have a concept-structuring function. The source model HOUSE, for example, suggests that theories are carefully designed and neatly organized structures, whose lower parts have to be solid and strong so that they can support the upper, more delicate, parts. This conceptual structure is supported by many other metaphorical expressions about theories which rely on our cognitive model of buildings or houses. For example one speaks of the *groundwork* or *framework* of a theory, of the need to *construct* or *build* a theory properly, to *support* or even *buttress* it with arguments, and of *solid* or *shaky* theories (cf. Lakoff & Johnson 1980: 99).

Second, it was mentioned that basic-level concepts can be visualized as gestalts. When the source model lends itself to such a visualization in the form of a holistic mental image, this image is also mapped onto the target model. The metaphorical expression *The theory collapsed* in example (11) can thus evoke an image of a house whose walls are breaking down with the roof falling on the debris. Other verbs mentioned so far (e.g. *demolish* and *backfire*) also allow for the formation of such images. Images of a much less concrete nature, i.e. IMAGE-SCHEMATA, can be evoked when ABSTRACT NOTIONS enter into locative relations, as in the examples (8) *the idea behind the project* or (9) *There was no substance in his words* mentioned above. As in the case of the more concrete images, it depends on the richness and specificity of the individual scenes whether this image-forming function of metaphors can take effect or not.

Basic-level metaphors have a considerable concept-structuring and image-forming potential, but the specificity of their source models has an additional, complementary, effect. Every single metaphorical expression can only map one source model onto one target model, although often a number of metaphorical expressions rely on the same source model (cf. the expressions relying on HOUSE given above). However, when the mapping relation is approached from the side of the target model and one starts collecting more metaphorical expressions used to structure one ABSTRACT NOTION, one finds that often not just one but several specific source models can be involved. As we have seen, the source model HOUSE depicts theories as neatly structured entities, but theories can also be portrayed as having the properties of being demanding, confusing or even impenetrable. Specific source models which draw attention to these aspects of theories are the models FIELD (*I ploughed through her entire theory*), MAZE (*His theory is a maze*) or JUNGLE (*Her theory is a jungle*). In this way, concept-structuring metaphors can provide alternative perspectives on ABSTRACT NOTIONS by exploiting source models which highlight particular attributes. This important and powerful function of metaphors can be called the highlighting function (Lakoff & Johnson 1980: 10ff).

We have now identified the CONCRETISING, the CONCEPT-STRUCTURING, the IMAGE-FORMING and the HIGHLIGHTING functions of metaphors. The table in Figure 2 below gives a survey of these four cognitive functions. As can be seen, the functions are defined by the nature of the source and target models that participate in the metaphorical mapping. Besides the metaphors with abstract notion target models which we have discussed, the table includes the other two ontological classes of target models, EVENTS and OBJECTS, with an indication of the relevant cognitive functions. When functions are put in brackets, this is to indicate that they are only relevant for some instances of this type but not for all.

The table (Figure 2) shows that all metaphors have a highlighting function, no matter which target models are involved. When an OBJECT model is mapped onto another, as in the lexical metaphors (computer) *mouse*, *head* (of a page), or *egg-beater* (for 'helicopter'), the basic motivation of the metaphor is probably a referential rather than a cognitive one. These metaphors emerge either from the need to name a new object (*mouse*) or to identify some part of an object (*head*), or from the wish to name an object in a particularly expressive, descriptive or simply funny way (*egg-beater*). From a cognitive point of view all three types perform the same function, namely that of highlighting one or several attributes: the shape, size and movement in the case of *mouse*, the structural relation 'is on top' in the case of *head*, and the revolving movement of the rotors in the case of *egg-beater*. As the example *egg-beater* suggests, an image-forming component can be involved but this is probably not the rule; other examples of image-forming metaphors are naming metaphors which are based on prototypical scenes (cf. Lipka 1992: 126), such as the words *crane* (as a machine) and *shuttle*.

Metaphorical mapping from source models or aspects of source models	objects	conceptual structure of basic-level concepts	gestalt of basic-level concepts	attributes of basic-level concepts
on target models				
abstract notions	concluding	concept-structuring	image-forming	high-lighting
events	(concluding)		image-forming	high-lighting
objects		FUNCTIONS		

Figure 2: Survey of cognitive functions of metaphor

The ontological class of EVENTS occupies a middle position between OBJECTS and ABSTRACT NOTIONS with examples ranging from concrete processes and activities over activities with limited abstract components to events in which abstract components such as aims, motivations or evaluations predominate. For example, the metaphorical expressions *leave, pass away* and *push up the daisies* map onto the relatively concrete EVENT target model DYING. In addition to the concrete activity EATING, the metaphorical expressions *stuff one's face* or *stuff oneself* involve the indication of the force and intensity of the activity (as much as possible). Examples of the more abstract type of EVENTS are the following expressions taken from Lipka (in press): both *doughnutting* (the practice of members of parliament coming and sitting in a group round a fellow member who is speaking in a televised session of parliament, in order to give the impression that he or she is addressing a well-attended house) and *goldfishing* (the practice of illustrating a television news commentary on parliamentary proceedings with silent footage of MPs speaking in the chamber) involve very specific characteristics concerning the setting and the participants of the event, and perhaps include a critical undertone. It is especially for this type of event that the concretising function of metaphors plays a crucial role. A final example taken from Warren (1992), the expression *swear on a stack of bibles* ('affirm with vehemence'), illustrates that both high-lighting and image-forming are important functions of metaphors with EVENT target models. The example shows how complex events are compressed into one

conceptual gestalt or one mental image. It is with examples like this one in mind that Lakoff & Turner (1989: 91) speak of "one-shot image mappings" which involve the cognitive transfer of detailed and specific images.

#### 4. Conclusion

This is a short paper with obvious limitations. The most distressing is perhaps that the list of functions of metaphors that is given is not exhaustive. For example the euphemistic function, which is related to the naming and the expressive function, was not discussed. Especially in slang, the euphemistic potential of metaphors can function as a motivation for the coining of alternative names for entities (Warren 1992, Lipka in press). Another sub-function, or better second-order function, of the referential function is the extending of the lexical resources of a language (Dirven 1985, Lipka 1990). Finally, mention should be made of the highlighting function of metaphor, a second-order cognitive function, which stands in a complementary relationship to the highlighting function (Lakoff & Johnson 1980: 10).

It is also a pity that the EVENT and OBJECT types of metaphors could not be discussed in adequate detail and that the relation of the cognitive to other functions of metaphor were only touched on in passing. Nevertheless it is hoped that this paper will be viewed as a step towards a more systematic and comprehensive identification and classification of the functions, and especially of the cognitive functions, of metaphor.

#### References

- Boyd, R. (1993), "Metaphor and theory change: What is 'metaphor' a metaphor for?". In: Ortony (1993), 481-532.
- Dirven, R. (1985), "Metaphor as a basic means for extending the lexicon". In: Paprotlé & Dirven (1985), 85-119.
- Dirven, R. (1993), "Metonymy and metaphor: Different mental strategies of conceptualization". *Leuvense Bijdragen* 82, 1-28.
- Dirven, R. (1994), *Metaphor and nation*. Frankfurt/Main: Peter Lang.
- Jackendoff, R. & D. Aaron (1991), Review of *More than cool reason: A field guide to poetic metaphor* by G. Lakoff & M. Turner, *Language* 67, 320-338.
- Johnson, M. (1987), *The body in the mind. The bodily basis of meaning, imagination, and reason*. Chicago - London: University of Chicago Press.
- Kitay, E. (1987), *Metaphor. Its cognitive force and linguistic structure*. Oxford: Clarendon Press.
- Kövecses, Z. (1986), *Metaphors of anger, pride, and love*. Amsterdam - Philadelphia: Benjamins.

- Kövecses, Z. (1990). *Emotion concepts*. New York: Springer.
- Kuhn, T.S. (1993). "Metaphor in science". In: Ortony (1993), 533-543.
- Lakoff, G. (1987). *Women, fire, and dangerous things*. Chicago: University of Chicago Press.
- Lakoff, G. (1993). "The contemporary theory of metaphor". In: Ortony (1993), 202-252.
- Lakoff, G. & M. Johnson (1980). *Metaphors we live by*. Chicago: University of Chicago Press.
- Leisi, E. (1985). *Praxis der englischen Semantik*. 2. Aufl. Heidelberg: Winter.
- Lipka, L. (1990). "Metaphor and metonymy as productive processes on the level of the lexicon". In: Bahner, W., J. Schildt & D. Viehweger, eds. (1990). *Proceedings of the XIVth international congress of linguists*. Berlin: Akademie-Verlag, 1207-1210.
- Lipka, L. (1992). *An outline of English lexicology*. 2nd ed. Tübingen: Niemeyer.
- Lipka, L. (in press). "Words, metaphors and cognition: A bridge between domains". Paper given at the conference on *Words in Lund*, August 1995.
- Lyons, J. (1977). *Semantics*. 2 vols., Cambridge: Cambridge University Press.
- Mayer, R.E. (1993). "The instructive metaphor: Metaphoric aids to students' understanding of science". In: Ortony (1993), 561-578.
- Paprotté, W. & R. Dirven, eds. (1985). *The ubiquity of metaphor*. Amsterdam - Philadelphia: Benjamins.
- Rosch, E. H., C.B. Mervis, W.D. Gray, D.M. Johnson & P. Boyes-Braem (1976). "Basic objects in natural categories". *Cognitive psychology* 8, 382-439.
- Schmid, H.-J. (1996). "Basic level categories as basic cognitive and linguistic building blocks". In: E. Weigand & F. Hundsnunser, eds., *Lexical structures and language use. Lexikon und Sprachgebrauch. Proceedings of the international conference on Lexicology and lexical semantics*. Münster 1994, Tübingen: Niemeyer.
- Ungerer, F. & H.-J. Schmid (1996). *An introduction to cognitive linguistics*. Harlow: Longman.
- Warren, B. (1992). *Sense developments*. Stockholm: Almqvist & Wiksell.

#### Note

- 1) I would like to thank Leonhard Lipka, Friedrich Ungerer, Günter Jehle and Wolfgang Falkner for their helpful comments on an earlier version of this paper. I am very grateful to Nick Jacob-Flynn for reading the manuscript with a particular eye on the use of the English language.

## Zur illokutiven Kategorie der Aufforderung und ihrer Realisierung im modernen Russischen

Sabine Dönningshaus, Bochum

### 0. Einleitung

Im Rahmen der linguistischen Pragmatik und der Sprechakttheorie ist die universale illokutive Kategorie der Aufforderung von besonderem Interesse. Die aus einzelsprachlichen Untersuchungen gewonnenen Daten über die je nach Sprachgemeinschaft variierenden Ausdrucksformen für den Vollzug von Sprechakten können als Basis für Sprachvergleiche und -typologierungen dienen. Ferner kann der Komplexitätsgrad der jeweiligen sprachlichen Ausdrucksformen objektive Rückschlüsse auf den Entwicklungsstand der Einzelsprache und den Zustand der jeweiligen Sprachgemeinschaft zulassen und ist in entsprechender Interpretation nicht nur von linguistischem, sondern auch von anthropologischem und sozialwissenschaftlichem Interesse. In diesem Sinne liefert der vorliegende Aufsatz einen Überblick über die sprachlichen Mittel, die im modernen Russischen konventionellerweise zur Signalisierung bzw. für den Vollzug des illokutiven Aktes AUFFORDERUNG geeignet sind. Das verwendete sprachliche Beispielmaterial stammt aus den in der Bibliographie angeführten Grammatiken der russischen Sprache, aus der Sekundärliteratur zum Thema Sprechakt und Aufforderung und aus dem Werk von Struzackie. Unberücksichtigt bleiben in der Untersuchung aus räumlichen Gründen die nonverbalen Mittel Mimik, Gestik und Kinesik. Aus denselben Gründen ist davon auszugehen, daß es sich nicht um eine erschöpfende Darstellung handeln kann.

Ausgangspunkt ist die Annahme, daß sprachlichen Äußerungen als kommunikativ-obligatorisches Merkmal Intentionalität zugrunde liegt und sie sich in Propositionen und eine mehrschichtige Modalitätskomponente (Sprecherinstellung, Realitätsstatus, illokutives Ziel) gliedern, welche wiederum die Proposition in einen kommunikativen Zustand versetzt. Ein Element der Modalitätskomponente ist entsprechend der traditionellen sprechakttheoretischen Terminologie die Illokution. Der Sprecher einer Sprache vollzieht illokutionsspezifisch mit Hilfe paralinguistischer, grammatisch-morphologischer und lexikalisch-syntaktischer Mittel den jeweiligen illokutiven Akt, der vom Hörer in entsprechender Weise erkannt und verstanden wird bzw. werden soll.

### 1. Die illokutive Kategorie der Aufforderung

Als funktional-semantische Kategorie inkorporiert die illokutive Kategorie der Aufforderung verschiedene pragmatische Gramme, die in Anpassung an so-