#### INTRODUCTION

# The construction of meaning in language

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## 1. Underspecification and the construction of meaning

It is unanimously agreed in Cognitive Linguistics that meaning does not reside in linguistic units but is constructed in the minds of the language users. For the listener this means that he takes linguistic units as prompts and constructs from them a meaningful conceptual representation. In fact, this principle of meaning construction is not confined to language. Every transformation of a sensory stimulus into a mental representation is an instance of meaning construction, which is rooted in the interaction of human beings with their environment. The world around us is not meaningful per se but rather acquires meaning through the human mind. For example, the moon is not in itself meaningful but it may be made purposeful in very different ways: astronomers and lovers have fairly disparate views of the moon.

The fundamental principles by which the mental transformation of a sensory stimulus is effected were discovered by Gestalt psychologists in the early twentieth century. Sensory stimuli tend to be interpreted in such a way that we see "good" gestalts. Figure 1 illustrates the presumably universal Gestalt principle of closure.

The pattern of equidistant dots in (a) is typically seen as a square in (b). That is, the lines connecting the dots are in the eyes of the beholder: they are mentally added to the visual input and transform it into a meaningful Gestalt. A holistic figure such as a square is simply more meaningful to us than four isolated dots. Gestalt principles are fundamental devices of meaning construction; they operate automatically and beyond our awareness and are probably shared by all human beings. We may compare the individual dots in (a) to a string of linguistic units and the

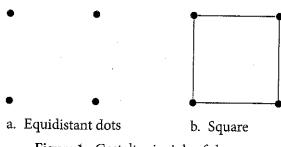


Figure 1. Gestalt principle of closure

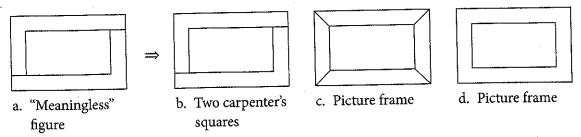


Figure 2. Reproductions of a seemingly meaningless figure

square in (b) to the conceptual representation which is evoked by these linguistic units.

Meaning construction pervades every aspect of our lives. A crucial aspect of our interaction in the world is being able to identify and categorize things. In his pioneering work on remembering, the British psychologist Sir Frederic Bartlett (1932) confronted subjects with what would seem to be meaningless figures and asked them to remember and reproduce them. One of the figures they were shown was Figure 2a. Some subjects would reproduce the figure the way it was presented to them, i.e. as (b), others would reproduce it as (c) or (d). The striking observation Bartlett made was that, in reproducing meaningless figures, his subjects turned them into meaningful drawings. For example, some subjects would interpret figure (a) as "two carpenter's squares" and hence reproduce it faithfully as in (b); other subjects would interpret it as a "picture-frame" and reproduce it as in (c) or (d). Bartlett fittingly described people's desire to associate things with meaning as "effort after meaning." Interestingly, finding a name for a meaningless figure turned out to be very helpful in the subjects' effort after meaning: they often felt relieved when they found a label which expressed a certain concept. In Langacker's (1987) terminology, the subjects were able to project a "sanctioning structure," i.e. the concept of two carpenter's squares or a picture frame, to the meaningless figures.

We reinterpret apparent meaninglessness in terms of *underspecification*: Bartlett's subjects imposed an interpretation on the stimulus figures which are somehow underspecified. This can be seen from the fact that, within a certain range, subjects differ in their interpretation of what they see. This range is, amongst others, constrained by the figure itself.

Underspecification is especially relevant for the interpretation of linguistic material. We believe that each utterance is underspecified in the sense that it cannot possibly express all aspects that are relevant to its full interpretation. Underspecification in language is not just the result of time constraints but is governed by communicative principles. For example, according to Grice's maxim of quantity, an underspecified utterance means something different from a fully explicated utterance. In his iconic approach to text interpretation, Posner (1986: 305f) provides a convincing example of differing interpretations derived from underspecified and more explicitly specified descriptions of the same situation:

- (1) a. Mr. Smith stopped in front of his house. He waved to a passing neighbour and got out of his car.
  - b. Mr. Smith stopped in front of his house. He raised his arm and smiled to a passing neighbour. He pulled the handle of the door of his car, pushed the door open, swung his legs out, heaved his body out, and shut the door.

The two passages differ with respect to the detail of description. Description (1a) is less detailed, but the reader will easily mentally supply the actions that are explicated in description (1b). Moreover, the reader understands Mr. Smith to be a normal adult and his actions as everyday behaviour. The painstaking description (1b), by contrast, is not just more detailed but suggests great effort involved in the actions. Hence Mr. Smith tends to be seen as a cautious elderly gentleman who plans every step carefully. None of these meanings are explicitly expressed in the description—they are inferred, or constructed.

Linguistic units almost invariably underspecify the conceptualizations they code (Langacker 1987:66). In his study on "The windowing of attention in language," Talmy (1996) has shown that the gapping of conceptual material in event frames may even be grammatically required. For example, in causal events we normally window our attention on the ultimate result. In expressing such events, we give expression to the final event, possibly also express the penultimate subevent, but have to gap the subevents in the middle of the causal chain. Thus, I broke the window by hitting it with a rock represents the normal way of expressing a causal event, mentioning the penultimate event is of marginal acceptability (\*I broke the window by throwing a rock at it), and mentioning an intermediate subevent makes the sentence unacceptable (\*I broke the window by swinging a rock with my arm). A host of subevents leading to the breaking of a window are of course conceptually present.

The preceding examples show that underspecification is an essential feature of language in use. In an ongoing piece of discourse linguistic expressions tend to evoke large amounts of knowledge. Fauconnier's (1999: 96) wording on this issue deserves to be quoted in full:

Language is only the tip of a spectacular cognitive iceberg, and when we engage in any language activity, be it mundane or artistically creative, we draw unconsciously on vast cognitive resources, call up innumerable models and frames, set up multiple connections, coordinate large arrays of information, and engage in creative mappings, transfers and elaborations. This is what language is about and what language is for.

In the spirit of this cognitive view of language, we propose the following definition of meaning construction:

*Meaning construction* is an on-line mental activity whereby speech participants create meanings in every communicative act on the basis of underspecified linguistic units.

This definition does not restrict the notion of meaning construction to the creation of novel meanings, i.e. novel representations. The task of constructing meanings is probably more demanding when they are novel than when they are conventionalized, as will be shown in the examples below.

A second point in the definition that deserves to be stressed is the role of the speech participants. The process of meaning construction is usually understood from the perspective of the listener while the role of the speaker is underestimated. However, both the speaker's and the listener's perspectives need to be taken into account because both are involved in meaning construction. In planning his linguistic expressions, the ideal speaker anticipates the particular meaning construction which the listener will presumably create. If there is a mismatch between the anticipated meaning construction and the one created by the hearer, the interlocutors will negotiate repair strategies in order to obtain a closer match between the two meaning constructions. Thus, meaning construction is a dynamic process in which fine-tuning between the interlocutors plays an essential role.

The relevance of fine-tuning becomes particularly clear in situations of miscommunication. Let us use one of Deborah Tannen's (1990: 51) examples between two speakers to illustrate the point.

- (2) a. HE: I'm really tired. I didn't sleep well last night.
  - b. SHE: I didn't sleep either. I never do.
  - с. не: Why are you trying to belittle me?
  - d. SHE: I'm not! I'm just trying to show that I understand.

The man apparently intended to communicate his nightly suffering (2a), and the woman constructed the illocutionary meaning from his underspecified utterance. Her reply (2b), however, gave rise to a serious misunderstanding: she intended to show her understanding whereas he interpreted her utterance to mean that she denied him "the uniqueness of his experience."

This example also demonstrates that meaning construction is an online process in which the communicative value of each utterance is determined and redefined with each turn and contribution. It also shows that meaning construction is not solely a matter of the hearer and his interpretation of an utterance; it crucially also involves the speaker and his assessment of the hearer's state of mind, his knowledge, his emotions, etc. Only when we also consider the other person's perspective can we

<sup>1.</sup> In this respect we take a different view of the notion of meaning construction from Evans and Green (2006: 363), who restrict their understanding of meaning construction to novel representations: "Meaning construction is the process whereby language 'prompts for' novel cognitive representations of varying degrees of complexity. These representations relate to conceived scenes and aspects of scenes, such as states of affairs in the world, emotion and affect, subjective experiences, and so on."

detect the whole impact of meaning construction in the above dialogue. The man produced utterance (2a) with the expectation in mind that his spouse would understand the intended meaning of his utterance and pity him; the woman gave her reply (2b) in the belief that sharing the same experience in this particular situation would mean the same to her companion as it did to her, which was obviously not the case.

Processes of meaning construction resulting from underspecification are, in principle, the same in miscommunication and successful communication. In his paper "Constructing the meaning of personal pronouns," Langacker (this volume) draws attention to "intersubjectivity" in communication, i.e. the apprehension of other minds. Intersubjectivity involves the conceptual coordination between the interlocutors, who are simultaneously the conceptualizers.

#### 2. Types of underspecification

Linguistic underspecification is manifested in different ways. We see at least three ways in which linguistic units can be said to be underspecified and in need of conceptual augmentation: (i) linguistic units verbalize meanings implicitly or indirectly, (ii) linguistic units are indeterminate, and (iii) linguistic units are incompatible. These three manifestations of linguistic underspecification will be termed 'implicitness,' 'indeterminacy,' and 'incompatibility.' These types of underspecification do not establish clearly defined categories but may overlap.

### 2.1 Implicitness

The notion of implicitness in this context is taken to mean that either no linguistic unit is present or that the linguistic unit is not conventionally associated with a particular meaning. This is the most common type of underspecification. Simple words and complex expressions underspecify conceptualizations in different ways. Simple words are associated with one or more conventionalized meanings which, within a given context, serve as prompts for the activation of richer conceptualizations (see also Nikiforidou, this volume). In the well-known case of the commercial event frame, any word denoting an aspect of a commercial event prompts the commercial event frame. Verbs such as *buy*, *sell*, *cost*, *pay*, etc. provide different entry points while the commercial event frame as a whole is not verbalized. At the same time, each entry point may further invite more specific processes of meaning constructions. For example, in *Harry sold his car for a good price*, the amount of money paid in this transaction is understood to be higher than in *Harry bought his car for a good price*. Again, this meaning is not present in the linguistic expression. A further example of implicit meanings evoked by a single word is the adjective *safe* in

usages such as *The beach is safe*. Fauconnier and Turner (2002: 25–7) show that *safe* prompts us to construct a counterfactual scenario of danger in which a person is harmed. None of this is present in the linguistic unit.

Complex expressions tend to underspecify with respect to the individual lexical items and with respect to their composition. As argued by Langacker (2000: 152), the component structures of complex expressions usually motivate, but do not predict, the composite structure. Language thus exhibits partial rather than full compositionality, i.e. the meaning of a composite structure is underspecified and needs to be constructed. This applies to morphological, syntactic, pragmatic and discourse structures alike. Many scholars have shown that the meanings of compounds and derivations are underspecified from their components. Thus, the compound trouser suit does not indicate that it is women's garment, the compound push chair does not reveal that it is designed to move children in it, and the compound wheelchair does not express that it is meant to transport elderly and/or sick people. Many syntactic constructions suppress entities that are part of the situation: Ruiz de Mendoza and Mairal Usón (this volume) have pointed out that, in nominalizations such as destruction, participants of the event may be left implicit; similarly, the inchoative construction in The door opened suppresses the controlling entity. Other examples of suppression include the passive construction, which optionally suppresses the agent, the imperative, which suppresses the addressee, modal verbs, which obligatorily suppress the speaker (\*You may come in by me), complement clauses, which may suppress the subject participant, etc. Grammatical implicatures are also instances of meaning construction. As shown by Posner (1986), the ordering of attributive adjectives may invite implicatures. For example, a small precious stone is a precious stone that is small, while a precious small stone is a small stone that is precious. Furthermore, our world knowledge of precious stones tells us that a small precious stone is smaller than a precious small stone, none of which is explicated in language.

#### 2.2 Indeterminacy

Indeterminacy refers to situations in which a linguistic unit is underspecified due to its vagueness in meaning. Indeterminacy is, as suggested by Langacker (in press), the canonical situation in grammar. It is probably also the canonical situation with lexical categories. This point can be illustrated by an example taken from Talmy (1988: 92). The verb *break* is indeterminate with respect to the manner, the effect, the speed of breaking, etc. Thus, *break* in the context of sentences (3a) and (3b) evokes very different meanings of breaking due to our knowledge of the world:

- (3) a. The heat broke the guitar.
  - b. A falling radio broke the guitar.

The manner of breaking in sentence (3a) is seen as slow, leading to gradual warping and tracework of cracks, and the like, while the manner of breaking in sentence (3b) is seen as involving a sudden localized disruption.

Grammatical indeterminacy is found in possessives (*my horse* can mean 'the horse I own,' 'the horse I ride,' 'the horse I bet on,' etc.), pronouns (*we* can include or exclude the hearer), attributive adjectives (*nice* in *a nice present* can be restrictive or non-restrictive), modal verbs (*The car should have air conditioning* is vague between an epistemic and root interpretation), indefinite quantifiers, and a host of other grammatical phenomena. In a study by Hörmann (1983, quoted in Gibbs 1994: 38f), subjects were asked to estimate the number of people expressed by *a few* in different situations. The lowest, the median and the highest average estimates are given in (4):

(4)	a.	a few people standing before a hut	4.55
	b.	a few people	5.72
	c.	a few people standing before the building	6.99

Gibbs (1994: 39) interprets these findings in terms of meaning construction: "Listeners do not simply look up the particular number associated with *a few* but construct its meaning, given some specific situation."

#### 2.3 Incompatibility

Incompatibility is understood as an instance of underspecification since it requires the interlocutors to construct meanings in order to reconcile the conflict between expressions. These meanings are prompted by linguistic expressions but not linguistically specified. Studies on meaning construction have mainly been concerned with this type of underspecification, probably because its deviant linguistic structure and the listener's effort after meaning call for an explanation. For obvious reasons incompatibilities are restricted to composite structures. Incompatibilities may occur between lexical units or between lexical and grammatical units—there do not seem to be incompatibilities between grammatical units. Lexical incompatibilities include the composition of antonyms, tautology, metaphor, metonymy, oxymoron, understatement, and profile/active-zone discrepancy; lexical-grammatical incompatibilities involve mismatches between a construction and lexical units used in it. A few of these instances of incompatibility will be dealt with here.

People's interpretation of antonymic adjectives was studied by Byrne (1979, reported in Posner 1986). Byrne asked his subjects to interpret noun phrases with contradictory attributive adjectives. The phrases were not rejected as meaningless but interpreted iconically according to the order of their adjectives. Thus, a slow fast dog was understood as a fast dog made temporarily slow, e.g. by injury, illness or age,

and a fast slow dog was interpreted as a slow dog made temporarily fast, e.g. a rocket-powered Saint Bernard. We interpret these findings in terms of meaning construction. The iconic principle of proximity provides an inferential pathway along which meaning construction may occur: units which belong together conceptually are more closely integrated syntactically. On the basis of this iconic principle, the more distant adjective invites aspects of meaning construction such as 'be made,' 'temporarily' or a setting in concrete real-world situations.

Tautologies may also be seen as instances of lexical incompatibility: the predicate of a nominal tautology is not compatible with the subject because it predicates the very content of the nominal and hence is not informative in its literal meaning. This linguistic situation therefore prompts meaningful interpretations. Thus, the well-known conversational tautology *Boys will be boys* is, depending on the context, understood to mean 'boys are unruly' or 'boys are cute and adorable' (Gibbs 1994: 345–51). In this case the meaning construction prompted by the tautological expressions is guided by metonymic reasoning based on shared stereotypical knowledge.

Metaphor, metonymy, oxymora, and some other "figures of speech" involve semantically "deviant" usages of language. Their incompatibility is resolved by constructing a target meaning which the speaker apparently intended to convey. Thus, in the sentence She is married to a library, the semantics of be married and library are incompatible and require the construction of meaning. The deviance may reside in either of the two terms. The listener may abandon the literal meaning of be married and construct a metaphorical meaning such as 'frequent a library' or 'study at a library,' or he may abandon the meaning of library and construct a metonymic meaning such as 'extremely well-read person,' 'lover of books' or 'person who has books all over.' In either case, the meaning construction is prompted by source expressions which are incompatible with other linguistic material which belongs to the target. Figures of speech other than metaphor and metonymy have hardly been studied within the cognitive-linguistic framework (apart from Gibbs 1994). The oxymoron in screaming silence and the understatement in She's a bit of all right, meaning 'good-looking' or 'terrific,' of course also require substantial efforts to construct their meanings.

Probably the commonest—and hence least noticeable—type of incompatibility is the phenomenon described by Langacker as "profile/active-zone discrepancy." An entity in a relationship is expressed, or profiled in Langacker's terminology, but only a facet of it, an active zone, directly and crucially participates in this relationship. In his example *The cigarette in her mouth was unlit*, only "a particular portion of the cigarette (one end) was contained in a particular portion of the mouth (a segment of the lips)" (Langacker, in press). Profile/active zone discrepancy is a kind of metonymy, i.e. whole for part, and involves focusing on an active zone as

its meaning construction, something which is normally performed automatically within a culturally given context.

Incompatibilities between grammatical constructions and lexical units are often treated within the framework of construction grammar. The meaning of the grammatical construction may sometimes be in conflict with the meaning of lexical items which are not normally used in this construction. Probably the best-known study of a lexico-grammatical incompatibility is Goldberg's (1995) analysis of the caused-motion construction with verbs that do not denote motion. In her classic example Fred sneezed the napkin off the table, the caused-motion construction in conjunction with the lexical verb sneeze prompts a construction of meaning which can be paraphrased as 'with the force of one's sneezing cause something to move away in a sudden, explosive, etc. manner.' What is underspecified in this sentence is not the construction but the lexical item. The caused-motion construction imposes a shift in the grammatical valency of the verb from a one-place predicate to a three-place predicate and concomitantly a shift in meaning from a non-causative meaning of the verb to a caused-motion meaning. The verb sneeze in this usage is thus underspecified with respect to the causal nature of the subject argument, an argument describing an affected entity and a further argument describing a direction. In addition, other aspects of meaning are inferred such as 'abrupt and uncontrolled motion' and 'motion away from the sneezer.' The following section will deal with possible ways of resolving this and other types of underspecification.

## 3. Ways of constructing underspecified meanings

The three types of underspecification distinguished in the preceding section share the property that underspecified linguistic units evoke a whole scenario. We think and experience the world in terms of scenarios. Linguistic units are prompts for accessing such scenarios, i.e. the meanings of these linguistic units metonymically stand as parts for the whole scenario. The PART FOR WHOLE-metonymy can thus be seen as a fundamental principle of all kinds of meaning construction. Scenarios are naturally part of a given culture and are crucial sources of information in meaning construction. Without knowledge of the scenarios surrounding September 11, 2001, language users would not be able to understand the meaning of a sign in public buses in New York City: "If you see something, do something." The linguistic units in this sentence are at the highest possible level of generality, or indeterminacy, and could mean almost anything: the indefinite pronoun *something* neither specifies what you have to look for nor what one has to do. Yet most Americans will probably interpret this highly underspecified message in precisely the way it was meant to be understood.

Meaning construction is an inferential process. The potential range of inferences is constrained by the linguistic expressions that serve as prompts, the situational and discourse context, the language users' encyclopaedic knowledge, their personal attitudes and certainly many more factors. These are very specific determinants and account for specific aspects of meanings. It is at this specific level that potentially different scenarios are evoked, as in the case of Boys will be boys, which may give rise to scenarios of 'boys' unruly behaviour,' 'their being cute' or 'their being adorable.' Whichever scenario is evoked as the listener's meaning construction, it is based on a general principle according to which things may stand for one or some of their properties. The conceptual metonymy thing for property of a thing is readily available to members of a community and guides more specific inferences. For example, the presenter who completed her first public talk at the ICLC in Seoul by saying "I'm just a student" did, of course, not want to inform the audience about her academic status. Thanks to our knowledge of the THING FOR PROPERTY OF THE THING-metonymy we know that her underspecified concluding words were meant to refer to properties of students. For lack of any evidence to the contrary we think of properties set in stereotypical scenarios associated with students in the Western culture: 'intelligent,' 'partially trained academically,' 'critical,' etc. Since her utterance was situated in an academic setting and meant as a meaningful act of communication, we further infer that its illocutionary force was probably that of an apology in case the audience felt that, due to her partial academic training, her paper might not meet with the high academic standards expected of presentations.

In what follows we will mainly concentrate on the general principles guiding meaning construction like the conceptual metonymy in the above examples. Such general guiding principles of meaning construction are metonymy, metaphor, conceptual blending, iconicity and possibly some more. The papers in this volume concentrate on the first three principles in various aspects of meaning construction.

Panther and Thornburg (2003, 2004) were among the first to recognize the general function of conceptual metonymy in inferences. They describe metonymy as natural inference schemas and inferential pathways. Conceptual metonymies operate at an intermediate level and guide the interlocutor in the construction of meaning. Their metonymic approach to meaning construction has been especially insightful in their analysis of lexico-grammatical incompatibility, i.e. in cases of grammatical coercion. For example, a number of constructions are only compatible with actions but are often used with stative predicates, like the imperative construction in *Be wealthy in ten months*. The meaning of the sentence can be paraphrased 'Do something to the effect that you will be wealthy in ten months.' The schematic meaning to be constructed is that of an action leading to a resultant state. Actions and their results are related metonymically, and our understanding of the sentence makes use of the widely used metonymy RESULT FOR ACTION. This me-

tonymy serves as a general inferential pathway that guides the listener to more specific interpretations. The specific kinds of action to be taken have to be inferred by reasonable guesses, such as the purchase of shares. Traditionally, it is claimed that grammatical constructions override the meanings of lexical expressions. Panther and Thornburg (2004), however, show that coercions are not always unidirectional. In their example *Enjoy your summer vacation!* the imperative construction does not, in its non-directive reading, coerce lexical adjustment, but the lexical item *enjoy* with its meaning of 'spontaneously occurring experiential state' coerces an adjustment of the meaning of the imperative construction: it is now understood to express an optative meaning, namely the speaker's wish or hope. Metonymy is without doubt a powerful principle guiding inferential processes of meaning construction.

Many of the contributions in this volume have been inspired by Panther and Thornburg's view of metonymies as natural inference schemas. For example, Ruiz de Mendoza Ibáñez and Mairal Usón focus on high-level metonymies in meaning construction. High-level metonymies are particularly pertinent in grammar. For example, they interrelate actions, processes and results. Thus, the process use of close in The door closed well thanks to her instructions involves the metonymy process for action, and the middle construction in This bread cuts easily is motivated by the double metonymy process for action for results.

Like conceptual metonymies, conceptual metaphors serve as pathways for meaning construction. As shown by Lakoff and Johnson (1980:52-5), the conceptual metaphor THEORIES ARE BUILDINGS is structured by focusing on certain parts of a building (foundations and outer shell) but also allows us to exploit other parts (the roof, rooms, staircases, hallways, etc.) which are normally not used in the metaphor. When we are confronted with a sentence like His theory is covered with gargoyles, we understand its schematic meaning on the basis of the metaphor THEORIES ARE BUILDINGS. We can then make further reasonable guesses about this particular theory by relating it to a scenario like that of grotesque creatures sitting on the gutters of medieval churches. Image metaphors, i.e. metaphorical expressions which are not based on conceptual metaphors, are not expandable in the same way. For example, the word bicycle is used in soccer to describe a player's shot while falling backwards. This metaphorical term does not motivate the use of unused parts of a bicycle like the saddle, the handle-bars or the chain in talking about soccer. The lack of a conceptual metaphor as an inferential pathway may also increase the difficulty of constructing an adequate meaning. Thus, a trite sentence such as Philosophy is the foundation of our knowledge is easily interpretable due to our knowledge of the THEORIES ARE BUILDING-metaphor, but the graffito Philosophy is the wallpaper of the mind requires quite some "effort after meaning" and will probably be interpreted differently by different people.

Conceptual metaphor is a predominantly lexical inference schema and less commonly found in grammar. Ruiz de Mendoza Ibáñez and Mairal Usón (this volume) provide instances of high-level metaphors operating at the lexico-grammatical level. One of their examples is the metaphor COMMUNICATIVE ACTION IS EFFECTUAL ACTION, which accounts for the conversion of the intransitive verb *talk* (to someone) to a goal-directed transitive verb in *He talked me into it*. Variations in the use of the caused-motion construction with intransitive verbs are extensively discussed by Wulff, Stefanowitsch, and Gries (this volume).

The notion of meaning construction has mainly been associated with mental spaces and the emergence of new meanings by conceptual blending. Fauconnier and Turner (1996: 40) define mental spaces as "small conceptual packets constructed as we think and talk, for purposes of local understanding and action." Conceptual blending occurs when two or more mental spaces are conceptually integrated to form a new complex concept. This is, for instance, the case in morphological blends and compounds, whose complex meanings are derived from blending two input spaces. In Fauconnier and Turner's (2000) example landyacht, selective elements of the two named input spaces 'land' and 'yacht' are projected onto a blended space and give rise to the emergent meaning 'expensive luxury car.' Conceptual blending also occurs from implicit cues as in the case of the danger frame evoked by safe in 2.1. A highly underspecified space-builder is also the negator no in a sentence like There is no beer in the fridge. The meaning construction involves "unpacking" the blend composed of a reality space in which there is no beer in the fridge and a counterfactual space triggered by no in which there is beer in the fridge. The input spaces are typically related by a small set of vital relations, which serve as general principles guiding meaning construction, such as relations of time, space, representation, cause-effect, analogy, and reality-counterfactuality. Relations between mental spaces may also involve 'contiguity' or 'similarity' and hence are metonymic or metaphoric, i.e. metonymy and metaphor may be seen as special instances of conceptual blending (see Coulson and Oakley 2003 for metonymic blends and Grady 2005 for metaphorical blends).

The contributions collected in this volume are grouped according to their focus on meaning construction in metonymy and metaphor on the one hand and mental spaces and conceptual blending on the other hand. Part I is devoted to meaning construction in metonymy and metaphor. The papers address the following issues:

Raymond **Gibbs**, Jr. surveys recent research on online meaning construction related to figurative language. While empirical research from psycholinguistics has not yet been able to investigate the conceptual nature of metonymy, there is considerable evidence of metonymic inferencing in language understanding and meaning construction.

Francisco José Ruiz de Mendoza Ibáñez and Ricardo Mairal Usón demonstrate

the role of high-level metaphor and metonymy in the construction of meaning in the domain of transitivity.

Antonio **Barcelona** studies meaning construction through implicatures in a piece of narrative discourse. The results of his empirical investigation show that readers' expectations about the development of the text are to a large extent guided by metonymies.

Martin **Hilpert** investigates the construction of meaning through chained metonymies. His cross-linguistic study is concerned with body part terms and their lexical extensions and development of grammatical meanings.

Debra **Ziegeler** argues that the notion of coercion is an inadequate tool in accounting for mismatches at the syntax–semantics interface. In her discussion of three representative cases of "coercion" she proposes alternative explanations, in particular metonymy, which are better suited to account for the construction of meaning.

Mario **Brdar** and Rita **Brdar-Szabó** study the use of figuratively used personal names and show how their online construction of figurative meaning involves tiers of metonymic and metaphoric mappings.

Anatol **Stefanowitsch** investigates the collocations in which selected metaphors occur and, on the basis of rich corpus data, concludes that statistical properties of collocational overlap can guide the construction of metaphoric meaning.

Part II is devoted to mental spaces and conceptual blending in the construction of meaning. It includes the following contributions:

Ronald **Langacker** explores the conceptual function of the personal pronouns *I* and *you*. The abstracted meanings of these pronouns invoke very basic cognitive models pertaining to the ground, a speech event, subject vs. object of conception, and intersubjectivity, which refers to the interlocutors' mutual apprehension of each other's minds.

Kiki **Nikiforidou** shows that Greek relatives may be highly underspecified with respect to the intended interpretation and, in order to be interpreted, require the construction of a blend with complex emergent meanings.

Christian **Koops** addresses the cross-linguistic variability of inferential constructions, in particular the *it is that*-construction, a construction that facilitates the hearer's construction of meaning. He shows that this construction is highly restricted and constrained in discourse.

Wiltrud **Mihatsch** studies the emergence of Romance approximators such as *espèce de*, which are derived from taxonomic nouns like *espèce* 'species.' This shift in meaning is motivated by communicative goals related to loose meaning construction.

Wolfgang **Schulze** argues that questions are the immediate reflexes of a memory mismatch. Questions require a change of perspective and are seen as ALTER-EGO

conceptualizations, a notion that is comparable to Langacker's notion of intersubjectivity.

Stefanie Wulff, Anatol Stefanowitsch, and Stefan Gries show that the *into*-causative construction has a much wider application in British English than in American English and hence is associated with different meaning constructions in these two varieties of English.

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