

Change of Paradigms – New Paradoxes

Recontextualizing Language and Linguistics

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Introduction.

Change of paradigms – New paradoxes. Recontextualizing language and linguistics

The title of this volume consists of two main parts, which are both linked to the seminal work produced by Dirk Geeraerts in the course of the last 30 years. The first part, *Change of paradigms: New paradoxes*, is meant as a pun on the title of Dirk's PhD thesis, *Paradigm and paradox: Explorations into a paradigmatic theory of meaning and its epistemological background* (Geeraerts 1985). To fully understand the contribution of this PhD, which already formulated key determinants of what would become the cognitive linguistics framework, three components of its title deserve some further clarification: (i) the basic idea behind phenomenological epistemology; (ii) the (polysemous) context-specific semantic load of the term "paradigm"; (iii) the nature of the construed paradox.

Phenomenological epistemology considers knowledge as "the synthetic interaction between the cognitive activity of the knowing subject and the givenness of the object known" (Geeraerts 1985: 13). In this respect, phenomenological epistemology can be contrasted with philosophical knowledge-theoretical views in which one of these two components – either the thinking subject or the given object – is seen as primarily responsible for knowledge (readers will recognize the basis of the age-old controversy between rationalism and empiricism, respectively, here). An additional and highly important component of Geeraerts's epistemology holds that knowledge is stored in structures. This then of course raises the question how we should conceive of the nature of these structures.

This is where paradigmaticity comes in. Crucially, paradigmaticity should in the present context not be understood in opposition to syntagmaticity. Instead, it is used in reference to the meaning of the Greek word παράδειγμα (*paradeigma* 'exemplar') and is as such meant to emphasize the idea that knowledge is organized in structural categories that are highly flexible and have peripheral nuances, with vague boundaries that are clustered around central,

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prototypical cores.

Additionally, Geeraerts relates paradigmaticity to Kuhn's usage of the term as referring to a set of practices and beliefs that make up a scientific discipline at a given point in time: in his PhD, he aimed to set up a comprehensive theory of science and methodology in general and of the choice between paradigms in particular. Geeraerts's claims on scientific paradigmaticity were construed through the rhetorical outline of the book, which starts from the level of linguistic knowledge, moves up to the level of general cognition and then arrives at the level of methodological meta-theory. It is at this final level that the notion of paradox fully comes to the fore. Specifically, it appears that applying the paradigmatic-phenomenological theory to the theory itself leads to a philosophical-epistemological paradox. When the theory is taken to hold universally, it follows that it is not universal, raising the question whether any scientific paradigm can ever be truly objective if the paradigmatic-phenomenological theory is said to hold.

The proposed way out of this paradox is of a complexity that would lead us too far in this introduction, especially since it is not a prerequisite for appreciating that Kuhn's usage of the term 'paradigm' is relevant for Dirk Geeraerts's thesis in yet another way. Independently of similar developments that were simultaneously taking place in the US through the works of, amongst others, Lakoff (1987) and Langacker (1987), Geeraerts formulated many of the basic tenets that formed the cornerstones of cognitive linguistics in general and of cognitive semantics and cognitive lexicology in particular. As such, his PhD not only developed a comprehensive theory of paradigms, but it also contributed significantly to the specific paradigm shift from generative to usage-based linguistics in Europe.

Not only was his PhD the first in Europe to explore prototype theory as applied to linguistics (see later Geeraerts et al. 1994; Geeraerts 1997 and others), it (as such) also formulated one of the most crucial and basic premises of cognitive linguistics, namely the conviction that **language and cognition** cannot be studied in isolation from each other. Hence, by emphasizing that thinking is in essence "an assimilation and organization of experience", Dirk also underlined the importance of experientialism in the acquisition of (linguistic) knowledge, and on this basis put forward several fundamental principles for scientific research on language and meaning.

First, principles at work in categorization at large (including notions such as prototypicality, exemplars, salience and entrenchment) also apply to the organization and categorization of meaning and meaning change. Second, within semantic concepts no sharp dividing line exists between purely linguistic and

encyclopedic information. Third (and ensuing), language and (linguistic) knowledge are not just located in the mind, they are also socio-cultural phenomena. Finally, when this experientialist, usage-based theory is said to hold, this comes with specific methodological requirements: “the referentialist conception of meaning (...) suggests the use of a non-introspective method in which the observation of the referential use of linguistic expressions yields information with regard to the semantic concepts involved” (Geeraerts 1985: 29).

Thirty years have passed since the publication of this PhD, and Dirk Geeraerts has just turned sixty. In the course of the three decades passed, cognitive linguistics has shaped and reshaped itself as the most recent, burgeoning and dynamic linguistic theory. As is demonstrated by the contributions over the years in the journal *Cognitive Linguistics* of which Dirk Geeraerts was the first editor-in-chief, as well as by the ones in this volume, a wide diversity of approaches that subscribe to the usage-based hypotheses have emerged (see also Geeraerts & Cuyckens 2007; Evans & Green 2006; Ungerer & Schmid 2006 and many others), alternative (sub)paradigms have arisen, theories have been reformulated, and new challenges have been identified, leading to new paradoxes. Nevertheless, the basic principles defined by (amongst others) Geeraerts in 1985 have not lost their relevance, and specifically the usage-based hypothesis still stands very strong. After a long time span in which language was primarily studied as an isolated phenomenon, contemporary linguistic research has in recent decades eventually been characterized by several attempts to recontextualize language (cf. Geeraerts 2010; Geeraerts and Kristiansen 2014).

This brings us to the second part of the title of this volume: *Recontextualizing language and linguistics*. “Recontextualization” forms the crucial component of all of Geeraerts’s work (from 1985 and beyond) and is also what binds the papers in this volume together. Specifically, the twenty-one contributions can be linked to five types of recontextualization that Geeraerts has pursued in the past thirty years. As mentioned above, on the most general level Geeraerts (along with other cognitive linguists) has always emphasized the importance of studying language in relation to general principles of cognition. Second, several of his works have explored the ways in which this usage-based hypothesis can be applied specifically to the study of lexical semantics and lexical change. Third, these semantic analyses were shown to be equally relevant for grammatical research: by eliminating the boundaries between lexicon and syntax, meaning was placed at the heart of grammatical investigation. Fourth, in recent years, the subparadigm of cognitive sociolinguistics (e.g. Kristiansen & Dirven 2008; Geeraerts et al. 2010) has drawn attention to the crucial role of socio-cultural context in the study of meaning and language. Finally, each of these

recontextualization tendencies comes with a set of methodological requirements and challenges: a truly usage-based paradigm cannot do without an empirical approach that studies actual usage.

These five recontextualization tendencies frame the general structure of this book, which consists of five sections: (1) “language in the context of cognition”; (2) “usage-based lexical semantics and change”; (3) “recontextualizing grammar”; (4) “the importance of socio-cultural context”; (5) “methodological challenges of contextual parameters”. Below, we provide a brief summary of the contributions in each of these sections. Needless to say, most papers simultaneously adhere to a number of the aforementioned recontextualization tendencies (e.g. studying lexical semantics in context by linking language change to general cognition, and at the same time aiming to surpass methodological hurdles).

1 Language in the context of cognition

If there is one belief that binds the diverse group of cognitive linguists together, it is the conviction that language and linguistic knowledge are rooted in and linked to general cognition. The usage-based hypothesis thus entails a generalization commitment, as a specific instance of the scientific commitment to general explanations where possible: the patterns we find in language acquisition and language change need to be explained by relying on general principles of cognitive function and development that are known to be relevant in other disciplines (e.g. Barlow & Kemmer 2000). The actual application of this generalization commitment in cognitive linguistics is very diverse, which is also illustrated by the two contributions in this section.

Jacob L. Mey’s paper, “Instrumentality: The embodied dialects of instrument and mind”, centers around experientialism and the dialectic relationship between world, body and mind. Specifically, he discusses the nature of instrumentality, of the ways in which we as users shape tools, instruments and artifacts and how, through that process, we also change ourselves. Looking into different levels of instrumentality, from the more concrete to the more abstract, Mey identifies an inversely proportional relationship between feedback and distance, which he amongst others illustrates through a discussion of artificial limbs.

In her contribution, “The dynamics of a usage-based approach”, **Marjolijn H. Verspoor** explicitly links language development to other (cognitive) sciences: she indicates how language can be related to Complex Dynamic System Theory (used in a number of exact and human sciences) in general and Edel-

man's Theory of Neuronal Group Selection in particular. Her paper connects a number of key principles inherent to Edelman's theory with child language development. To give just one example, the principle of aggregation (related to critical mass) applies to the finding that children need to acquire a whole number of words before they can actually start structuring those words meaningfully. Verspoor concludes that human infants can be considered as complex adaptive systems that have a tendency to self-organize, and who (therefore) show nonlinear patterns of development.

2 Usage-based lexical semantics and semantic change

In emphasizing the importance of context when studying the lexicon, Geeraerts has always insisted on making a distinction between meaning and naming. As such, he was one of the main figures behind the revival of the terms semasiology and onomasiology (as discussed in Geeraerts 2010, the term "onomasiology" was introduced in 1903 by Zauner). Where semasiology starts from the level of the word and looks at the different meanings that a word may have, onomasiology takes the reverse perspective and studies the different ways in which a given concept can be expressed in language. Crucially, key principles of categorization (such as salience, entrenchment and prototypicality) apply to both of these levels of research.

In his paper on the semantics of *over*, **Dylan Glynn** discusses how the application of prototype theory to meaning and naming actually problematizes the distinction between the concepts. If we assume both a lack of discrete senses and a lack of discrete forms, the difference between form and meaning eventually blurs. Then, it becomes unclear whether we can analytically keep up with a distinction between the level of decoding and the level of encoding. A way out of this conundrum is to loosen our understanding of linguistic form, which Glynn illustrates by means of an analysis of 400 instances of *over* ("the quintessential example of semasiological research").

Another paper relating to Geeraerts's work on semasiology and onomasiology is **Kathryn Allan's** contribution on diachronic evolution in the semantic field of education. Methodologically, she shows how the *Historical Thesaurus of the Oxford English Dictionary* can be used to study diachronic onomasiology, zooming in on the subfields of teaching and learning. The present analysis reveals several links between culture and naming, amongst others connecting the

frequent occurrence of loanwords in the semantic field to the influence of continental Europe on the English education system in the nineteenth century.

Change and evolution are of course also present on the semasiological level of analysis, as is shown in **Ricardo Maldonado and Patricia Palacios's** paper, “*Bueno*, a window opener”. The paper discusses how previous research has described *bueno* as a marker of anaphora, correction, concession and as a topic shifter. However, the analysis presented here indicates how this anaphoric notion has lost prominence in Mexican Spanish. The discourse marker is also used as bi-directional marker that not only refers back to what is known, but also points forward towards new information that will be announced. *Bueno* is furthermore increasingly used solely to introduce new events.

Whereas Maldonado and Palacios focus on changes in the pragmatic and discursive functions of a discourse marker, the other papers on semantics in this section focus more specifically on the ways in which the generalization commitment of cognitive linguistics can be applied to meaning shifts and meaning change. Specifically, the papers rely on well-known general cognitive mapping abilities to explain the ways in which words are used and extended to new contexts, and as such acquire new meanings (see, e.g., Peirsman and Geeraerts 2006). For instance, **Zoltán Kövecses** presents a contextualist version of conceptual metaphor theory. First, he summarizes the four main types of experience from which conceptualizers derive their metaphors, namely situational context (e.g. culture), discourse context (e.g. previous discourse on the same topic), conceptual-cognitive context (e.g. ideology) and bodily context. Then, Kövecses discusses conceptual metaphors and discusses when which contextual features can prime our use of metaphors.

Antonio Barcelona shifts the attention to two other general mapping abilities, namely metonymy and blending. Specifically, he focuses on their importance for bahuvrihi compounds. In these compounds (which portray a prototype structure, with family resemblance between the different types of bahuvrihi compounds) metonymy in general and CHARACTERISTIC PROPERTY FOR CATEGORY (pars pro toto) in particular play a crucial role. Blending, on the other hand, is often merely a by-product of the interaction between metaphorical and metonymical processes in bahuvrihi compounds (e.g. *fathead*). Sometimes, however, more is at play, which is illustrated by means of the Spanish compounds *cuatro ojos* (‘someone wearing glasses’, literal gloss ‘four eyes’) and *manirroto* (‘someone excessively generous’, literal gloss ‘a hand broken person’).

Metonymy is not only relevant for compounds, it also applicable to modality, as is shown in **Klaus Panther's** contribution. Panther discusses the close

associative relations between ACTUALITY, MODALITY, EVALUATION, and EMOTION, that can be considered as linguistic metonymies. For example, in sentences such as *he was occasionally allowed to have a beer*, we go from PERMISSION TO ACT to ACTUAL ACTION. Panther goes on to explain how these metonymies can be important for a proper understanding of illocutionary acts. Specifically, he describes how modals can be used as hedges for performative speech acts (e.g. *I can promise you...*), with two possible outcomes. Either the hedges have no effect on the illocutionary force of the utterance (but e.g. add emotive or evaluative information) or they can block that force. Both outcomes, and the relevant metonymies, are discussed by means of a number of examples. After a final note on the idiosyncratic behavior of hedged declarations (e.g. *I pronounce you husband and wife*), Panther concludes by indicating how CAUSE → EFFECT is the higher-level metonymy at work in these hedged performative speech acts.

3 Recontextualizing grammar

The same principles that govern meaning shifts and meaning change in the lexicon are clearly also at work in morphology and pragmatics. The same holds for grammar: introducing a separate section for lexical semantics and semantic change on the one hand and grammar on the other hand to a certain extent goes against the very basic idea of recontextualization in the cognitive linguistics framework. Cognitive grammar is *eo ipso* concerned with meaning, and neither the lexicon nor grammar can be considered independent of each other (see already Langacker 1976). As Langacker formulates it in his contribution (see below), the recontextualization of grammar in semantics “is reflected in the basic architecture of cognitive grammar (CG), which holds that linguistic units are abstracted from usage events, that their import includes the interlocutors and their interaction, and that lexicon, grammar, and discourse form a continuum of symbolic assemblies”.

The way in which cognitive grammar historically emerged as a paradigm forms the focus of **Margaret E. Winters**’s contribution, “On the origins of cognitive grammar”. Similar to the way in which Geeraerts has made links between cognitive semantics and pre-structuralist historicist approaches (Geeraerts 2010), Winters aims to uncover both the main similarities and differences between generative semantics (itself a reaction against the ‘syntacticocentrism’ of generative grammar up till then) on the one hand and cognitive grammar and cognitive linguistics on the other hand. To this end, she conceives of the main question (“what is the relationship between generative semantics and cognitive

grammar?") as a multiple choice question, and discusses each of the possible answers in more detail. As it turns out, no simple yes or no answer can be provided for the question whether cognitive linguistics (as developed in the US) directly descends from generative semantics.

The lexicon-syntax continuum not only plays a crucial role in cognitive grammar, it also forms the basis of other cognitive linguistic approaches to syntax and grammar such as construction grammar (e.g. Goldberg 1995) and radical construction grammar (e.g. Croft 2001). For an overview of the similarities and differences between the three approaches, see Langacker (2005). The contribution of **Fuyin Li, Mengmin Xu and Alan Cienki**, "The linguistic representation of agency in causal chains" is a prime example of the way constructions embed semantics and the lexicon in grammar. Specifically, the paper focuses on claims made in Talmy's work (e.g. Talmy 2000) on the morphosyntactic features of agency in causal context, scrutinizing the order and linguistic form of agentive events in Chinese narratives. The data include 1000 narrative events that were elicited from twenty video clips that were shown to fifty native speakers of Mandarin Chinese, who were asked to describe what they had seen on the video. In 971 of the cases, the agentive event occurs sentence-initially. Six different patterns (five of which with sentence-initial agent) were found and discussed. Overall, the results seem to indicate that Talmy's claims cannot be said to hold universally.

In the next contribution, "*Much in all as*: The anatomy of a strange expression", **John R. Taylor** focuses attention to the highly peculiar expression *much in all as*. This recent and low frequency concessive subordinator has a seemingly opaque, non-compositional internal structure. However, as Taylor discusses by means of Google extracts, several different components make up the expression and bringing these together might not be as strange as it seems at first sight. More specifically, the constructions and expressions discussed are *as*, *so/as... as...* and *(as) much as*; the variants found for the expression *much in all as* (most notably *much and all as*); and *and all* in its concessive reading.

The final paper in this section pushes the recontextualization of grammar one step further, from the lexicon to discourse. In "Descriptive and discursive organization in cognitive grammar", **Ronald W. Langacker** starts off by summarizing the four axes that are relevant for linguistic structures, namely the individual (affect, emotion), the interactive (social routine), the descriptive (lexicon, grammar) and the discursive (the organization of descriptive structures). The focus here lies on the lack of a sharp dividing line between the descriptive and the discursive level, which is visible in a number of parallels between both levels. Specifically, Langacker's paper looks into the way focus and

anchoring work on the descriptive and discursive axes, amongst others linking the notions *subject* and *topic*, and *profile* and *focus of interest*.

4 The importance of socio-cultural context

Cognitive linguistics has from the very start focused on contextualizing language in thought and semantics in grammar. In the past ten years, more and more attention has also been paid to the way language and cognition are rooted in the socio-cultural context. As is stressed by cognitive sociolinguistics (see, e.g., Kristiansen and Dirven 2008, Geeraerts et al. 2010), language is primarily used for communicating with others, and therefore a social component cannot be excluded from linguistic analyses. Additionally, as linguistic communities are “never homogeneous and hardly ever self-contained” (Weinreich 1970: vii), the study of language in use in itself implies the study of socio-linguistic variation.

This interaction between the individual mind and the level of social groups lies at the heart of **Ewa Dąbrowska**’s contribution, which looks for the best way to provide concrete support for the idea that language is inherently social. Specifically, Dąbrowska presents a number of links between grammar, grammatical complexity and type of society. She for instance discusses the correlation between the esoteric or exoteric nature of a society and the level of linguistic complexity of the society’s language; as complex morphology is difficult to acquire for adults, a clear link can be found between the amount of adult L2 learning and morphological simplification. Additionally, the relationship between hypotactic syntax and the widespread use of writing is presented, showing how language change can only truly be understood when the interaction between the individual and the social level is brought to the fore.

In “Cognitive sociolinguistics, language systems and the fall of empires”, **Peter Harder** advocates a return to the macro-level of analysis when dealing with the relationship between language, the mind and the social world. Where Third Wave sociolinguistics has left the level of overarching structure to look for ways in which language creates meaning *in situ*, Harder considers it time to go back to the “social order”. He proposes to study the relationship between the aggregate system and local variational features, based on the insights we have acquired through the Third Wave. When undertaking such an endeavor, the notion of socialization becomes crucial: the question is how the mind adapts to a system and how it learns to follow the cultural laws of the place where one grows up. There is in essence no free variation, as “[s]ocial facts are social only

because of the existence of institutionalized sameness”. No matter what choice we make between variants, their significance is (partially) already determined in advance. Harder illustrates these ideas by a discussion of “the nation” as contested macro-level unit and the choice for the term *Commonwealth* (instead of *British*) to refer to the British Empire.

In his discussion of Britishness and nationhood, Harder refers to Geeraerts’s work on cultural models (2003). In this work, Geeraerts proposes two models, a rationalist and a romantic one (and their variants), for the way we think and feel about the distribution of language varieties over a given community. The tension between both models forms the core of **Augusto Soares da Silva**’s paper. Specifically, he describes how the rationalist (LANGUAGE IS A TOOL) and romantic models (LANGUAGE IS AN IDENTITY MARKER) underlie attitudes towards European and Brazilian Portuguese, the two national varieties of the language. To this end, an analysis is presented of press, political, didactic and scientific texts on Portuguese language policies. The paper reveals four different attitudinal models at play: a romantic convergent attitude, a romantic divergent attitude, a rationalist convergent attitude and a rationalist divergent attitude. Interestingly, both the rationalist and romantic models of Portuguese appear to exhibit prototypicality effects and paradoxes. Additionally, Soares da Silva finds that the conceptual metaphors and metonymies for language underlying the opposing rationalist and romantic ideologies are in essence surprisingly similar.

Linguistic purism is a direct consequence of the convergence models presented by Soares da Silva. Looking for the actual effect of puristic language policy planning is addressed in the contribution of **Raphael Berthele**. The analysis is based on a selection of anglicisms and suggested French alternatives from two English-prone fields, namely sports terminology and telecommunication. Looking for diachronic shifts in lexicalization preferences, Berthele checked the frequencies of the terms in Google Books for the period 1950-2008. By means of inferential statistical analyses the odds of using the loanword are modeled against two factors: time, and before/after the suggestion of an official terminological alternative. Results reveal a general rise in the use of English, without any notable effect of norming attempts.

5 Methodological challenges of contextual parameters

When aiming to reliably attest the effect of linguistic purism, it is advised to study actual language usage. This observation lies at the core of the final recontextualization tendency we aim to present. The usage-based hypothesis of cognitive linguistics assumes that language structure emerges in the form of generalisations based on language use. Put differently: truly usage-based implies truly empirical. The complex interplay of linguistic variants, language varieties and socio-cultural phenomena make the empirical analysis of language methodologically challenging. Over the past decades, many advanced inferential statistical techniques have been applied in order to deal with this complexity, together making up “the methodological machinery” of cognitive linguistics (Divjak, this volume).

Many methodological steps have been taken in the past decades, but a number of challenges can still be identified. In her contribution, **Dagmar Divjak** presents four such challenges for usage-based analyses. The first challenge centers around the observation that data annotation categories and principles are very diverse within cognitive linguistics. Annotating lies at the heart of empirical usage-based analyses, but the categories we work with are often still based on introspection. Why not stay closer to the raw data? For her second challenge, Divjak describes the way probabilities are used and suggests to look into the benefits of shifting from frequentist probabilities to Bayesian statistics. Third, regression analysis has become more and more popular in cognitive linguistics, but maybe we should spend more attention to testing these models against actual speakers and human behavior. The final challenge is based on the contrast between language in the lab and language in use. Overall, then, Divjak notes that the key task for empiricists is to not forget about the importance of actually thinking about the data that we collect and the analysis that we subject the data to.

The methodological challenge at the heart of **Stefan Th. Gries**'s contribution concerns the selection of the appropriate technique when dealing with multifactorial phenomena where independence-of-data assumptions are violated. Specifically, the paper presents two complementary ways of presenting the same data, focusing on the *as*-predicative. The input consists of 512 sentence completions by native speakers of English. First, the data are analyzed in a two-step approach: a principal component analysis for dimensionality reduction to overcome issues with collinearity is followed by generalized linear multilevel

modeling to account for the repeated measures in the data. Second, a newer method for dealing with collinearity is applied, namely multi-modal inferencing. Overall, the results of both approaches turn out to be conceptually very similar.

Another type of methodological exercise is presented in “Does gender-related variation still have an effect, even when topic and (almost) everything else is controlled?”, the contribution by **Hans-Jörg Schmid**. As the title reveals, this paper mainly focuses on confounding variables: many differences in the speech of men and women have been described, but it is so far unclear whether these truly reflect gender-related linguistic preferences or whether the attested linguistic variation is simply indicative of other differences between men and women (such as choice of topic in conversation). In an attempt to resolve the issue, Schmid turns to a corpus where a wide number of possible confounds are kept stable, namely a database of dialogues involving map-reading. Specifically, 128 dialogues for 32 men and 32 women are studied. Due to data sparseness, the analysis focuses on the frequencies of *the, and, of, I, you, okay* and *mmhmm*. Three types of regression models were tested, but only the best fit is reported (negative binomial models for the first five lexemes, mixed-effect models for the final two). Gender-related differences are sparse, but not entirely absent: there is at least some proof for gender variation in lexical choice, even when keeping topic constant.

The penultimate paper of this volume focuses on ways to measure complexity in language when making a shift from complexity on the system level to complexity on the usage level. Specifically, **Benedikt Szmrecsanyi** presents three different corpus-based measures. The first of these, typological profiling, is used to arrive at syntheticity and analyticity indices for languages, contrasting analytic word tokens (function words from synchronically closed word classes), synthetic word tokens (words with bound grammatical markers), and those that are both (e.g. inflected auxiliary verbs). The second approach concerns an unsupervised method: Kolmogorov complexity relies on the basic idea that text samples that can be compressed easily (e.g. when creating zip-files) are also linguistically simple. The final, and probably most innovative measure of complexity at the usage-level concerns variational complexity. Here, the number of factors constraining variation (e.g. dative alternation in English) are measured. The more constraining factors, the more complex the language. Crucially, simply counting the *amount* of constraints is only the tip of the iceberg of ways to measure variational complexity.

The section on methodology in the usage-based framework, and this volume as a whole, is concluded by a paper on techniques for attitude measurement. **Stefan Grondelaers and Dirk Speelman** focus on a direct measure of

attitudes, namely free response tasks. In such tasks, participants are asked to list their associations with e.g. labels for language varieties. These associations can then be categorized and interpreted, a process that inevitably involves some subjectivity on behalf of the researchers. This paper verifies how the automatic classification of adjectives based on distributional semantics can help address this issue, and more generally improve on the elicitation and analysis of free response data. Two experiments on Netherlandic Dutch variation are presented relying on these “distributionally enriched free response data” (“defr”). In the first experiment, participants are asked for their associations with six variety labels (three regional accent varieties, three ethnic). The second experiment focuses on subject use of *hun*, a controversial but unstoppable “counter-standardness marker” occurring in the Netherlands, and on the less controversial emergence of periphrastic *doen*. For both experiments, results are compared to those acquired through the widely used speaker evaluation paradigm, which aims to reveal attitudes more indirectly. Amongst others, the results reveal that defr and speaker evaluation experiments access the same perceptual clusters.

Overall, the contributions brought together in this volume are indicative of the way in which cognitive linguistics has developed and diversified over the past decades. Different ways of contextualizing language in the mind, the body and the social environment have been proposed, and each of these endeavors has led to new insights on language in general and language variation and change in particular. Simultaneously, the different approaches have shed light on new problems, new challenges and new paradoxes. Time for new paradigms?

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