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Motivation in Grammar and the Lexicon

Edited by
Klaus-Uwe Panther
Günter Radden

John Benjamins Publishing Company

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Volume 27

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Preface

Most of the papers collected in the present volume originated from the theme session “Motivation in Language” organized by us at the 10th International Cognitive Linguistics Conference in Kraków, Poland, July 15–20, 2007. We would like to express our appreciation to the 31 presenters and the large audience attracted by the topic of the theme session. In addition to the presenters, Ronald Langacker and Teenie Matlock were invited to contribute to the volume.

We gratefully acknowledge the support of the publishing house John Benjamins and the editors of the series Human Cognitive Processing. In the summer of 2007, we enjoyed the hospitality extended to us by Peter Koch, University of Tübingen. We are deeply indebted to him for giving us the opportunity to present our ideas on motivation to his research group on Lexical Motivation in French, Italian and German. We are also grateful to the DFG-funded research project “Linguistische Datenstrukturen: Theoretische und empirische Grundlagen der Grammatikforschung”, which allowed us to rely on the native speaker expertise of Susannah Ewing-Bölke in editorial matters.

Hamburg, February 2011

Klaus-Uwe Panther and Günter Radden

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Introduction

Reflections on motivation revisited*

Klaus-Uwe Panther and Günter Radden

University of Hamburg

1. Introduction

The title of this introductory chapter alludes to our prior volume *Studies in Linguistic Motivation* (2004), in which we offered a working definition of linguistic motivation and proposed a typology of motivations, comprising ecological, genetic, experiential, perceptual, cognitive, communicative and other motivations. In the present chapter our point of departure is cognition, the “information-processing system” that we consider central to the human condition. Cognition relates to and mediates among other human systems, which we refer to as “peripheral” (see Figure 1). They include, amongst others, bodily experience, emotion, perception, action, social and communicative interaction, culture – and language. From this more general perspective, motivation in language can be regarded as a special case of influence that one human system exerts upon another human system.

The Introduction is structured as follows: Section 2 presents a sketch of the overall framework of the interaction among human systems. Section 3, more specifically, elaborates the interaction between language and cognition (thought). Section 4 provides summaries of the contributions to this volume, relating them to the conceptual framework outlined in Sections 2 and 3. Section 5 concludes with some remarks on open questions and an agenda for future research.

* We would like to thank Linda Thornburg for reading carefully through the introductory chapter and suggesting many improvements both in content and style, which have found their way into the text. We are also grateful for the comments of an anonymous reviewer, which inspired us to rethink and reformulate our conception of motivation in language. The above-mentioned scholars are of course not responsible for any remaining errors and flaws.

2. Human systems and their interaction

This section discusses the relation between cognition and other important human systems. The overall picture is given in Figure 1.

The basic idea of Figure 1 is that all human systems interact with cognition and may, via cognition, interact with one another. Cognition thus functions as the central switchboard that receives input from peripheral systems, processes them, and may influence them in turn. This two-way traffic between cognition and the peripheral systems is indicated by double-headed arrows. In Sections 2.1–2.8, cognition and the peripheral systems are introduced and their mutual interactions are illustrated with non-linguistic and linguistic examples.

2.1 Cognition

Cognition is understood here in the narrow sense of specifically human higher-level mental processes, particularly the ones listed in the central box of Figure 1. In a broader sense, cognition is seen as including the peripheral systems of perceptual, emotional, and linguistic processing. For analytical purposes we find it useful to distinguish between e.g. “raw” experiences, emotions, perceptions, etc., and their cognitive processing and representation. Cognition gives these peripheral systems meaning and functions as a mediator among them.

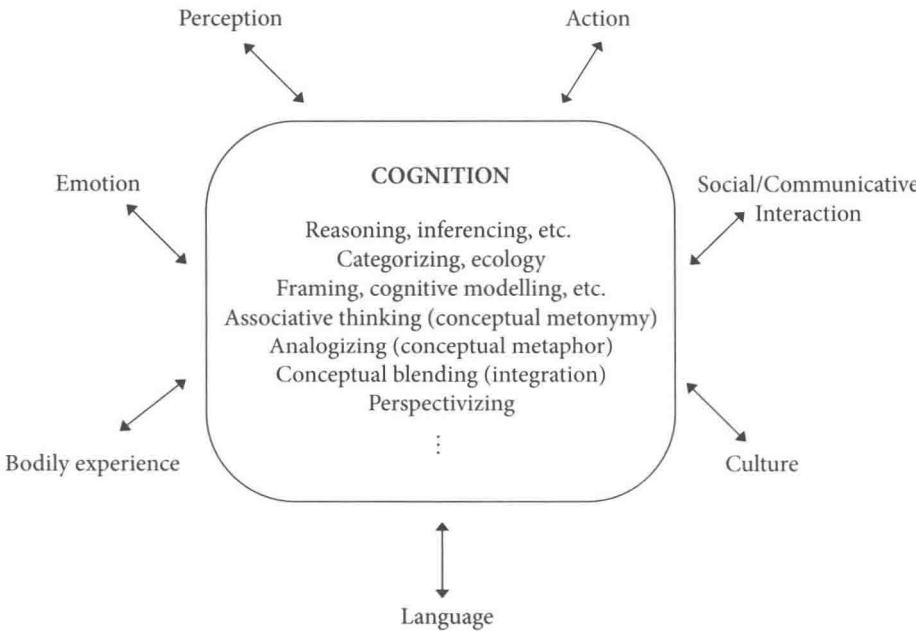


Figure 1. Cognition and its interactions with other human systems

Cognition comprises dynamic mental processes and the product of these processes. For example, the dynamic processes of categorization lead to categories as their products, and the resulting categories may undergo further processes of recategorization. A case in point is the creation of novel antonymic concepts, as analyzed by Panther and Thornburg (forthcoming). For example, the concepts ‘summer’ and ‘winter’ are normally seen as two members of the category ‘season’. However, in the following advertisement (Google search), the concepts ‘summer’ and ‘winter’ are re-categorized as antonyms.

- (1) A car-free family resort offering a warm welcome, summer and winter alike.

In (1), the categories ‘summer’ and ‘winter’ are conceptualized as *maximally contrastive* with respect to meteorological conditions, temperature, and vegetation. Their re-categorization affects the *value* (in the Saussurean sense) of ‘summer’ and ‘winter’ in the system of seasons and hence the system of seasons as a whole. Following Lakoff (1987: 487) and Taylor (2004), we refer to the value of an entity within a system as its “ecology” but understand this notion not just in a linguistic sense but as applying to cognition in general. In the above advertisement, the seasons summer and winter are profiled but, in all likelihood, the resort is also open to tourists in the spring and the fall, i.e. the use of the two terms *summer* and *winter* invites the metonymic inference that all four seasons are meant. The metonymy itself is motivated by a principle of economy; in this case by the principle of informativeness “say no more than you must” (Levinson 2000, Huang 2007).

Even more on the fly than sentence (1) is the following example:

- (2) Doctors and citizens alike are concerned about the consequences of health-care reform.

In this example, doctors are contrasted with citizens (even though they themselves constitute a subset of the set of citizens), i.e., citizens are conceptualized as potential patients and seen in opposition to doctors. What is predicated of these two contrasted groups is that they share a concern “about the consequences of healthcare reform”.

To summarize, the seemingly straightforward uses of the *X and Y alike*-construction in sentences (1) and (2) exhibit a complex of cognitive processes and properties: categorization and recategorization, metonymic inferencing, ecology, and economical coding (informativeness).

2.2 Bodily experience

One of the basic tenets of cognitive science is that the human mind is grounded in the body. Numerous studies have provided evidence for the embodiment hypothesis in thought, language, perception, emotion, action, and other human systems (see e.g. Gibbs 2005; Feldman 2010). Basic bodily experiences are hunger, thirst, pain, sex, sleep, physical force, posture, locomotion, etc. These kinds of bodily experience are

typically metaphorically projected onto more abstract domains, as in *DESIRE IS HUNGER* (e.g. *He hungers for adventure*) (Gibbs 2005: 184–87), *UNDERSTANDING IS GRASPING* (e.g. *grasp a complex idea*) or *BEING PROVOCATIVELY INTERESTING IS BEING SEXY* (e.g. *a sexy idea to trim Japan's debt*). Here, the abstract concepts of desire, understanding, and appeal are understood in analogy to the bodily experiences of hunger, grasping, and sex, respectively.

Conversely, cognition may also exert its influence on the way people experience their body. For example, moral codes or religious taboos may lead to the suppression of one's sexual drive or associate sex with feelings of guilt. Cultural taboos are also reflected in the lexicon of a language. The very existence and condemnation of taboo words, most of which refer to bodily functions such as excretion and sex, reinforce strong negative feelings associated with these bodily functions. Rules of social interaction normally prohibit people from using taboo words. Reference to a taboo is, of course, sometimes unavoidable and can only be done indirectly through euphemisms, such as *Where can I wash my hands?* (for 'I want to use the bathroom,' which is itself a euphemism) or *We have a relationship* (for 'We have a sexual relationship'). Such euphemisms are typically metonymic or metaphoric in nature and fill an ecological niche in the subsystem of social interaction.

2.3 Emotion

Emotion is intimately tied to bodily experience and action. In our folk understanding, emotions are part of a causal chain, involving a causal event, the emotion itself, and physiological or bodily reactions. The causal link between an emotion and its physiological reaction is felt to be particularly tight and does not involve cognition as an intermediary link. Owing to their tight causal relation, we can conceive of emotions metonymically in terms of their physiological reactions or express them together in "symptom-emotion" constructions, as in *white with anger* or *tremble in fear* (for the use of prepositions expressing emotional causality, see Radden 1998; for emotion metaphors and metonymies, see especially Kövecses 2000).

Emotions tend to be beyond our control and, therefore, are often conceptualized as independently existing, forceful entities, as illustrated in sentence (3a).

- (3) a. Juliet_i was struggling with her_i anger.
- b. Juliet_i was struggling with herself_i.
- c. Romeo_i was beside himself_i (with anger).

In (3a), Juliet's anger is metaphorized as an adversary. *Juliet* stands for her normal, controlled self, while *her anger* refers to an uncontrolled emotion. The subscripts indicate that *her* is referentially identical with *Juliet*. A further step in the conceptualization of emotion is exemplified in (3b), where *Juliet* again stands for her calm, controlled self, whereas the coreferential *herself* stands for a highly emotionalized self. Juliet is split into two personalities that, nevertheless, are blended into the same self (for the

notion of divided self see Lakoff 1996 and Kövecses 2000: 24, 38, 44). Sentence (3c) involves another split of self in which *himself* represents Romeo's usual location, i.e. his normal, controlled emotional state of mind, in contrast to the subject *Romeo*, which describes Romeo's shifted location (*beside*), i.e. his uncontrolled, angry state of mind. These examples illustrate the highly complex cognitive operations involved in processing emotions: the metaphor EMOTION IS AN ADVERSARY (*struggle with*), the metonymy PERSON FOR PERSON WITH SALIENT CHARACTERISTICS, and the conceptual integration of two selves into one self.

From a more general perspective, strong emotions are seen as being in conflict with the "essence" of human beings as rational agents. Lakoff and Johnson (1999: 282) claim that there exists a folk model according to which "every object has an essence that makes it the kind of thing it is and that is the causal source of its behavior." In the sentences under (3), the emotional behavior does not correspond to the ideal of rationality attributed to humans by the folk theory of essences. The cultural model thus provides a powerful reason why people should control their emotions. This does, however, not mean that emotions have to be suppressed altogether but that they can be displayed within culturally defined boundaries.

The display of emotions is highly culture-dependent. As a case in point consider how culture, via cognition, interacts with the emotions and the behavior of mourners in funeral ceremonies. Although the spontaneous emotional response to the demise of a close family member is universally a feeling of sadness, cultures vary substantially in the way grief is channeled in mourning ceremonies, i.e. in the kind of behavior that is deemed appropriate in such situations. Islamic cultures, for example, allow mourners to express grief by weeping but prohibit "wailing [...], shrieking, tearing hair or clothes, breaking things or scratching faces [...]" (Wikipedia, s.v. *Mourning*). One's behavior in mourning situations is thus shaped not only by the emotion of grief but also by religious beliefs and cultural practices. At funerals, priests and orators often try to mitigate mourners' grief by presenting the deceased's life as fulfilled and meaningful, by claiming that the deceased is now in a better place, that he died for his country as a "hero", etc. Such conceptualizations of death may have a comforting effect on the mourners, i.e., its rationalization has a feedback effect on the experience of the emotion of grief itself.

2.4 Perception

Perception feeds into cognition and, in turn, receives meaningful interpretations through the cognitive system. In the "real world" we perceive individual objects or phenomena (*tokens*), which, in order to become meaningful, need to be assigned to a *type*. For example, the utterance *That's a possum* presupposes for its comprehension knowledge of the category (type) 'possum'. In general, knowledge of types feeds back into our "meaningful" perception of tokens. Thus, without knowing the rules, a continental European watching a baseball game will not be able to make sense of the game

and enjoy its subtleties. In a jocular vein, cognition accounts for the fact that we do not say, *I wondered why the baseball kept getting bigger. Then it hit me.*

Cognition also enables us to divide a perceived scene into a *figure* and a *ground*, which, under specific circumstances, can even be reversed. The figure is perceived as salient, especially if it is moving, against a more or less static background. The cognitive interpretation of a visual scene in terms of figure and ground thus feeds back into the perceptual system itself. Analogously, the perceptual figure-ground distinction also applies to the conceptual and grammatical organization of syntactic units.

As one of the most important sources of knowledge, the domain of perception is used in structuring the domain of knowledge, as in *I see* ('know') *the solution to the problem* or *I see* ('understand') *your point*. The impact of perception on cognition can be gleaned also from the use of perception verbs in sentences like *John looks sad* or *You sound disappointed*, which, via metonymic inference, convey the interpretations '(Judging from his appearance, I infer that) *John is sad*' and '(Judging from your tone of voice, I infer that) *you are disappointed*'; respectively (see Panther and Thornburg 2009).

As pointed out by Gibbs (2005: ch.3), "[p]erception cannot be understood without reference to action" (49). For example, we associate our perception of objects with the actions typically performed with them, we often interpret static scenes as motional, and we grasp at small objects within arm's reach. Within the framework of interacting human systems, the above-mentioned perceptual affordances are mediated by inferential processes in cognition (with the exception of infants, whose grasping behavior is probably instinctual).

2.5 Action

Actions may be seen as motivated by the need of humans to survive in a potentially hostile environment. Actions are typically physical, intentional, controlled, goal-directed, and meant to have an effect upon the world, for which the human agent is held responsible. As with perceptions, an occurrence needs to be interpreted by the cognitive system. Depending on how many of the above criteria are fulfilled, an occurrence will, or will not, be assigned to a certain type of action. For example, a driver who accidentally hits a cyclist riding a bike without lights does not act intentionally but may still be held responsible for the accident. Yet, this incident does not count as a full-fledged action. A border guard who shoots a person attempting to cross the border illegally acts intentionally but will claim that he acted on command of his superiors and hence had no full control over his act. Such categorizations of occurrences as more or less prototypical actions have consequences in the judicial system, which is part of the culture. For example, in an American courtroom, a jury must decide whether an act of killing is to be categorized as first-degree murder, second-degree murder, or manslaughter. Judgments of what constitutes a premeditated action may vary from culture to culture.

2.6 Social and communicative interaction

Human interaction, both social and communicative, is a subtype of action. Like physical action, human interaction is guided by intentionality, goal-directedness, and effectiveness. However, the effect is not on the physical world *per se* but rather on the social and/or mental world yet may have material consequences. For example, if my boss declares, “You are fired”, the consequences for my social status and material well-being might be serious.

Typically, communicative intentions are conveyed by means of signs, in particular, in language through speech acts. The felicity conditions of speech acts are, among other things, dependent on social parameters. For example, an order is only felicitous if the speaker has authority over the addressee, while in imploring someone to do something, the speaker humbles himself vis-à-vis the addressee.

Not only speech acts, but also any physical act may be intended and/or understood as communicating something. For example, if, at midnight, my neighbor starts drilling holes into the wall, I might interpret this physical act rightly or wrongly as communicating that she intends to exasperate me. Such examples illustrate that cognition is always involved in the interpretations of actions, whatever their nature.

2.7 Culture

Culture encompasses systems of knowledge, beliefs, values, ethics, etc., that are acquired and shared by members of any human society and transmitted to subsequent generations. These elements of culture provide relatively stable cognitive models that guide people in their behavior and orientation in the world. In this sense, culture can be regarded as a system that exists independently of the individual human mind. A precondition for developing a culture is the specifically human ability to read other persons’ minds and cooperate with them, i.e. to engage in activities that require joint attention and the sharing of intentions and goals. These abilities are crucial in what Tomasello et al. (2005) call “cultural cognition”.

2.8 Language

Like the other peripheral systems, language interacts with cognition and, via cognition, with the other peripheral systems discussed above. Since the focus of this volume is on language and its motivation, we devote a separate section to the mutual influences between language and cognition.

3. Language and cognition

Language is probably the system that links more tightly than any other system to cognition. Language influences cognition and is, in turn, influenced by the latter. The hypothesis that language influences cognition is usually attributed to Edward Sapir (1921: 13–18) and, especially, Benjamin Lee Whorf (1964). A thought shaped by a linguistic phenomenon is nowadays often referred to as a “Whorfian effect”. Section 3.1 considers some examples of plausible Whorfian effects that have been proposed in the literature.

The opposite directionality, the impact of cognition on language, is traditionally referred to as *linguistic motivation*. Language is a system of signs, i.e. pairings of concepts and forms. It is only by virtue of form that thoughts can be communicated. A study of motivation in language, therefore, will have to take into account the nature of the linguistic sign. Linguistic motivation is discussed in Section 3.2, and the nature of linguistic signs and their relation to motivation are explored in Section 3.3.

3.1 From language to cognition: Whorfian effects

In the early 19th century, Wilhelm von Humboldt (1979 [1830–35]: 426) postulated that language is the formative organ of thought (“Die Sprache ist das bildende Organ des Gedankens”). In the 20th century, Benjamin Lee Whorf’s (1964) version of this hypothesis, known as the *linguistic relativity principle*, has received perhaps more attention than any of its predecessors. It is a moot point whether Whorf embraced a strong deterministic version of the linguistic relativity principle, implying that speakers cannot escape from the conceptual prison of their mother tongue, or whether he intended to make the point that language *may*, under certain conditions, have an influence on how language users think and experience the world in terms of their native language (see Lee 1996 for detailed discussion).

Recent psycholinguistic studies suggest that language structure indeed may have an influence on thought (see Boroditsky 2003 for a useful summary of recent post-Whorfian work). For example, Bowerman (1996) shows that English and Korean contrast in how spatial relations are coded. Whereas English makes a distinction between ‘containment’ (*in*) and ‘support’ (*on*), Korean distinguishes between ‘tight fit’ (*kkita*) and ‘loose attachment’ (*nehta*). As shown by McDonough, Choi, and Mandler (2003), Korean adult subjects readily picked the “odd man out” when shown several pictures of tight fit and one of loose fit (and vice versa), while English subjects did not notice any differences among the pictures. Similarly, Whorfian effects have been observed by Levinson (1996) in his study of spatial reference systems in Dutch and Tzeltal. Dutch speakers act in accordance with a system of egocentric location (e.g. ‘left/right’, ‘front/back’) as coded in Dutch, whereas Tzeltal speakers behave in accordance with a geocentric system of reference (e.g. ‘north/south’) as coded in their native language.

Grammatical categories have also been shown to have Whorfian effects. According to a study conducted by Boroditsky, Schmidt, and Phillips (2003), the grammatical gender of a noun seems to influence how people think about its referent. For example, when asked to describe associations evoked by the word for ‘key’ in their respective native language, Spanish and German speakers chose completely different sets of attributes. The German masculine noun *Schlüssel* ‘key’ evokes “male” attributes such as ‘hard, heavy, jagged, serrated, and useful’, whereas the Spanish grammatically feminine equivalent *llave* evokes “female” properties such as ‘golden, intricate, little, lovely, shiny, and tiny’. Conversely, the noun for ‘bridge’ is feminine in German (*die Brücke*) and evokes female attributes like ‘beautiful, elegant, and slender’, while its masculine counterpart in Spanish (*el puente*) evokes male attributes like ‘big, dangerous, and towering’ (Boroditsky 2003: 920).

In a similar vein, Panther and Thornburg (2009: 20–22) argue that German nouns such as *Stadt* ‘town, city’ and *Kunst* ‘art’, which are grammatically feminine, are sometimes conceptualized as having conceptual gender. For example, in the German sentence (4), the agreement of the subject *Kunst* with the feminine and female noun *Vermittlerin* (‘female mediator’) shows that art is metaphorically personified as a woman.

- (4) *Kunst ist die Vermittlerin des Unaussprechlichen.*
 art.FEM is the mediator-FEM of.the unspeakable
 ‘Art is the mediator of the unspeakable’

In this example, the grammatical (feminine) gender of the noun *Kunst* evokes the corresponding conceptual (female) gender and determines the speaker’s choice of the feminine and female predicate noun *Vermittlerin*, which may, in turn, reinforce the female character of art. In addition, the female conceptual gender of *Kunst* is certainly also motivated by the Western cultural tradition of pictorially representing the arts as young females.

3.2 From cognition to language: Motivation in language

As mentioned at the beginning of Section 3, we understand the term *linguistic motivation* as the influence of cognition and, via cognition, of peripheral systems on language. The notion of motivation adopted here differs only slightly from the one proposed by Radden and Panther (2004: 4); it now reads as follows:

- (5) A linguistic sign (target) is motivated to the extent that some of its properties are shaped by a linguistic or non-linguistic source and language-independent factors.

The definition in (5) captures the following aspects of motivation in language: First, motivation in language involves a *source* and a *target*. The target is a form and/or content of a linguistic sign, while the source may be cognitive and/or linguistic in nature. A cognitive source of a motivational process is illustrated in the following compound sentence.