INTERVIEW

"Cognitive Linguistics is fun"

An interview with Günter Radden

Réka Benczes
Eötvös Loránd University, Hungary

R.B.: As one of the leading figures of the cognitive linguistics movement, you have published extensively on a broad range of topics, including, among others, linguistic motivation, cognitive grammar, conceptual metaphor and metonymy, prepositions, and space and time. Given the wide range of your publications within Cognitive Linguistics, the question arises as to how did you become acquainted with it in the first place and why did this approach appeal to you?

G.R.: The advent of Cognitive Linguistics is usually associated with the year when Lakoff and Johnson's classic *Metaphors we live by* appeared: 1980 (Lakoff & Johnson, 1980). Like many other people – linguists, literary critics, philosophers and journalists, I devoured the book in one go. I had been interested in metaphor since my early days as a student, had studied the imagery in *Hamlet* in a literary course, and had written my MA thesis on the transformational relationship between metaphor and comparison. Now there was a book that showed us that metaphor was neither a matter of literary excellence nor just a matter of language. Metaphor, Lakoff and Johnson told us, is a matter of everyday speech and has a conceptual basis. I sensed right away that this book not only offered insights into the study of metaphor, but also opened up new avenues of cognitive research into all areas of language.

R.B.: How did *Metaphors we live by* fit into the wider linguistic environment that you were also a member of?

G.R.: In the decades preceding 1980, the predominant linguistic pattern was Chomskyan Generative Grammar. In this model, syntax was treated as an autonomous system, largely detached from the meanings it conveys. Needless to say that we, the young generation of linguists, tremendously enjoyed postulating rules and constraints, transforming deep structures into surface structures, and keeping track of the ever-changing models: Chomsky's Standard Theory

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was followed by an Extended Standard Theory and followed again by a Revised Extended Standard Theory. But linguists also realized that, to use Jakobson's words, "Language without meaning is meaningless." George Lakoff, John Ross, Paul Postal, and James McCawley developed a model of Generative Semantics; Dwight Bolinger studied grammatical form in its relation to semantics, discourse and intonation; Michael Halliday integrated meaning, as well as communicative, cultural and social aspects, within his systemic-functional grammar; and Charles Fillmore proposed a framework of conceptual, or deep, cases.

R.B.: So how did these new approaches influence your research?

G.R.: My work on English grammar and prepositions in the 1970s and 1980s immensely profited from case theory. It served as the theoretical framework for several articles and, in co-authorship with René Dirven, for our book *Semantische Syntax des Englischen* (Dirven & Radden, 1977), for two edited volumes on case grammar (Dirven & Radden, 1981, 1987a), and for a reader on Fillmore's Case Grammar (1987b). Due to its conceptual basis, case grammar offers an excellent conceptual template for intra- and cross-linguistic studies.

For example, the choice of case roles for the subject of a sentence can be shown to be much more liberal in English than in German. In English, the subject may, apart from an Agent and Experiencer, express a Cause, as in *The hurricane destroyed the town*, a Location, as in *The first chapter presents the theory*, an Instrument, as in the medio-passive construction *Money doesn't buy everything*, and some other case roles. In English, these case roles may also be coded as prepositional phrases. In German, however, the use of prepositional phrases is often the only structural option available. To check whether this asymmetry between English and German leads to interferences from German, I asked the students of a course I taught at that time to translate sentences such as *Mit Geld lässt sich nicht alles kaufen* ("with money not everything can be bought") into English. Only five out of 25 students translated this sentence as *Money doesn't buy everything*. The majority of the students stuck to the model of their German mother tongue and used a prepositional phrase in English as well. They thus gave translations such as *You cannot buy everything with money* or *It is impossible to buy everything with money.* The students' translations are, of course, not ungrammatical but sound unidiomatic. Since most of our students were to become teachers of English, I specifically focused on such problems to increase their awareness of the particular structure of English, the language they were going to teach later on. And case grammar was a model that was well suited for this purpose.

Looking back at my early writing and teaching I might say that I was cognitive in spirit many years before Lakoff and Johnson's metaphor book appeared, but I didn't realize I was a cognitive linguist until 1980.

R.B.: One of the main tenets of the cognitive linguistic enterprise is the idea that there is a bidirectional relationship between language and cognition. In a joint paper with Klaus-Uwe Panther (Radden & Panther, 2011, p. 8), you claim that "[l]anguage 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. […] A thought shaped by a linguistic phenomenon is nowadays often referred to as a 'Whorfian effect'. […] The opposite directionality, the impact of cognition on language, is traditionally referred to as *linguistic motivation*" (emphasis as in original). Cognitive Linguistics argues that language is to a large extent motivated – which view goes against the Saussurean notion of the arbitrariness of language. In your view, and based on your research to date, to what degree can we say that language is indeed motivated?

G.R.: *Motivation* is my favourite word, so I would like to elaborate on this topic in some more detail. Let me start out with the notions of arbitrariness and motivation. Ferdinand de Saussure is known as the linguist who introduced the principle of arbitrariness in linguistics. He is less known as the linguist who also gave quite some thought to the notion of motivation. For de Saussure, arbitrariness and motivation were not mutually exclusive notions but extremes on a scale of relative motivation. He came to the conclusion that there is no language in which nothing is motivated and no language in which everything is motivated. This view of motivation certainly has a modern, cognitive ring.

The impression that language is arbitrary arises when we compare isolated words in different languages, such as *tree*, *arbre*, *Baum* or Japanese *ki*. Here, the pairing of a form and a meaning appears to be unpredictable. The majority of words are, however, polysemous, and once we consider extended meanings of a word, they are bound to be motivated. Thus, the meaning extensions of *tree* in genealogy and linguistics are, of course, well motivated by metaphor. When we consider complex linguistic units in morphology and syntax, motivation even turns out to be the rule rather than the exception. However, as observed by de Saussure, their motivation is relative.

R.B.: Can you provide a specific example?

G.R.: This can most clearly be seen in names given to new products. For example, the latest fad is an extendible pole on which a smartphone can be mounted to shoot photos of oneself posing, for instance, in front of the Eiffel Tower. Its Canadian inventor patented this terribly useful thing under the name *Quik Pod*. He probably had properties of the thing in mind: *Quik* might suggest "quick to handle" and the bound morpheme *pod* indicates "pole", as in *monopod* ("single" + "foot"). The name *Quik Pod* was, however, considered to be "not as catchy as *selfie*

stick",[1] the name under which the product is now sold worldwide. Why should the name *selfie stick* be more catchy than *Quik Pod*? The motivation of the name *Quik Pod* is relatively low because the constituent elements of the compound do not refer to central properties that metonymically evoke the product. By contrast, the motivation of the name *selfie stick* is high because its constituents describe relevant aspects of the product and the expression is appealing and easy to memorize thanks to its alliteration. This is reflected in an article in *The New York Times* describing the present craze of using selfie sticks. For readers who haven't yet heard of selfie sticks the article gives an explanation:[2] "The selfie stick is, as the name suggests, an extendable rod to which a smartphone can be affixed for selfies to be snapped from a longer-than-an-arm's distance." The interesting part in this definition is the phrase "as the name suggests". The components *selfie* and *stick* do, of course, not "suggest" an extendable rod, a smartphone, its affixation to the rod and a longer-than-arm's distance. However, the fusion of *selfie* and *stick* evokes the concept 'selfie stick', which in turn evokes the conceptual frame 'selfie stick', which finally evokes the above parts and properties.

R.B.: Turning back to the original question, where – and how – does motivation fit into the cognitive linguistic framework?

G.R.: Motivation is at the very heart of Cognitive Linguistics but, for a long time, it only played an ancillary role. My colleague Klaus-Uwe Panther and I felt that motivation deserved more attention and devoted an international workshop at Hamburg University in 1999 and an ICLC theme session in 2007 to the issue of motivation. In two volumes on motivation, published in 2004 and 2011 (Radden & Panther, 2004a; Panther & Radden, 2011), Klaus and I also developed our views of motivation. In the introductory chapter to the first volume, "Reflections on motivation" (Radden & Panther, 2004b), we specified the ingredients of motivation: "a linguistic target that is being shaped by a linguistic source (form and/or content) and language-independent factors". In the introductory chapter to the second volume, "Reflections on motivation revisited" (Radden & Panther, 2011), we suggested that motivation could be seen within the wider framework of interacting human systems.

Human systems that are of paramount importance to our human existence include, amongst others, cognition, bodily experience, emotion, perception,

1. http://readwrite.com/2015/01/13/selfie-stick-inventor-wayne-fromm-shafted-lost-out.

2. http://www.nytimes.com/2015/01/04/style/the-selfie-stick-takes-manhattan.html?_r=1. Selfie-sticks have also been dubbed *Narcisstick*, "wand of *Narcissus*".

action and language. At the centre of these human systems is cognition. The cognitive system processes information by, for example, categorizing, inferencing, framing, analogizing, etc. The cognitive system also interacts with the other, more peripheral, systems. The interaction between human systems is dynamic: One of the interacting systems tends to influence, or shape, the other system. In principle, either of two interacting systems may influence the other. Thus, perception is shaped by cognition whenever we interpret a thing we see. For example, our cognitive system makes us interpret a red light flashing as an instance of a type, such as a traffic light. Conversely, cognition is shaped by perception when we "see" the solution to a problem.

R.B.: Yes, I "see" all this, but how does language come into the picture?

G.R.: Language as a human system always interacts with cognition and, via cognition, may also interact with other systems. The interaction between language and cognition is bidirectional: Cognition may influence language and language may influence cognition. The former direction of influence is known as motivation, the latter as linguistic relativity. The idea that language influences thought was already voiced as early as 1836 by Wilhelm von Humboldt, who spoke of language as "the formative organ of thought" (Humboldt, 1836). The theory of linguistic relativity is mainly associated with Benjamin Lee Whorf (Whorf, 1939) and his famous claim that "We dissect nature along lines laid down by our native language." Whorf's deterministic view of linguistic relativity has, however, been met with scepticism for decades. Dedre Gentner poignantly described the predominant attitude towards linguistic relativism: "If you talked about language's impact on cognition, you were considered an idiot or a lunatic."[3]

R.B.: Yet this attitude could be accounted for the lack of scientific evidence for the influence of language on thought.

G.R.: The motivational impact of cognition on language can be observed in linguistic facts: The word *selfie stick* has entered our language, it has a meaning, it evokes a frame, and it is used to refer to selfie sticks. An impact of language on cognition, by contrast, is not directly observable: There is no observable indicator distinguishing a thought for which we have a word from a thought for which we lack a word. The only reliable evidence we have of language shaping thought can be found in its further impact on other human systems, in particular in people's action, perception, memory or association. Recent empirical research has

3. Quoted in Hamilton (2010).

confirmed that language does have an impact on cognition.[4] Thus, speakers of a language that distinguishes hues of a colour, as in Russian, which has words for lighter and darker blue, pay closer attention to these shades of colour than speakers of a language that only has one term for both shades of colour. The impressive sense of spatial orientation displayed by speakers of Guugu Yimithirr and Tzeltal has been related to their language with its fixed geographic directions. It has also been shown that people remember sentences with deliberately acting persons better if their language has different verb forms for intentional and accidental acts like Spanish or Japanese.

R.B.: So, to what degree does language influence thought?

G.R.: Like motivation, linguistic relativity needs to be seen not as a matter of all or none, but as relative. We may thus suspect that many other linguistic phenomena more or less strongly influence cognition. For example, we might hypothesize that the distinction between perfective and imperfective aspects in English has repercussions on cognition. A study carried out by Teenie Matlock (Matlock, 2011) confirms this assumption. She presented students with sentences such as *John was painting houses last summer* and *John painted houses last summer* and asked them to answer the question, *How many houses?* The participants estimated that considerably more houses were painted in the imperfective description (M = 22.01) than in the perfective description (M = 13.58). These results are surprising in view of the fact that aspect only specifies the temporal structure of an event and, moreover, the time period in both sentences was held constant as *last summer*. Matlock explains these differences in terms of our ability to simulate actions: The imperfective aspect draws attention to the ongoingness of a situation, and its mental simulation leads to inferences about more action. The form of grammatical aspect thus influences our interpretation of either more or less action and thus establishes a Whorfian effect. Conversely, the simulation of a situation may influence the speaker's choice of aspect: Thus, our simulation of more action makes us focus on the ongoingness of a situation and motivates the use the imperfective aspect in describing it. Linguistic motivation and linguistic relativity thus turn out to be two sides of the same coin.

Neo-Whorfian studies have only scratched the surface of linguistic relativity. This far, studies of linguistic relativity have tended to concentrate on striking phenomena typically found in "exotic" languages, somehow suggesting that only outlandish phenomena of distant languages influence cognition. I venture to say

4. For surveys of recent research by Neo-Whorfians see, e.g., Gomila (2015) and Deutscher (2010).

that linguistic relativism is part and parcel of our everyday language and is only waiting to be backed up by empirical evidence.

R.B.: Cognitive Linguistics is based upon two main assumptions, the Generalization Commitment and the Cognitive Commitment (Lakoff, 1990). The former states that various aspects of language are structured by the same guiding principles, while the latter holds that linguistic structure should reflect principles that are general to human cognition. Such views necessarily entail that Cognitive Linguistics is able to offer a more accessible and intuitively sound account of grammar. Nevertheless, there is still a lack of cognitive linguistics-inspired grammar books. You did, however, contribute substantially to the very first introductory linguistics textbook with a cognitive linguistic focus, *Cognitive explorations of language and linguistics* (Radden & Dirven, 1999; Radden, Dirven, & Verspoor 1999), and later on co-authored the immensely popular *Cognitive English grammar* (Radden & Dirven, 2007) – which has been also translated into Korean. How did these projects come about?

G.R.: Both the generalization commitment and the cognitive commitment are well compatible with applied linguistics. Let me give an example of a general cognitive guiding principle that is also relevant in grammar: bounding.[5] Our daily lives are surrounded by boundaries, and we constantly impose boundaries ourselves, e.g. when we don't want to be disturbed during our afternoon nap. It, therefore, doesn't come as a surprise to find the principle of bounding operating in grammar as well.

R.B.: How does the cognitive principle of bounding though manifest itself in English grammar?

G.R.: Collective nouns are a perfect example of bounding. Thus, we draw mental boundaries around musicians who play together and refer to them collectively as an *orchestra*. The importance of bounding can also be seen in the fundamental distinctions between count and mass nouns and between perfective and imperfective aspect. The grammar of English forces us to categorize things and situations as either bounded or unbounded. Let me illustrate the impact of boundedness with nouns. Many nouns in English are used both as count nouns and mass nouns, and their difference in meaning can be readily attributed to the presence or absence

5. The omnipresence of imposed mental boundaries has vividly been demonstrated by cognitive sociologist Aviatar Zerubavel in his fascinating book *The fine line: Making distinctions in everyday life* (Zerubavel, 1991). The relevance of the notion of boundedness for foreign language teaching has also been pointed out by Susanne Niemeier (Niemeier, 2008) in her paper on "The notion of *boundedness/unboundedness* in the foreign language classroom".

of boundaries. For example, *language* as a count noun evokes bounded meanings. Thus, *She speaks three languages fluently* refers to specific (bounded) languages spoken by members of a particular (bounded) country or region. *Language* as a mass noun, by contrast, evokes unbounded meanings. Thus, *Children acquire language at an astounding rate* refers to language in general, be it as a system of communication or as the linguist's object of study.

The impact of bounding and unbounding shows even more clearly in shifts between count nouns and mass nouns. When a noun that is primarily understood as a count noun is used as a mass noun, it needs to be interpreted as an (unbounded) substance. There is no problem with objects that can, or could be, transformed into matter, such as animals or organic products that are processed into food that can be eaten. Thus we can speak of eating spider or tree bark, but we can't transform cars, houses or iPhones into matter. Nouns expressing such objects – and these are, in fact, the majority of nouns – can still be turned into mass nouns. The unbounded meaning they evoke relates to one or several outstanding properties associated with the object. For example, the advertisement *Buy smart: Get more car for your money* invites inferences about properties such as horsepower, performance, comfort or luxury gadgets. Conversely, when a mass noun is turned into a count noun, it no longer designates a substance but refers to a variety of that substance, seen in contrast to other varieties. For example, in *People have become increasingly aware of the foods they consume*, the shifted count noun *foods* refers to varieties of food that are healthy as opposed to varieties of food that are unhealthy. A variety is bounded as a subtype of a type within a taxonomy. In the absence of any other bounded thing, a "variety" represents a well-motivated bounded entity that can readily be inferred from the substance-to-object shift. All these shifts involve metonymy, which could efficiently be explored in the classroom. The use of the mass noun in *They eat spider* involves the metonymy ANIMAL FOR FOOD MADE FROM ANIMAL, which could more generally be stated as OBJECT FOR SUBSTANCE MADE FROM THE OBJECT, the use of *Get more car* illustrates the metonymy OBJECT FOR SALIENT PROPERTY OF THE OBJECT, and the use of *the foods* exemplifies the metonymy SUBSTANCE FOR VARIETY OF THE SUBSTANCE.

R.B.: What prompted you and René Dirven, however, to write a textbook based on cognitive grammar?

G.R.: Doing applied linguistics is part of my, and René's, biography. I need to go back in time to the early 1970s, when linguistics was still in its infancy at our universities. Linguistics had just superseded traditional philology, and Chomsky's theory of syntax was hailed as the bedrock of linguistic studies. It came along with impressive concepts such as deep and surface structure, competence and performance, creativity, universality and innate principles of language faculty. It

also raised high expectations with regard to foreign language teaching. Linguistics became part of university curricula on a par with the study of literature, and it typically meant applied linguistics. The head of our linguistics section of the English Institute at Trier University, my mentor Wolfgang Kühlwein, inspired us to pursue applied linguistics. He established an international network of applied linguists, and we cooperated with Belgian, Dutch and French colleagues, developed study materials and gave a radio show on applied linguistics. We also wrote a joint book on *The applicability of linguistics to language teaching* (Dirven, Hünig, Kühlwein, Radden, & Strauß, 1976) and were involved in various activities of the *German Society of Applied Linguistics* (GAL). The students we taught were particularly interested in the "relevance" of linguistics for their prospective job as teachers, so we always taught linguistics with an eye on its potential impact in the classroom.

I was also interested in getting the students' perspective on the topics we were teaching, so I cooperated with teachers and interviewed high-school students about their subjects. The questions I asked also included their attitude to grammar. Most students bluntly admitted that they hated grammar, and I remember one of them referring to grammar as "my enemy". There was definitely something wrong with the way language, in particular grammar, was taught at that time: The predominant method was still based on memorization of words and rules of grammar, which, unsurprisingly, did not make much sense to the learner. In those days, Ausubel's (1963) theory of meaningful learning sparked intense discussions in educational circles. In meaningful learning, as opposed to rote learning, the learner integrates new information with information already known. Information that is anchored makes sense, and the more meaningful the information is, the easier it is for the learner to understand and retain it. I believe that the principle of meaningful learning is still as valid today as it was at the time when it was proposed by Ausubel, and I also believe it applies to any kind of new information that we want to learn and remember, including a foreign language.

R.B.: How does meaningful learning emerge in your cognitive grammar textbooks?

G.R.: René Dirven and I wrote two grammars of English: *Semantische Syntax des Englischen* in 1977 (Dirven & Radden, 1977) and *Cognitive English grammar* in 2007 (Radden & Dirven, 2007). Together with Richard Geiger, René also edited *A user's grammar of English* in 1989 (Dirven & Geiger, 1989), where I also contributed the chapters on "Semantic roles" and "Figurative use of prepositions" (Radden, 1989a, 1989b). These books were based on the assumption that grammar is just as meaningful as the lexicon of a language. In our earlier semantic approach to syntax we focused on the meaningfulness of grammatical structures, i.e. we adopted

a semasiological approach. In our cognitive approach to grammar, we adopted a truly conceptual approach. When we first conceived our *Cognitive English grammar*, we originally thought of a "soft" version of Ron Langacker's fascinating model of Cognitive Grammar: We had a book in mind that made Ron's ideas also accessible to uninitiated readers such as our students. We adopted Langacker's cognitive model but also decided to take the speaker's conceptual world as the point of departure and look at the way "thinking" is rendered as "speaking". In lexical semantics, this perspective is known as onomasiological – there is no term available for the corresponding perspective on grammar. There are very few linguists, even in Cognitive Linguistics, who systematically take an onomasiological perspective on grammar, one notable exception being Len Talmy. Grammarians probably stick to the traditional semasiological approach because linguistic categories represent a safer ground – we don't really know what conceptualizations and conceptual structures are like. But there is one thing we do know: Our world of thought is real and meaningful.

R.B.: *Cognitive English grammar* starts off with the basics – it acquaints students with the methodological framework that is used throughout the book to explain various grammatical features, such as categorization, conceptual metaphor and metonymy, blending, figure and ground, etc. Which of these processes play a more substantial role in accounting for the properties of English, or are they equally prominent?

G.R.: The first three chapters of our book are, in fact, devoted to the theoretical framework and basic notions of Cognitive Grammar. We have always endeavoured to make the cognitive notions we introduced meaningful by linking them to familiar situations and everyday experiences. We also felt committed to the series in which the book appeared: *Cognitive Linguistics in Practice*. The book was conceived to be used as a textbook by undergraduate and graduate students. We always had to perform a delicate balancing act between presenting the linguistic contents in an insightful and user-friendly way and meeting the expectations associated with a scholarly book.

All of the cognitive notions you mentioned are relevant in grammar. Some of them, in particular categorization and metaphor, are certainly more relevant to lexical semantics than to grammar. But I would like to extend the list of important cognitive notions in grammar and include inference, frame, perspective, subjectivity and fictivity, as well as various types of motivation, in particular ecological and iconic motivation. If I had to rank the cognitive notions with respect to their grammatical relevance, I would tend to give the highest priority to inference, metonymy and ecology.

R.B.: How does inference, metonymy and ecology pertain to grammar?

G.R.: Grammatical units, as opposed to lexical units, are highly schematic and indeterminate. As a result, grammatical units, in particular composite constructions, normally only provide a partial representation of the speaker's conceptualization, leaving it up to the hearer to infer the complete intended meaning. The hearer's inferential process is based on metonymic reasoning: PART of the information is used to stand for the WHOLE information. Due to its overall indeterminacy, grammar is, according to Langacker (2009, p. 46), "basically metonymic".

Apart from its general impact on grammar, metonymy also plays a major role at local levels, particularly in grammatical shifts, as in the shifts between count nouns and mass nouns, which we talked about earlier. To mention just a few more examples: As observed by Nikiforidou (1999), nominalizations may involve metonymies. For example, the abstract noun *delivery* typically expresses an action. However, in *The final delivery was in huge paper boxes*, an ACTION stands for a PRODUCT OF THIS ACTION, and in *The final delivery was careless and sloppy*, an ACTION stands for the MANNER IN WHICH THE ACTION IS PERFORMED.

Language, including its grammar, is also shaped by its ecological system. The idea of language as a system in which "everything hangs together" has usually been associated with Antoine Meillet but apparently goes back to de Saussure. In grammar, the meaning conveyed by a construction is in part shaped by the constructions surrounding it. Thus, the uses associated with the Simple Present are, amongst others, shaped by the Present Progressive and the non-existing form of a Habitual Present. A less familiar case of ecological motivation might be that of the system of indefinite determiners in English. Singular count nouns take either *a(n)* or *some* and plural count nouns either the zero article or *some*, in its reduced form /sm/. There are thus two forms marking indefinite reference both for singular and plural nouns. When there are two words for the same thing, we expect them to carry different meanings.[6] This also applies to the pairs of indefinite determiners. Etymologically, both *some* and *a(n)* meant "one", but they ended up developing different usages. *A(n)* has developed into the unmarked indefinite determiner indicating specific or non-specific reference, i.e. it is used for referents that are known or unknown to the speaker. *Some*, by contrast, has developed into a marked indefinite determiner indicating non-specific reference only, i.e. it is used for referents that are unknown to the speaker. Since we don't know anything about the referent of *some*, we tend to associate it with further meanings, especially

6. This also applies to variant pronunciations of the same word. For example, people associate vase /va:z/ with a big vase and /veɪz/ with a smaller vase (Labov, p.c.), or *dreamed* with a slowly moving action and *dreamt* with a completed action (Bolinger, 1980, p. 19).

negative ones, as in *Probably some idiot pressed the wrong switch somewhere and the power went out.*

The reverse picture emerges with the plural indefinite determiners. The unmarked choice is /sm/, while the zero form became the marked choice. As a quantifier, *some* describes an amount or number between "two" and "not all". This aspect of quantity is still preserved in the weakened form of the plural determiner /sm/. Thus, *I'm going to see some of my friends* means that I will meet at least two friends, but not all of them. The marked choice of plural indefiniteness is the zero article, as in *I'm going to see friends*. The indefiniteness is fully indeterminate, so we tend to shift our attention away from the notion of indefiniteness to the frame associated with the noun and may interpret this sentence to mean that we are going to meet friends as opposed to, for example, family. In all these cases, our interpretation of an utterance is typically arrived at by inference. Language dramatically underspecifies, and most of what we understand has not been uttered explicitly.

R.B.: There are plenty of areas of English grammar that are confusing and difficult for non-natives, such as negated modality, for which you have managed to provide a cognitively plausible and systematic account (see Radden, 2007, 2009a, 2014). From an applied perspective, which areas of English grammar lend themselves best to a cognitive linguistic account and why?

G.R.: Yes, negated modality appears to be one of those terribly confusing areas of English. But if looked at from a concept-based view, even the interaction of modality and negation turns out to be motivated. In my approach to negated modalities I plotted the negated modals against a matrix of conceptual slots. The matrix immediately reveals that modal negation typically has wide scope, i.e. the negation affects the proposition, as in *This can't be true.* In German, all modal negations have wide scope, and wide scope is also the default negation used with modals in the other Germanic languages. Let me just consider one puzzling case of narrow scope of negation in English: Prohibitions, as in *You mustn't drink when you are going to drive*, are expressed by the compelling root modal *mustn't* with a narrow scope. However, there is no corresponding narrow scope negation with compelling epistemic modals, i.e. *mustn't* can't be used in sentences such as **This mustn't be true*. Why should *mustn't* be available to express a prohibition but not to express a necessity that something is not the case? It has been suggested that *mustn't* is not used in epistemic modality because *can't* is used instead. The existence of the "impossibility" modal *can't* is, of course, no satisfactory explanation. A more sensible motivation is to be found in the different force-dynamic constellations: Prohibitions, like obligations, may involve the speaker acting onstage as the imposer. In prohibitions, the speaker's volitional impact is given expression in

having the subjective compelling modal *must* scope over the negated proposition. Epistemic assessments, by contrast, are conclusions drawn by the speaker on the basis of the strength of circumstantial evidence. The speaker thus does not take an acting part in the force-dynamic constellation, which is given expression in the use of the objective compelling model *can't* and the default wide scope of negation. The interaction of forces underlying such modal constellations can be nicely visualized in graphic representations.

Areas of English grammar that lend themselves best to a cognitive-linguistic account are, of course, those where students experience substantial difficulties and consistently make mistakes. Such errors are typically based on interferences from the students' mother tongue and hence are largely predictable. I used to collect students' errors and, when discussing certain error-prone areas, present the students with recurrent mistakes made by their fellow-students, insinuating, of course, that the study of Cognitive Linguistics can also be very useful in avoiding mistakes. Notoriously difficult areas of grammar include aspect (especially the use of the non-progressive for the progressive form, as in **National Geographic is offered for sale* (for *being offered*); the present perfect, as in **Rosch's findings have a huge influence on the study of language* (for *have had*); abstract mass nouns, as in **These examples serve as an evidence for […]* (for *as evidence*); articles with abstract nouns, as in **It was claimed by the classical theory* (for *by classical theory*); order of attributive adjectives and participles relative to their head noun, as in **the above described features* (for *features described above*), etc.

R.B.: Is it possible to account for every error a language learner makes by adopting a cognitive linguistic approach?

G.R.: No, unfortunately not. Many errors are not clearly attributable to general cognitive principles. For example, mention of the dative participant is obligatory with certain verbs in English but not in German, leading to mistakes such as **The words remind of the usual sense of the word […], *These metaphors allow to reason about power,* and **The model helps to understand how meaning is construed*. Why should English use the conjunction *that* rather than a conjunction of time in reference to a temporal antecedent, giving rise to the mistake in **It was on January 13, 1988, when a group of 33 men assembled*? Learners of English may wonder why the English verb *to base* should be used in the passive voice and not, as in their mother tongue, in the active voice so that they form sentences such as **Metaphors base on common concepts* rather than *Metaphors are based on common concepts*.

Errors show most clearly where the structure of a language conflicts with people's linguistic intuitions. They reflect powerful assumptions about construals that are motivated but, for some reason, not made use of in a given language.

R.B.: What further topics would you like to see included in a cognitive linguistic account of English grammar?

G.R.: Cognitive grammar, like most linguistic and didactic approaches to grammar, has mainly been confined to the structure of the sentence in its written form. All linguists are aware of the primacy of spoken language and know that spoken sentences may be truncated or ill-formed and still be understood. We also know that sentences do not occur in isolation but within a communicative setting. The overall discourse and situational context largely determine the speaker's verbalization and the hearer's interpretation. However, most cognitive linguists tend to ignore discourse in the same way that discourse linguists tend to ignore Cognitive Linguistics.

A challenge for cognitive grammarians might be to investigate the problems speakers face in fitting their complex ideas into the straightjacket of grammatical constructions, a task we face every day when writing a paper or giving a presentation. The speaker's choice of a construction determines whether a piece of discourse is felt to be coherent or incoherent and easy or difficult to understand. The grammatical level should, of course, not be divorced from the lexical level – the language user does not distinguish between these two levels either. Both grammar and the lexicon cooperate when we want our speech acts to be informative and sound attractive, humorous or convincing to the hearer.

Most grammatical phenomena (of English) at the sentence level have probably been explored in light of their underlying cognitive basis. Discourse processes and linguistic interaction, by contrast, are among the wider areas waiting to be researched. With its conceptual framework and cognitive tools, Cognitive Linguistics is, in fact, predisposed to explore aspects of language in use.

R.B.: One of the most influential definitions of metonymy within Cognitive Linguistics to date originates from yourself and Zoltán Kövecses (Kövecses & Radden, 1998; Radden & Kövecses, 1999), according to which metonymy is a "within-domain mapping", i.e., the metonymic vehicle provides mental access to the target that is situated in the same domain or idealized cognitive model. In a recent interview (Brdar & Brdar-Szabó, 2014, p. 230), Klaus-Uwe Panther has argued that such a definition "allows too many phenomena to be called 'metonymy', resulting in an inflationary proliferation of this concept". In light of the proliferation of cognitive linguistic work on metonymy (e.g., Benczes, Barcelona, & Ruiz de Mendoza Ibáñez, 2011; Panther & Radden 1999; Panther, Thornburg, & Barcelona, 2009), as well as your own work on the application of metonymy to grammar, more specifically generic reference (e.g., Radden 2005, 2009b), what are your current views on the original definition of metonymy you proposed with Zoltán Kövecses?

G.R.: When Zoltán and I started looking into metonymy in the mid 1990s, all we could rely on was traditional work such as Ullmann's *Semantics* (Ullman, 1962), Norrick's *Semiotic principles in semantic theory* (Norrick, 1981), and a few scattered cognitive articles and chapters of books, in particular Lakoff and Johnson's (1980) 6-page Chapter 8 on "Metonymy" and Gibbs' (1994) discussion of metonymy. In our papers of 1998 and 1999, Zoltán and I proposed the cognitive working definition of metonymy you referred to. What we had in mind was a reinterpretation of the traditional notion of metonymy as a figure of thought. We eliminated the aspect of substitution and, instead, focused on the associative and dynamic nature of metonymy. The associative nature is reflected in what we called a "metonymy-producing relationship", and the dynamic nature is manifested in the metonymic process.

During the last 15 years, an impressive amount of research has been carried out on metonymy, and the notion of metonymy has dramatically expanded. Langacker's view of grammar as basically metonymic also applies to morphology and the lexicon. Probably all linguistic categories exhibit prototype structure or are polysemous or indeterminate. Interpreting even a simple lexical item involves metonymic reasoning: A general, polysemous or indeterminate category metonymically stands for a prototypical or specific member of the category, or in Ruiz de Mendoza Ibáñez's (2000) terms, the metonymic process involves domain reduction. Stating that all language is metonymic may allow us to distinguish language from other modes of communication but it does not allow us to distinguish phenomena within a language and hence would make metonymy a vacuous notion in linguistics.

Metonymy involves the co-activation of strongly associated concepts,[7] but how strong does an association have to be in order to count as a metonymic relation? For example, is there a strong association between a person's utterance "I got the job" and her emotion of happiness, or is a piece of music strongly associated with the feelings awakened in a listener? And if the answer is in the affirmative, do these situations also involve metonymy? Such decisions were easier to make in the days when metonymy was seen as a matter of substitution: the answer would have been a straightforward "No".

R.B.: What approach to metonymy can Cognitive Linguistics offer that is able to account for the vast range of phenomena that it can apply to yet still keep metonymy within limits?

7. Bierwiaczonek (2013, p. 37) convincingly argues that the associations underlying metonymy are neurally motivated.

G.R.: Like any other category, the term *metonymy* is, as has been suggested by Yves Peirsman and Dirk Geeraerts (Peirsman & Geeraerts, 2006) and Antonio Barcelona (Barcelona, 2011), to be seen as a radial category. The "best" metonymies are probably those that are always given as illustrations of metonymy: referential metonymies involving a source-in-target shift, such as *having a roof over one's head*. These metonymies involve a clear shift of meaning of the source expression, whose meaning is integrated in the target. Less prototypical instances of metonymy are target-in-source shifts, like *reading Proust*. The target is inferable as a feature of the source, but the shift in meaning almost goes unnoticed. The status of predicational, propositional, illocutionary and situational metonymies within the radial category is far from clear. They relate to a conceptual situation and their intended target meaning is fairly easily inferable, such as the travel scenario from a precondition of travelling. Peripheral members of the metonymy category are meaning-making phenomena that are "based on metonymic principles",[8] such as the examples of getting a job and being happy or listening to music and experiencing certain feelings or memories. The two related situational concepts are certainly associated and their relationship can be specified as one of CAUSE and EFFECT, i.e. as a metonymy-producing relationship. However, the speaker's utterance was certainly primarily meant to convey the literal news of getting a job; likewise, the musician's play was meant "literally" to sound as perfect as possible. Depending on the analyst's notion of metonymy, such discourse-related situations would, or would not, count as metonymic. If an analyst understands metonymy as a conceptual shift in which the speaker's (or musician's) intended metonymic target is to be inferred, these situations would not be considered metonymic. To an analyst, however, whose understanding of metonymy solely relies on metonymic relationships, these situations would be considered metonymic. Needless to say that these different conceptions of metonymy may give rise to misunderstanding.

R.B.: In your study on the folk model of language (Radden, 2004a), you claim that the metonymies SPEECH ORGAN FOR SPEAKING and SPEECH ORGAN FOR LANGUAGE (which are attested in a number of unrelated languages) behave like metaphors in the sense that concrete subdomains of experience "stand for" abstract subdomains, and there are unidirectional mappings between them. In your view, where can then the line be drawn between metaphor and metonymy (if at all)?

G.R.: I really enjoyed writing that article on the folk model of language. I literally had to giggle when I came across all those wonderful expressions that people have

8. For this new field study based on metonymic principles, Denroche (2015, p. 181) coined the term *metonymics*.

created in their attempt to come to grips with linguistics. For example, "being able to speak well" is in Hungarian expressed as "one's tongue turning well", and if you are "at a loss for words" in China, you have "an open mouth and a knotted tongue". The popular view of language that shines through such expressions reveals an amazing folk model. Linguistic action as well as language are conceived and expressed in terms of articulation. Five articulatory elements are particularly prominent: voice, tongue, mouth, teeth and lips. These speech elements are salient in articulation: they are palpable to the speaker and perceptible to the hearer. Their choice is thus well motivated in our basic experiences. The folk model of language is thus fundamentally metonymic. It is based on the metonymies SPEECH ORGAN FOR SPEAKING and SPEECH ORGAN FOR LANGUAGE.

R.B.: Taking cultural variation into consideration, can we claim nevertheless that the metonymic shifts that make up this folk model are relatively universal?

G.R.: Yes, I would definitely say so. The metonymies form a cross-linguistically coherent system. For example, the idea "start to speak" is typically expressed as "open the mouth" and, conversely, the idea "shut up" as "close the mouth" or "hold the mouth". Since metonymy is a matter of inference, the metonymic expressions may also invite language-specific implicatures. For example, the literal Hungarian expression "open one's mouth" means "begin scolding someone" or "say one's opinion frankly", and the literal Japanese expression "tightly close one's mouth" means "refuse to say something". The metonymies can be, and often are, elaborated by metaphor: for example, the tongue is described as being split, knotted, tied, etc.

This study has shown that metonymy is not just a matter of local shifts, but may, like metaphor, also involve systematic conceptual mappings between domains. Since source and target of a metonymy share the same overall domain, frame or ICM, we can refer to the metonymic domains as subdomains. Thus, in our metonymic folk model, the subdomain of articulation is mapped onto the subdomain of speaking within the same overall domain of language as a whole. As in metaphor, the metonymic mappings discovered here are unidirectional and serve the purpose of understanding: The concrete source subdomain of SPEECH ORGANS allows us to understand the abstract target subdomains of SPEAKING and LANGUAGE.

Systematic metonymic patterns like these cast doubt on the usefulness of the notion of "domain" as a criterion distinguishing metaphor from metonymy. There are certainly many more areas in which a domain is structured and understood in terms of metonymy. One such area that comes to mind is that of illnesses. There is a strong experiential link between a disease and its symptoms, and most of us being patients, are much more familiar with the symptoms. As a result, we typically

describe an illness by way of one of its salient symptoms, as in *a cold*. The Greek or Latin etymology of disease names often hides their reference to symptoms. Thus, *asthma* derives from Greek *asthma* "short breath", *inflammation* from Latin "setting on fire, redness", and the skin disease *scabies* from Latin *scabere* "to scratch". At least part of medical, or folk-medical, terminology can be subsumed under the metonymic heading SYMPTOM FOR DISEASE as an instance of the higher-level metonymy EFFECT FOR CAUSE.

R.B.: This leads us to metaphor. Besides metonymy, you have also done considerable research on metaphor, especially the conceptualization of time as space (Radden, 2004b, 2006a, 2006b, 2011). As you have pointed out in these papers, we do have some concept of time, yet we use space to elaborate on and make sense of this concept. It seems straightforward to use space as a source domain, as it is so readily available to us – no wonder that so many languages conceptualize time as space. Nevertheless, the question necessarily arises as to why it is so "natural" to think of time as space? And, given the very different spatial elaborations of time as space in the various languages (one only need to think of the horizontal versus vertical distinction), one is tempted to think that space is not conceptualized similarly in every language. How can dissimilar experiences converge in such a near-universal metaphor for time?

G.R.: The metaphorical understanding of time as space comes so "naturally" that people don't even notice it. What makes this metaphor particularly natural is that there are, as a rule, no corresponding non-metaphorical expressions available. If you wanted to refer to the week in the future relative to the current week, you have no other choice but to use spatial expressions: *the following week* or *coming week*. Even *next week* is, historically, a spatial term: The adjective *next* derives from the superlative form of Old English *neah* "nigh, near". The basic relational notions of time all have a spatial basis. We conceptualize and express time as moving, passing, and having gone, as being distant or near, long or short, ahead of or behind us, etc. A small inventory of spatial terms provides a perfect framework for structuring time. No other domain could structure our everyday experience of time as efficiently as space: The notion of the passage of time is matched by spatial motion, the notion of time passing us is matched by objects moving past us, the notion of us going with time is matched by our locomotion, the notion that time cannot be turned back is matched by unidirectional motion, etc. As in all instances of conceptual metaphor, there are, of course, aspects of space that do not map onto time. For example, in space but not in time, we can move back, go to the same place twice, or simply remain stationary at a place.

R.B.: In view of these perfect analogies then why do we need for a language to develop a separate system for notions of time?

G.R.: Indeed, it is much more economical to make use of an existing system. We might be tempted to argue, as probably most people would do, that expressions that designate both spatial and temporal meanings are simply polysemous. However, we also find many expressions of spatialized time that are clearly felt to be metaphorical, such as *time flying*, *flashing by*, *slipping away*. But these live metaphors are based on the underlying system of basic spatial relations and would not make sense without them.

The conceptual metaphor TIME AS SPACE strikes us as so natural because the mapping between the two domains is so well motivated. The directionality of the metaphorical mapping is motivated by vision and our bodily experience. As suggested by Lakoff (1993, p. 218), the spatial metaphor may even be biologically determined: "We have detectors for motion and detectors for objects/locations. We do not have detectors for time." This could explain why there is apparently no language that does not use spatial expressions for time, and there is hardly any evidence for the use of temporal expression for space.

Everything thus points to space as a conceptually more basic domain than time. However, time also interacts with space. Time is, for example, an essential component of motion. According to Langacker (2012), time can be argued to be even more basic than space. Even when we view a spatial scene, it involves dynamic, and hence temporal, processes of scanning and shifting attention. As many scholars have suggested,[9] our experience of space and our experience of time are inseparable.

R.B.: If time is more basic than space, then why are there such differences among languages in its conceptualization?

G.R.: All languages conceptualize time in terms of space but the topology of space allows them to exploit the metaphor differently. As you said, construing the time line as front–back or vertical is one of the choices – the left–right axis has, to my knowledge, not been exploited for time by any language. There have been quite some interesting suggestions about the motivation of vertical time: In China and East Asian languages influenced by Chinese, the cultural importance of the Yangtze River could have motivated the model of downward flowing time. Vertical writing going from top to bottom and the stroke order of Chinese characters may also have contributed in motivating vertical time in East Asian countries.

9. See e.g. Kronasser (1968, p. 158): "In our everyday life, there is no experience of space without time nor an experience of time without space."

Another suggestion considers our position when we crawl and hence move in the direction of the head. The head is, in fact, not only used as a spatial marker for a topmost region but also for a front region. Finally, a family tree typically displays the generations in vertical order, with the oldest generation on top, and representations of society display the highest-ranking members at the top, as in the placements of dolls on "Girls' Day" (*hinamatsuri*) in Japan.

Cyclic conceptions of time are found in some Amerindian languages. Interestingly, cyclic time tends to go along with other cyclic systems in the culture. For example, the culture of Toba also conceptualizes cosmology, Christianity and its kinship system in terms of cyclic phases. In some, especially Amerindian, languages, the past is conceived of as lying in front of the observer and the future is as lying behind. This makes perfect sense since the past is known and the future is unknown. But this model of time is also embedded in the culture. For example, the Indians of Aymara have a profound respect for their ancestors, their tradition and their history and see little point in speculating about events that haven't occurred.

R.B.: Metaphor routinely shows up in our use of prepositions as well. As argued in Radden and Matthis (2002), similarity is understood in terms of closeness (e.g., "This is close to the truth"), while difference is understood in terms of distance (e.g., "This is far from the truth"). However, why do we use dynamic prepositions to describe spatial scenes? What does this reveal about our conceptualization? And is this specific to English, or can it be attested in other languages as well?

G.R.: This was a study my former student and friend Elizabeth Matthis and I really enjoyed doing. I had always been puzzled by the seemingly odd uses of *different* with the prepositions *from*, *to*, and *than*, and we asked ourselves how these usages might be motivated. In order to see if the English uses differ from those of other languages, we first looked at the way notions of "similarity" and "difference" are rendered in other languages. Of the random sample of 23 languages we consulted, the majority express similarity and difference metaphorically in terms of space and, to a lesser degree, by means of expressions of similarity or comparison. In their spatial construals, "similar" is overwhelmingly construed with a Goal marker (13 languages vs. four languages using Place or Accompaniment markers), while "different" is overwhelmingly construed with a Source marker (13 languages vs. four languages using Accompaniment and two languages using Goal markers). The use of directional markers for similarity and difference is thus quite common cross-linguistically. The metaphorization of similarity and difference in terms of space is also well motivated: Like other mental processes, judgements of similarity and difference are understood as motion: THINKING IS MOVING.

Why should similar things be seen as moving together and different things as moving away from each other? Imagine returning from a linguistics conference and sorting the papers you have brought home. You will put the papers that match with your cognitive interests on one pile, probably in front of you, and put the ones that deal with other, less interesting, topics somewhere else or even drop them right away into the garbage can. The attraction of similar things also finds expression in the proverb *Birds of a feather flock together*, and the separation of different things finds expression in *Oil and water don't mix.*

It might be added that we also looked into the distribution and meaning of the prepositions in conjunction with *different*. The three prepositions exhibit regional as well as semantic differences. Speakers of British English mainly use the prepositions *from* and *to*, speakers of American English mainly *from* and *than.* The prepositions are not interchangeable: Thus, *from* is associated with substantial differences, *to* with minor differences, and *than* with differences along a specific dimension. These prepositional meanings are, of course, motivated but it would lead too far to go into them here.

R.B.: Over the years, you have taught linguistics courses in Trier, Siegen, Hamburg, Kraków, Warsaw, Debrecen, Bergen and Olsztyn and have been visiting scholar at the universities of California at Berkeley and San Diego, Osaka City University and Bergen University. How has this international experience contributed to (or shaped) your research work and research interests?

G.R.: Academics are in a privileged position. Their area of research is part of a global network, and they can meet scholars all over the world who share their interests. My research has profited immensely from exchanging ideas with colleagues with other cultural and linguistic backgrounds. An interesting side effect has always been trying to learn a new language; needless to say that I never reached the level of communicative competence in Polish, Hungarian, Norwegian or Japanese. But I learned some of the Polish verbal prefixes used to mark perfective aspect and I still can't believe that they should be unsystematic. I learned from Noriko Matsumoto that Japanese has different verbs for putting on headgear (*kaburu*), clothes on the upper body (*kiru*), clothes on the lower body (*haku*), and for clothing accessories (*suru*). I learned from Péter Pelyvás that, in Hungarian, things that come in pairs like shoes or eyes are usually expressed as singular nouns and one item of the dual pair is referred to as "half the thing". For example, "I found a shoe under the bed" is expressed as *Találtam egy fél cipőt az ágy alatt*, which literally translates as "I found half a shoe under the bed".

I think I can, in all modesty, say that the time I spent teaching and lecturing abroad was as valuable for me as it was to my hosts. I enjoyed teaching the highly

motivated students in Warsaw, Kraków and Debrecen, and I received marvellous responses for the lectures I gave. I never had such long several-minute applause as after the talk I gave at the University of Zagreb, and I never had such a huge auditorium of several hundred students and faculty members as at the University of Miskolc, where, after my talk, an English lecturer came up to me expressing his surprise that a German speaker would give a talk on English at a Hungarian University. And the only time I had to give a talk without shoes was at Nara Women's University, where all the slippers I could choose from were way too small.

R.B.: Many of your publications are the results of collaborations. In fact, you have co-authored or co-edited six books with René Dirven (Dirven et al., 1976; Dirven & Radden, 1977, 1981, 1987a, 1987b; Radden & Dirven, 2007) and co-edited three with Klaus-Uwe Panther (Panther & Radden, 1999, 2011; Radden & Panther, 2004a), to name but two of your most prolific partnerships – with further collaborations with Hubert Cuyckens, Elżbieta Górska, Klaus-Michael Köpcke, Thomas Berg, Peter Siemund, Zoltán Kövecses and Ken-ichi Seto among many others (Cuyckens, Berg, Dirven, & Panther, 2003; Górska & Radden, 2006; Kövecses & Radden, 1998; Radden & Cuyckens, 2002; Radden, Köpcke, Berg, & Siemund, 2006; Radden & Kövecses, 1999, 2007; Radden & Seto, 2003). How have these collaborations arisen – was it just simply a case of mutual research interests or is there something more to it? How have these collaborations shaped your research – and ultimately, your views on Cognitive Linguistics?

G.R.: In the natural and social sciences, collaboration in research teams and joint publications are the rule. In the humanities, we find the reverse picture: Scholars are solitary thinkers and publish under their name, probably because search committees tend to value monographs more highly than joint publications. According to Tomasello, humans, as compared to apes, have strong positive motives to cooperate in group activities, which brings them pleasure. My academic life has, in fact, been shaped by the pleasurable experience of cooperation.

I spent many years collaborating on a gamut of linguistic topics mainly instigated by René Dirven. Apart from publishing books and articles and editing volumes, we launched a linguistic clearing-house at Trier University in 1973 for the purpose of disseminating linguistic preprints and organizing symposia with distinguished linguists. It was at these annual symposia that Charles Fillmore, George Lakoff and Ron Langacker spread the Cognitive Gospel and paved the ground for the development of Cognitive Linguistics in much of Europe. The clearing-house, originally known by the acronym LAUT (Linguistic Agency of the University of Trier), moved with René to Duisburg in 1985 and has been renamed LAUD (Linguistic Agency at the University of Duisburg). LAUD is, in

fact, still going strong, now located at the universities of Essen (Ulrich Schmitz) and Landau (Martin Pütz).

When I moved to Hamburg University in 1983, I was once again fortunate to find a colleague at our institute who shared my cognitive-linguistic interests. Highlights of Klaus-Uwe Panther's and my collaboration were the conferences we organized on metonymy and motivation and the founding conference of the German Cognitive Linguistics Association Klaus-Uwe Panther, Mechthild Reh and I held in 2004. In the late 1980s and the 1990s, Hamburg was a kind of haven for Cognitive Linguistics in Germany: We offered a program of courses and colloquia on Cognitive Linguistics; one of our graduate students, Olaf Jäkel, established a preprint series for cognitive linguistics papers, dubbed CLEAR (Cognitive Linguistics in English and American Research); and thanks to our cooperation with Suzanne Kemmer and Sally Rice, many of our young scholars were able to enrol in the PhD programs offered at Rice University and the University of Alberta.

In this stimulating cognitive atmosphere it was only natural for me to find colleagues I could collaborate with in Germany as well as abroad. Collaborating with people who are on the same wavelength is something I would not have wanted to miss. Several projects have materialized as publications, many other projects were enthusiastically planned and even begun but, due to lack of time or other commitments, not completed – something all of us are familiar with in academia. I would like to take this opportunity to express my gratitude to the colleagues I collaborated with as well as to the many academic friends who inspired me in my work – there are too many to name. But I would like to extend my special thanks to Hubert Cuyckens, Thomas Berg, René Dirven and Klaus-Uwe Panther, who dedicated a Festschrift in my honour on the occasion of my (official) retirement. The editors of this impressive collection of 17 contributions could not have done me a greater pleasure than choosing my primary linguistic interest as the topic of the volume: *Motivation in language* (Cuyckens, Berg, Dirven, & Panther, 2003).

R.B.: Since the 1970s, Cognitive Linguistics has been able to produce a formidable amount of high-quality research on every aspect of language, and in doing so, it has managed to seriously question the dominant formal approaches to language. In fact, it can be plausibly argued that cognitive science has definitely moved away from a strict computational approach to a more dynamic, connectionist and even embodied view – to which Cognitive Linguistics has definitely contributed in some way or another. In light of this convergence of approaches and theories, where does – in your view – the future of cognitive linguistics research lie? What advice would you give to aspiring cognitive linguists?

G.R.: Cognitive Linguistics has given us refreshing insights into the nature of language as well as the conceptual world of humankind. The framework and methodology of Cognitive Linguistics is certainly here to stay. There is, of course, no shortage of fertile areas that young cognitive scholars can write their dissertation on. I already mentioned discourse, linguistic relativity and the onomasiological perspective; other fields that are still under-researched and could be of interest to cognitive linguists include idiomaticity, spoken language, language play, historical linguistics and contrastive linguistics. An abundant field of linguistic subjects that might be revisited by cognitive linguists are tropes such as hendiadys, hyperbole, pleonasm and solecism. We may also consider exploring central cognitive notions such as construal and the usage-based approach, which are being mentioned all the time but have not been subject to an in-depth study. The most important language user, the conceptualizing speaker, has, in fact, only received very little attention by cognitive linguists.

Linguists can benefit greatly from cooperating with neighbouring disciplines. Eleanor Rosch's work on categorization is a prototypical example of how research findings from one discipline can have a significant impact on another discipline. Interdisciplinary cooperation of cognitive linguists with psychologists, anthropologists, sociologists, neurologists and biologists would considerably widen each other's view. Being cognitive linguists, we should be ardently interested in learning more about cognitive processes and conceptualizations from psychologists, notions we always talk about but only have vague ideas of.

Cognitive Linguistics will become more "scientific" in making use of authentic and empirically obtained data, by quantifying them and evaluating them statistically. Cognitive Linguistics has been steadily growing, and this will, in all likelihood, also lead to a fragmentation into subdisciplines, which can already be seen from the many new journals that have appeared recently.

I doubt that an aspiring young cognitive linguist would want to listen to a grandfather's advice. One thing I can be sure of is, and here I may quote Lakoff, that cognitive linguistics is fun.

References

Ausubel, D. (1963). *The psychology of meaningful verbal learning*. New York: Grune and Stratton.

Barcelona, A. (2011). Reviewing the properties and prototype structure of metonymy. In R. Benczes, A. Barcelona, & F. J. Ruiz de Mendoza Ibáñez (Eds.), *Defining metonymy in Cognitive Linguistics: Towards a consensus view* (pp. 7–57). Amsterdam: John Benjamins. DOI: 10.1075/hcp.28.02bar

Benczes, R., Barcelona, A., & Ruiz de Mendoza Ibáñez, F. J. (Eds.). (2011). *Defining metonymy in Cognitive Linguistics: Towards a consensus view*. Amsterdam: John Benjamins. DOI: 10.1075/hcp.28

Bierwiaczonek, B. (2013). *Metonymy in language, thought and brain*. Sheffield: Equinox.

Bolinger, D. (1980). *Language: The loaded weapon*. London: Longman.

Brdar, M., & Brdar Szabó, R. (2014). In search of motivation in language: An interview with Klaus-Uwe Panther. *Review of Cognitive Linguistics*, 12(1), 223–242. DOI: 10.1075/rcl.12.1.08brd

Cuyckens, H., Berg, T., Dirven, R., & Panther, K.-U. (Eds.). (2003). *Motivation in language: Studies in honor of Günter Radden*. Amsterdam/Philadelphia: John Benjamins. DOI: 10.1075/cilt.243

Denroche, C. (2015). *Metonymy in language: A new theory of linguistic processing*. New York: Routledge.

Deutscher, G. (2010). The new linguistic relativism in the NY Times. http://neuroanthropology.net/2010/08/31/the-new-linguistic-relativism-guy-deutscher-in-the-nytimes/. Last accessed: April 2015.

Dirven, R., & Geiger, R. A. (Eds.). (1989). *A user's grammar of English: Word, sentence, text, interaction*. Frankfurt/Main: Lang.

Dirven, R., Hünig, W., Kühlwein, W., Radden, G., & Strauß, J. (1976). *Die Leistung der Linguistik für den Englischunterricht*. Tübingen: Niemeyer.

Dirven, R., & Radden, G. (1977). *Semantische Syntax des Englischen*. Wiesbaden: Athenaion.

Dirven, R., & Radden, G. (Eds.). (1981). *Kasusgrammatik und Fremdsprachendidaktik*. Trier: Wissenschaftliche Verlagsgesellschaft.

Dirven, R., & Radden, G. (Eds.). (1987a). *Issues in the theory of Universal Grammar*. Tübingen: Narr.

Dirven, R., & Radden, G. (Eds.). (1987b). *Concepts of case*. Tübingen: Gunter Narr.

Gibbs, R. W. (1991). *The poetics of mind*. Cambridge: Cambridge University Press.

Gomila, A. (2015). Language and thought: The neo-Whorfian hypothesis. In J. D. Wight (Ed.), *The international encyclopedia of the social and behavioral sciences*(pp. 293–299). 2nd edition. Oxford: Elsevier. DOI: 10.1016/B978-0-08-097086-8.57005-6

Górska, E., & Radden, G. (Eds.). (2006). *Metaphor–metonymy collage*. Warsaw: Warsaw University Press.

Hamilton, J. O. C. (2010). You say up, I say yesterday. *Stanford Magazine*, May/June. https://alumni.stanford.edu/get/page/magazine/article/?article_id=29489.

Humboldt, W. (1836). *Über die Verschiedenheit des menschlichen Sprachbaues und ihr Einfluß auf die geistige Entwicklung des Menschengeschlechts*. Berlin: Dümmlers.

Kövecses, Z., & Radden, G. (1998). Metonymy: Developing a cognitive linguistic view. *Cognitive Linguistics*, 9, 37–77. DOI: 10.1515/cogl.1998.9.1.37

Kronasser, H. (1968). *Handbuch der Semasiologie*. Heidelberg: Winter.

Lakoff, G. (1990). The invariance hypothesis: Is abstract reason based on image-schemas? *Cognitive Linguistics*, 1(1), 39–74. DOI: 10.1515/cogl.1990.1.1.39

Lakoff, G. (1993). The contemporary theory of metaphor. In A. Ortony (Ed.), *Metaphor and thought* (pp. 202–251). Cambridge: Cambridge University Press. DOI: 10.1017/CBO97811391738 65.013

Lakoff, G., & Johnson, M. (1980). *Metaphors we live by*. Chicago: University of Chicago Press.

Langacker, R. W. (2009). Metonymic grammar. In K.-U. Panther, L. Thornburg, & A. Barcelona (Eds.), *Metonymy and metaphor in grammar* (pp. 45–71). Amsterdam: John Benjamins. DOI: 10.1075/hcp.25.04lan

Langacker, R. W. (2012). Linguistic manifestation of space-time (dis)analogy. In L. Filipović & K. M. Jaszczolt (Eds.), *Space and time in languages and cultures* (pp. 191–215). Amsterdam: John Benjamins. DOI: 10.1075/hcp.37.15lan

Matlock, T. (2011). The conceptual motivation of aspect. In K.-U. Panther & G. Radden (Eds.), *Motivation in grammar and the lexicon* (pp. 133–147). Amsterdam: John Benjamins. DOI: 10.1075/hcp.27.09mat

Niemeier, S. (2008). The notion of *boundedness/unboundedness* in the foreign language classroom. In F. Boers & S. Lindstromberg (Eds.), *Cognitive linguistic approaches to teaching vocabulary and phraseology* (pp. 309–327). Berlin: Mounton de Gruyter.

Nikiforidou, K. (1999). Nominalizations, metonymy and lexicographic practice. In L. de Stadler & C. Eyrich (Eds.), *Issues in Cognitive Linguistics* (pp. 141–163). Berlin: Mouton de Gruyter.

Norrick, N. R. (1981). *Semiotic principles in semantic theory*. Amsterdam: John Benjamins. DOI: 10.1075/cilt.20

Panther, K.-U., & Radden, G. (Eds.). (1999). *Metonymy in language and thought*. Amsterdam: John Benjamins. DOI: 10.1075/hcp.4

Panther, K.-U., & Radden, G. (2011). *Motivation in grammar and the lexicon*. Amsterdam: John Benjamins. DOI: 10.1075/hcp.27

Panther, K.-U., Thornburg, L., & Barcelona, A. (Eds.). (2009). *Metonymy and metaphor in grammar*. Amsterdam: John Benjamins. DOI: 10.1075/hcp.25

Peirsman, Y., & Geeraerts, D. (2006). Metonymy as a prototypical category. *Cognitive Linguistics*, 17, 369–316.

Radden, G. (1989a). Semantic roles. In R. Dirven & R. A. Geiger (Eds.), *A user's grammar of English: Word, sentence, text, interaction* (pp. 421–272). Frankfurt/Main: Lang.

Radden, G. (1989b). Figurative use of prepositions. In R. Dirven & R. A. Geiger (Eds.), *A user's grammar of English: Word, sentence, text, interaction* (pp. 551–576). Frankfurt/Main: Lang.

Radden, G. (2004a). The metonymic folk model of language. In B. Lewandowska-Tomaszczyk & A. Kwiatkowska (Eds.), *Imagery in language: Festschrift in honour of Professor Ronald W. Langacker* (pp. 543–565). Frankfurt/Main: Peter Lang.

Radden, G. (2004b). The metaphor time as space across languages. In N. Baumarten, C. Böttger, M. Motz, & J. Probst (Eds.), *Übersetzen, Interkulturelle Kommunikation, Spracherwerb und Sprachvermittlung – das Leben mit mehreren Sprachen: Festschrift für Juliane House zum 60* (pp. 225–238). Geburtstag. Bochum: AKS-Verlag.

Radden, G. (2005).Accessing generic referents by metonymy. In A. J. Schuth, K. Horner, & J. J. Weber (Eds.), *Life in language: Studies in honour of Wolfgang Kühlwein* (pp. 121–133). Trier: Wissenschaftlicher Verlag Trier.

Radden, G. (2006a). Where time meets space. In R. Benczes & S. Csábi (Eds.), *The metaphors of sixty: Papers presented on the occasion of the 60th birthday of Zoltán Kövecses* (pp. 210–226). Budapest: Eötvös Loránd University.

Radden, G. (2006b). The metaphor time as space across languages. In E. Górska & G. Radden (Eds.), *Metonymy-metaphor collage* (pp. 99–120). Warsaw: Warsaw University Press.

Radden, G. (2007). Interaction of modality and negation. In W. Chłopicki, A. Pawelec, & A. Pokojska (Eds.), *Cognition in language: Volume in honour of Professor Elżbieta Tabakowska* (pp. 224–254). Krakow: Tertium.

Radden, G. (2009a). Affirmative and negated modality. In M. A. Olivares & E. Llácer (Eds.), *Nuevas perspectivas en Lingüistica Cognitiva/New perspectives in Cognitive Linguistics* (pp. 169–192). Valencia: Universitat de València.

Radden, G. (2009b). Generic reference in English: A metonymic and conceptual blending analysis. In K.-U. Panther, L. Thornburg, & A. Barcelona (Eds.), *Metonymy and metaphor in grammar* (pp. 199–228). Amsterdam: John Benjamins. DOI: 10.1075/hcp.25.13rad

Radden, G. (2011). Spatial time in the West and the East. In M. Brdar, M. Omazic, V. Pavičić Takač, T. Gradečak-Erdeljić, & G. Buljan (Eds.), *Space and time in language* (pp. 1–40). Frankfurt: Peter Lang.

Radden, G. (2014). Making sense of negated modals in English, with a glimpse at other Germanic languages. *Review of Cognitive Linguistics*, 12(2), 471–491. DOI: 10.1075/rcl.12.2.08rad

Radden, G., & Cuyckens, H. (Eds.). (2002). *Perspectives on prepositions*. Tübingen: Niemeyer. DOI: 10.1515/9783110924787

Radden, G., & Dirven, R. (1999). The cognitive basis of language: Language and thought. In R. Dirven & M. Verspoor (Eds.), *Cognitive exploration of language and linguistics* (pp. 1–24). Amsterdam: John Benjamins.

Radden, G., & Dirven, R. (2007). *Cognitive English grammar*. Amsterdam: John Benjamins. DOI: 10.1075/clip.2

Radden, G., Dirven, R., & Verspoor, M. (1999). Putting concepts together: Syntax. In R. Dirven & M. Verspoor (Eds.), *Cognitive exploration of language and linguistics* (pp. 79–105). Amsterdam: John Benjamins.

Radden, G., Köpcke, K.-M., Berg, T., & Siemund, P. (Eds.). (2007). *Aspects of meaning construction*. Amsterdam: John Benjamins. DOI: 10.1075/z.136

Radden, G., & Kövecses, Z. (1999). Towards a theory of metonymy. In K.-U. Panther & G. Radden (Eds.), *Metonymy in language and lhought* (pp. 17–59). Amsterdam: John Benjamins. DOI: 10.1075/hcp.4.03rad

Radden, G., & Kövecses, Z. (2007). Towards a theory of metonymy. In V. Evans, B. K. Bergen, & J. Zinken (Eds.), *The Cognitive Linguistics reader* (pp. 335–359). London: Equinox.

Radden, G., & Matthis, E. (2002). Why *similar to* but *different from*? In H. Cuyckens & G. Radden (Eds.), *Perspectives on prepositions* (pp. 231–255). Tübingen: Niemeyer. DOI: 10.1515/9783110924787

Radden, G., & Panther, K.-U. (Eds.). (2004a). *Studies in linguistic motivation*. Berlin/New York: Mouton de Gruyter.

Radden, G., & Panther, K.-U. (2004b). Introduction: Reflections on motivation. In G. Radden & K.-U. Panther (Eds.), *Studies in linguistic motivation* (pp. 1–46). Berlin/New York: Mouton de Gruyter.

Radden, G., & Panther, K.-U. (2011). Introduction: Reflections on motivation revisited. In K.-U. Panther & G. Radden (Eds.), *Motivation in grammar and the lexicon* (pp. 1–26). Amsterdam: John Benjamins. DOI: 10.1075/hcp.27.02pan

Radden, G., & Seto, K. (2003). Metonymic construals of shopping requests in have- and be-languages. In K.-U. Panther & L. Thornburg (Eds.), *Metonymy and pragmatic inferencing* (pp. 223–239). Amsterdam: JohnBenjamins. DOI: 10.1075/pbns.113.16rad

Ruiz de Mendoza Ibáñez, F. J. (2000). The role of mappings and domains in understanding metonymy. In A. Barcelona (Ed.), *Metaphor and metonymy at the crossroads* (pp. 109–132). Berlin/New York: Mouton de Gruyter.

Ullman, S. (1962). *Semantics: An introduction to the science of meaning*. New York: Barnes & Noble.

Whorf, B. L. (1939). The relation of habitual thought and behavior to language. In L. Spier (Ed.), *Language, culture, and personality* (pp. 75–93). Menasha, WI: Sapir Memorial Fund.
Zerubavel, A. (1991). *The fine line: Making distinctions in everyday life*. Chicago/London: The University of Chicago Press.

Interviewer's address

Réka Benczes
Department of American Studies
Eötvös Loránd University
H-1088 Budapest
Rákóczi út 5.
Hungary

About the interviewer

Réka Benczes is Assistant Professor at the Department of American Studies, Eötvös Loránd University, Budapest (Hungary). She is the author of *Creative Compounding in English* (2006), *Kognitív nyelvészet* ([Cognitive linguistics], 2010, with Zoltán Kövecses) and dozens of articles on lexical creativity and cognitive word-formation. Most recently she co-edited *Wrestling with Words and Meanings: Essays in Honour of Keith Allan* (2014) with Kate Burridge.