

Introduction

Sandra Handl and Hans-Jörg Schmid

1. Windows to the mind: Metaphor, metonymy, and conceptual blending

The cognitive turn in linguistics, triggered to a large extent by key publications such as Lakoff and Johnson (1980), Lakoff (1987), and Langacker (1987), has led to the now widely shared view that our linguistic behaviour is constrained by the way we experience and perceive the world and by how we conceptualize and construe these experiences and perceptions in our minds. This suggests that the study of language allows us to catch a glimpse of otherwise hidden mechanisms of human thinking. In addition to opening up windows to the mind, the structure and use of language arguably also has an influence on the way our minds work (cf. Pederson 2007).

Right from the beginning of cognitive linguistics, the realm of figurative language proved to be an especially fruitful area for studying this reciprocal relation between language and other cognitive abilities. Mostly concentrating on metaphor, research has shown that figuratively motivated expressions abound in everyday language. These conventional figurative expressions can be traced back to deeply entrenched mappings, i.e. well-established mental connections between different domains of experience, characteristically between a more concrete source domain and an abstract target domain (cf. e.g. Lakoff and Johnson 1980; Lakoff and Turner 1989). Starting out from typically inconspicuous linguistic examples, such as (1) or (2), conceptual metaphor theorists identify underlying patterns of thinking:

- (1) *He has strong beliefs.*¹
- (2) *That belief died out years ago.*

In both examples, mental issues are assigned the ontological status of concrete entities. (1) bears witness to the fact that essentially abstract concepts such as BELIEFS, IDEAS, and the like can be conceptualized as concrete entities one can possess. In (2), BELIEFS are construed differently, i.e. as

BEINGS WITH A LIFE CYCLE. Both types of conceptualization lead to further, related metaphorical ideas: Possessions, for example, can be acquired, bought, and sold, therefore it is possible to do the same with beliefs (cf. 3–5). When BELIEFS are conceptualized as LIVING BEINGS, they can be regarded as PLANTS, whose growth stands for the development of the beliefs (cf. 6), whose roots signify the basis for the beliefs (cf. 7), and whose cultivation entails encouragement of the beliefs (cf. 8). Beliefs can, however, just as easily be construed as BELOVED (HUMAN) BEINGS (cf. 9), especially as CHILDREN or PETS one has to take care of (cf. 10–11).

- (3) *He acquired his beliefs during childhood.*
- (4) *I really buy what he's saying.*
- (5) *He tried to sell me a load of hooey.*
- (6) *This is a flourishing belief in his culture.*
- (7) *This is a deeply rooted belief.*
- (8) *I cultivated a belief in my infallibility among my subordinates.*
- (9) *He espoused that belief publicly.*
- (10) *He nourished his belief with weekly church visits.*
- (11) *He fostered the belief within himself.*

Illustrative as these examples may be, they also raise some methodological questions, mainly regarding the identification of metaphorical expressions and conceptual mappings. Frequently, studies of conceptual metaphor (e.g. Lakoff and Johnson 1980, 1999; Kövecses 2000, 2002) use invented examples to prove the existence of conceptual mappings. One can even suspect that, at least in some cases, what researchers have in mind first is the mapping rather than the examples, i.e. that they construct examples to fit the mappings proposed. This is certainly a problem, as what is at issue are not the possible conceptualizations language users have at their disposal, but those which are frequently used and shared by the majority of the members of a given speech community, i.e. the conventional metaphors. It cannot be

denied that in strong contexts speakers are able to use and understand almost any metaphorical conceptualization.² This, however, only reveals something about speakers' competence with regard to conceptualizing and decoding, but not about how the mind is structured, about how humans commonly perceive and understand the world. And while examples like (1) – (11) sound natural enough, this does not tell us anything about their authentic use in everyday language. For this reason, the focus of more recent metaphor research has shifted towards usage-based studies (cf. e.g. Cameron 2003, 2007; Deignan 1999, 2005; Nerlich 2004; Nerlich and Halliday 2007; Stefanowitsch and Gries 2007; Steen 2007). They concentrate mostly on finding out how frequently different metaphorical mappings are actually used either in a language as a whole, by relying on large corpora like the British National Corpus, or in various more specific types of discourse, such as political discourse or journalistic discourse.

These data-driven approaches go hand in hand with a shift towards more functional considerations. Since metaphors are first of all ways of thinking about topics, they are not only informative about how speakers or writers conceive of a given issue. Especially in text-types such as newspaper articles and political speeches, they can be and certainly sometimes are used consciously to influence the hearers' or readers' perception of certain issues. Just as it matters whether a BELIEF is construed as a POSSESSION one can acquire, buy, and sell more or less at one's one discretion, or whether it is construed as a PET or CHILD one has the moral obligation to take care of and cater to, metaphorical conceptualizations of current events or problems proposed and publicized by politicians or journalists are apt to affect our views of these issues. The language chosen to talk about something thus also has effects on the addressees' minds, whose current metaphorical structures are therefore continuously updated by linguistic input.

It can be argued that the figurative structures entrenched in a person's mind arise from, and are sustained by, linguistic as well as non-linguistic sources, which constantly influence each other reciprocally (cf. Figure 1). One the one hand, taking a 'Whorfian' perspective, figurative thought is influenced by the conventionalized figurative expressions which are part of and current in the surrounding language(s). For instance, if a speaker's native language 'teaches' her or him to talk about TIME in terms of MONEY, it may not seem far-fetched to argue that they will eventually come to conceptualize TIME that way. On the other hand, an individual's system of figurative thought is shaped by (non-linguistic) perceptions and experiences. These can rely on individual and personal memories, opinions or attitudes,

which, however, do not tend to develop in isolation, but rather under the influence of socio-cultural models and values shared by larger groups of people (e.g. the culture-specific Japanese conceptualization of ANGER as being located in the *hara*, literally ‘belly’; cf. e.g. Matsuki 1995). In addition to social factors, universal, as it were pan-human, ones such as bodily experience play a role, manifested for example in the metaphorical conceptualization of GOOD as UP. Closing the feedback loop and again taking a Whorfian stance, the way these essentially non-linguistic memories and experiences are processed and structured by individuals may be influenced by linguistic structures and patterns. The conceptualization of GOOD as UP just mentioned, in addition to being based on the fact that people usually adopt an erect posture when they are happy, may to some degree also be an effect of linguistic conventions. In short, the figurative expressions conventionalized in a given language function both as a central determinant and a mirror image of how the minds of the speakers of the language are structured and work. It is from this perspective that figurative language can be seen as opening up a (methodological) window to the notorious black box.

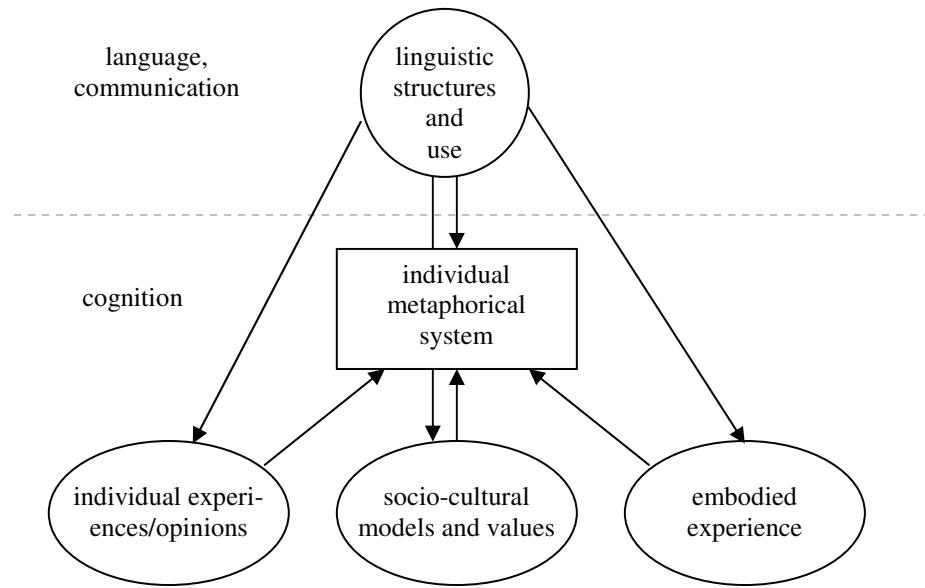


Figure 1. Factors determining an individual's mental metaphorical system

As suggested by the crucial role attributed to shared experiences, cultural models, and, last but not least, shared knowledge about a language, patterns

of figurative thought entrenched in one individual's mind can be assumed to be similar to patterns in the minds of speakers with a comparable linguistic and cultural background. This is essentially what conventionality is all about (cf. Langacker 2008: 21). However, it is far from exceptional that we come across novel or previously unfamiliar ways of conceptualizing entities or events. And this concerns not only novel or unfamiliar figurative cognitive construals, but also any other kind of conceptually multi-layered expression.

One theory which has considerable potential to explain how we deal with such new or unusual cognitive construals is *conceptual blending* (also called *conceptual integration theory*), introduced by Turner and Fauconnier (1995) and further developed in multiple publications, notably Fauconnier and Turner (1998) and (2002). As opposed to conceptual metaphor theory, conceptual blending emphasizes the on-line processes which lead to our understanding of linguistic expressions. Blending theory developed out of Fauconnier's (1994) mental space theory, an account which underlines that language only prompts us to construct meaning, since it does no more than provide us with "minimal, but sufficient, clues" (1994: xviii). Accordingly, any linguistic input leads to the formation of temporary mental representations, called *mental spaces*, i.e. "constructs distinct from linguistic structure but built up in any discourse according to guidelines provided by the linguistic expressions" (Fauconnier 1994: 16). A good example to illustrate this are simple metaphorical utterances like (5), repeated here for convenience as (12):

(12) *He tried to sell me a load of hooey.*

Leaving aside the effect of the verb *tried* for the time being, conceptual blending would begin by arguing that the two key words *sell* and *hooey* will call up two related mental spaces in the hearer's mind, dubbed 'commercial transaction' and 'communication' in Figure 2. As the internal structures of these spaces are based on corresponding frames stored in long-term memory and their components (indicated in the figure), the activation of these mental spaces is presumably automatic and effortless. The next assumption of conceptual blending theory is that hearers construct a blended space by projecting selected information from the two input spaces and integrating it. The details of what is projected and how it is integrated depend on a number of so-called *vital relations* such as identity, similarity, and cause-effect and are restricted by a set of governing principles, among

them compression, integration, and relevance (see the papers in Part III for more details). This is in fact where the verb *tried* comes in, since the collocation *tried to sell* conjures up a scene where it is the seller rather than the buyer who profits from the commercial transaction. This idea is integrated

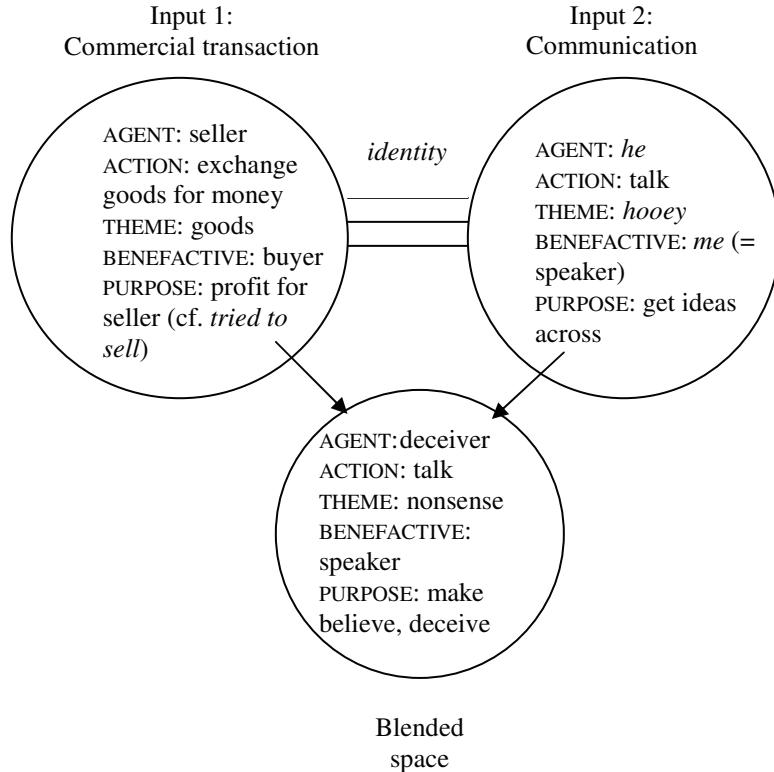


Figure 2. Conceptual network of *He tried to sell me a lot of hooey*

with information projected from Input Space 2, especially the strongly evaluative expression *a load of hooey*, in such a way that the hearer arrives at the interpretation, represented in the blended space, that the referent of *he* is trying to deceive the speaker or at least to make him or her believe things that may not be true. While conceptual metaphor theory would presumably try to trace this example to conventionalized metaphors such as IDEAS ARE OBJECTS and the well-known CONDUIT-metaphor of communication (cf. Reddy 1993), it would leave unexplained central components of the interpretation emerging from the juxtaposition of the two domains. These, on the other hand, play an important role in conceptual blending theory and are

accounted for in terms of notions like *compression*, *integration*, and *emergent structure*.⁴

Like conceptual metaphor theory, the theory of conceptual blending has attracted much criticism, since – at least in its early versions, before the optimality principles controlling the most effective generation of blends had been introduced – it seemed much too unconstrained (cf. e.g. Gibbs 2000). However, it is possibly also the open-ended and all-encompassing nature of the cognitive process of conceptual integration proposed by this theory that has made it so attractive to researchers interested in quite diverse types of linguistic structures of different sizes: Blending has proven a powerful tool in explaining long stretches of discourse (cf. e.g. Oakley and Hougaard 2008), advertising texts (cf. e.g. Herrero Ruiz 2006; Joy, Sherry, and Deschenes 2009), riddles and jokes (cf. e.g. Coulson 2001: 179–185; Fauconnier and Turner 1998: 136–142), metaphorical and non-metaphorical phrases and sentences (cf. e.g. Coulson 2001: 125–161; Grady, Oakley, and Coulson 1999), counterfactuals (cf. e.g. Coulson 2001: 203–212; Pérez Hernández 2002), constructions (cf. e.g. Broccias 2006; Mandelblit and Fauconnier 2000), as well as word-formation processes (cf. e.g. Benczes 2006, Ungerer 2007).

Similarly to conceptual metaphor theory,⁵ blending theory thus elucidates structural and regular principles of human cognition as well as pragmatic phenomena. However, there are also some noteworthy differences between the two theories. While blending theory has always been more oriented towards real-life examples, conceptual metaphor theory had to come of age before it was put to the test with data-driven approaches. A further difference between the two theories already alluded to is that blending theory focuses more on the decoding of creative examples, whereas conceptual metaphor theory is well-known for its interest in conventional examples and mappings, i.e. in what is stored in people's minds. But again, the difference is one of degree and not an absolute one. Blending processes can be routinized and stored if their outcome proves to be useful on more than one occasion. And conceptual metaphor theory is able to explain and accommodate novel figurative linguistic expressions as long as they are compatible with the more general metaphorical makeup of the human mind. Another, perhaps somewhat less important difference lies in the fact that while from the start conceptual blending has pointed to the importance of metonymic construals and thinking for cognitive processes (cf. e.g. Fauconnier and Turner 1998: 158–162), the conceptual metaphor paradigm has long underestimated the role of metonymy, a fact already evident in the

name commonly used to refer to the theoretical framework. Even though metonymy is already mentioned in Lakoff and Johnson (1980), the book which largely triggered the by now uncountable publications in this area, and even though it has been repeatedly underlined that metonymy might very well be the cognitively more fundamental process (cf. e.g. Lakoff and Turner 1989: 108; Radden and Kövecses 1999: 24; cf. also Lakoff 1987: 77–90), the lion's share of attention is still devoted to metaphor. This is probably also the reason why equally appropriate names for the more general area of research, like *conceptual theory of metaphor and metonymy* or *conceptual theory of figurative language*, still sound somewhat strange and unfamiliar.

Although both conceptual metaphor (and metonymy) theory and conceptual blending theory are no longer new and have undergone considerable scrutiny, both theoretical and empirical, there are still fundamental questions to be answered. For the conceptual metaphor paradigm, this relates to questions such as how the conventionality of linguistic expressions and conceptual mappings can be established or the extent to which conceptual mappings as such are cognitively real, i.e. the role adults' and children's knowledge of source domains plays in the understanding of a metaphor. For blending theory, this pertains, among other issues, to the cognitive status and relative weighting of the above-mentioned optimality principles, i.e. to the question as to how exactly the generation of a blend is governed by aspects such as integration, unpacking, or relevance. In addition, and despite several attempts to redress this shortcoming (cf. e.g. Gibbs 2000, Stefanowitsch 2007), both theories still suffer from a certain lack of methodological rigour which (indeed) invites justified criticism. The articles in this volume are intended as a contribution to a better understanding of the explanatory potential as well as possible limitations of the two frameworks by taking up basic methodological questions and providing empirical foundations for contested theoretical assumptions.

2. The articles in this volume

The present collection originated mainly from the Second International Conference of the German Cognitive Linguistics Association, held in Munich on 5 – 7 October 2006, with some additional, solicited papers which fit the overall focus of the volume. The articles assembled here all share the central idea that cognitive approaches to the study of language open a win-

dow to how the human mind works and is possibly influenced by available linguistic structures and choices. The volume is divided into three parts. The first and second build in various ways on the conceptual theory of metaphor and metonymy, while the third is devoted to studies set in the framework of conceptual blending theory.

The first part addresses fundamental issues in the study of metaphor and metonymy. It begins with a strong, albeit controversial, methodological statement by Zoltán Kövecses. His article is a contribution to the ongoing discussion on the extent to which analyses of conceptual metaphor which are not data-driven can be informative about the role metaphors play in language users' minds. Kövecses tackles criticism recently levelled at more 'traditional' studies of conceptual metaphor by proponents of usage-based, bottom-up approaches, such as Dobrovolskij and Piirainen (2005) and Stefanowitsch (2007), concerning three different but related points: Firstly, regarding what has been called *intuitive metaphor analysis*, i.e. the fact that many researchers in the field base their arguments on introspection. Such an approach entails that, secondly, traditional studies potentially miss out on the irregular character of metaphorical language found when looking into natural data. And thirdly, that owing to their intuitive methods, they are hardly able to draw a complete picture of all the possible metaphorical conceptualizations of different target domains. While Kövecses admits that all these criticisms are justified to a certain extent, he builds a strong case for the theoretical and practical value of intuitive studies, mainly by claiming that the results of data-driven research have so far confirmed rather than refuted the assumptions based on intuitive analyses.

Dmitrij Dobrovolskij's paper focuses on the relationship between the semantics of idioms and their conceptual grounding, and argues that the linguistic description of the semantics and syntax of idioms can profit very much from insights gained by cognitive research. The fact that many idioms like *to spill the beans* or *to let the cat out of the bag* are motivated by underlying metaphors has been amply illustrated within cognitive-linguistic research (cf. e.g. Gibbs and O'Brien 1990; Nayak and Gibbs 1990). Dobrovolskij addresses the problem of the semantic analyzability or decomposability of idioms, a phenomenon which has been the subject of many, also non-cognitively-oriented, publications (cf. e.g. Abel 2003; Geeraerts 1995; Gibbs, Nayak, and Cutting 1989; Nunberg, Sag, and Wasow 1994). Analyzability is related to the more or less autonomous semantic status of some of the constituents of the idiom within the actual, non-literal meaning conveyed by the idiom as a whole. Dobrovolskij holds that whether or not the

status of the constituents can be seen as autonomous depends on the mental metaphors underlying the idiomatic expressions. If the structure of the metaphorical mental image and that of the idiom's lexicalized meaning correlate, the idiom is analyzable. The fact that this also has considerable effects on the discursive behaviour, i.e. the syntactic flexibility, of idioms, is illustrated with natural data taken from the internet.

Fundamental questions related to conceptual metaphor theory are also addressed by Aivars Glaznieks. Like Dmitrij Dobrovolskij, he investigates metaphorically-based idiomatic expressions, but Glaznieks focuses on how children's understanding of such expressions develops. At the age of four, children have acquired the general ability to comprehend metaphors, i.e. metaphorical competence. Still, not each and every metaphorical expression is understood at this age. It has been found that the further development of children's metaphorical competence is dependent on their knowledge of the domains involved in the metaphorical mappings (cf. Keil 1986). It could be assumed that it is their knowledge of the source domains rather than that of the target domains that is vital in this respect, since the source domains act as explanatory devices for the targets. Glaznieks, however, provides experimental evidence from children aged five, eight and ten, suggesting that knowledge about the source domains of metaphors may in fact be less important for their acquisition and understanding than was previously believed.

Shifting the focus to metonymy, Sandra Handl's contribution proposes an empirical framework for investigating the hitherto much neglected issue of the conventionality and salience of metonymic meanings. Handl discusses the results of a usage-based study which show that metonymic construals vary a great deal in terms of their conventionality, operationalized as being mirrored in the relative frequency of metonymic meanings of lexemes and expressions in natural discourse. She demonstrates that the conventionality of metonymy can be approached, especially as far as reversible mappings are concerned (e.g. PRODUCER FOR PRODUCT vs. PRODUCT FOR PRODUCER), by applying the laws of ontological salience, as proposed for example by Kövecses and Radden (1998). However, it is argued that a full account of the phenomenon, which explains conceptual regularities and linguistic irregularities alike, can only be given if these more general preferences are supplemented by a consideration of what Handl calls *target-in-vehicle salience*, a term which captures the degree to which target-related attributes are salient in the vehicle concept that is used to convey a metonymic meaning.

The second part of the volume collects papers which share a strong empirical grounding in authentic data and the goal of applying the cognitive-linguistic theory of metaphor in the service of superordinate aims. Both Brigitte Nerlich and Monica Petrica study strategies, exploitations, and effects of the use of metaphor in public discourse. Nerlich examines the role of metaphor in disease management discourses relating to two recent types of disease which received considerable media coverage in the last years, foot and mouth disease and avian influenza. Using UK print media as the source for her empirical investigations, she shows how different metaphor scenarios are created and employed in the media, which then heavily influence public opinion about such socio-political issues (cf. also Musolff 2006). Nerlich suggests that the metaphorical conceptualization of diseases and its change over time can, in general, be explained by a source-path-goal schema, which entails the extensive use of journey metaphors. Accordingly, a virus which has not yet 'arrived' in a given country, is construed as travelling. However, once it has reached its goal, i.e. the country, the conceptualization changes and war metaphors prevail.

The variance of metaphor usage is also the topic of Monica Petrica's contribution. She looks into the Maltese journalistic discourse covering the EU-membership of the country. Based on a corpus of English-language newspapers, she identifies metaphor variance of two types: overt and covert. Overt variation describes the more obvious differences between metaphors commonly used in countries like Great Britain or Germany, i.e. the more powerful member states, and Maltese metaphors, i.e. the metaphors of one of the weaker members. These intercultural differences between European and nation-specific metaphors manifest themselves in the use of different source domains. While the former are dominated by sources like FAMILY, GAMES, or BUILDING, the latter depict the EU as a body exercising pressure upon Malta or even as abusing it. Covert variation designates two different forms of variation: Firstly, the use of identical source domains across countries which are, however, linked to different targets in the different states. Secondly, cases in which it seems at first glance as if the sources and targets employed were the same as in other countries, whereas a closer analysis reveals that the sources are actually conceptually different. Petrica shows that the intra-cultural, covert variation in particular can only be noticed and analyzed if the cultural context is taken into account to a sufficient degree.

Kathleen Ahrens' paper is also concerned with political discourse. Her aim lies in uncovering the underlying cognitive models in the speeches of

US presidents Ronald Reagan, George H.W. Bush Sr., Bill Clinton, and George W. Bush Jr. Ahrens takes the criticism of Lakoff's (1996, 2002) ideas concerning the two dominant cognitive models related to the two political parties in the US – i.e. the strict father model (MORALITY IS STRENGTH) for the Republicans and the nurturant parent model (MORALITY IS NURTURANCE) for the Democrats – as her starting-point, and proposes a methodology for the identification of metaphorical models through the examination of lexical frequency and co-occurrence patterns in small computerized corpora. An analysis of the frequencies of keywords associated with the two different models proposed by Lakoff as well as a subsequent examination of collocational patterns is revealing in two respects, as Ahrens demonstrates: Firstly, with regard to the more general political convictions of the different presidents, and secondly, concerning how they adjust their metaphors to different types of audiences.

Like Ahrens' paper, Beate Hampe's contribution relies on corpus data and has a strong methodological focus. Hampe investigates the semantics of grammar and combines metaphor theory and construction grammar in her study of the so-called *causative resultatives*, which include the Caused-Motion Construction (e.g. *The warm air pushes other air out of the way*), and the Resultative Construction (e.g. *If you have fresh maggots, riddle them clean of the sawdust*; both examples taken from the *International Corpus of English – GB*). By way of collostructional analysis (cf. Stefanowitsch and Gries 2003, Gries and Stefanowitsch 2004), it is demonstrated that the postulation of the Resultative Construction and its extensions does not exhaustively account for the semantic potential of the complex-transitive argument structure with adjectival predicative, as there are multiple form-function mappings. In particular, there is a strong, non-resultative verb class, which is referred to by Hampe as the *attributive* class. This class covers cognition verbs, and the constructional meaning underlying these expressions can be described as (X THINK [Y BE Z]). While metaphorical polysemy links can account for a wide variety of uses of the two types of causative resultatives, it is shown that is is not likely that attributive uses of this argument structure are derived via a metaphorical inheritance link from resultatives ones. Based on this main finding, Hampe differentiates metaphorical links between constructions on different levels of generality, i.e. the schematic and the local level.

The third and last part of the volume reflects the growing interest in conceptual blending theory, and is structured along the size of the linguistic units investigated. The section starts with Hans-Jörg Schmid's study of the

understanding of novel N+N-compounds. Based on data on the comprehension of invented compounds such as *bean-garden* or *hamburger-shrub* investigated by Ryder (1994), Schmid tests the predictions made by conceptual blending theory as to how humans are likely to cope with situations in which they are forced to make sense of novel combinations of existing lexical material. The theory predicts that the process of ‘running the blend’ is constrained by the governing or optimality principles (cf. Fauconnier and Turner 1998, 2002). It turns out that the principles of relevance as well as the maximization of vital relations like CHANGE, SPACE, IDENTITY, and CAUSE-EFFECT can explain large parts of the data analyzed. However, some of the vital relations, i.e. ROLE, REPRESENTATION, ANALOGY, and DIS-ANALOGY, are not confirmed by the data. Due to the restricted data set, this, however, does not falsify Fauconnier and Turner’s assumptions. More importantly, the data suggest further conceptual links not yet explicitly covered by blending theory, such as CONTAINER- or MADE-OF-relations, which are all motivated by the relevance principle hitherto quite unspecified within the framework of blending. Schmid therefore concludes that this principle should be strengthened and amended by adopting a simplified notion of optimal relevance in line with Sperber and Wilson’s (e.g. 1995) relevance theory.

The paper by Réka Benczes also applies blending theory to compounds. Benczes tests the potential of the theory to explain creative ad-hoc metaphorical and metonymic N+N-compounds, which have been largely neglected by traditional approaches due to their semantic non-transparency. After an introduction to the general explanatory potential of blending with respect to creative compounding, Benczes’s contribution provides detailed accounts of the meanings of two such compounds, *sandwich generation* and *flame sandwich*. It is argued that their actual meanings have developed out of a sequence of different blending operations, all initiated by a first, physical-material blending process which has led to the original meaning of the word *sandwich*. The paper ends with some theoretical remarks on the justification of using of blending theory to explain N+N-compounds.

Elena Tribushinina’s contribution takes the section on blending from word-formation to the semantic structure of premodified noun phrases. In her analyses, which concentrate on ‘simple’ noun modifications via predicated colour adjectives (e.g. *red house* as opposed to more exotic cases like *dolphin-safe* or *fool-proof*), she combines blending theory and ideas from Langacker’s Cognitive Grammar, especially his notions of *active zones* (e.g. 1984, 1987) and *reference points* (1993). It is shown that, con-

trary to what has been pointed out by Murphy (1990), for example, even the understanding of ‘simple’ predicating adjectives like *red* is context-dependent. It varies with the active zone of the ENTITY SPACE, i.e. the space containing information about the modified noun, which is determined by factors such as e.g. perceptual salience, and discourse relevance. The active zone of the PROPERTY SPACE, i.e. the space containing information about the colour, is accessed, however, via a number of reference points within the spectrum of a given colour. What is more, it is argued that the emergent structure, typically described as being a characteristic of the blended space only, is not restricted to this space. Emergent structure is said to pertain to the whole conceptual integration network, since no one fixed and predetermined reference point exists in the PROPERTY SPACE in the case of pre-modified noun phrases, but rather different ones among which the decoder has to choose in order to establish mental contact with the relevant active zone.

The section closes with Siaohui Kok and Wolfram Bublitz’s contribution, which takes up the register of political discourse also investigated by Nerlich, Petrica as well as Ahrens, but exploits the potential of blending theory to explain the fundamental pragmatic phenomena of common ground and stance/evaluation. They provide detailed analyses of two texts, one political joke and one short extract from a political speech, where the evaluative meaning is not encoded in the lexical or structural surface, but has to be arrived at by way of more complex cognitive processes. Pragmatic theory alone, it is argued, is not sufficient to account for how what is actually meant is inferred from what is said in such cases. In line with blending theory, it is proposed that the addressees’ construal of evaluative meaning depends on setting up and mapping mental spaces which allow them to align their ‘inside-world’ to the speaker’s/writer’s. By doing so, common ground is created, which is accordingly characterized as an emergent configuration composed of semantic as well as attitudinal aspects. Only when this empathetic process of creating common ground is successfully accomplished can the intended evaluative meaning be derived or inferred – either by relying on stored cognitive domains or frames or by constructing short-lived mental spaces.

Notes

1. The examples in this section are all taken from the *Master Metaphor List* (Lakoff, Espenson, and Schwartz 1991). Some of them have been slightly modified.
2. The influence of context on the comprehension of metaphors has been tested in many psycholinguistic experiments (cf. e.g. Ortony et al. 1978; Gibbs and Gerrig 1989; Giora and Fein 1999; Gong and Ahrens 2007). Even though the results are by no means homogeneous, and it has been pointed out that other factors such as familiarity also play a role, most researchers agree that strong contexts facilitate comprehension.
3. Fauconnier and Turner (e.g. 1998, 2002) typically use integration networks consisting of a minimum of four spaces. The so-called *generic space* which “contains what the inputs have in common” and is linked to each of the input spaces (Fauconnier and Turner 1998: 137) is neglected here.
4. A further aspect which would be highlighted more by blending theory than by conceptual metaphor theory is the following difference between selling goods and convincing somebody of an idea: Once sold, objects belong exclusively to the buyer, but ‘sold’ ideas are not ‘possessed’ solely by the person recently convinced of them. They are usually still shared by the person convincing the other as well. The invariance principle proposed by conceptual metaphor theory (cf. e.g. Lakoff 1990) to solve such problems is not too successful in explaining this inconsistency, since both the source and the target involve events which have largely the same schematic structure. Blending is much more flexible and explicitly allows inconsistencies between mental representations which are related by a conceptual integration network.
5. A concise and useful overview of further similarities and differences between the conceptual theory of metaphor and conceptual blending theory is provided, for example, by Grady, Oakley, and Coulson (1999).

References

Abel, Beate
2003 *Sprecherurteile zur Dekomponierbarkeit englischer Idiome: Entwicklung eines Modells der lexikalischen und konzeptuellen Repräsentation von Idiomen bei Muttersprachlern und Nichtmuttersprachlern*. Tübingen: Niemeyer.

Benczes, Réka
2006 *Creative Compounding in English. The Semantics of Metaphorical and Metonymical Noun-noun Combinations*. Amsterdam/Philadelphia: Benjamins.

Broccias, Cristiano

2006 Cognitive approaches to grammar. In *Cognitive Linguistics. Current Applications and Future Perspectives*, Gitte Kristiansen, Michel Achard, René Dirven, and Francisco J. Ruiz de Mendoza Ibáñez (eds.), 81–115. Berlin/New York: Mouton de Gruyter.

Cameron, Lynne

2003 *Metaphor in Educational Discourse*. London: Continuum.

Cameron, Lynne

2007 Confrontation or complementarity?: Metaphor in language use and cognitive metaphor theory. *Annual Review of Cognitive Linguistics* 5 (1): 107–135.

Coulson, Seana

2001 *Semantic Leaps. Frame-shifting and Conceptual Blending in Meaning Construction*. Cambridge etc.: Cambridge University Press.

Deignan, Alice

1999 Corpus-based research into metaphor. In *Researching and Applying Metaphor*, Lynne Cameron, and Graham Low (eds.), 177–199. Cambridge etc.: Cambridge University Press.

Deignan, Alice

2005 *Metaphor and Corpus Linguistics*. Amsterdam/Philadelphia: Benjamins.

Dobrovolskij, Dmitrij, and Elisabeth Piirainen

2005 *Figurative Language: Cross-cultural and Cross-linguistic Perspectives*. Amsterdam: Elsevier.

Fauconnier, Gilles

1994 *Mental Spaces. Aspects of Meaning Construction in Natural Language*. Cambridge etc.: Cambridge University Press.

Fauconnier, Gilles, and Mark Turner

1998 Conceptual integration networks. *Cognitive Science* 22 (2): 133–187.

Fauconnier, Gilles, and Mark Turner

2002 *The Way We Think. Conceptual Blending and the Mind's Hidden Complexities*. New York: Basic Books.

Geeraerts, Dirk

1995 Specialisation and reinterpretation in idioms. In *Idioms: Structural and Psychological Perspectives*, Martin Everaert, Erik-Jan van der Linden, André Schenk, and Robert Schreuder (eds.), 57–73. Hillsdale, New Jersey: Lawrence Erlbaum.

Gibbs, Raymond W. Jr.

2000 Making good psychology out of blending theory. *Cognitive Linguistics* 11 (3/4): 347–358.

Gibbs, Raymond W. Jr., and Richard J. Gerrig

1989 How context makes metaphor comprehension seem ‘special’. *Metaphor and Symbolic Activity* 4 (3): 145–158.

Gibbs, Raymond W. Jr., Nandini P. Nayak, and Copper Cutting
 1989 How to kick the bucket and not decompose: Analyzability and idiom processing. *Journal of Memory and Language* 28: 576–593.

Gibbs, Raymond W. Jr., and Jennifer E. O'Brien
 1990 Idioms and mental imagery: The metaphorical motivation for idiomatic meaning. *Cognition* 36: 35–68.

Giora, Rachel, and Ofer Fein
 1999 On understanding familiar and less-familiar figurative language. *Journal of Pragmatics* 31: 1601–1618.

Gong, Shu-Ping, and Kathleen Ahrens
 2007 Processing conceptual metaphors in on-going discourse. *Metaphor and Symbol* 22 (4): 313–330.

Grady, Joseph E., Todd Oakley, and Seana Coulson
 1999 Blending and metaphor. In *Metaphor in Cognitive Linguistics. Selected Papers from the Fifth International Cognitive Linguistics Conference, Amsterdam, July 1997*, Raymond W. Gibbs Jr., and Gerard J. Steen (eds.), 101–124. Amsterdam/Philadelphia: Benjamins.

Gries, Stefan Th., and Anatol Stefanowitsch
 2004 Extending collocational analysis: a corpus-based perspective on ‘alternations’. *International Journal of Corpus Linguistics* 9: 97–129.

Herrero Ruiz, Javier
 2006 The role of metaphor, metonymy, and conceptual blending in understanding advertisements: The case of drug prevention ads. *Revista Alicantina de Estudios Ingleses* 19: 169–190.

Joy, Annamma, John F. Sherry Jr., and Jonathan Deschenes
 2009 Conceptual blending in advertising. *Journal of Business Research* 62 (1): 39–49.

Keil, Frank C.
 1986 Conceptual domains and the acquisition of metaphor. *Cognitive Development* 1 (1): 73–96.

Kövecses, Zoltán
 2000 *Metaphor and Emotion: Language, Culture, and Body in Human Feeling*. Cambridge etc.: Cambridge University Press.

Kövecses, Zoltán
 2002 *Metaphor. A Practical Introduction*. Oxford etc.: Oxford University Press

Kövecses, Zoltán, and Günter Radden
 1998 Metonymy: Developing a cognitive linguistic view. *Cognitive Linguistics* 9 (1): 37–77.

Lakoff, George
 1987 *Women, Fire, and Dangerous Things. What Categories Reveal about the Mind*. Chicago/London: University of Chicago Press.

Lakoff, George
 1990 The invariance hypothesis. Is abstract reason based on image-schemas? *Cognitive Linguistics* 1: 39–74.

Lakoff, George
 1996 *Moral Politics: What Conservatives Know that Liberals Don't*. Chicago: University of Chicago Press.

Lakoff, George
 2002 *Moral Politics: How Liberals and Conservatives Think*. 2nd ed. Chicago: University of Chicago Press.

Lakoff, George, Jane Espenson, and Alan Schwartz
 1991 *Master Metaphor List*. 2nd ed. Berkeley: University of California.

Lakoff, George, and Mark Johnson
 1980 *Metaphors We Live By*. Chicago/London: University of Chicago Press.

Lakoff, George, and Mark Johnson
 1999 *Philosophy in the Flesh. The Embodied Mind and its Challenge to Western Thought*. New York: Basic Books.

Lakoff, George, and Mark Turner
 1989 *More Than Cool Reason. A Field Guide to Poetic Metaphor*. Chicago/London: University of Chicago Press.

Langacker, Ronald W.
 1984 Active zones. *Proceedings of the Annual Meeting of the Berkeley Linguistics Society* 10: 172–188.

Langacker, Ronald W.
 1987 *Foundations of Cognitive Grammar. Vol. I: Theoretical Prerequisites*. Stanford/CA: Stanford University Press.

Langacker, Ronald W.
 1993 Reference-point constructions. *Cognitive Linguistics* 4 (1): 1–38.

Langacker, Ronald W.
 2008 *Cognitive Grammar. A Basic Introduction*, Oxford: Oxford University Press.

Mandelblit, Nili, and Gilles Fauconnier
 2000 How I got myself arrested. Underspecificity in grammatical blends as a source for constructional ambiguity. In *Constructions in Cognitive Linguistics. Selected Papers from the Fifth International Cognitive Linguistics Conference, Amsterdam, 1997*, Ad Foolen, and Friederike van der Leek (eds.), 167–190. Amsterdam/Philadelphia: Benjamins.

Matsuki, Keiko
 1995 Metaphors of anger in Japanese. In *Language and the Cognitive Construal of the World*, John R. Taylor, and Robert E. MacLaury (eds.), 137–151. Berlin/New York: Mouton de Gruyter.

Murphy, Gregory L.

1990 Noun phrase interpretation and conceptual combination. *Journal of Memory and Language* 29: 259–288.

Musolff, Andreas

2006 Metaphor scenarios in public discourse. *Metaphor and Symbol* 2 (1): 23–38.

Nayak, Nandini P., and Raymond W. Gibbs Jr.

1990 Conceptual knowledge in the interpretation of idioms. *Journal of Experimental Psychology: General* 119 (3): 315–330.

Nerlich, Brigitte

2004 Towards a cultural understanding of agriculture: The case of the “war” on foot and mouth disease. *Agriculture and Human Values* 21 (1):15–25.

Nerlich, Brigitte, and Christopher Halliday

2007 Avian flu: The creation of expectations in the interplay between science and the media. *Sociology of Health and Illness* 29 (1): 46–69.

Nunberg, Geoffrey, Ivan A. Sag, and Thomas Wasow

1994 Idioms. *Language* 70: 491–538.

Oakley, Todd, and Anders Hougard (eds.)

2008 *Mental Spaces in Discourse and Interaction*. Amsterdam/Philadelphia: Benjamins.

Ortony, Andrew, Diane L. Schallert, Ralph E. Reynolds, and Stephen J. Antos

1978 Interpreting metaphors and idioms: Some effects of context on comprehension. *Journal of Verbal Learning and Verbal Behavior* 17: 465–477.

Pederson, Eric

2007 Cognitive Linguistics and Linguistic Relativity. In *Oxford Handbook of Cognitive Linguistics*, Dirk Geeraerts, and Hubert Cuyckens (eds.), 1012–1044, Oxford etc.: Oxford University Press.

Pérez Hernández, Lorena

2002 Blending vs. conceptual integration in the construction of illocutionary meaning: Counterfactual pieces of advice. *Revista Alicantina de Estudios Ingleses* 15: 181–194.

Radden, Günter, and Zoltán Kövecses

1999 Towards a theory of metonymy. In *Metonymy in Language and Thought*, Klaus-Uwe Panther, and Günter Radden (eds.), 17–59. Amsterdam/Philadelphia: Benjamins.

Reddy, Michael J.

1993 The conduit metaphor – a case of frame conflict in our language about language. In *Metaphor and thought*, 2nd ed., Andrew Ortony (ed.), 164–201. Cambridge: Cambridge University Press.

Ryder, Mary Ellen

1994 *Ordered Chaos. The Interpretation of English Noun-noun Compounds*. Berkeley etc.: University of California Press.

Sperber, Dan, and Deirdre Wilson

1995 *Relevance. Communication and Cognition*. 2nd ed. Oxford: Blackwell.

Steen, Gerard J.

2007 *Finding Metaphor in Grammar and Usage. A Methodological Analysis of Theory and Research*. Amsterdam/Philadelphia: Benjamins.

Stefanowitsch, Anatol

2007 Words and their metaphors. In *Corpus-based Approaches to Metaphor and Metonymy*, Anatol Stefanowitsch and Stefan Th. Gries (eds.), 64–105. Berlin: Mouton de Gruyter.

Stefanowitsch, Anatol, and Stefan Th. Gries

2003 Collostructions: Investigating the interaction of words and constructions. *International Journal of Corpus Linguistics* 8 (2): 209–243.

Stefanowitsch, Anatol, and Stefan Th. Gries (eds.)

2007 *Corpus-based Approaches to Metaphor and Metonymy*. Berlin/New York: Mouton de Gruyter.

Turner, Mark, and Gilles Fauconnier

1995 Conceptual integration and formal expression. *Journal of Metaphor and Symbolic Activity* 10 (3): 183–204.

Ungerer, Friedrich

2007 Word-formation. In *The Oxford Handbook of Cognitive Linguistics*, Dirk Geeraerts, and Hubert Cuyckens (eds.), 650–675. Oxford etc.: Oxford University Press.

Ungerer, Friedrich, and Hans-Jörg Schmid

2006 *An Introduction to Cognitive Linguistics*. 2nd ed. Harlow: Pearson Education.

Part I:
Metaphor and metonymy:
Fundamental issues