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A Cognitive Linguistic Approach to Pedagogical Grammar:
Current Results and Future Directions
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As observed in the introduction to *Cognitive Linguistics: Current Applications and Future Perspectives* (Kristiansen et al. 2006), language pedagogy is interdisciplinary in character, crossing over into and closely collaborating with, among others, psycholinguistics and educational psychology. The volume looks at a central area of language pedagogy, i.e., pedagogical grammar (PG), and more particularly, from the viewpoint of cognitive linguistics (CL). The papers brought together in the volume offer a number of cognitive insights not only into the nature of language and grammar but also into ways of teaching and learning the grammar of second or foreign languages (L2/FL).

In this paper we address two general questions. First, what does CL theory and description have to offer to language teaching and especially pedagogical grammar? Note that we take “pedagogical grammar,” the bridge between theory and practice, to metonymically stand for (i) research into pedagogical grammar and grammar pedagogy as a process and (ii) the outcome of that research in the form of a pedagogical grammar package for a given language. Compared with the areas of lexis and metaphor and their rich and varied research tradition within the CL framework (Boers and Lindstromberg 2006 and forthcoming; Littlemore and Low 2006), pedagogical grammar has received only scant attention. This imbalance motivates our second question: What are currently the main strands of grammar research into the CL-PG interface, what results have these studies yielded so far and what can we expect for the future? In answering both questions we present the main research results of the 13 papers of the edited volume *Cognitive Approaches to Pedagogical Grammar* (CAPG) – to be published in 2008 (De Knop and De Rycker, in prep.).

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1 We would like to thank Prof. René Dirven for his critical reading of earlier versions of this paper.

2 The past few years have witnessed a growing interest in cognitively oriented applied research (Pütz et al. 2001; Achard and Niemeier 2004; Tyler et al. 2005; Robinson and Ellis in press 2008). Still, there is nota strong focus on pedagogical grammar in any of these volumes so that the present volume is one of the first attempts to approach the area of pedagogical grammar from a cognitive point of view.

3 A pedagogical grammar, as the term *package* suggests, is different from a didactic grammar or school grammar in the sense that it can never be equated with nor be intended as a practical manual for teachers, let alone, learners.
1. The Contribution of CL to PG

The CL enterprise differs from previous schools of linguistics in that it views language as usage-based events and as a component of, and thus interacting with, other faculties of human cognition; these processes are laid down in communicable conceptualisations. This view offers many inroads for pedagogical grammar. Some of these assets are:

(i) the usage-based nature of grammar and language acquisition;
(ii) the interaction of grammar and cognition;
(iii) the symbolic nature or meaningfulness of all linguistic forms, including grammatical forms;
(iv) the lexicon-grammar continuum;
(v) the network structure of grammatical and lexical meanings as concepts laid down in language.

Let us look at each of these in turn.

(i) The usage-based nature of grammar and language acquisition

The usage-based, bottom-up model of language acquisition that cognitive linguistics adheres to is very much in line with new methods of language teaching, in which meaningfulness, communication and context, but also authenticity are highly valued. Modern methods of grammar teaching with a “focus on form” (Cadierno, in prep.) approach grammar in the context of communication and primarily focus on language in use. Building on usage-based and especially corpus-based data, the last part of this CAPG volume deals with tense and aspect, motion and manner of motion and the use of passives and alternatives, and thus it illustrates and applies the principles it starts from.

(ii) The interaction of grammar and cognition

Situations and objects cannot be described as they are but as they are conceived and construed, i.e., as the result of our conceptualisation and the communication of our conceptual world. This means that the worlds of physical, psycho-social and mental reality are experienced in a given socio-cultural community and that they are organised by the speakers of linguistic communities into conceptual categories. Lexical expressions as well as grammatical constructions are not determined by objective properties but reflect these linguistically and culturally. Moreover, they are closely related to perception and to the whole bodily basis of cognition, which guarantees a universal dimension to language and culture as well. Grammar structures many aspects of reality as conceived in cultural communities and makes the categories laid down in language coherent. One of the roles of a pedagogical grammar will be to show how a particular language expresses its conceptual categories.

(iii) The symbolic nature or meaningfulness of all linguistic forms, including grammatical forms
All linguistic expressions, also grammatical ones, are symbolic, i.e., are composed of a semantic pole and a phonological pole, which implies that grammatical structures are meaningful, and that differences in grammar reflect meaning differences. Therefore, the grammar of a language should not be regarded as a set of so-called purely syntactic and morphological rules, that is, meaningless rules, which can only be learned but which are hardly motivated. The aspect of “motivation” provides interesting opportunities for language teaching, as it can be assumed that learning about the cognitive motivation of grammatical variability in a particular target language increases the understanding of the target language system, and may help improve mastery of that system.

(iv) The lexicon-grammar continuum

Cognitive linguistics starts from the assumption that “grammar and lexis build a continuum consisting of assemblies of symbolic structures” (Langacker, in prep.). A symbolic structure results from the relationship between a semantic structure and a phonological structure. Grammar is meaningful, not an autonomous formal system characterized by arbitrary restrictions. Speakers “assemble” words and phrases into meaningful sentences, many of them according to conventionalised patterns or constructions. Just like single words, grammatical units are likely to be polysemous, having a prototypical meaning and an array of less central values resulting from an elaborated multifaceted conceptual substrate.

(v) The network structure of grammatical and lexical meanings as concepts laid down in language

The meanings or senses of linguistic expressions are normally structured and modelled in terms of a network structure centred around a prototype (see Broccias, in prep.), with more peripheral members somewhat removed from the prototype (the latter are to be regarded as extensions of the prototype). Such meaning extensions are arrived at through a number of semantic processes such as metaphor and metonymy. The processes of metaphor and metonymy have been extensively studied in cognitive semantics – they offer a kind of indirect access to the concepts in which we think. A metaphorical approach is by no means restricted to lexical categories; it can also be applied to the study of the meaning of grammatical structures (see, e.g., Sweetser 1990 for an account of the semantics of modal verbs). The impact of the metaphor concept in grammar teaching becomes clear in the contributions by Ruiz de Mendoza and De Knop and Dirven. Moreover, the network model – which makes use of prototypes and processes like metaphorization – enables the learner to visualise meaning relations and so may facilitate the acquisition of the second or foreign language.
2. Definition, Aim and Scope of PG: A Cognitive View

A pedagogical grammar contains not only a representation of the main constructions and/or rules of a particular target language, but also the teaching and learning infrastructure to facilitate their acquisition. Moreover, pedagogical grammar as a research program and process has several phases, and as one of its first phases, it tries to examine the contribution that theoretical and descriptive linguistics can make towards facilitating the learning and teaching of second or foreign languages in guided learning situations.

Obviously, pedagogical grammar research can be practised in a number of different ways, some of which are focused upon in the CAPG volume:

- Providing the repertory of all the essential linguistic units considered relevant by theoretical and descriptive linguistics in a given language.
- Pointing out the areas of overlap and contrast between a target language and the learner’s native language, and analysing interferences between those languages in the learner’s interim grammars, i.e., the grammars that he or she uses in attaining some degree of fluency in the target language. These areas are traditionally known as contrastive analysis and error analysis.
- Delineating learning problems by means of certain conceptualisations, either differently represented in the two languages, or differently matched in the pairing of forms and meanings. Such descriptive and teaching- or learning-oriented analyses can directly or indirectly serve the purpose of preparing teaching materials and exploiting these in L2/FL instruction.

These three task areas of pedagogical grammar are addressed in the three main parts of the volume.

3. Main Strands of CL-PG Research in the Contributions

3.1 Cognitive Views on Units of Grammar and their Meaning

Under the heading Cognition and usage: Defining grammar, rules, models and corpora, the volume’s Part I seeks to define and justify the units of grammar and to compare these definitions and justifications across the various strands that exist within cognitive linguistics. The different views of what constitutes the central unit in grammar are extremely relevant for a pedagogical grammar. The reason is that they directly touch on the key question of how much weight must be attached to the more universal aspects of grammar, more strongly represented by Langacker, and how much to the language-specific, idiomatic or idiosyncratic elements. The latter aspect is more strongly emphasised in Goldberg’s (1995) construction grammar, Croft’s (2001) radical construction grammar, and also by Taylor, who is a more moderate adherent of a type of construction grammar combined with Langacker’s cognitive grammar model. For Langacker, grammar is the
inventory of all linguistic units. Within this grammar constructions are just one of the units, and as such, have no privileged status. He defines grammar as the inventory of “lexical items, formatives, grammatical constructions, sound patterns, etc. which fluent speakers learn as units” (in prep.). These conventional units – also called symbolic units – result from generalisations made in a bottom-up way in language acquisition on the basis of actual instances of language use, also called usage events (in prep.). Grammatical and lexical units can be of any length and of varying complexity, and they only differ from one another in terms of structural complexity. Langacker’s view of grammar is very strongly influenced by the traditional structuralist notion of compositionality. In a compositional view of grammar, smaller units get “assembled” with other smaller units into ever-larger units according to certain rules, or what he calls patterns, of composition. For these larger units Langacker uses the term constructions: “Complex expressions are called constructions, and the patterns they instantiate are constructional schemas.” (in prep.). Here Langacker does not yet attribute any special status to the unit of constructions.

From Langacker’s cognitive perspective, grammar has to describe not only the meanings of grammatical units and structures but also the grammatical categories used to build the constructions such as noun, verb, subject, object, clause, etc. The conceptual generalisations catching the meaning of a subject-object relation, and of several other grammatical relations, are the notions of “trajector” and “landmark.” The trajector designates the primary participant in a relation, the landmark the secondary one. This approach allows the description of grammatical structures in terms of universal relations. Thus, in the relational structure of a phrase such as the roof on that house, a preposition (on), just like a verb in a subject-object relationship, designates a relationship resulting from the combination, or the composite structure, of that preposition with a noun phrase: on that house; this “phrase is a prepositional phrase because it profiles a relationship rather than a thing, and that house is the prepositional object because its profile corresponds to on’s landmark” (in prep.). The prepositional phrase on that house is then assembled via its trajector slot with the noun phrase the roof. Though seemingly simple, this approach can account for all partial and major constructions in any language and represents a universal principle of language. As a corollary, it is also at the basis of language acquisition or language learning. According to Langacker, learning a second or foreign language means learning a vast array of conventional units, including – at least at the level of unconscious processing – the descriptive grammatical categories of these units and the composition patterns, or the rules, of that language. Since usage events are unique, the patterns (or schemas) only become apparent at a certain level of abstraction of such events. Consequently, a pedagogical grammar will have to include all the units at different levels, the grammatical categories they are framed in, the principles of compositionality and the schemas abstracted from the various routes of compositional structures.
**Broccias’** contribution to the present volume is meant as an explicit comparison between the three most prominent grammar models in cognitive linguistics: Langacker’s (1987) cognitive grammar, Goldberg’s (1995) construction grammar, and Croft’s (2001) radical construction grammar. Broccias discusses their similarities and differences as well as their relevance for language pedagogy. The similarities are in fact more important than the differences and relate especially to the cognitive commitment, i.e., the bottom-up way of approaching both grammar and language acquisition. An important difference, however, between Langacker’s and Goldberg’s or Croft’s views of constructions is that the latter two consider constructions to be conventionalised, and often idiosyncratic, linguistic sequences expressing a whole complex event in one grammatical unit, be it at word level, phrase level or sentence level. Constructions have a form and a constructional meaning of their own, which means that their meaning cannot always be assembled compositionally. Even more importantly, they tend to have a strong idiomatic flavour as in “Lesley joked her way into the meeting”. In the beginning, Goldberg even narrowed down the notion of constructions to idiomatic instances, but recently, as Broccias observes, she has widened the notion to apply to all constructions.

The notion of construction as a special unit of grammar may become particularly clear in a caused motion construction such as *to shout somebody out of the room*: the elements of this construction cannot be assembled compositionally, because *shout* cannot have a human object (one can only shout a person’s name) nor can it have an argument designating a landmark as a place describing the source of a motion (here expressed by *out of the room*). The problem is that here a non-motion verb is used to express caused motion. This is only possible when we accept the existence of an autonomous level of constructions as a unit of grammar in which the speaker has the option to integrate not only motion verbs, but all kinds of verbs describing events that trigger other events. According to Broccias, one of the main strengths of Goldberg’s construction grammar is that it shifts our attention away from single verbs to constructions, i.e., to larger meaningful units in grammar. Pedagogical grammar should therefore build the principles of constructions right into its descriptive inventory of the target language. In the volume, this approach is put into practice by Cadierno and by De Knop and Dirven. Both contributions show that constructions are language-specific and not universal – in contrast to Langacker’s claim.

Croft’s (2001) radical construction grammar is claimed to be radical for four reasons: (i) Grammatical categories are construction-specific and not primitives as postulated by Langacker. Broccias illustrates this claim with a discussion of the notion of direct object. Traditionally, this notion is defined with reference to passivizability. So, if an object following the verb in an active sentence can become the subject of a corresponding passive sentence, it will be analysed as a direct object. This criterion does not hold for an example like *John weighs 80 kg*, in which *80 kg*, though also following the verb, cannot become the subject of the passive construction *80 kg are weighed by John*. On the other hand, a
sentence like *This house was lived in by Hemingway* shows that some objects that do not follow the verb can be turned into subjects of a passive (in prep.). It becomes clear that the notion of what constitutes a direct object and what does not is dependent on the construction. (ii) Constructions are considered to be the basic units of syntactic representation. This is nothing new as it was already claimed by Langacker and Goldberg. (iii) However, according to Croft, syntactic relations do not exist. He suggests using instead the term *syntactic role*, which refers to the relation between an element and the construction as a whole (in our example above, the relation between *to shout* as non-motion verb and the whole construction of caused motion); thus, syntactic relations in Langacker’s sense should not be part of a grammar. (iv) Constructions are language-specific and so “no two constructions can be assumed to be identical across languages” (in prep.). This latter claim is also made by Langacker’s cognitive grammar and Goldberg’s construction grammar. In any case, it has important implications for L2/FL teaching. When learning a second or foreign language, one has to move away from a preoccupation with words and learn to focus on constructions as this term is defined in construction grammar.

The role of the teacher will then become that of a “facilitator” (Broccias, in prep.), i.e., someone who presents some *templates* of constructions to the learner based on the principles of networks, construal and blending (in the sense of Fauconnier and Turner’s (2002) conceptual blending theory). According to Broccias, blending theory is very relevant for pedagogical grammar, not only in order to explain the motivation of larger language-specific constructions such as the caused motion construction, but also smaller ones such as noun-noun and adjective-noun combinations. A fairly simple combination like English *milk chocolate* (Broccias in prep.) corresponds to a more complex pattern in French for instance: *chocolat au lait* (lit. ‘chocolate at milk’). So, an underlying conceptual complexity is not always reflected by complex structures and it will be an important task for the teacher to draw learners’ attention to the differences between the languages in question.

Another application of construction grammar to pedagogical grammar, shared by Langacker’s cognitive grammar as well, is the use of networks: constructions are related to each other by categorizing relationships, e.g., constructions with the preposition *over* which have related senses. It will help L2/FL learners to start with the prototypical senses, then to gain insight into the conceptual links between different uses, and finally, to gradually come to grips with less or even non-prototypical senses.

For Taylor, just as for Langacker, the basic units of grammar are symbolic units which “vary with respect to their abstractness, or, in Langacker’s terminology, their ‘schematicity’. A schema is described as ‘an abstract characterization that is fully compatible with all the members of the category it defines’.” (Taylor, in prep.). Like Goldberg and Croft, Taylor also believes in constructions but he basically remains close to Langacker’s cognitive grammar model and sees grammatical constructions as schemas composed of two or more simpler units. Although Langacker (1987: 12) already claimed that “grammar is simply the
structuring and symbolization of semantic content,” Taylor stresses the narrow relationship between grammar and semantics as he highlights the non-arbitrariness of syntax and the necessity to give grammatical constructions a semantic explanation. In his illustration of verb complementation it becomes clear that the choice of an infinitive or a that-clause depends on the meaning of the verbs: “predicates which denote a desire to bring about a new situation (want, intend, mean, etc.), predicates which denote an effort leading to an accomplishment (manage, try, strive), and predicates of influence and indirect causation (persuade, ask, get)” (Taylor, in prep.) can be followed by an infinitive and not by a gerund or a that-clause.

Taylor goes one step further than Langacker by claiming that the basic units of a grammar include rules as well. In spite of their productivity, the instantiations of grammatical constructions do not have to be learned individually if one knows the rules of construction schemas. These rules are semantic in nature: “A rule of grammar merely states a conventionalized pairing of semantic structure with a formal structure” (Taylor, in prep.). For example, the abstract nouns information, advice and news all belong to the conceptual domain of verbal communication. If one recognizes the underlying conduit metaphor (communication involves sending the “abstract” contents of the mind from one mind to another), it is easier to understand why these words cannot be used with an article as is the case with nouns expressing concrete “things.”

As Taylor (in prep.) puts it, a pedagogical grammar “will strive to offer semantic explanations for grammatical rules.” With Langacker he shares the assumption that these semantic explanations reflect conventionalized conceptualizations which are the result of mental experience. Often conceptualizations in the foreign language are not isomorphic with those of the native language. Therefore, it will be important for the foreign language learner to focus on the foreign conceptualisations rather than simply the foreign forms. So, a pedagogical grammar will have to be contrastive, “focusing on what is idiosyncratic in the target language vis-à-vis the learner’s native language” (Taylor, in prep.)

For Taylor (in prep.) an account of a second or foreign language in a pedagogical grammar needs to be based on corpus data which reflect the entrenched conceptualisations. That is why the corpus linguist Meunier was invited to explore the usage-based dimension of grammar by comparing the various meeting grounds between corpus linguistics and cognitive linguistics. Both branches of linguistics share the bottom-up, usage-based approach already advocated in Langacker’s cognitive grammar and Goldberg’s and Croft’s construction grammars, but each exploits this interest in a different way. Corpus linguistics uses the heuristic power of language use for its descriptive value and does so while being statistically-based whereas cognitive linguistics uses it for the sake of explanation. Here we can again refer to Taylor’s notion of “rules.” Langacker but also Goldberg and Croft already showed that cognitive linguistics is committed to taking the study of language beyond the word level. Corpus linguists share the same interest and commitment. The underlying
grammar in both corpus and cognitive linguistics is a “grammar of choice motivated by contextual factors” (Meunier, in prep.). It became clear from Croft’s description of constructions discussed above that contextual factors play a predominant role. So, both corpus and cognitive linguistics involve the consistent and principled use of authentic material. Of course, this material has to be evaluated according to certain criteria such as frequency (a criterion especially used in corpus linguistics) before it is possible, as suggested by Taylor’s approach of pedagogical grammar, to infer rules that can be incorporated into a pedagogical grammar.

3.2. Tools for Conceptual Teaching: Contrastive and Error Analysis

Language learning is the nexus in which various cognitive faculties mesh together. With its emphasis on the interaction of language and cognition, cognitive linguistics has sparked renewed interest in two applied linguistics disciplines, i.e., contrastive studies and error analysis. Both disciplines have always been explicitly aimed at facilitating second and foreign language acquisition through more effective syllabus design and teaching materials. Contrastive studies and error analysis have been primarily concerned with three issues: (i) identifying differences and similarities between mother tongue and target language, (ii) discovering recurrent patterns of errors, and (iii) in a later development, the ever-growing learner’s “interlanguage”. Selinker (1972) was the first to unveil this transitional system of procedural – or “how to” – knowledge that learners construct, however imperfectly, to deal with the productive and receptive challenges of using another language. As Connor (1996: 14) points out, there were, and still are, a good many different orientations in the applied linguistics involved in contrastive studies, error analysis and interlanguage research: structuralism, generativism, functionalism, psycholinguistics, corpus linguistics, etc. The promise that CL holds, however, is that it will provide researchers with a much more adequate and more coherent theoretical framework for dealing with language differences and non-native speaker errors. After all, many CL studies are already cross-linguistic in nature and, as the various articles in Part II of the CAPG volume demonstrate, their resulting descriptions lend themselves rather well to further exploitation in language pedagogy. More importantly, they approach linguistic knowledge as conceptual structure and ground their descriptions in the conceptualization of human experiences to be communicated rather than concentrating on language for the sake of language itself. Thanks to this experience-based approach, CL offers contrastive studies and error analysis a neat way round the problem of “comparative fallacy” (Bley-Vroman 1983; Lakshmanan and Selinker 2001), i.e., the mistake of studying the systematic character of one language by comparing it to another. A mere comparison runs the risk of relying too heavily on analytical concepts (e.g., plurality or aspect) that are defined relative to either the native or the target language. This kind of descriptive bias or comparative fallacy may fail to reveal,
however, the true amount of systematicity and internal logic that is present in the learner’s (inter)language.

Methodologically, error analysis usually goes hand in hand with quantitative corpus analysis (On the deeper interwovenness of CL, corpus linguistics and pedagogical grammar, see also Meunier, in prep.). A convenient and reliable source to look for (inter)language error data is the International Corpus of Learner English (ICLE). In one of their empirical studies, **Valenzuela and Rojo** make use of the ICLE’s Spanish subcorpus to examine the ungrammatical instances, produced by native speakers of Spanish, of the English ditransitive construction as in *I baked Mary a cake* vs. the benefactive construction *I baked a cake for Mary*, which is far less frequent in Spanish. The authors also include a strong qualitative component, which helps them uncover exactly what role “constructions” (Goldberg 1996) play in the L2/FL learning process. The errors produced become significant by approaching them from the broader CL perspective of usage- and exemplar-based language knowledge. The main goal of the authors is to provide evidence for the psychological reality, not only of constructions as mental structures, but also of the “constructional islands” (Tomasello 2003) that seem to emerge around certain verbs such as *give* and *tell* or certain constructional configurations like ditransitives with a pronominal recipient (e.g., *I baked her a cake*). As such, Valenzuela and Rojo’s study shows that “the process of learning a foreign language also takes place by acquiring specific constructions which get extrapolated into more general structures” in the learners’ interlanguage (in prep.). A similar conclusion can also be drawn from their two other studies on ditransitives, i.e., a replication of Bencini and Goldberg’s (2000) sentence-sorting experiment and a newly designed grammaticality rating task – both again with Spanish learners of English. In the former experiment participants were asked to sort sixteen sentences into four stacks of four according to their overall meaning. Apparently, Spanish learners of English complete this task by relying on the information supplied by the constructional configuration (e.g., transitive or caused motion) rather than on the meaning of the verb (e.g., *throw* or *cut*). So, instead of putting *Pat threw the hammer* together with another *throw*-sentence, e.g., *John threw the key onto the roof*, they would relate it to other transitive constructions in the set, e.g., *Barbara cut the bread*. The third experiment, i.e., the grammaticality rating task, builds further on the ICLE-based analysis. It tries to establish whether the usage differences observed also correspond to how the L2/FL learners judge the grammaticality of ditransitive configurations which contain a pronoun (*Laura showed them the map*), a noun phrase (*Simon told his boss the news*) or a proper noun (*I offered Tony a ride*). In fact, the results of the grammaticality rating task fully confirm the corpus findings for the ditransitive constructions with a personal pronoun. Just as the ICLE-based analysis shows that the ditransitive construction as a whole is preferentially entrenched in the minds of Spanish learners of English, it is perceived as being more “grammatical” than its prepositional counterpart (e.g., *Laura showed the map to them*). Furthermore, ditransitive sentences with
a pronoun are consistently regarded as more grammatical than other ditransitive configurations, i.e., those including proper nouns or full noun phrases. Whatever the details of Valenzuela and Rojo’s studies, the main points are (i) that their research findings support an approach to L2/FL acquisition that sets out from an exemplar-based view of grammatical organization, and (ii) that these findings would be much more difficult to explain in terms of a traditional rule-based conception.

The potential benefits from adopting a CL approach in second and foreign language research are also clear in Ruiz de Mendoza’s analysis of Spanish diminutives and reflexive constructions. This contribution looks for experientialist rather than traditional explanations of the differences and similarities between Spanish and English. In this way, Ruiz de Mendoza is able to discover patterns of predictability and systematicity where previous researchers of both phenomena were only able to come up with fragmented and explanatorily inadequate accounts. The theoretical apparatus which forms the centrepiece of his analysis is Lakoff’s notion of an Idealized Cognitive Model (ICM), and more particularly, Ruiz de Mendoza’s own recently developed expansion of it (Ruiz de Mendoza and Mairal 2007). ICMs like image schemas, metaphors and metonymies lie at the basis of both lexical and grammatical constructions. Now, what Ruiz de Mendoza does in his expansion is to incorporate into the description the mutual interaction of these units or processes (in the form of so-called metonymic and/or metaphoric chains). He also invokes the different levels involved in conceptualizing metaphors and metonymies and introduces three general principles that act as constraints on their generation. At the topmost level there is the Mapping Enforcement Principle, which states that “no item will be discarded from a mapping system if the item in question may be adapted to the meaning demands of the system” (in prep.). So, for example, John is a horse will not be discarded from the conceptual metaphor PEOPLE ARE ANIMALS in the metaphorical mapping process for the very reason that the sentence can be used to describe John’s great physical strength. According to Ruiz de Mendoza, this semantic adaptation is governed by two other principles: the Extended Invariance Principle and the Correlation Principle. The Extended Invariance Principle, a further elaboration of Lakoff’s (1990) Invariance Principle, postulates that “all the generic structure of the target domain of a metaphoric mapping has to be preserved in a way that is consistent with the generic structure of the source” (in prep.). So, agents map onto agents in the same way as in the example John maps onto horse. The Correlation Principle, finally, captures the idea that “the target domain of mappings places relevance constraints on the implicational structure of the source, which needs to parallel the target in every possible respect” (in prep.). For example, the conceptual metonymy AUTHOR FOR WORK would not be the best possible source domain in Shakespeare is on the top shelf since on the top shelf cannot be easily profiled in the domain of authorship. Rather, what is needed here is a metonymic chaining of the kind AUTHOR FOR WORK FOR MEDIUM. Acting in unison, these three principles help explain, for
example, the differences between the English inchoative construction (Suddenly the door opened) and the Spanish se reflex passive (De repente, se abrió la puerta) and the various metonymic operations involved.

In Ruiz de Mendoza’s other case study, Spanish versus English diminutives, it is especially high-level metaphor and metonymy that help reduce the prima facie complexity of this area of contrastive grammar. In his analysis Ruiz de Mendoza makes use of certain primary concepts that arise from bodily experience like image schemas and notions of size or color. In addition, he also distinguishes between lower-level concepts like chair or mother and higher-level ones such as action or process and relationships like cause and effect. Interestingly, the notion of high-level conceptualization, combined with metaphor and metonymy, has consequences for grammar (e.g., nominalization and categorial conversion). In the case of the latter ICM type, it has even led Ruiz de Mendoza and Pérez Hernandez (2001) to introduce the concept of “grammatical metonymy.” The concept is based on Halliday’s “grammatical metaphor”, but differs from it in a number of important respects. For example, unlike Hallidayan grammatical metaphors, grammatical metonymy only accepts target domains that are actions, processes, agents, instruments and similar high-level propositional models. Crucially, when applied to diminutives, these various CL concepts and terms allow Ruiz de Mendoza to produce a more elegant description than earlier, more traditional studies. He sets out from a relatively straightforward “size” ICM, i.e., a primary “size” concept that provides information about image-schematic differences in size (e.g., relative smallness and bigness). More importantly, the “size” ICM also captures how these different construals impact people’s bodily interactions with, and related emotional reactions to, variously-sized entities, properties or events. In this way, Ruiz de Mendoza can adequately explain the basic values of, for example, the -ito/-illo suffixes, and also predict their range of possible uses, without having to take recourse to connotative semantics (i.e., the presumed presence or absence of positive and negative overtones). Thus, although the two forms of the diminutives may have different literal meanings as in Venga, dame un pastelito ‘Come on, give me a delightful little cake’ vs. Venga, dame un pastelillo ‘Come on, give me a small little cake,’ the two forms may have the same non-literal meaning of “a nice little cake.”

It is the great merit of Ruiz de Mendoza’s contrastive analyses of reflexive constructions and diminutives that he not only goes a long way towards proving that CL indeed contains “powerful analytical tools endowed with both descriptive and explanatory levels of adequacy,” but also manages to show their practical usefulness in the construction of a pedagogical grammar (in prep.). In his view, such a pedagogical grammar is primarily “a grammar that supplies learners with fine-grained explanations of usage rules which allows them [through the conversion of explicit rules into implicit knowledge] to exploit constructions in a native-like manner” (in prep.). Arguably, for both diminutives and reflexive constructions, a better understanding of the main differences and similarities but
also, and more importantly, a better understanding of their cognitive motivation can help lay the foundations for more effective and efficient L2/FL teaching strategies.

The topic of Spanish reflexives is also dealt with by Maldonado but then against the wider background of Spanish middle constructions like La viejita se cayó ‘The old lady fell down.’ Middle constructions (or “middles” for short) describe actions, events or states with special reference to the subject’s own immediate sphere or dominion. For example, in Nanda se deprimió (‘Nanda got depressed’) the middle directs the attention to the change of state (i.e., from a state of happiness to one of depression) undergone by the agent or experiencer (i.e., Nanda) rather than to the implicit agent or experiencer as such. In addition, middle constructions can also be used when an action, event or state is conceptualized as being sudden and unexpected as in the La viejita se cayó example. Whereas Ruiz de Mendoza’s pedagogical suggestions are based on the relationships between reflexives and middles, Maldonado makes a strong case for keeping both constructions completely separate. He even argues that “middles must be introduced as opposed to reflexives and that using the reflexive as the base form to derive middle constructions is misleading” (in prep.).

In his view, the ideal instructional path for teaching middles is first to introduce those middle uses which partially overlap with reflexives and next those from which any idea of reflexivity is completely absent. A corpus-based analysis of the errors made by English learners of Spanish reveals that it is only middles that tend to get either overused or underused. Moreover, the extent to which this happens can be shown to vary as a function of the cross-linguistic differences in the underlying conceptualizations. To remedy this situation of over- and underuse, CL can be fruitfully employed, as Maldonado explains, to reduce the multitude of middle values (e.g., self-benefaction, translational motion and emotive speech) to a cognitively motivated nucleus of meaning, i.e., the focus on change-of-state. This key notion of pivotal change can then be used as a springboard for developing appropriate grammar teaching strategies and learning materials. He advocates a step-by-step approach by which learners are given time to inductively infer the prototype meaning of the Spanish middle construction and thus build up their own internal grammar in a gradual but effective way. If this process is successful, the L2/FL learner will acquire a simple rule focusing on the combination of the conceptual areas of suddenness, speed, energy input and unexpectedness. And the internalization of this focusing process will help to improve actual usage in a significant way. The dominant groups to be covered are: the middle reflexive overlap (Me olvidé las llaves ‘I forgot the keys’), transitive middles (Adrián se puso el sombrero ‘Adrian put on his hat’), middles with emotional verbs (Gabriela se enoja con los niños ‘Gabriela gets mad at the children’), and middles with motion verbs (La taza se rompió ‘The cup broke’).

Maldonado’s contribution has also wider relevance. Learning another language is not a matter of learning general rules (e.g., the subject-object co-reference rule, which is
traditionally taken to underlie the use of the Spanish middle) and long lists of often arbitrary exceptions. However, it is neither a matter of “big” prototypes, as Maldonado calls them, or their extensions and manifestations. As also Langacker (in prep.) explains, general rules themselves are, “schematizations and abstractions of smaller rules that group around related notions” (Maldonado, in prep.). To simplify language learning, it is essential that learners are encouraged to see the internal coherence, underlying motivation and interrelatedness of these smaller systems of language structure. This learning process may not only have a beneficial influence on memory dynamics, as Maldonado concludes, but it may also be conducive to relating those increasingly ingrained schematizations to cultural patterns.

While Maldonado offers conceptual strategies to teach and learn the L2/FL grammar, he still relies on traditional error analysis to develop new ways of describing and teaching the Spanish middle. That is, he does not really make explicit which forms of individual language behavior constitute errors and which ones do not. Neither does he try to redefine this key concept of error in cognitive linguistic terms. The generally accepted understanding of linguistic errors is that they are purely formal in nature and primarily result from either L1 transfer or a learner’s developmental process of formulating and testing hypotheses (see, e.g., Thornbury 1999: 114-115). However, Chomsky’s notion of an abstract and formalist “grammatical competence,” on which this view is largely based, fails to recognize that in communicative interaction learners also struggle to attain conceptual competence, which is often, though far from always, synonymous with metaphorical competence (for this notion, see Littlemore and Low 2006). It is already since 1990 that this type of conceptual (and metaphorical) competence has been further elaborated by Danesi. In fact, Danesi does not simply talk of metaphorical competence but widens the concept to encompass all forms of person- and interaction-oriented “conceptual fluency.” Conceptual fluency (or conceptual competence), in his view, is “the ability to give appropriate structural form to the metaphorically-based meanings that constitute the semantic system” of the second or foreign language (in prep.). An earlier analysis of English discourse produced by Italian students revealed that these “students ‘speak’ with the formal structures of the target language, but they ‘think’ in terms of their native conceptual systems” (Danesi 1994: 454). They do not only make lexical, grammatical and discourse errors, but also what Danesi calls “conceptual errors.” These can be defined as errors that are due to mismatches between the conceptual systems of the two languages involved, or in other words, errors that are due to a lack of conceptual fluency. So, when native speakers of Italian comment on the weather and produce an ill-formed It makes hot rather than It is hot, this does not happen because they fail to remember the right idiom but because they are unable to access the appropriate image schema and source domain. It is these fundamental ideas that are revisited and further elaborated in Danesi’s contribution to the volume. At the same time he reports as evidence for his theory the findings of various studies conducted over the past ten years e.g., experiments eliciting the figurative meanings of color terms across different languages
based on conceptual metaphors of the type EMOTIONAL STATES ARE COLORS. For example, the Italian giallo ‘yellow’ as it occurs in essere giallo dalla rabbia (‘to be yellow with anger’) expresses an emotional state of extreme anger. In English, however, this figurative meaning is associated with other color terms, especially red and white (to be red/white with anger). Also note in this respect to be livid (Lit. ‘to be unpleasantly purple’), the idiomatic equivalent of to be extremely angry. The importance of Danesi’s Conceptual Fluency Theory to pedagogical grammar is that it makes a convincing case for adopting a different instructional sequence in second and foreign language learning. Instead of beginning with concrete grammatical structures and communicative language skills, teachers should first develop in their learners an awareness of culturally-transmitted and discourse-embedded concepts. In this view, English learners of Spanish, for example, will first have to internalize the conceptual operations involved in construing inchoative situations before they can start using the se reflex passives and related forms successfully. English language users routinely recast the object of an action (to open the garage door) as the actor of a process (The garage door opens). Yet, this only covers part of what is possible in Spanish and will not help to differentiate La puerta del garaje no abre (‘The garage door won’t open’) and La puerta del garaje no se abre (Lit. ‘The garage door doesn’t open itself’, i.e., ‘The garage door does not open automatically’) (Ruiz de Mendoza, in prep.). These and similar examples may serve to show that conceptual fluency also represents a valuable strategy for the conceptual teaching of grammar.

When taken together, the contributions to Part II of the volume provide a clear insight into how cognitive linguists approach contrastive grammar issues and learner errors with a fresh perspective and framework. Their research into ditransitive constructions, diminutives, reflexive constructions and middle constructions offers further evidence for the benefits of a usage-based model for understanding L2/FL acquisition. Not unlike children acquiring their mother tongue, L2/FL learners “begin with exemplar-based very narrow construction types, even specific to individual verbs and nouns, and gradually build more schematic grammatical constructions over time” (Croft and Cruse 2004: 325). The interlanguage errors which occur during this learning process provide researchers with invaluable data. At the same time cross-linguistic comparisons help to figure out the different conceptual systems involved. Where structuralist and generative models tend to focus on rules and regularity, CL links grammatical knowledge to the use of utterances in communication. It makes perfect sense, therefore, to try and base a pedagogical grammar on how constructions get acquired through communicative interaction and how their general and idiosyncratic properties can be explained in conceptual terms.
3.3. Conceptual Learning: Construal of Motion Events, Temporal Structure, and Dynamic Action

Part III offers discussions on language-specific constraints for the construal of motion events (by Cadierno and by De Knop and Dirven), temporal structure (by Niemeier and Reif and by Schmiedtova and Flecken), and dynamic action (by Chen and Oller). Various contributions in this section seek to analyse, from a contrastive perspective, data from languages other than English (e.g., French, Chinese, Spanish, German and Danish). Typically, the grammar of a language provides a variety of means to portray a particular situation or scene (e.g., the active-passive diathesis in Chen and Oller’s contribution). The array of potential choices to construe a scene is restricted, however, and the restrictions differ from language to language. So, grammatical constructions in one language can differ from the ones in the other; sometimes grammatical constructions present in one language do not even exist in another language (see De Knop and Dirven, in prep.). In the realm of language learning and teaching, this may cause problems of native-language transfer. As Achard and Niemeier (2004: 6) observe, “In a developing L2 system, the target units are in direct competition with the native ones because they both represent alternative ways of construing the same reality.” Because there is often little or no congruence in the expressions of concepts in different languages, a pedagogical grammar will have to describe the differences systematically and to aim for a schematization of those differences in order to make L2/FL teaching and learning easier.

In the opening paper of Part III Cadierno argues that a usage-based pedagogical grammar will benefit greatly from (i) choosing CL for that framework and (ii) integrating CL with Long’s (1991) focus-on-form approach to grammar teaching. To begin with the former, the conventionalized form-meaning mapping that Cadierno concentrates on is the language-specific conceptualization and expression of motion events in Danish and Spanish. Compare, for example, the Danish sentence Flasken flød ind i grotten ‘The bottle floated into the cave’ with its Spanish equivalent La botella entró a la cueva flotando ‘The bottle entered the cave floating.’ Talmy’s (1985) typological framework offers a useful set of concepts and contrasts for describing these different conceptualization and lexicalization strategies. It should be observed that both linguistic expressions refer to exactly the same event of a bottle (FIGURE) moving (MOTION) in a floating fashion (MANNER) into a cave (GOAL). Like English, Danish is a satellite-framed language in that it typically maps manner of motion onto the verb as part of its root meaning (float), whereas GOAL (into the cave) but also SOURCE (out of the treasure chest) and PATH (through the air) are encoded by adverbials, particles (up, out or into), etc. Spanish, on the other hand, is a verb-framed language. It uses a separate constituent like the gerund flotando to express manner of motion while characteristically conflating path and motion in one more general verb like subir ‘go up’, as in El globo subió por la chimenea flotando (Lit. ‘The balloon moved-up through the chimney floating,’ or in more idiomatic English ‘The balloon floated up the
chimney’). Collectively, components like motion, path, manner and goal are said to form an event schema, i.e., an abstract representation of the various participant roles involved in the event. The difference is that Danish as a Germanic language makes use of specific manner verbs and expresses the rest as satellites, whereas Spanish as a Romance language expresses the motion and its general direction (in, out, up, down) in a more general verb and either does not express the manner at all or else uses other verb forms or expressions for manner.

After a thorough discussion of Talmy’s typological distinction, Cadierno critically reviews the empirical work into first language acquisition that Talmy has generated (for references, see Cadierno in the volume). The conclusion is that “in-depth analyses provided by cognitive linguists can provide applied linguists with valuable descriptions of the types of form-meaning relations encoded in the learners’ mother tongue and the foreign language [i.e., Danish] they are attempting to learn” (Cadierno in prep.). This also holds true, by the way, for the opposite route, i.e., where L1 speakers of Spanish learning a satellite-framed language like Danish have to construe motion event schemas from a verb-framed perspective.

As for the pedagogical angle that Cadierno adopts, Long’s (1991) focus-on-form approach “involves drawing L2 learners’ attention to linguistic elements in the context of communication, i.e., in lessons whose overriding focus is on meaning and communication” (in prep.). In this part of her research Cadierno limits herself to one clearly problematic language-learning area, i.e., the semantic component of manner of motion, and how this can be taught to adult learners with an L1 verb-framed language (Spanish) and an L2 satellite-framed language (Danish). Incorporating attention to form into a task-based syllabus involves quite a number of complex issues, as Ellis (2003: 230–238) observes, but Cadierno’s paper makes clear that part of the solution may lie in employing the processing instruction technique. This technique involves explanation intended to “alter the processing strategies that learners take to the task of comprehension and to encourage them to make better form-meaning connections than they would if left to their own devices” (VanPatten 1996: 60). True to the focus-on-form approach, there is no analysed output component but to promote deeper learning, Cadierno also suggests intensive production activities in the form of a number of planned, rather than fully authentic or unfocused, tasks. For example, pairs of learners can be asked to complete a two-way spot-the-difference task in which they have to try and identify the differences between two pictures. The pictures would be exactly the same except for the fact that they involve different manners of motion (e.g., people walking, running, jumping, and so on).

The conceptual domain of motion events and the language-specific constraints that guide their mental construal and subsequent linguistic expression also form the subject of De Knop and Dirven’s contribution. Whereas Cadierno studies one instance of the Germanic-Romance typological contrast, i.e., Danish and Spanish, De Knop and Dirven look at two contrastive pairs, i.e., French, a verb-framed language like Spanish; English, an intermediate satellite-framed language; and German, a more extreme satellite-framed
language like Danish. Let’s take as an example the scenario of athletes swimming across a river as designated by the French sentence *Les athlètes traversent le fleuve (à la nage).* The typical construal in French is one of a transitive event, using the full verb *traverser* (‘to cross’) to express the path of motion and optionally specifying the manner of motion by a prepositional phrase (*à la nage* ‘by swimming’). Such a construal is also possible in English, witness *The athletes cross the river,* but far less preferred than one which encodes manner of motion at the level of the verb: *The athletes swim to the other bank.* This tendency to express the manner of motion in the verb and the path of motion in the so-called satellites (in our example the preposition *to* in English or *an* in German) is much more pronounced in German, which only permits *Die Athleten schwimmen ans andere Ufer.*

After a detailed and exhaustive analysis of how the three typologically different languages single out and realize different aspects of the event schemas for motion and location, De Knop and Dirven focus on extensions of the prototypical concept of spatial motion into partial motion of instrumental body parts (e.g., *in einen Apfel bießen/to bite into an apple*), fictive motion (e.g., *Wir sind über den Berg/We are over the mountain = We have overcome all obstacles*) and abstract motion in German (e.g., *in eine andere Sprache übersetzen/to translate into another language*). They try to understand the subtle interplay between differences in conceptualization and corresponding differences in morphosyntax, more specifically, in the German case marking system. This descriptive and explanatory approach allows De Knop and Dirven to correctly identify the kinds of learning difficulties that French and English speakers may experience when learning German as a foreign language, but also to offer some explanatory aids to help use the German cases correctly. It is on the basis of these observations that their study is able to formulate a number of useful pedagogical suggestions.

As a matter of fact, one of their main research findings is that “it looks as if the whole German spatial prepositional system and its case marking system may find a natural explanation in terms of the event schemas for motion and location” (De Knop and Dirven, in prep.). Both motion and event schemas neatly reveal the ultimately cognitive motivation for the two-way case markings of the German prepositions *an, auf, hinter, in, neben, über, unter, vor and zwischen* (‘at,’ ‘on,’ ‘behind,’ ‘in,’ ‘next,’ ‘over,’ ‘under,’ ‘in front of/before’ and ‘between’). These prepositions can be used with either the accusative or the dative, depending on the conceptualization that they are intended to express: the accusative case for dynamic motion (e.g., *Vati stellt die Vase auf den Tisch* or ‘Daddy puts the vase on(to) the table’) and the dative case for static location (e.g., *Die Vase steht auf dem Tisch*). The distinction between these two is notoriously hard to learn, but causes even more learning problems with examples of partial, fictive or abstract motion. For example, why an accusative as the realization of a dynamic movement in an abstract example like *sich an die Hoffnung klammern/to cling to hope*? Language instructors should help learners to “grow into the habit of focusing on these canonical orientational positions when talking about them.
instead of abstracting away from these physical aspects as they are accustomed to in their native language” (De Knop and Dirven in prep.). One strategy which may facilitate this process is to offer learners “a very concrete, visual and even tactile way of experiencing the learning problem and associating the linguistic expressions with these bodily experiences” (De Knop and Dirven in prep.). Another strategy would be to take into account the relevant conceptual metaphors such as CHANGE IS MOTION or MOTION (and ABSTRACT CHANGE) IS CHANGE OF LOCATION, which would exploit the same embodied conceptualisations in abstract domains.

As observed by Taylor (2002: 427), motion events have been “subject to quite intensive investigation,” and this ever since Talmy’s (1985) groundbreaking study. What makes these dynamic process types such a fascinating research area is, of course, the possibility of alternative construals. This ability to mentally structure a scene in different ways is an interesting topic because it goes right to the heart of what CL attempts to do, i.e., “examine languages from the point of view of the palette of resources that they make available for purposes of construal” (Taylor 2002: 11) and to lay bare the language-specific possibilities and limitations. Both Cadierno and De Knop and Dirven make a welcome contribution to this research tradition and clearly demonstrate its relevance to pedagogical grammar. Their studies show that CL constitutes not only a reliable basis for conducting more theoretical SLA studies but also for designing contrastive pedagogical interventions. After all, the key question is how adult L2 learners can be taught to express motion events in an L2 that is typologically different from their L1. As Ellis (2003: 234) points out, a grammatical structure or feature that has no correlate in L1 is especially suited for learning through explicit instruction rather than mere consciousness-raising tasks.

Also Niemeier and Reif present a compelling case for a CL, or rather CG (cognitive grammar), approach to language pedagogy, and more particularly, the teaching of English tense and aspect to native speakers of German. It is worth pointing out that their work has a much stronger applied linguistics focus than either of the previous two. To begin with, the authors discuss in detail the largely prevailing communicative approach to tense-aspect teaching in German classrooms with its combination of extensive and intensive learning at the expense of “analysed input/output” (Swan 2007). Next, they also include a critical evaluation of two textbook grammars that are widely used in secondary schools across Germany, identifying the following three shortcomings: (i) a preoccupation with form and use over (cognitive) meaning; (ii) the reduction of grammar knowledge to memorizing simplified rules and random lists of exceptions; and (iii) the reliance on invented and isolated example sentences to illustrate grammatical usage. Finally, their contribution offers a more systematic overview of how CG can improve grammar instruction. Three benefits are mentioned. The main pedagogical strength of CG lies in its fundamental conception of grammar as inherently meaningful and as being no different from other symbolic units: “grammatical units, just like lexical ones, are meaningful in the sense that they possess a phonological and a conceptual pole … In contrast to lexical units,
However, they are used to express a rather abstract meaning, as, for instance, ‘occurring at a time before that of the present communication’ in the case of the past tense marker” (Niemeier and Reif in prep.). This view implies that thanks to CG, L2/FL learners should have less trouble remembering the relevant grammatical regularities (like those pertaining to tense and aspect) once they have recognised their underlying form-meaning connections. A second advantage of basing pedagogical interventions on CG has to do with the notion of polysemy. Since CG provides EFL instructors with the means of motivating the various uses and meaning extensions, learners can be expected to gain a quicker understanding of, for example, the non-temporal uses of the past tense morpheme. For example, in an expression like I wondered if you could help us the past tense wondered does not locate a situation prior to speech time but is used to express attenuation, i.e., it minimizes the amount of social pressure exerted on the addressee. Thirdly, the potential use of CG for teaching purposes derives from its usage-based orientation, a feature that encourages inductive grammar learning. One of the basic assumptions of CG is that “a good deal of a person’s language knowledge may consist in rather specific, low-level knowledge, not far removed, in terms of abstractness (i.e., schematicity), from actually encountered expressions” (Taylor 2002: 27). Language acquisition is “a bottom-up process, driven by linguistic experience.” It stands to reason, as Niemeier and Reif observe, that L2/FL learners should, therefore, be given extensive language input in the form of actual usage-based examples, visual tools as well as practice exercises – and that all this should help them generalize over the various form-meaning connections that they are exposed to.

Naturally, a good deal depends on the quality and extent of the initial CG descriptions and explanations. Tense is technically regarded as a grammatical category that reflects concepts of time, i.e., it situates a process or state relative to the moment of speaking (cf. Dirven and Verspoor 2004: 93; Radden and Dirven 2007), as in Vanessa works as an account executive versus Vanessa worked as an account executive. In Niemeier and Reif’s view, tense morphology is used to symbolize temporal relevance but also a variety of other non-temporal meanings depending on context (e.g., epistemic relevance, salience, and attenuation). Both types of uses have, however, a shared conceptual basis: the proximal/distal schema or alternatively the immediacy/non-immediacy schema. So, the present tense is used to express proximity, i.e., temporal but also epistemic or “narrative” proximity. The past tense, on the other hand, indicates distance with respect to relevance time, reality status or social commitment. As for aspect, Niemeier and Reif (in prep.) suggest a theory that “takes into account both lexical aspect (Aktionsart) and grammatical aspect, assuming that lexis and grammar interact with each other on a conceptual level during communication.” They note that in communication verbs more often than not show up with complements and that the interaction between both influences the type of situation that is expressed. So, it is not <DRAW> in itself but <DRAW A CARTOON SNOWMAN> that is important, with the former being a potentially bounded situation whose boundaries are implicit and the latter one whose boundaries are explicit. Both are alike in that they are
“internally heterogeneous and susceptible to change, and they are expected to come to an end at some point” (Niemeier and Reif, in prep.). Compared with German, English is special in that every finite verb group will not only have to be marked for tense but also for grammatical aspect, e.g., the progressive *Pete was drawing a cartoon snowman* versus the non-progressive *Pete drew a cartoon snowman*. Now, the use of either form interacts with lexical aspect in the following way. The non-progressive aspect expresses that the situation is construed holistically with both its beginning and end-point within the scope of the predication. In contrast, the progressive aspect has the effect of ‘defocusing’ the boundaries, i.e., of excluding both the initial and final boundaries of the situation (see also Schmiedtova and Flecken, in prep.). Niemeier and Reif also argue that the progressive aspect itself does not cancel out the higher-order schematic conception of the bounded situation <DRAW A CARTOON SNOWMAN>. Actually, what this schema does is to provide the possibility of defocusing boundaries in the first place. Thus, in the case of the progressive aspect, the situation <DRAW A CARTOON SNOWMAN> is perceived as being in progress, and as a consequence, even if only potentially, as being susceptible to change. When combined with the non-progressive, however, the same situation is construed as being no longer susceptible to change because it is presented as complete in itself.

The main purpose of this contribution, and also its main value, is to discuss, however, the pedagogical implications of all this for German learners of English. Problems in this area are “partly due to divergences between the L1 and the target language system, partly due to inherent ‘properties’ of the phenomena themselves such as semantic and grammatical complexity, which may exacerbate cognitive processing” (Niemeier and Reif, in prep.). For example, German has no grammaticalized correlates for expressing bounding, i.e., perfective situations like *write an email message* or imperfective situations like *write*. Because of this, it has to fall back on lexical means to highlight the ongoingness of a particular situation: (i) *gerade* ‘right now’ or *momentan* ‘at the moment,’ and (ii) idiomatic expressions like *dabei sein* and *etwas zu tun* ‘be in the middle of doing something.’ Curiously, even though German can express the non-temporal concept of attenuation by means of tense morphology (as in English), Niemeier and Reif observe that many learners struggle with this pragmatic function, too. The authors’ belief is that these and similar learning obstacles can be removed, however, by designing a suitable CG approach to teaching tense and aspect – both in terms of classroom procedures and with respect to the development of teaching and learning materials. Without going into details, Niemeier and Reif suggest an instructional sequence that first presents the necessary abstract concepts like boundedness, grammatical aspect and tense, and then tries to explain these through a variety of visualization activities (e.g., flash-animated graphics). When teaching the two tenses in English, one should move from the temporal core meanings to the non-temporal extensions rather than the other way round, emphasizing in this way the overarching motivatedness of all meanings in terms of the proximal/distal opposition. Admittedly, Niemeier and Reif’s
research project is still in an early stage and most of their suggestions require further corpus-based analysis and experimental testing. Nor have they obviously exhausted all there is to say about tense and aspect as such, but this brings us to the next contribution.

Schmiedtova and Flecken’s paper has the great merit of clearly setting off the perfective/imperfective distinction in the Slavic languages versus the progressive in the Germanic languages: the former fully focus on whether an end-point is reached or not, the latter fully defocus the end-point, if there is one at all. Unlike Niemeier and Reif, however, they ground their descriptive claims in empirical fact, namely, spoken data produced by (i) Russian and Czech learners of German as an FL and (ii) native speakers of Czech, Dutch, German and Russian. Their empirical approach to the analysis of aspect focuses broadly on the following two areas: (i) distributional differences in the use of aspect markers between languages that are typologically very similar (e.g., the Slavic languages) and (ii) the varying degrees to which certain aspectual distinctions have become grammaticalized in the Germanic languages under examination.

To begin with the former, Czech and Russian both distinguish between perfective and imperfective aspect as two fully grammaticalized categories. Schmiedtova and Flecken (in prep.) claim that their crucial functional difference lies in “the degree of focus on the right boundary of a situation (e.g., in the situation in which a person drinks up a glass of water, the right boundary (or end-point) is reached when the glass is empty and the person is in the post state of having finished a glass of water).” Or put in another way, “the function of the perfective in Czech and Russian is to encode that a situation has reached its right boundary [the glass is empty] and also that an assertion is made about the possible post state of this situation [someone has finished drinking the water].” But what are the actual preferences of Czech and Russian speakers for either type of aspect when they construe events like that in their mother tongues? In one of their experiments, Schmiedtova and Flecken presented Czech and Russian native speakers with short video clips of what is traditionally called an accomplishment, i.e., an inherently accumulative and bounded process like playing a Mozart sonata, writing a novel, building a house or walking to the store. This set of visual stimuli was further divided into two subsets depending on whether or not the right boundary of a situation was shown and actually reached. Two conclusions could be derived from this prompting experiment. First, the preferred construal among the Czech speakers was the perfective form regardless of the type of clip shown, while the Russians defocused the right boundary and used the imperfective aspect throughout in all scenes. When they used the perfective form at all, it was exclusively for scenes showing the right boundary (or end-point) being reached, i.e., the final bars of the sonata, the last page of the novel, the completed house and the arrival at the store. Second, and in agreement with the previous conclusion, when verbalizing scenes whose potential right boundary could only be inferred but was not shown to have been reached, Czech native speakers had a clear preference for mentioning the end-points compared with much lower frequencies for the Russian speakers.
When taken together, the data show that Czech speakers tend to concentrate on the time interval at and after the right boundary but that Russians are more likely to zoom in on the time interval preceding the right boundary.

Their second major finding relates to the process of grammaticalization. Aspectual categories can be somewhat similar in form and meaning like the progressives in English, Dutch, and to a lesser extent, German, but may still differ in terms of their integration within the language system. Thus, the Dutch construction *aan het + V + zijn* as used in sentences like *Ik ben aan het lezen* ‘I am reading’ finds itself at the onset of such a grammaticalization process. In this respect, it only differs from the formally and semantically related *be + V-ing* form in English in that the English progressive marker is in a far more advanced stage of the same process. Again, as with the aspectual differences between Czech and Russian, the evidence for these claims is empirical. In the spoken production data that Schmiedtova and Flecken have collected, native speakers of English consistently use the *be + V-ing* form when asked to describe an inherently bounded process. By contrast, one of the preliminary results of an acceptability judgment task completed by native speakers of Dutch showed that *aan het + V + zijn* is most often used with verbs like *lezen* ‘to read’, *tekenen* ‘to draw’ or *knutselen* ‘to tinker’; second best are verbs denoting long duration (e.g., *afwassen* ‘to do the dishes,’ but impossible are verbs with short duration like *vallen* ‘to fall’

Arguably, the various acceptability judgments reflect the fact that the Dutch progressive is at the onset of grammaticalization. The progressive marker is prototypically used for activities whose boundaries can be defocused (*lezen* ‘to read’) but is rated unacceptable when used to depict situations where one of the boundaries is prominently present (*breken* ‘to break’) or where no boundaries seem to exist at all (*houden van* ‘to love’).

One of the preconditions for writing a pedagogical grammar is coming up with descriptively adequate accounts of particular linguistic phenomena across languages. Schmiedtova and Flecken’s paper on aspect shows that these descriptive accounts can benefit greatly from clearing up the terminological imprecision and confusion surrounding the notion of aspect – an implicit critique of Langacker’s work – and from adopting a robustly empirical approach. As in other contributions (e.g., Danesi, Maldonado, Cadierno, and De Knop and Dirven), the general conclusion is that “patterns found for native speakers for event depiction in their native language still drive the perspectivization in L2 production” (Schmiedtova and Flecken, in prep.). Aspectual distinctions are not merely a matter of grammatical categories and inflectional morphology (e.g., the use of the verbal prefix *s*- to mark perfectivity in Czech) but reflect conceptual structures and hence have psycholinguistic reality. This implies, of course, a paradox for all those involved in foreign-language teaching. The question, and indeed the challenge, for pedagogical grammar is how it can raise learners’ awareness of these underlying conceptualizations without getting

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4 To add a critical note, the authors overlook the fact that Dutch also uses the construction with abstract verbs, as in *Ik ben er nog over aan het nadenken* ‘I am still thinking about it.’
bogged down by terminological issues and abstract generalizations – a point also touched upon by Niemeier and Reif (in prep.).

Whereas the previous four articles were all about the construal of motion events and temporal structure, Chen and Oller’s contribution deals with the construal of dynamic action. “Learning a language”, they observe, “involves the mastery of an open-ended and dynamic inventory of possible meaningful linguistic constructions. A passive construction is merely one among many possible dynamic constructions” (in prep.). Language learning also involves learning how to use these constructions flexibly to construct coherent and cohesive connected discourse. As such, the focus is on situations, number of participants involved in the action, and participant roles like agent and patient. More particularly, Chen and Oller’s study deals with the repertoire of perspective-taking devices which Chinese EFL learners and native speakers of English use when retelling the plot of the children’s book, Frog, Where Are You? This 24-page storybook without words – except for the title – has featured in previous psycholinguistic work such as, most famously, Berman and Slobin (1994) and Slobin (1996), but also more recently Slobin (2004) or Kang (2004).

The main focus in Chen and Oller’s experiment is on those episodes in the Frog, Where Are You? story that are built around transitive causative event sequences (e.g., the episode in which a ground squirrel comes out of a hole and bites the boy’s nose). Their main conclusion is that “the Chinese EFL learners ... made less flexible use of the range of perspective-taking devices that are available in the target language than did the native speakers of English. In particular, they exhibited difficulty in expressing varying degrees of agency in the descriptions of the potentially transitive causative event sequences that we focused on” (in prep.). Sometimes the Chinese EFL learners even failed to verbalize a particular episode at all but more often they narrowly focused on the main character of the boy (The boy fell on the horns of the deer) rather than also attributing agency to a secondary character (The deer picks him up). The quantitative and qualitative analysis of the retellings does not only allow one to assess the linguistic flexibility of both groups of narrators. In line with accepted CL thinking, it can also be inferred that perhaps Chinese and English speakers conceptualize these transitive causative event sequences in slightly different ways, leading to conceptual transfer when using the other’s language. Furthermore, as Chen and Oller point out, “each native language has trained its speakers how to choose to construe and to attribute differentiated cognitive significance to an event and its parts for expressive purposes” (in prep.), habits that are difficult to break out of in adult SLA contexts. At the risk of simplification, they also observe that the Chinese mindset is essentially one of shì zài rén wéi (thing-exist-man-do, meaning ‘It all depends on human effort’), which may explain the Chinese speakers’ preference for active sentences and constructions in which either the boy or the dog are singled out as AGENTS. Finally, Chen and Oller also discuss some pedagogical implications. Their study lends further support, they claim, to the view that extensive, even interactive exposure to the target language in itself will never be enough
(see also Niemeier and Reif, in prep.). After all, the Chinese EFL learners – Ph.D. students, to be precise – were all advanced L2 speakers and had lived in the U.S. for over two years on average. Optimal language development also requires “analysed input/output” (Swan 2007). As Chen and Oller put it, “the teacher in the foreign language classroom and the conscious effort exerted by the learner also play essential roles in enabling second language learners to decipher and fully unpack meaning relations and their linguistic construal in target language packages” (in prep.).

In conclusion, Part III of the CAPG volume has zoomed in on the complex interactions between types of situation, possible construals of these situations, and the linguistic variations in expressing them. The first two papers set out from a conceptual domain, i.e., that of motion or location, whereas the other three take the linguistic expression via a grammatical form as their starting point (e.g., tense/aspect, (im)perfective, progressive, and the passive or its many alternatives). All five contributions, however, concentrate on both ends of the form-meaning pairings. Thus they illustrate the basic choice between two ways of describing, and accounting for, a number of language-dependent form-meaning relations across a variety of languages. As in Part II, detailed contrastive analyses of differences and similarities between these languages and their underlying conceptual systems (Danesi, in prep.) have steered the cognitive linguistic descriptions. What differentiates Part III from the previous part, however, is its more explicit concern with identifying conceptual learning targets and formulating appropriate pedagogical interventions in light of recent language-teaching insights.

4. Future Perspectives

In his plenary at the 40th International Annual IATEFL Conference held in 2006, Swan (2007: 48) argues that a “properly-balanced language-teaching programme … has three ingredients – extensive, intensive and analysed – at both input and output stages” and that all three of these ingredients are equally important. First of all, L2/FL learners need exposure to extensive “quantities of spoken and written language, authentic or not too tidied up, for their unconscious acquisition processes to work on” (Swan 2007: 46). And they also need opportunities to produce free writing and speaking themselves. Note that all this ties in perfectly with the usage-based approach that Langacker (2001) advocates: “optimal language development requires interactive exposure to large quantities of natural speech in context.” Secondly, learning will also gain from “intensive engagement with small samples of language which they can internalize, process [in the sense of comprehend], make their own and use as bases for their own production” (Swan 2007: 47). The third ingredient in successful language teaching is what is called “analysed input,” i.e., learners require “information about the workings of particular aspects of the language, presented implicitly or explicitly” (Swan 2007: 47). Again, this should go hand in hand with plenty of output practice in the form of exercises and tests. Of course, as Swan (2007) points out, the value of this kind of deliberate grammar teaching has become rather controversial over the past
thirty years. And also, even when sufficient emphasis is put on the presentation of analysed input and output, the question remains as to what kind of linguistic theory is best placed to provide the overall framework for that analysis.

The contributions of the CAPG volume offer some answers to this question. They are all based on the insights of CL. Like any other comprehensive theory of language, CL is faced with the problem of turning a rich, specialized and emerging body of applied cognitive linguistic research into a practical guide for foreign-language teachers, course designers and materials writers. To that end, CL-based grammar teaching and L2/FL teaching in general needs to show that (i) it can move beyond the largely unmotivated rules, examples, and lists typical of the traditional paradigm; (ii) that it can produce results-driven grammar instruction and practice; and (iii) that it can ultimately balance all of this properly with Swan’s (2007) two other key ingredients, i.e., extensive and intensive input and output.

What Cognitive Linguistics (CL) brings to the multifaceted field of language pedagogy – more than any other contemporary form of linguistics – is “a strong conceptual unity” (Kristiansen et al. 2006: 14). It is this unity in theoretical assumptions, basic units and constructs that is expected to offer a better insight into the nature of language and grammar and further improve the efficiency and effectiveness of existing second and foreign language teaching.

The contributions in the first part of the CAPG volume make clear that a cognitively-oriented pedagogical grammar can only be based on a model that offers a sufficiently streamlined integration of the dominant strands in CL. So far none of them has come up with such an integrated model but the volume hopes to stimulate further research in this direction.

In the second part of the CAPG volume it becomes clear that CL can provide researchers with a much more adequate and more coherent theoretical framework for dealing with language differences and non-native speaker errors. CL studies are cross-linguistic in nature, they ground their descriptions in the conceptualization of human experiences which are different in every speech community. Thanks to this experience-based approach, CL exploits contrastive studies and error analysis to understand and study the systematic character of one language by comparing it to another.

The contributions of the third part of the CAPG volume take as a starting point the way different languages construe their reality and the corresponding expressions.

The five contributions illustrate the basic choice between different ways of describing. They concentrate on language-dependent form-meaning pairings and aim at formulating appropriate pedagogical interventions in light of recent language-teaching insights.

The CAPG volume with its thirteen contributions offers a good overview of some of the main issues relevant in language pedagogy. Though numerous and varied as the issues described in the contributions are it is clear that there is still much work to do. We hope that the volume may offer rewarding avenues for further exploration of what it means “to think before you speak” in a foreign language.
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