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## BOOK OF ABSTRACTS

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# Plenary Papers



# Speakers, usage, culture: language as a phenomenon of the third kind

Ewa Dąbrowska (Northumbria University)

Why are languages the way they are? Cognitive theories attempt to explain language structure by appealing to cognitive mechanisms, which may include general abilities such as categorization and pattern-finding skills, innate linguistic representations, or some combination of the two; functional theories, on the other hand, emphasize discourse pressures and processing limitations. While it is undeniable that both of these play an important role, many aspects of grammar are best understood by appealing to cultural processes such as language transmission, community size, exotericity, standardization and education. I argue that higher-level patterns in language are not necessarily represented in individual speakers' mental grammars, and that community grammars are typically more regular than the grammars of individual speakers. Languages belong to communities, and individual speakers "own" only parts of their language. To explain language structure, it is important to distinguish between individual grammars, the patterns found in the language as a whole, and the complex interactions between them.

# When the Ground turns into an abyss

Dirk Geeraerts (University of Leuven)

If empathy is the ability to see another person's point of view, then the ability to see another person's conceptualization as incorporating a model of one's own point of view may be called 'second order empathy'. In this talk I will explore how first and second order empathy have an impact on the notion of Ground as used in Cognitive Linguistics. Specifically, I will argue, first, that empathetic construal points to the necessity of incorporating the interlocutor as an independent conceptualizer into an intersubjective model of the Ground, and second, that the possibility of choosing between first order empathetic and second order empathetic readings of an interlocutor's utterances may introduce an irreducible interpretative aporia in the Ground.

# On parents and peers in constructional networks

Muriel Norde (Humboldt University Berlin)

Linguistic networks are a fundamental concept in construction grammars of various kinds (e.g. Croft 2001, Goldberg 2006, Bybee 2010, Traugott & Trousdale 2013), but also in other frameworks such as Word Grammar (Hudson 2007). Drawing on this (rapidly expanding) body of research, I will discuss the types of links that can be identified in networks of morphologically related nodes. I will argue that there are two main types of links: inheritance links (the “parents”), which form hierarchical structure, and lateral links (the “peers”) which link nodes on the same level of schematicity. Inheritance links relate constructional schemas (e.g. word formation schemas or inflectional schemas) to their instantiations at the micro-constructional level, whereby a micro-construction may inherit from multiple schemas (cf. Goldberg 1995). Within the category of lateral links, I will furthermore distinguish between (i) intraparadigmatic links (adapted from Booi’s (2010) paradigmatic links), i.e. micro-constructions with the same base (for either inflection or derivation), (ii) interparadigmatic links, i.e. micro-constructions that inherit from the same schema(s), and (iii) resemblance links, linking phonologically and / or semantically similar micro-constructions that are not paradigmatically related. In addition, lateral links can be observed to exist on the level of (sub-)schemas, a phenomenon termed degeneracy (Van de Velde 2014).

Special emphasis will be on morphological change, which will be recast as realignment in parts of the network. More specifically, I will explore the varying roles of parents and peers in case of massive constructional realignment (such as the loss of schemas in deflexion, or the emergence of new (sub-)schemas). Using data from particular instances of change in Swedish and Dutch (Norde 2008, Norde & Morris 2013, Norde & Trousdale ms.), I aim to show that these changes are constrained by two basic constructional properties: connectivity, i.e. the number of links which connect micro-constructions to their (multiple) parents and peers, and frequency, both at the micro-constructional level (i.e. token frequency) and at the schema level (i.e. type frequency).

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# Words, concepts, referents, and perspectives: Aspects of metaphor in discourse

Gerard Steen (VU University Amsterdam)

The cognitive-linguistic analysis of metaphor typically builds a two-dimensional picture in which metaphor is a matter of language and thought. In this talk I will argue that we need a more sophisticated approach in which distinctions are made between aspects of metaphor that have to do with metaphor in language ('words'), metaphor in thought ('concepts' and 'referents') and metaphor in communication ('perspectives'). I will present illustrations of these distinctions and their importance with reference to data from the VU Amsterdam Metaphor Corpus. The distinctions can be motivated by generally psychological considerations of discourse processing. They can moreover be subjected to a form of explicit and formally constrained semiotic analysis that is entirely compatible with the cognitive-linguistic agenda. It is the aim of my talk to demonstrate this approach to metaphor in some detail and to argue for its adoption in any usage-based data analysis of metaphor in discourse.



# Theme Session Papers: Cognitive Linguistics and Phenomenology

Organised by Ad Foolen (Radboud University Nijmegen) and Paul Sambre (University of Leuven)

Discussant: Frank Brisard (University of Antwerp)



# Intentionality. Phenomenological and cognitive aspects

Els Elffers (University of Amsterdam)

Intentionality is a key concept in Searle's speech act theory. Speech acts express a psychological state of the speaker (e.g. *assertions* express a belief, *directives* express a desire) and this psychological state is *intentional*: it is *about* something (Searle 1983). Many linguists incorporated Searle's views into their own theory, among them cognitive linguists (cf. Dirven and Verspoor (1999), Nuyts (2008)).

Through the concept 'intentionality', there is a relation between speech act theory and phenomenology as developed by Brentano and Husserl around 1900. Brentano borrowed the concept from mediaeval scholastics and developed it into a central element of his philosophical psychology. During this reintroduction, the concept acquired a new dimension in addition to *aboutness*, namely *directedness* (cf. Van Baaren 1996).

This development caused a heterogeneous application of the concept, depending on a focus on *aboutness* or on *directedness*. Heterogeneity increased by widely divergent answers to intentionality-related philosophical questions, e.g. about the alleged teleological character of intentionality or about the validity of the phenomenological method in analyzing intentional acts.

In my talk the focus will be on the role of phenomenological thought about intentionality in the important "depsychologization" of linguistics during the first decades of the 20<sup>th</sup> century. Due to insights into the intentional character of language use, the earlier view of linguistic utterances as mere expressions of the speaker's successive mental occurrences, was abandoned in favor of the view that utterances are essentially hearer-directed *acts* related to objective contents. A clear signal of this major transition is Bühler's requirement that definitions of the notion 'sentence' no longer refer to mental occurrences preceding the utterance (cf. Paul's and Wundt's "genetische Definitionen") but to their effect, the appeal made to the listener ("Leistungdefinitionen") (cf. Bühler 1918: 16).

Ironically, Searle's work is a step backwards in this respect. Although speech acts are defined in terms of their illocutionary effects, they are *at the same time* regarded as expressions of the speaker's mental states. Intentionality no longer triggers an "appeal" view of language use; the concept resurfaces only as a feature of the speaker's psychical situation, which is expressed in his utterances. Significantly, Searle only speaks about

“intentional states” not about “intentional acts”, which used to be the customary expression.

How do cognitive linguists cope with this aspect of Searle’s theory? Answers seem to be variable. One example: Nuyts (2008) reinterprets Searle’s ideas in a less “psychologistic” way, but goes not far enough to attain a fully-fledged act-oriented view of linguistic utterances.

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# A linguistic handshake with phenomenology

Ad Foolen (Radboud University Nijmegen)

Roman Jakobson's strong interest in phenomenology (see Daalder 1999) was triggered by his search for a theoretical foundation of the distinction between phonetics and phonology. Following de Saussure's (2016) general dichotomy between *substance* and *forme*, an analogical pairing should be available on the level of meaning. In other words, if phonology:phonetics = semantics:x, we need to fill in x. In Bloomfield's view, we can only do this on the basis of a scientific description of the world. As long as this description is only partially available, "the statement of meanings" will remain "the weak point in language study" (1933: 140).

The present paper aims to show that phenomenology is the proper antidote against Bloomfield's pessimism, more specifically, the version of phenomenology that stresses the central role of the human body in perception and conception, as proposed by Merleau-Ponty (cf. Sambre 2012, Krawczak 2013). It is the phenomenological world as we know it through our body, senses, and action, which is the *substance* in relation to which linguistically coded meanings should be analyzed. This view was already taken by Dutch linguists like Witte (1949) and Wils (1965), long before modern theories of embodied cognition came to the same conclusion.

Blomberg (2014)'s study on 'motion' shows that a systematic distinction between motion as experienced in the 'life-world' and motion as coded in different languages is a productive point of departure for the semantic analysis of motion expressions. In the present paper, I will follow a similar approach, focusing on the analysis of Dutch and German idiomatic expressions with *hand*, like *De handen uit de mouwen steken* 'to stick your hands out of the sleeves', German *die Ärmeln hochkrämpfen*, to give only one example of many: the hand is the most productive body part for creating idiomatic expressions. Phenomenological studies on the hand, like Depraz (2013) and Gallagher (2013), and other papers in Radman (ed.), are taken as a point of departure to fill in the x in the 'semantics:x' formula.

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# Empathetic ambiguity and phenomenological immediacy

Dirk Geeraerts (University of Leuven)

As pointed out as early as Geeraerts (1985, 1993), a major point of appeal of the phenomenological tradition for cognitive linguistics is its suggestion of an epistemological immediacy that avoids the pitfalls of the Cartesian cogito. With the growing attention in cognitive linguistics for the social nature of language, this overall attractiveness may be further focused on the cultural and intersubjective aspects of the phenomenological tradition: see e.g. Sambre (2012) on the cultural orientation of Merleau-Ponty's conception of phenomenological embodiment. Continuing that line, the present talk will focus on the phenomenological conception of empathy, which in recent years has been revived under the influence of mirror-neuron research (see Stueber 2006), and which - in contrast with a.o. an analogy-based theory of empathy - suggests an unmediated, transparent presence of the Other.

However, the present talk will argue that the systematic ambiguities triggered by second order empathy (a pervasive but understudied phenomenon) are a warning against too much optimism about the intersubjective immediacy of empathy. If empathy is the ability of Self to take into account Other's point of view, then the ability of Self to take into account Other's point of view as including a view of Self (and specifically, as including an empathic view of Self) may be characterized as 'second order empathy'. Second order empathy exists in different mental modes (visual, cognitive, verbal), but specifically, verbal second order empathy leads to systematic ambiguities of interpretation, at diverse levels of linguistic meaning. The paper, then, will explore the consequences of these ambiguities for a phenomenological interpretation of intersubjectivity.

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# Interaction and intersubjectivity: the phenomenology of multimodal co-constructions in instrumentals Submitted for panel on cognitive linguistics and phenomenology

Paul Sambre (University of Leuven)

General objective - In this paper we try to relate some fundamental phenomenological considerations, older and more recent, about intersubjectivity and the perceptive status of material objects, to recent cognitive linguistic work in multimodal construction grammar (MM CxG).

Framework - This work in construction grammar claims the multimodal nature of constructions: constructions contain a verbal layer on top of which other, paraverbal or non-verbal (visual) layers, like prosody, gesture, facial expressions and enacted object manipulation may contribute to building rich conceptual structures. Furthermore, these multimodal constructions may be distributed over different conceptualizers involved in jointly speaking about a shared phenomenal world.

Data - We will elaborate on the conceptual status of words and objects by means of which otherwise private conceptualizations acquire intersubjective status. As human agents manipulate or conceive of objects, like instruments used for cutting and breaking other objects, the body, through its posture and gestures, occupies a pervasive conceptual position. In this rich phenomenological and linguistic view, real-life usage events add experience to the pre-existent meanings of language, when speakers,, for instance, creatively select argument structures for instrumental roles (DuBois 2003) or exploit different conceptual entities for instrumentals, in varied constructions used in perceiving and manipulating these objects, but also through the selection of construction types, which interacts with how these speakers anticipate and respond to their interlocutor involved in the action and talk about (represented) action (Lerner 2002, Ford & Thompson 1996).

Method - The phenomenological tradition in philosophy, where these notions of body, interaction and intersubjectivity have been thoroughly discussed, by Merleau-Ponty (1969), Alfred Schutz (2011) or, more recently, interaction theory (Gallagher & Zahavi 2008), serves both as an input and endpoint to a reflection on multimodal grammatical co-constructions. This phenomenological tradition, though, has been largely ignored by cognitive linguistics.

Expected result - If grammatical descriptions, for instance, empirically reflect the intersubjective multimodal event in which constructions are set up, and if the material, corporeal and dialogic setting does affect the selection of constructions used for building co-conceptualizations of usage events through language, then our linguistic

conceptualization of the world cannot be detached from a phenomenological account of bodies in interaction.

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## Regular Session Papers



# Flies Flying around Lollipops: Metaphorical Conceptualization of Islamic Hijab in Iran

Mohsen Bakhtiar (Eötvös Loránd University Budapest)

The proper observance of Islamic hijab is a serious issue for political-religious hardliners in Iran. The concern revolves around the extramarital sexual attraction-sexual arousal bond as the basis of individual and social corruption as well as the threat of cultural metamorphosis through following a western lifestyle. In order to deal with the problem, the religious fanatics resort to metaphorical language, among other measures, to persuade Iranian women to modestly dress in public. The present paper, based on Kövecses's (unpublished manuscript) theory of metaphor in context, explores the role of contextual factors involved in the formation of hijab linguistic metaphors used in pro-hijab billboards and similar hijab-encouraging expressions. The frame analysis of HIJAB revealed a tripartite classification based on which the hijab status of women is evaluated. Moreover, analyzing hijab metaphors indicated that the metaphorical conceptualization of women as FLOWER, PEARL, and BIRD act more successfully in persuading a larger number of women to veil. On the other hand, WOMEN AS CANDIES, or WOMEN AS SOLDIERS attracts a smaller category. Finally, the metaphorical patterns represent the context-dependency of metaphorical meaning, especially, the contextual role of ideology and entrenched conventional conceptual metaphors in the production of novel metaphors as Kövecses's theory suggests.

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# Modeling Language Change with Construction Grammar

Jóhanna Barðdal (Ghent University)

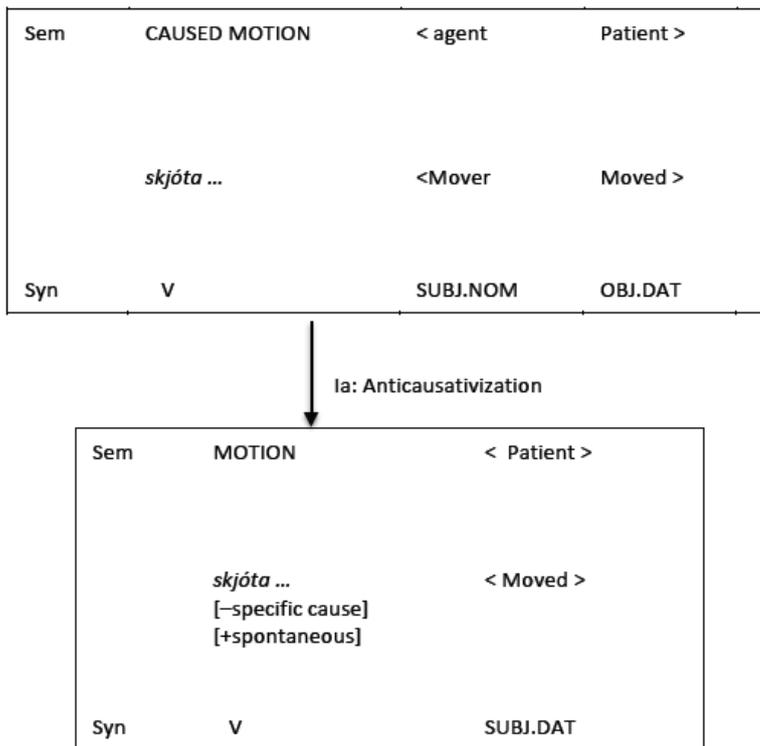
In contrast to typologically well-known causative–anticausative pairs where a derived anticausative has a nominative subject, Icelandic exhibits anticausatives where the subject unexpectedly maintains the object case of the causative (with the direction of the derivation being evident from the case marking of the arguments).

- (1a) *Búnaðurinn ... skaut **bátnum** upp eftir að skipið sökk.* Nom-Dat  
Equipment.the.NOM shot boat.the.DAT up after at ship.the sank  
'The equipment ... shot the boat back up after the ship sank.'
- (1b) *Öllum skaut upp úr ólgunni fyrir rest.* Dat  
all.DAT shot up from swell for rest  
'Everybody came to the surface out of the swell in the end.'

On traditional and generative accounts of grammar, such alternations would be conceptualized as a rule deriving one from the other synchronically (Zaenen & Maling 1990). On a constructional approach, however, the two would be regarded as separate argument structure constructions standing in a systematic relation with each other, with the intransitive denoting an event that has occurred spontaneously with no causer, while the transitive is a causative with an explicit agent (Haspelmath 1997, *inter alia*), shown in Figure 1. (based on Sandal 2011, who adopts the formalism of Goldberg 1995). The verb *skjóta* means 'emerge to the surface' instead of 'shoot up'. All these properties must be specified as inherent features of this constructional alternation.

Alternations of this type are not confined to Modern Icelandic, but have been documented in several early/archaic Indo-European languages such as Old Norse-Icelandic (Westvik 1994, Sandal 2011, Ottósson 2013), Latin (Matasović 2013), Baltic and Slavic. An ongoing change is found in Icelandic where the object case marking of the anticausative subject becomes nominative; alternations of this type also disappeared in Latin, long before the breakdown of the case system.

Figure 1: The Causative–Anticausative Relation between Nom-Dat and Dat-only



The two constructions are connected with an inheritance link, here labeled *Ia* for “Inheritance” and “Anticausative”, making anticausative inheritance links on par with other types of links that Goldberg posits, like instance/taxonomy, subpart, polysemy and metaphorical links. Since constructions have multiple inheritance, the Anticausative is also an instance of the ordinary intransitive construction, which means that it inherits properties from that construction as well as from the transitive construction. The intransitive construction, in turn, consists of several subconstructions, namely Nom-only, Acc-only, Dat-only and Gen-only (Barðdal 2009).

Figure 1 above models an earlier stage of the Germanic languages, although the alternation between the causative and this anticausative is not productive anymore, representing a development from a systematic alternation to a stage where no link between the two constructions is found. Instead, one is an instance of the transitive construction and the other of the intransitive construction. The change from Proto-Germanic to Modern Icelandic can thus easily be modeled through a simple disappearance of a link from the grammar.

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# A usage-based model of early grammatical development

Barend Beekhuizen (Leiden University)

A striking aspect of language acquisition is the difference between children's and adult's utterances. Not only are many functional elements (determiners, auxiliaries) absent from early productions, we also encounter verb-valency patterns more restricted in scope than typically encountered with adults.

Although much research in the usage-based tradition has been devoted to the limited productivity of early grammatical representations (see Ambridge & Lieven 2012: ch. 6 for an overview; we could call this the limitedness of the *paradigmatic* dimension), the representations and processes yielding the limited verb-valency patterns of early language production have received less attention (which we could call the *syntagmatic* dimension). This research aims to fill that theoretical gap, using a computational operation of the learning processes.

Building on earlier proposals (Schlesinger 1971, Braine 1976), and inspired by Langacker's (2009) exposition of language-acquisition-as-processing, we propose a computational model that acquires form-meaning pairings from noisy input data. We evaluate the model's performance both on its ability to understand novel sentences, and, crucially, to produce utterances on the basis of unseen semantic representations. We show that both the increasing length and productivity found in children's productions can be simulated.

To the best of our knowledge, this is the first computational model that both involves symbolic pairings of phonological and semantic material, and is able to simulate the gradual development of children's grammatical productions. Moreover, whereas many other models of grammatical acquisition assume lexical knowledge to be in place, our model starts with an empty set of linguistic representations. On the linguistic-theoretical side, the proposed mechanisms form a further specification and formal operationalization of Langacker's (2009) view on language acquisition and fill a blind spot of much usage-based theorizing, namely the syntagmatic development.

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# Two types of Dutch intransitive verbs? The role of attested data

Maaïke Beliën (Delft University of Technology)

In line with the Unaccusative Hypothesis (Perlmutter 1987, Burzio 1984), Dutch is often assumed to have two types of intransitive verbs: unaccusatives, such as *vallen* ‘fall’, and unergatives, such as *werken* ‘work’. The two types of verbs are considered to show different syntactic behavior, as illustrated by examples (1)-(3) from Alexiadou et al. (2004: 9). Such data support the idea that past participles of unaccusative verbs cannot occur in impersonal passives, they take *zijn* as their auxiliary in the perfect tense, and they cannot be used as adjectives before a noun. Past participles of unergative verbs, on the other hand, can occur in impersonal passives, they take *hebben* as their perfect auxiliary, and they can be used as attributive adjectives.

- (1) *Er wordt \*gevallen/gewerkt*  
there is fallen/worked
- (2) *De jongen is gevallen/\*gewerkt*  
the boy is fallen/worked
- (3) *de gevallen/\*gewerkte jongen*  
the fallen/worked boy

A number of recent studies, however, have presented attested examples, mainly collected from the Internet, that are problematic for these generalizations. Primus (2011) and van Schaik-Rădulescu (2011), for example, provide examples of Dutch impersonal passives with verbs that have been classified as unaccusatives, cf. e.g. (4) from van Schaik-Rădulescu (2011: 71). Beliën (2012) discusses examples of auxiliary choice with Dutch manner of motion verbs that cross-cut the unaccusative-unergative distinction. Elffers et al. (2012), finally, present empirical data to support their intuition that some unaccusative verbs are quite restricted in their use as attributive adjectives, such as *#de gestopte man* ‘lit. the stopped man’.

- (4) *Rond km.38 zat ik iets meer achterin het peloton toen er vlak voor mijn neus gevallen werd.*  
‘At about km 38 I was riding a bit farther in the back of the pack when there was a fall right in front of my nose.’

These studies appear to have developed largely independently from each other, each focusing on only one of the grammatical constructions deemed relevant to the

Unaccusative Hypothesis. With their use of attested data, however, the studies represent a methodological departure from earlier work in this area, which relied on constructed examples with grammaticality judgments (cf. (1)-(3) above). On the basis of a review of the recent work, this presentation aims to identify the implications of this methodological departure for studying linguistic phenomena related to the Unaccusative Hypothesis.

# Collexemes, constructions, and polysemy: *zullen* ('will'/'shall') and *gaan* ('be going to')

Ronny Boogaart & Robbert van Etten (Leiden University)

Right from the start of cognitive linguistics, polysemy has been a major concern, and at the same time a major claim, of studies dealing with modal verbs. As such, cognitive linguistic accounts of modals have always focused on the conceptual-semantic side of modality. The more recent advance of construction grammar may be seen as complementary to such purely semantic accounts. In this framework, different functions of a modal verb are ascribed to systematic differences in the linguistic context in which it is used. These larger patterns, or modal constructions, act as constraints on the polysemy of the modal verb and are themselves not necessarily polysemous at all. But how can we determine all the constructions that a given modal verb is a constituting part of, and what exactly does it tell us about the meaning of the verb?

In this talk, we investigate to what extent the method of collocation analysis is capable of answering such questions. The case in point is constituted by the Dutch verbs *zullen* ('will'/'shall') and *gaan* ('be going to'). A classic (recently revived) discussion concerns the question whether *zullen* is an auxiliary of future time or a modal verb. Since both uses are attested, it seems to be a school book example of polysemy, but the Dutch linguistic tradition consistently argues in favour of a monosemous analysis in which *zullen* is considered a modal verb expressing epistemic modality. As for *gaan*, it has been argued that it is developing from a motion verb to a form expressing future time and in the latter function it may compete with *zullen*. Therefore, the two verbs make interesting candidates for a more specific distinctive collexeme analysis. We present the results of such an analysis conducted in the written language Corpus Hedendaags Nederlands (Corpus of Contemporary Dutch) of the Instituut voor Nederlandse Lexicologie (INL), available on-line since 2014. It turns out that there is hardly any overlap between the infinitives (collexemes) attracted to *zullen* and *gaan*. A further interesting outcome is that the collexemes of *zullen* and *gaan* differ significantly depending on tense and person/number of the finite form.

In the final part of our talk we will reflect on the relationship between the collexemes that result from our corpus-based research, and the issues that are central to the more theoretical discussions about modal verbs: What, if anything, does collocation analysis tell us about the relationship between the different readings of *zullen* and *gaan*, and more generally about the alleged polysemy or monosemy of modal verbs?

# The pluralization of presentational *haber* in Caribbean Spanish. A study in Cognitive Construction Grammar and comparative sociolinguistics

Jeroen Claes (University of Antwerp)

In standard Spanish, presentational *haber* ('there-to-be') is an impersonal construction: it only takes the third person singular verb-ending and its nominal argument, e.g. mangos 'mangoes' in (1), behaves as a direct object. However, there seems to be a growing tendency to establish verb-agreement with the NP (cf. D'Aquino-Ruiz, 2008), which is known as 'the pluralization of *haber*'. From a construction-grammar perspective (cf. Goldberg 1995, 2006), this could indicate that the singular construction (<AdvP *haber* Object>) coexists with a pluralized schema (<AdvP *haber* Subject>). I hypothesize that in Caribbean Spanish, this alternation constitutes an ongoing linguistic change from below. Additionally, I present the hypothesis that *haber* pluralization is constrained by three general cognitive factors: markedness of coding, statistical preemption, and structural priming.

(1) Sí, *había* mangos (SJ14H22 /SJ1672).

'Yes *there were*<sub>sing</sub> mangoes.'

(2) En mi época *habían* unos veinticinco, treinta alumnos por aula (LH01H22/LH17).

'In my days, *there were*<sub>plur</sub> some twenty, thirty students per classroom.'

To evaluate these hypotheses, I present a variationist analysis. In three recent samples of the varieties of Havana, Santo Domingo, and San Juan, I trace the grammatical and social distribution of the alternation, in order to establish whether and to which extent the variation points to an ongoing linguistic change from below and an alternation involving two variants of the presentational construction with *haber* that is constrained by these three general cognitive factors.

Overall, the results indicate that speakers of Caribbean Spanish pluralize the verb in similar proportions (Havana: 44.6%, N=934/2093; Santo Domingo: 46.7%, N=859/1841; San Juan: 41.4%, N=682/1649). The comparative sociolinguistic analysis (involving mixed-effect logistic regression, conditional inference trees, and random forests) displays little variation when it comes to grammatical constraints: in the three capitals, the pluralization is favored by NPs that refer to typical action-chain heads, the use of the pluralized variant in prior discourse and all verb tenses, minus the present and

preterit. The sole difference is that, only in San Juan does the absence of negation support pluralization.

By contrast, the associations between *haber* pluralization and social groups vary more significantly according to the respective speech communities. In Havana, the alternation is linked to lower social class. In Santo Domingo, *haber* pluralization expresses middle-class membership. In San Juan, finally, the pluralization of *haber* is associated to female gender. The results also suggest a significant interaction between age and social class, in the sense that younger speakers appear to associate *haber* pluralization to lower social class, whereas it is a typical feature of middle-class speech among older speakers. For none of the three communities, the data display style-shifting.

These results suggest that the pluralization of *haber* constitutes an advanced change from below (Labov, 2001: 308-309), which is constrained by the three general cognitive factors.

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# A reassessment of the diachrony of the auxiliary selection alternance in Dutch verbal clusters with a modal

Evie Coussé (University of Gothenburg) & Freek Van de Velde (University of Leuven)

Dutch features a conspicuous alternance in its auxiliary selection in clusters with a modal verb: both (1) and (2) occur.

(1) *Hoe heeft dat kunnen gebeuren?*  
how has that can happen  
'How could this have happened'

(2) *Hoe is dat kunnen gebeuren?*  
how is that can happen  
'How could this have happened'

The reason behind this variation is that in variant (1), the perfective auxiliary is selected by the modal (*kunnen* 'can'), which in Dutch invariably takes *hebben* ('have') as its auxiliary when it occurs in isolation, see (3), whereas in variant (2), it is the main verb *gebeuren* ('happen') that selects the perfective auxiliary. *Gebeuren* is an unaccusative that selects *zijn* for its perfect tense in isolation, see (4).

(3) *Hij heeft het gekund*  
he has it can:PTCP  
'He was able to do it'

(4) *Het is gebeurd*  
it is happened  
'It happened'

In the literature, it has been claimed that (2) is an innovative variant, slowly gaining ground on (1) (Van der Horst 1998, Van der Horst & Van der Horst 1999, Draye & Van der Horst 2006, Van der Horst 2008). Remarkably, this would mean that the South, where variant (1) is predominant, is 'ahead' of the North, where variant (2) is preferred. In our talk, we want to critically look at the diachronic evidence supporting this claim. On the basis of existing observations, and of additional diachronic corpus research (using the corpus of Coussé 2010), we argue that the evidence for the scenario described above is not very solid. We propose an alternative, construction-based account, that fits better with the diachronic data. In essence, this account entails that both variants are

the result of the extension and integration of different source constructions, but each of the variants resolves the conflicts arising from the integration in a different way.

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# Gender-neutral or not: feminine forms as self- reference in Spanish

Barbara De Cock (Université catholique de Louvain)

The Spanish personal pronoun paradigm allows for a typologically rather rare (Siewierska 2004) gender distinction in the 1<sup>st</sup> person plural, viz. plural *nosotras* 'we' refers to an all-female group (instead of *nosotros*). In addition, the indefinite pronoun *uno* ('one'), which is often associated with speaker-reference, also has a feminine counterpart *una*. Whereas the grammatical tradition is quite unanimous as to the use of *nosotras* by women, the use of *una*, however, has been described in a more nuanced way, with some authors highlighting regional differences (Butt & Benjamin 1988, NGLE 2010) or differences related to the degree of self-reference (Butt & Benjamin 1988) or expression of the own opinion (NGLE 2010:1132). I will argue that the use of feminine forms for self-reference is not only related to the sex of the speaker and to self-reference, but also to the conceptualization she wishes to convey, relying crucially on the concepts of subjectivity and intersubjectivity (Benveniste 1966, Lyons 1994, Traugott 2003)

In this paper, I will analyze the use of both *nosotras* and *una* in contexts where a female identity is particularly at stake, namely conversations, debates and blogs on women's rights or other topics that are typically associated with women, such as pregnancy. From this analysis, it will become clear that women may refrain from using the feminine forms in view of certain conceptualization choices, namely when their female identity seems less at stake or, crucially, to achieve an intersubjective effect when affiliation with male interlocutors is being sought.

In the second place, I will look into the differences between *nosotras* and *una*, as it seems that the more direct speaker inclusion realized by 1<sup>st</sup> person plural pronoun *nosotras* makes it less likely for women to refrain from using the feminine form. The vaguer speaker inclusion realized by indefinite *uno/una*, on the contrary, seems to license more easily the use of masculine *uno*, even for reference to a female speaker or group.

Thus, I will show that the use of feminine pronouns is not only determined to the sex of the speaker, but that female speakers may conceptualize different subjective positions and create intersubjective effects through pronoun choice.

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# Parallel sources, different outcomes: a corpus-based study of the ‘far from X’ construction in Dutch, English and French

Hendrik De Smet (University of Leuven), Kristel Van Goethem (Université catholique de Louvain) & Gudrun Vanderbauwhede (Université de Mons)

In language change, parallel source constructions can undergo cross-linguistically divergent developments. The focus of this paper is on one such case, the development of degree modifiers from markers of physical distance. Specifically, we compare the histories of Dutch *verre van*, English *far from* and French *loin de* – all three consisting of an adjective/adverb and a preposition, and all three meaning ‘far from’.

The first purpose of our study is to analyze to what extent the parallel source constructions have developed degree modifying uses. Data from the BNC show that English *far from* can be used as degree modifier with gerunds and adjectives (cf. De Smet 2012).

- (1) this competition, **far from** resolving the problem of security, in fact exacerbates it (BNC)
- (2) Nutty was **far from** sure, and Bidy looked doubtful. (BNC)

Data from the COW corpus (Schäfer & Bildhauer 2012) show that Dutch *verre van* has undergone constructional specialization: it acts as an adverbial downtoner in more than 87% of the cases (3), whereas its formal variant *ver van* is exclusively used to indicate spatial or metaphorical distance (4). Moreover, contrary to English *far from*, *verre van* can occur without a complement (5), signaling an even more advanced degree of adverbialization.

- (3) Nee, dit is **verre van** plezierig. (NLCOW 2012) ‘No, this is far from pleasant.’
- (4) Iquitos ligt niet zo **ver van** Brazilië en dat is te merken. (NLCOW 2012) ‘Iquitos is not so far from Brazil, and that shows’.
- (5) Ik zeg niet dat hier alles beter is, **verre van**, zou ik haast zeggen. (NLCOW 2012) ‘I don’t say that everything is better here, far from (it), I would almost say.’

Contrary to Dutch, French *loin de* combines the spatial, metaphorical (6) and degree modifying use (7). However, syntactically *loin de* does not act as an adverb, but always functions as a complex preposition (with nominal complements), even if used with a downtoning function (7).

- (6) Nous voilà **loin de** la mondialisation heureuse ! (FRCOW 2011) ‘Here we are far from happy globalization!’
- (7) Or, c’est **loin d’être** le cas. (FRCOW 2011) ‘But this is far from being the case.’

As a second objective, we aim to account for these synchronic differences by exploring the dia-chronic pathways taken by  $[[far\ from]\ [X]]_{YP}$   $[[ver/verre\ van]\ [X]]_{YP}$  and  $[[loin\ de]\ [X]]_{PP}$  and by examining if their diachronic development into adverbial /prepositional downtoners can be seen as an instance of (grammatical) constructionalization (Traugott & Trousdale 2013). For this purpose, we will carry out an in-depth diachronic corpus study, based on data that we have already compiled from EEBOCorp for English, *Frantext* for French and the KB newspaper archive for Dutch. These diachronic data will be interpreted in terms of the parameters proposed for grammatical constructionalization by Traugott and Trousdale (2013), that is productivity, schematicity and compositionality.

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## Corpora

BNC = British National Corpus: <http://corpus2.byu.edu/bnc/>  
COW = Corpora from the Web: <http://hpsg.fu-berlin.de/cow/colibri/>  
EEBOCorp: <https://lirias.kuleuven.be/handle/123456789/416330>  
Frantext: <http://www.frantext.fr/>  
KB: <http://kranten.kb.nl/>

# Language is a bio-cultural hybrid: a cross-linguistic study of English and Mandarin expressions of the Self from a cognitive point of view

Simon Devylder (Jean Moulin University Lyon)

How do people structure abstractions? Time, for instance, is constructed through analogical extensions of the more experience-based domain of space and its conceptualization varies from one culture to another<sup>1</sup>. This paper will focus on an equally ubiquitous abstraction we live through: the concept of Self. We collected two sets of metaphorical expressions people frequently use to refer to themselves in English and in Mandarin Chinese. On the one hand the set of English expressions show that its speakers refer to the Self as a whole made of parts. For instance an entity whose unity can be damaged (*I'm breaking to pieces ; I'm falling apart*) or preserved (*I'm whole again ; A man of integrity*). On the other hand Mandarin speakers refer to the Self as an “inside” and an “outside” that can be consistent (表里如一, *Biao li ru yi*: “outside inside like one” ; 秀外慧中, *Xiu wai hui zhong*: “beautiful outside wise inside”) or inconsistent (表里不一, *Biao li bu yi*: “outside inside not one” ; 外中干, *wai qiang zhong gan*: “outside hard inside dry”). This cross-linguistic study reveals that when speakers of both groups express a continuous relation (whether *complete* or *consistent*) between the constituents of Selfhood (parts/whole ; inside/outside) they sense their Self as being harmonious, whereas when the relation is discontinuous (whether *incomplete* or *inconsistent*) they experience their Self as being chaotic. We extend this specific analysis to the wider linguistic debate of language universals versus linguistic relativity, by arguing that language is a bio- cultural hybrid<sup>2</sup>: an embodied symbolic system shaped by the human biological machinery from which it emerges and also a vehicle for the worldview of a given culture, constraining its speakers to select culture-specific linguistic strategies to experience their Self. From this point of view we first propose the hypothesis that English and Mandarin speakers both refer to the common primitive image schema /SELF -CONTINUITY IS GOOD- SELF-DISCONTINUITY IS BAD/ because it was

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<sup>1</sup> Majid, A., Gaby, A. & Boroditsky, L. (2013). Time in terms of space. *Frontiers in Psychology*, 4(554), online

<sup>2</sup> Evans Nicholas and Levinson Stephen C., (2009). “The myth of language universals: Language diversity and its importance for cognitive science”. *Behavioral and Brain Sciences* 32: 429-492.

incorporated at a pre-linguistic level from an embodied experience undergone at an early stage of childhood, where, to cope with the feeling of helplessness, an infant finds in the mirror image a promise to be a consistent, pulled-together whole<sup>1</sup>. Secondly we explain that it is well- identified cultural characteristics which encourage English speakers to refer to themselves as a whole made of parts and Mandarin speakers to comprehend Selfhood in terms of consistency.

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<sup>1</sup> Johnston Adrian, "Jacques Lacan", *SEP* (Summer 2013 Edition), Edward N. Zalta (ed.)

# Deconstructing a verbal illusion: the ‘No X is too Y to Z’ construction and the rhetoric of negation

Egbert Fortuin (Leiden University)

Consider the following sentences which both have the structure NO X BE TOO Y TO Z:

- (1) No head injury is too trivial to be ignored.
- (2) No mountain is too high to climb.

At first glance we seem to be dealing with the very same construction, but closer scrutiny reveals that the two sentences get a very, even diametrically opposed, inference, namely that the situation expressed by the infinitive Z *cannot* or *should not* be realized (1) or *can* or *should be* realized (2). It is usually assumed that sentences such as (1) are incorrect (grammatical mistakes) but get a coherent interpretation because of shallow processing, and because of pragmatic factors, which overrule semantics and syntax (e.g. Wason and Reich 1979). In this paper I argue that this analysis is incorrect and that (1) can be seen as an instance of the negative ‘No X is too Z to Y’ construction, which is a sub-construction of the abstract ‘No X is too Y to Z’ construction (cf. the notion of ‘family of constructions’ given in Goldberg and Jackendoff 2004). I will show that in contrast to the negative sub-construction, the meaning of the positive sub-construction can be compositionally derived. Nevertheless, the negative construction can be seen as conventionalized construction (form-meaning unit) that has a transparent (i.e. linguistically analyzable) syntactic structure that can be linked to and motivated by other constructions. As I will show, the occurrence of negative ‘No X is too Z to Y’ construction has to do with the rhetorical function of the infinitival verb in these sentences, and the need to express particular negative information by a form-meaning element. As such, my analysis stresses the importance of the rhetorical dimension of constructions (cf. Verhagen 2005).

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# Predicting the dative alternation in early modern Dutch

Tim Geleyn & Timothy Coleman (Ghent University)

Up until the late Middle Dutch period (1500 AD), the dative case was the standard way in Dutch of marking the recipient argument in ditransitive scenes with various verbs of giving and verbs of semantically related verb classes. Sentence (1) below provides an example with the typical dative marker *n*.

- (1) Mer men beval            hem den gilden. (*Utrechtsch-Hollandsche jaarboeken*, 1481-1483)  
but they consign.PST him the guilds  
“But they consigned him to the guilds.”

By the start of the early modern Dutch period (from 1500 onwards), the dative/accusative distinction had already eroded (Van der Horst 2008: 578), and was eventually lost. In the above mentioned ditransitive contexts, the locative preposition *aan* (which is cognate with English *on* and German *an*) was adopted as recipient marker, see e.g. (2) for an early 17<sup>th</sup>-century example.

- (2) ... dat ... het lichaem wederom sij    aen    den vrinden gaeven. (*Achilles en Polyxena*, 1600)  
that the body back they AAN the relatives give.PST  
“... that they returned the body to the relatives.”

This prepositional construction was fully sanctioned by contemporary grammarians in the 17<sup>th</sup> century (Weijnen & Gordijn 1970). From that period onwards, many ditransitive verbs alternate between the double object construction (DOC, with zero-marked recipient argument) and the prepositional construction with *aan* – a phenomenon commonly described as the ‘dative alternation’. The choice between these two largely functionally equivalent argument structure constructions is nevertheless not random, as has been shown in e.g. Van Belle & Van Langendonck (1995) and Coleman (2009), or for the present-day English dative alternation in Bresnan (2007). In this paper, we would like to determine to what extent the choice between both constructions in the earlier periods was determined by the same (kinds of) factors known to determine the dative alternation today. On the basis of a self-compiled corpus of literary prose (1600-1650), we will perform a logistic regression to assess the strength and predictive power of various explanatory variables, including semantic parameters (e.g. semantic class of the verb, animacy of the arguments), formal parameters (e.g. length of theme and recipient) and discourse parameters (e.g. givenness of theme and recipient). In this way, we will try to provide new insight into the different factors at

work in verb pattern alternations, and reveal possible diachronic shifts in their relative weight.

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# What remains? A constructivist examination of verbs in aphasia

Rachel Hatchard & Ruth Herbert (University of Sheffield)

Verbs commonly present challenges for people with aphasia (Links et al. 2010). Much research in this area has addressed verbs as single words (see Webster & Whitworth 2012) and studies examining verbs in wider structures are mostly underpinned by rule-based, generative theory (e.g. Bastiaanse & Thompson 2003). There appear to be no constructivist characterisations of verbs in aphasia.

In the constructivist view, verbs are closely linked with the constructions they are produced in through, for example, semantic association and frequency effects. In this approach, language is acquired from the input, beginning with single-word and item-based constructions, before generalisations are made to form more schematic abstractions of these items (Ambridge & Lieven 2011). Accordingly, verbs are acquired in piecemeal fashion with each verb developing in its own time-scale rather than full mastery of a verb being achieved outright (Tomasello 1992). Such characterisations in acquisition raise questions about verbs in aphasia: which verbs remain and with what level of abstraction? Also, how might these be influenced by frequency levels in the input? Since more frequent items should be more entrenched, they may be easier to retrieve and perhaps more resilient to loss. This would make them likely candidates for retention and relatively easy to access by people with aphasia.

This study examines the verbs produced in Cinderella narratives by three adults with aphasia, including one PATSy database participant (Lum et al. 2012). Specifically, it investigates (1) the verb types (lemmas), (2) verb forms (tokens) and (3) the constructional combinations in which verbs are produced. Particular attention is paid to productivity levels and any link with frequency (in the Spoken British National Corpus, Davies 2004-). Comparisons are also drawn with a group of twelve non-aphasic speakers narrating the same story.

Preliminary results indicate that the verbs produced are indeed piecemeal and mainly limited to a small number of concrete forms and constructional combinations. Also, there are links with frequency at all levels (type, form, combination). These initial findings support a constructivist approach and thus show how this could offer fresh insight into verbs in aphasia.

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# Interactional shifts between the three terms of address in everyday situations in Chilean Spanish

Kris Helincks (Ghent University)

This lecture focuses on the negotiation and variation of the three terms of address (ToAs) in ongoing interaction in Chilean Spanish. The Chilean address system contains three pronominal ToAs with corresponding verb forms: *ustedeo* (*usted*+3<sup>rd</sup> p.sg.), *tuteo* (*tú*+2<sup>nd</sup> p.sg.) and *voseo* (*vos*+archaic 2<sup>nd</sup> p.pl.). Since the 1960, this threefold system undergoes a linguistic change with an increasing use of verbal *voseo* opposed to a persistent stigmatization of pronoun *vos* (Torrejón 1986). This evolution has recently prompted some sociolinguistic studies which supply the first systematic empirical data on familiar *voseo* vs. normative *tuteo* (Stevenson 2007, Rivadeneira 2009, Bishop & Michnowicz 2010, Helincks 2012). As a natural consequence of this linguistic change in progress, shifts between these ToAs are common, even within the same interaction. Moreover, Chilean Spanish characterizes a ‘*usted* of tenderness’ with a specific pragmatic use and meaning. Despite the common practice of interactional shifting between the three ToAs in Chile (2010: 134-135), the above mentioned studies comment only anecdotally on these shifts or explain them unsatisfactorily as ‘free’.

In this lecture I present quantitative results of a sociopragmatic-oriented research on this topic. The data come from a corpus of spontaneous conversations in everyday private and public situations. Social, relational and situational factors are analysed, as well as the influence of normative use, *facework* and identity construction. The following research questions will be answered: how frequent are shifts between the three ToAs within an act, intervention, exchange or conversation between two interlocutors?; which shifts are most common?; do some situations trigger more shifts than others?; do age (difference), gender (difference) and type of relationship of interlocutors influence the amount of shifting?; do certain shifts relate to specific *facework* strategies?; and, does an individual address variation system express a particular social identity? The analysis contributes to how contextual, pragmatic and discursive factors determine or favour interactional negotiation and variation of ToAs.

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# Use of Parallel Texts as a New Approach to Spatial Cognition: The Case of English and Czech

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Prepositions have been a well-investigated area in cognitive linguistics, with already quite a number of studies addressing the conceptual or constructional aspect of their use (Lakoff 1987, Tyler and Evans 2003, among others). However, most of these studies are based on either intuition or (a comparison of) mono-lingual corpora at the best. In view of this gap, we propose an alternative methodology of investigating how speakers of different languages verbalize their understanding of space in the *same* usage event. We suggest to look at the case of English *down* and its Czech counterparts by using the first chapter of *Alice in Wonderland* and its four Czech translations as our research material.

One of the most striking finding that the parallel texts uncovered are discrepancies in the distinction of *static* and *dynamic* terms in English and Czech (Dušková 2006), i.e. whether the trajector in a conceptual scene is stationary or in motion. What is perceived as *dynamic* in English is, in some cases, expressed by *static* preposition in Czech. While English uses *down* to code both static and dynamic relations, in Czech we observe a functional split between *s* (literally 'from'), *po* (literally 'onto') in dynamic terms, and *v* (literally 'in') in static terms. Moreover, we observe that in Czech, a spatial relationship may be realized by constructions at the morphological level (inflections in particular), which serves the semantic function of a preposition. English, on the other hand, does not take advantage of similar constructional means for verbalizing a spatial relationship.

The study further revealed that discrepancies occur even in within-language processing, as the four translations ranging from 1902 to 1961 expose a great variety in coding the same concepts. This supports the notion that meaning is construed dynamically, that is, the structures are "continually evolving" (Langacker 1987). This study therefore also sheds light on how the degree of entrenchment rationally increases prototypicality of symbolic units (Langacker 1987).

We conclude that our study reveals the radically conventional nature of grammar (Croft 2001), especially how language utilizes available constructional means to code spatial relationship. We in addition hope to show the usefulness of parallel texts as a new methodology in the study of spatial cognition across languages.

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## Appendix

(1) Chlapec slezl se stromu. (Dynamic)  
The boy climbed-3FIN down-PREP the tree.

(2) Pluli jsme po proudu Temže. (Dynamic)  
We-NS sailed-1FIN down-PREP the Thames-OBL.

(3) Je nyní nízko na společenském žebříčku. (Static)  
Now-ADV she-NS is-3FIN deep-ADV down-PREP the social ladder-OBL.

# The polysemy of the Spanish verb *sentir*: a Behavioral Profile analysis

Marlies Jansegers, Clara Vanderschueren & Renata Enghels (Ghent University)

As for other linguistic fields, within the area of semantics several authors have been arguing for the need to pursue corpus-linguistic methods in order to reduce the share of subjective interpretation (Glynn 2010). In this talk, we propose to use the ‘behavioral profile’ (BP) (Gries 2010) in order to disentangle the intricate polysemy of the Spanish perception verb *sentir* (‘to feel’). Indeed, just like the more-studied ‘p rototypical’ perception verbs *ver* (‘to see’) and *mirar* (‘to look’), *sentir* shows an ample gamut of semantic uses, in various syntactic environments, ranging from purely physical perception (1), over cognitive perception (2) and emotive meanings (3), to a rather discursive use (4):

- 1) Ella *siente* la mano de Tomasa.  
‘She *feels* Tomasa’s hand.’
- 2) Para que *sintieran* que su poder es en sí mismo frágil.  
‘So that they could *sense* that their power is in itself fragile.’
- 3) Indalecio *sintió* cierta ternura [...] por aquella chica.  
‘Indalecio *felt* a certain tenderness for that girl.’
- 4) *Lo siento*, señor, pero [...] me encontraba un poco despistada.  
‘*I am sorry*, Sir, but I was a bit distracted’

The BP approach starts from a fine-grained manual annotation of a large number of syntactic, morphological, semantic and pragmatic variables, called ID-tags. Subsequently, the frequency data for each ID-tag per (predefined) semantic meaning are processed through various kinds of statistical analyses (mainly hierarchical agglomerative cluster analysis and correlational analysis). Thus, by gathering the largest possible amount of distributional contextual information, a clear picture can be made of the polysemy of a lexical item. In concrete terms, we annotated 1810 matches of the lemma *sentir*, randomly selected from the Peninsular Spanish part of the CREA-corpus, for 138 ID tag levels. The BP analysis allows us to address the following questions: (1) How are the different meanings structured: how many senses should be distinguished – i.e. which meanings cluster together and which meanings should be kept separately? (2) What is the prototype of each cluster of meanings? (3) Which meanings are more related to each other and which are highly distinguishable? (4) What variables make them more or less distinguishable?

The first results of a pilot cluster analysis show that two big significant meaning clusters can be distinguished, which coincide with the division between the middle voice uses (*sentirse*) and the other uses (*sentir*). Within these clusters, a number of meaningful subclusters arise, which largely seem to coincide with the more general semantic categories of physical, cognitive and emotional perception. Further analyses will reveal how different these clusters are from each other, and which ID tags prototypically characterize each of these clusters.

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# “WHAT? THAT!” Relative clauses as intersubjective constructions in signed languages

Maria Josep Jarque (University of Barcelona) & Esther Pascual (University of Groningen)

This paper stems from the assumption that language is modeled by the structure of face-to-face interaction (Voloshinov 1929; Vygotsky 1962; DuBois 2001; Verhagen 2005; Zlatev et al. 2008). The focus is on the interpersonal conversational pattern of question(-answer), grammaticalized as a relative clause construction. Typological research has shown that the *wh*-marker is one of the most common sources for relative markers across the languages of the world (Sankoff and Brown 1976; Herring 1991; Heine and Kuteva 2002; Lehmann 2008).

Since signed languages are discourse-oriented and used mostly in face-to-face interaction, we suggest that this grammaticalization path is not only present in the languages of the visual-gestural modality, but also constitutes the default strategy for relativization. We show that in signed languages relative clause constructions display similar features as information-seeking questions. Consider this example from Catalan Sign Language, marked by two non-manual features: a browraise spread over the entire nominal phrase, signaling topic, and, within its scope, a forwardhead tilt, specifically for the relative. Both markings coincide with the non-manual markings for polar questions:

- (1) [DEAF [OF LIVE IX-THERE)]<sub>headforward</sub>] <sub>browraise</sub> KNOW  
Lit. ‘The deaf (man)? The one who was living there? He knew (about that possibility)’  
‘The deaf man who was living there knew (about that possibility).’

A non-conversational scenario is presented through interactional means. The non-genuine question sets up a *fictive interaction* (Pascual 2002, in press) between a fictive questioner and answerer, corresponding to the factual signer producing the utterance.

This investigation is based on a bibliographic study of 22 signed languages and a qualitative analysis of a corpus of naturalistic Catalan Sign Language data. This dataset includes monologues and conversations in various discourse modes (narrative, descriptive, and informative) of different genres (from ordinary conversations to television newscasts and videoblogs). The study contributes to the array of research arguing for an interactional basis of linguistic structures, based on the primacy of conversation (cf. Pascual 2002, in press).

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# Classroom Applications of Cognitive Linguistic Key Concepts

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Phrasal verbs (PVs) are considered to be a notoriously difficult field for learners of English as a foreign language (EFL). Many lexemes that frequently occur in PVs (e.g. *to get*, *to come*, *to go* as verbs and *up*, *down*, *out* as particles) are highly polysemous. Furthermore, the idiomatic and opaque nature of many PVs can also be regarded as an impediment for learners. Conventional teaching approaches to PVs have been rather unsystematic, expecting students to simply learn PVs by rote.

Emphasizing that almost all conventional language use is conceptually motivated (Langacker 2008), CL key concepts might serve pedagogical ends and help students study PVs more systematically. It is assumed that the meaning of the particle contributes significantly to the overall understanding of PVs and that even very opaque PVs can be analysed on the basis of the meaning of the particle (Alejo 2010). According to Tyler & Evans (2003) the different senses of a linguistic form build motivated semantic networks which are distinct from but related to the so-called PROTOSCENE. Thus, the more abstract senses of particles are related to their prototypical or basic senses as prepositions (e.g., *up* = upwards movement => more, better, complete, *to go up* = *increase*). Teaching students these semantic networks can endow them with strategies to cope with the seeming arbitrariness and opacity of more figurative PVs.

Although a substantial body of CL-based research on PVs already exists (e.g., Condon 2008), empirical studies embedding CL-methods in a teaching and learning process in order to prove the ecological validity of such an approach are still rather scarce.

This paper presents the results of a quasi-experimental field study with pre-/posttest design ( $N=200-250$ , German EFL students, year 9, still ongoing), testing the effect of CL-based instruction (experimental group) in comparison to conventional teaching methods (control group). On the basis of the empirical data the following research questions are discussed:

- Q1: Is a CL-based teaching approach more efficient than conventional teaching methods with regard to the **retention** of PVs under the condition that deep cognitive processing is triggered in both groups?
- Q2: Does a CL-based teaching approach facilitate **transfer** to novel PVs?

First pilot studies (N=81) were conducted with no significant effect with regard to Q1 (retention). Yet, concerning the understanding of new PVs (transfer), the CL-instructed students outperformed the control group significantly ( $p < 0.05$ ).

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# A non-categorical approach to the grammatical functions of gesture

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The functions of co-speech gestures in spoken discourse are not all that different from those of speech. Like speech, gestures can present semantic content, mark emphasis or personal commitment to the expressed content, structure the overall organization of the discourse, and contribute to the perlocutionary force of an utterance (Kendon, 2004; Müller et al., 2013a). These potentials have recently fueled an upsurge of interest in the connections between gesture research and cognitive-functional theories of grammar (Cienki, 2012; Muntigl, 2004; Turner and Steen 2012).

An important question that arises when considering how construction-based grammar models can accommodate bodily movements, is whether their discourse functions are linked with delineable form parameters. Recent research has addressed this question in a form-first approach that aimed at identifying ‘recurrent’ gestural patterns (Müller et al., 2013b). This approach revealed a number of clusters in gesture form and context of occurrence. The observed variance within these patterns resonates with a view of gestures as symbolic units of a schematic nature (Ladewig, 2011; Wilcox & Xavier, 2013).

A possible drawback of this research is the assumption of a one-to-one mapping between gesture categories and their functions. In actual spoken discourse, gestures appear strongly multifunctional: in addition to representing semantic content, they often provide emphasis to what is said and manage the interpersonal space between interlocutors. In the current contribution, I pursue an approach to mapping out the (grammatical) functions of gestures that does not assume one-to-one categorical mappings.

This view is operationalized by means of a large-scale video survey. In an internet-based study, approximately 500 route-description gestures (derived from the Bielefeld Speech and Gesture Alignment corpus; Lücking, Bergman et al. 2012), have been rated in terms of a set of eleven possible functions (e.g., reference, ascription, emphasis, hedging, meta-communicative) on a seven point likert scale, each by fifteen independent raters. This results in a characterization of the different degrees to which each of these gestures performs a range of different functions. Because the corpus has also been annotated in terms of gesture form parameters (e.g. hand shape, orientation,

and movement), these data allow for a detailed scrutiny of the formal correlates of gesture's functions.

A second study addresses the question to what extent gestural meaning is constrained by the verbal context. The exact same procedure was carried out, but the videos were deprived of sound. This provides further insights into the contributions of gestures to the discourse, above and beyond those of speech. I conclude by discussing implications of this research for the notion of *entrenchment* and *conventionalization* (Langacker, 1987). Accordingly, I consider possible extensions of grammar models (Cognitive Grammar in particular) that are needed to account for the structure and functions of co-verbal behaviors in their full import.

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# V1-Conditionals in German and English: a Constructionalization Perspective

Torsten Leuschner (Ghent University)

In this contribution I propose a first constructional approach, from both a synchronic and a diachronic point of view, to V1-conditionals like the following in German and English:

1. Scheitert der Euro, dann scheitert Europa. (Angela Merkel)
2. Should the Euro fail, Europe will fail.

While such constructions are without doubt conditionals (Van den Nest 2010: ch. 2), the initial position of the finite verb in the protasis is clearly reminiscent of polar interrogatives. This suggests that V1-conditionals are a node in a constructional network linking conditionals and interrogatives, or semantically speaking, that their meaning can be analysed in terms of frame overlay (cf. Verhagen 2000 on concessives, adopting ideas from Fauconnier/Turner 1998). Judging from the empirical data in [anonymized], both is clearly the case in German but not in English, where V1-conditionals are better described as a severely constrained conditional subschema whose link with interrogatives is more apparent than real.

These observations in turn throw an interesting light on historical developments. In this regard, the distinction between initial constructionalization on the one hand and post-constructionalization changes on the other hand (Traugott/Trousdale 2013) proves especially helpful. Philologists have often speculated on the rise of V1-protases from discourse patterns involving polar interrogatives in early Germanic (e.g. Jespersen 1909: 376), i.e. on their constructionalization by recategorization from V1 main clauses just prior to the onset of written documentation; by contrast, little attention has been paid to subsequent constructional changes. Two points are worth making in this regard. On the one hand, statistical data based on historical corpora ([anonymized]) suggest that post-constructionalization changes have been a particularly protracted affair in German, leading to different degrees of divergence from interrogatives and specialization for conditionality at the levels of lexis, morphology and syntax in each language. On the other hand, the data reinforce the need to view low-level changes as embedded in changes higher up the constructional network, a point emphasized by Traugott/Trousdale (2013) but often neglected by contrastive approaches (e.g. König 2012: 8-10 on V1-conditionals). Not only have English V1-conditionals lost any

productive link with interrogatives, their relative constructional isolation (as already hinted by Hawkins 1986: 211) is in part a consequence of the fixation of SVO and the attendant loss of paradigmatic oppositions between different word order options which came to distinguish English from German early in its historical development.

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# Iconicity and usage: a quantitative corpus-based study of European causatives

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## Introduction

The study focuses on variation in expressing causative events in fifteen Indo-European languages from the Germanic, Romance and Slavic groups. Based on a parallel corpus of film subtitles, the study investigates the factors that determine the choice between periphrastic and lexical causatives in a series of logistic regression analyses. It thus sheds light on the relationships between frequency and iconicity as major factors that shape up language structure.

## Background

In functionally oriented studies, the ‘division of labour’ between periphrastic (1a) and lexical causatives (1b) is traditionally explained by the iconicity principle: lexical causatives convey more ‘direct’ causation with a stronger conceptual integration of the cause and effect, whereas periphrastic causatives convey more indirect causation (e.g. Haiman 1985).

- (1) a. *The sheriff caused Bob to die.*  
b. *The sheriff killed Bob.*

However, there exist other proposals, which focus on the role of usage. For example, Haspelmath (2008) shows that frequently occurring events tend to have more basic, unmarked forms, whereas rarer events are encoded with the help of more complex forms. This study is an attempt to disentangle the iconicity and usage factors in variation of causative constructions with the help of corpus-based multivariate analyses.

## Data and method

The data come from a self-compiled multilingual corpus of aligned film subtitles and fiction. The data set contains approximately 700 multilingual exemplars that contain periphrastic and lexical causatives (10,500 data points). The exemplars are coded for the type of causative construction and a number of conceptual and usage variables, based

on previous theoretical accounts, e.g. agentivity of the Causee and volitionality of the Causer. The frequencies are extracted from large comparable monolingual reference corpora. A series of logistic regression models are fit with the above-mentioned variables as predictors, and the type of the causative construction as the response, and the 95% confidence intervals are compared (see an illustration in Figure 1).

## Results

In accordance with the iconicity hypothesis, the variables that are associated with the (in)directness of causation, behave in a similar way across the languages, as can be seen from the 95% confidence intervals, which tend to overlap (see Figure 1). However, adding the frequency of causation events as an independent variable significantly improves the predictive power of the models, which suggests that both usage and iconicity shape up language structure.

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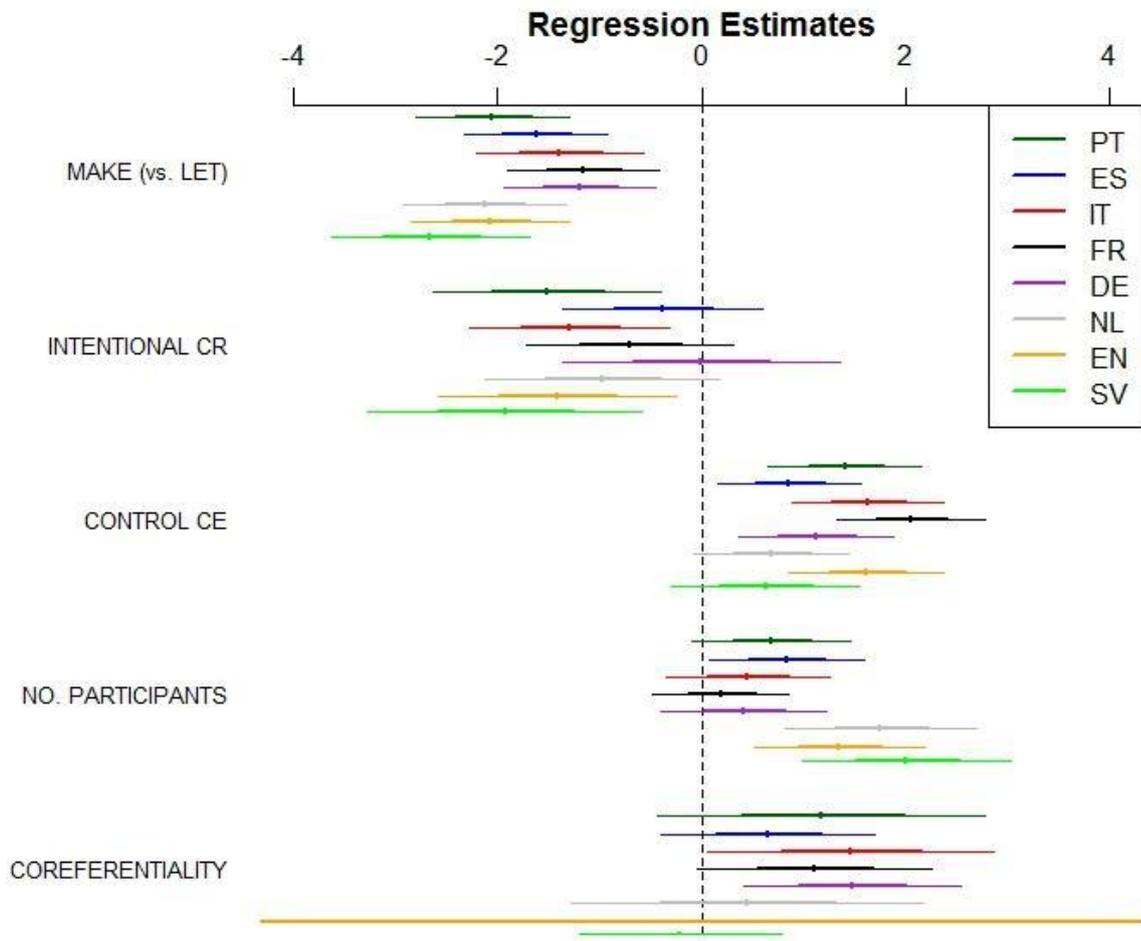


Figure 1. Overlapping 95% confidence intervals of iconicity-related variables in eight Germanic and Romance languages.

# The “Belgian Tetris”: assessing the political impact of metaphors on citizens’ perception of and attitude towards Belgian federalism.

Julien Perrez (Université de Liège) & Min Reuchamps (Université catholique de Louvain)

In the literature, the political impact of metaphors has often been taken for granted from metaphor analysis in political discourse, be it elite discourse or media discourse. However, a more global understanding of what this political impact could consist of, is still lacking from the current research agenda. As Koller (2009:121) puts it: “metaphor helps construct particular aspects of reality and reproduce (or subvert) dominant schemas.” To be able to account for how metaphors, through discourses, actively shape the political reality, it is important to look at the relationships between metaphorical discourses and their environment.

Based on the idea that metaphors do not only reflect the perceived reality, but also function as cues through which citizens come to understand complex political processes and through which they shape political behaviors, the aim of this study is precisely to look at how specific metaphors might impact on the citizens’ framing of Belgian federalism.

To measure the impact of metaphors on the citizens’ political representations and attitudes, we developed an experimental set-up based on an article published in the Belgian newspaper *Le Soir* (13-14 July 2013) in which Belgian federalism was deliberately compared to a Tetris game. The original article included a picture and a text (208 words), which were used as authentic experimental material. For this experiment, we distinguished three experimental conditions and one control condition. In the first experimental condition (full condition), the participants were exposed to the original article (including the text and the picture). In the second and third experimental conditions, the participants were respectively exposed either to the text (text condition) or the picture (picture condition). In the control condition, the participants weren’t exposed to any metaphorical material at all. In the second stage of the experiment, the participants were asked to achieve three interrelated tasks: (i) a free description task, based on a free description of their own perception of Belgian federalism, (ii) an association task, in which they had to select a picture which they found the most appropriate to describe Belgian federalism, and finally (iii) a questionnaire measuring the participants’ political knowledge of Belgian federalism and attitudes towards its future development. In a post-test held four weeks after the first

experiment, the three tasks of the second stage have been replicated. This experiment has been conducted in autumn 2013 among 400 students.

Comparing the various experimental conditions will make it possible (i) to measure the impact of the Tetris metaphor on the citizens' perceptions and representations of Belgian federalism, (ii) to assess to what extent the different metaphorical media differently contribute to this impact and (iii) to measure the long-term impact of this metaphor on the citizens' political representations and attitudes. In answering these questions, this study will contribute to a better understanding of the role and functions metaphors play in political discourse, and more globally in our everyday political interactions.

# Indefinite *uno* in Spanish: an exploratory study based on two discursive genres

Marie Rasson (Université catholique de Louvain)

The aim of this paper is to analyze the discursive functioning of the Spanish pronoun *uno* ('one'/'you'), in its non-numeral uses. Such uses are typically described in the literature as "generic", "impersonal" or "undefined." In this study, I will show what mechanisms and factors influence their interpretation, paying specific attention to differences in discourse genre. Furthermore, I will propose an analysis of *uno* as strategy of intersubjectivity.

I will establish a classification of undefined *uno* through a qualitative analysis of occurrences obtained from two different corpora, namely an informal conversations corpus (CORLEC) and a written academic discourse corpus (CLAE), which will allow me to discover which factors influence the interpretative mechanisms. Using two corpora of different genres/text types allows me to analyze the impact of the factor discourse genre on the use of *uno*.

I propose a first typology of different uses in terms of reference of this pronoun. It can vary from generic (1) to a particular individual, who can be the speaker (2), the hearer (3) or another person (4). However, I also observe different degrees of genericity within these categories, which justifies the qualitative analysis.

- (1) *Este ejemplo es el contrario de lo que sucede en poblaciones como Woodland California en donde la ciudad es primordialmente mexicana y el español se puede escuchar en casi cualquier lugar que **uno** visite.* (CLAE)

'This example is the opposite of what happens in places like Woodland California where the city is primarily Mexican and Spanish can be heard in almost any place **you** visit.'

- (2) *Si hoy se acabara el agua pues me agarraría de sorpresa ya que **uno** vive al día y para planear lo que **uno** haría a futuro pues tendría uno que empezar a cambiar los hábitos.* (YCCQA)

'If the water ran out today, it would take me by surprise since **you** live day by day and to plan what **you** would do in the future, **you** would have to begin to change habits.'

(3) *Claro, cuando uno tiene ya muchas ganas de hacer algo...* (CORLEC – CONV)

‘Of course, when **you** are already very eager to do something ...’

(4) *Tuvo muchos críticos Cantinflas, pero sin críticos, uno no puede tener carácter.* (CLAE)

‘Cantinflas had many critics, but without critics, **you** cannot have character.’

I will show that some uses of this undefined *uno* are marks of intersubjectivity, as defined by Benveniste (1966) and Traugott (2003), i.e. an expression of attention of the speaker / writer to the hearer. Therefore I will propose a scale of intersubjectivity of the uses of *uno*, in order to describe in more detail their functioning in both genres/text types.

### Corpora

CLAE: *Corpus de lenguaje académico en español*. 2009.

<http://www.lenguajeacademico.info>.

CORLEC: *Corpus del Español centro-peninsular*, 1990-1993.

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# The epistemic large-quantity construction in Italian: [non so quant\_ + N/V] (*I don't know how many/much + N/V*)

Valentina Russo (Humboldt University Berlin & Università degli studi di Napoli "L'Orientale")

This paper deals with a poorly studied epistemic construction for expressing indefinite quantity: Italian [non so quant+N(oun)/V(erb)] (*I don't know how many/much + N/V*). This construction is used to express large or exaggerated quantities in a rhetorical way by conveying one's own commitment toward it. It is argued that the **semi-idiomatic quantity construction** (Antonopoulou/Nikiforidou, 2011) [*neg-know*]<sub>verb</sub> Q(quantifier)]<sub>Q</sub> [N/V] has distinct syntactic, semantic and pragmatic features of its own that make it different from the homonym **complementation construction** [*neg-know*]<sub>verb</sub> [Q + N/V]<sub>compl</sub> (s. Russo/Dittmar, 2014), as exemplified below:

[Non so]<sub>verb</sub> [[quanti]<sub>Q</sub> [chili]<sub>NP</sub> [ha perso]<sub>VP</sub>]<sub>compl</sub> >> [[Non so quanti]<sub>Q</sub> [chili]<sub>N</sub>]<sub>NP</sub> [ha perso]<sub>VP</sub>

*I do not know how many kg he has lost*

*I know that he has lost many kilos, probably more than I expected, but I don't know exactly how many*

The paper raises the following questions: what makes the two constructions different? Which morpho-syntactic, textual and prosodic constrains enable a different segmentation of the “non so quant\_” sequence, i.e. [*neg-Know+Q+NP/VP*]?

I will address these questions relying on the notion of constructions (Goldberg, 1995; Croft, 2001), accounting for those aspects that characterize the epistemic semi-substantive quantity construction in oral and written usage. The analysis is based on real corpus data, consisting of spontaneous oral interactions (LIP, Lablita), written literature (DiaCoris) and Web occurrences. Results will bring evidence of a variety of functional and formal features that apply to both oral and written uses, such as: tense, mood and person of the verb *know*; mood of the following verb; syntactic and semantic restrictions; informational status and other constrains. I will finally focus on the prosodic profile of *non so quant\_* in the quantity construction, examining pitch movements, integration with following or preceding elements and phonological reduction (McGregor, 2013), which contribute to make it conventional and psychologically entrenched in the speech community (Langacker, 2005: 140).

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# Fictive interaction in the Hebrew Bible

Sergeiy Sandler (Ben-Gurion University)

Modern public discourse and the speech of contemporary youth appear to be particularly ‘conversational’, regularly using interactional structures such as the *like* construction (“It was like *Why not?*”) (Fairclough 1994; Streeck 2002). While acknowledging that some specific conversational constructions may be novel or occur more frequently in certain contexts, I suggest that fictive interaction—the use of the basic frame of the conversation in order to structure language and discourse—is overarching and widespread across genres and sociolinguistic groups (Pascual 2006, forth.).

To explore this, I study an ancient and extremely influential religious text, the Hebrew bible. The Hebrew bible shows a highly conversational structure, in the vast occurrence of: (i) non-information seeking questions; (ii) the verbal root ‘רמא’ (*amar*), ‘to say’; and (iii) direct rather than indirect speech (Rendsburg 1990; Miller 2003). I will discuss examples of such frequent structures as: (i) ‘conversations’ with one’s mind or parts of one’s body (e.g. “God said to his heart,...”); and (ii) the presentation of non-reported speech—ascribed to God, a person or group, and even an action—in order to introduce actual or putative intentions, hopes, motives, or states of affairs (e.g. “Saul blew the trumpet throughout all the land, *to say let the Hebrews hear*”, 1Sam 13:3). Special emphasis will be laid on the grammaticalized form of the complementizer ‘רמאל’ (*lemor*), from the infinitive of the speaking verb ‘רמא’ (*amar*) (Miller 2003). This complementizer introduces the reason or significance of a particular action, presented through direct speech (e.g. “And the officers [...] were beaten *saying [lemor] Wherefore have ye not...?*”, Exod 5:14).

By looking at Biblical Hebrew, we hope to shed some light on the hypothesis that structuring language and discourse through the conversation frame is a non-trivial overarching phenomenon, which I suggest reflects the dialogic nature of language.

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# What can gestures tell us about particle meanings?

Steven Schoonjans (University of Leuven)

A recurrent issue in the analysis of modal particles is the description of their meaning. Indeed, the meaning of modal particles is highly context-dependent, which makes it hard to offer a general meaning description. Closely related to this issue is the fact that there is discussion about the exact relation between particles with resembling meanings. Replacement tests and translation analyses have been brought in in attempts to come to better grips with the particle meanings, but so far no unanimity has been reached in these discussions.

In this talk, it will be shown that gesture research can shed a new light on the meaning-related issues. This will be illustrated by means of a comparison of the gesture patterns co-occurring with seven German modal particles, distributed over three onomasiologically defined clusters: particles linking questions to the context (*denn*, *eigentlich*), particles underlining the truth of the message in assertions (*ja*, *doch*), and particles marking obviousness or self-evidence (*eben*, *einfach*, *halt*), as illustrated in the examples below (taken from Thurmair 1989). The analysis is based on ca 21 hours of video materials stemming from three different settings (talk shows, televised sports reports, and parliamentary speeches).

- 1) Willst du morgen mitkommen zum Baden? – Hast du *denn* zur Zeit Urlaub?  
'Would you like to join in for a swim tomorrow? – Do you *denn* have a holiday at the moment?'
- 2) Im Auto hat man wenigstens freie Sicht, da hat man *ja* einen Scheibenwischer.  
'At least in the car you have an unhampered view; there you have *ja* a windscreen wiper.'
- 3) Warum sind die Frauen so hinter dir her? – Ich bin *eben* unwiderstehlich.  
'Why are women so after you? – I am *eben* irresistible.'

Issues to be discussed in particular include the polysemy of the particle *ja* and the relation of the particles *eben*, *einfach*, and *halt*. Being the most frequent modal particle of German, *ja* is notoriously polysemous, which has led to considerable disagreement about how its meaning is to be described (see Rinas 2007). It will be shown how the gesture distribution can contribute to mapping out this polysemy. As for *eben*, *einfach* and *halt*, scholars disagree about the precise relation between these particles. Especially

the relation between *eben* and *halt* is controversial: Scholars such as Autenrieth (2002) think they are synonymous, while others follow Thurmair (1989) in claiming that they are not. Similarities and differences in the gestures patterning with these particles will be referred to in order to arrive at a more nuanced view on the relation between the particles.

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# From reportative evidentiality to cohesion: a corpus study between stance and discourse reference

Stef Spronck (University of Leuven/The Australian National University)

Reported speech is an evidential strategy. In constructing an utterance such as (1)

(1) 'John said: "There is still hope"'

the current speaker (typically) invokes a discourse situation previous to the current discourse situation involving the reported speaker John and the reported message. Whether the reported message is relevant at the speech moment depends on the way in which the reported speech situation and its participants relate to the current speech situation. This opposition of two discourse events is the defining feature the grammatical category of evidentiality (Jakobson, 1957). In deciding whether John's hopeful assessment in (1) is still relevant at the speech moment and for the discourse participants involved, interpreting the evidential meaning is key.

Typologically, languages have been found to use direct speech constructions mostly for functions that include an evidential meaning but in exceptional {but not uncommon} cases, examples have been attested of direct speech constructions being used for functions beyond the evidential domain (see Pascual, *fc*: ch. 4). Functions of direct speech constructions that include an evidential meaning are those that involve some attribution of speech, thought or intentions to some discourse participant other than the current speaker at the present time and place. A language that uses one single construction to express all three of these functions is the Australian Aboriginal language Ungarinyin. Attested functions of direct speech constructions that do not include an evidential meaning have been as diverse as 'causality' (voice), 'lest' (modality), 'beginning of the action' (aspect), 'future' (tense) and others. The Usan example in (2) illustrates the second of these functions:

(2) *mi qei-qei man umer-iner qamb gitab ig-oun*  
thing some-RED yam wilt-3s:UF say:SS abstain:SS be-1p:PR  
'We abstain from various things lest the yams wilt' (Reesink, 1993: 222)

In this paper I begin by showing that the discourse referential properties of direct speech constructions with and those without or with a more non-prototypical evidential meaning, differ considerably. Since 'evidential' reported speech constructions

(such as in Ungarinyin) involve two opposed discourse situations with their own inherent time, place and participants, reference to these discourse participants, places and times displays two separate patterns: that of the current speech situation and that of the reported speech situation. In non-evidential reported speech constructions this distinction is absent, which is reflected in the discourse status of the discourse participants referred to in a construction as in (2).

I then present a corpus analysis of Russian texts demonstrating that several types of reported speech constructions in the language can be identified as contrasting evidential strategies and that these also display specific patterns of discourse reference. These patterns reveal important clues as to how the study of stance (Du Bois, 2007) and discourse reference within a cognitive approach (Kibrik, 2011) may be combined. I conclude by arguing that the study of reported speech constructions in connection to discourse organisation offers a perspective onto two of the most central cognitive processes in constructing language: social cognition and memory.

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# Humorous implications and meanings: a study of sarcasm in interactional humor

Sabina Tabacaru (Université Lille 3 & University of Leuven)

According to Bergen and Binstead (2001), humor is “the least understood of our cognitive capacities”, and since humor abuses inferences through linguistic imagery, it should be cognitive oriented. My talk aims at defining the relationship between humor and the human mind, as already pointed out in Cognitive Linguistics (Vandaele 2002; Feyaerts 2004; Veale *et al.* 2006; Ritchie 2006; Brône 2008; Brône and Feyaerts 2003). More specifically, I focus on underlining the importance of addressing sarcasm from the perspective of the linguistic mechanisms creating it. I base my results on a large corpus of examples drawn from two American TV-series: *House M.D.* and *The Big Bang Theory*. The examples are annotated using ELAN which allows a more fine-grained analysis of the data. Based on these results, I present a typology of sarcasm in the form of complex cognitive phenomena, ranging from metonymy and metaphor to figure-ground reversal. These sarcastic utterances are analyzed against the background of Clark’s (1996) layering model and Fauconnier’s (1984, 1994) mental spaces theory, as suggested by Brône’s (2008) unified account of humor, to show how the human mind creates and understands sarcasm. I show that this unified account can also be used to explain sarcastic utterances because it points out the importance of separating the discourse base space from the pretense space in which sarcasm takes place. The discourse base space represents the common ground between interlocutors, because the speakers must be confident enough of all the assumptions the hearers are most likely to draw in interaction. Given all the rich implications and meanings that it generates, I argue that sarcasm is a fundamental means of all types of meaning construction (Radden *et al.* 2007).

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# Raised eyebrows as gestural triggers in interactional humor

Sabina Tabacaru & Maarten Lemmens (Université de Lille 3)

The growing interest in humor within the field of Cognitive Linguistics these past few years (Brône and Feyaerts 2003; Veale *et al.* 2006; Brône 2008) shows that humor exploits inferences through linguistic imagery and that it is highly creative. Following Yus (2003: 1299), we assume that humor uses discourse markers that allow the audience to see that what is being said should not be taken seriously. In this study, based on a large corpus of examples extracted from two American television series (*House M.D.* and *The Big Bang Theory*), we add a yet unexplored multimodal perspective, that of facial expressions accompanying humorous utterances. More specifically, we focus on raised eyebrows used with sarcasm and hyper-understanding. We present a qualitative and quantitative analysis of raised eyebrows used in interactional humor, arguing they play a role in the switch of the context to a humorous interpretation, contributing in this way to meaning construction. Our study analyzes these humorous utterances against the background of Clark's (1996) layering model and Fauconnier's (1984, 1994) mental spaces theory (cf. Brône 2008). We show how raised eyebrows function as "gestural triggers" allowing the hearer to make the connection between explicature (i.e., what is explicitly communicated by an utterance; cf. Carston 2002, 2004) and implicature (assumptions that are not explicit and that the hearer has to infer from the contextual environment, cf. Grice 1989). As such, we show that raised eyebrows play an important role in the understanding of the humorous message, because they guide the hearer to interpret utterances in a humorous way and they contribute to meaning construction.

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# Discourse position and polyfunctionality of the Spanish markers *anda*, *vamos*, *vaya* and *venga*

Sanne Tanghe (Ghent University)

Major works on (discourse) markers derived from motion verbs have concentrated mainly on their pragmatic functions (Company Company 2004, Romero Aguilera 2006, Zorraquino y Portolés 1999). Nevertheless, recent studies have emphasized the importance of taking into account also formal parameters for a more complete description (Pons Bordería 2006, Melón Eva 2013, Pons Bordería and Estellés 2013). Therefore this study focusses on the discourse position of the Spanish markers *anda*, *vamos*, *vaya* and *venga*. The goal is to study whether there is a correlation between the discourse position and the function of a marker and to what extent the position restricts or defines the activation of a function. The level of mobility of each marker will be measured in order to verify if greater mobility involves greater functional variability (Pons Bordería 2010, 336).

The dataset consists out of transcriptions of oral corpora (CREA, MC-NLCH, COLam, Val.es.co, Corlec) with a total of about 3100 occurrences. The framework for the analysis of the discourse positions is the Val.es.co. model of discourse units (cf. selected bibliography). This model takes into account the discourse unit formed by the marker (*intervention, act or subact*) and the distribution of the unit within the discourse (*initial, medial, final or independent position of intervention, act or subact*). Next, the occurrences of the markers are classified according to their pragmatic values (*appellative, expressive, metadiscursive*) and subvalues (*surprise, disagreement, reformulation, etc.*). The two variables (position and function) will then be statistically tested for correlations (by applying a Fisher-Freeman-Halton-test) and analyzed qualitatively.

A first approximation to the data shows us that we can expect there to be at least some relation between both variables in that, for example, appellative or expressive uses can be used independently as an intervention (1), while markers with a metadiscursive function will be imbedded into a greater unit (2):

(1) <H6>Quería hacer una pregunta.

<H1> **Venga.**

<H6> Es que mi marido no quiere hacer testamento. (CORLEC)

(2) NM: #y / {<sub>SA</sub> bueno<sub>SA</sub>} / crees que ha cambiado la vida en el centro / desde que han llegado todos estos muchachos / {<sub>SA</sub> vamos<sub>SA</sub>} de [/] de origen extranjero ?#  
(C-ORAL-ROM)

The results of the quantitative study will provide a more detailed overview of the mapping of meaning (pragmatic values) and form (discourse position) of the four markers.

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# Motor concepts, metaphor and gesture: The comparison between referential gestures referring to concrete and metaphorical motor concepts

Yao Tong & Alan Cienki (VU University Amsterdam/Moscow State Linguistic University)

Some consensus has been reached in Cognitive Linguistics that much of our thought is grounded in physical actions and meaning is in some ways embodied (Lakoff & Johnson, 1999; Barsalou, 2008). Some motor concepts have been argued as image schematic and as fundamental embodied experiences which give rise to more abstract concepts (Johnson, 1987). Since speech and gesture can both serve as “windows into thought,” the starting point of this research is how a motor concept as a minimal analytic unit of thought (McNeill’s [1992] notion of the “growth point” of an idea) is realized in linguistic and gestural modalities in natural discourse.

This research intends to investigate the conceptualization of motion in its metaphorical nature, represented in visible/gestural forms of expression, from a quantitative perspective. The metaphorical nature of a motor concept, i.e., (conceptual) motor metaphor in this research, is regarded as a degree of metaphoricity ranging from concrete to metaphorical conceptualization. This research intends to answer the following research question: Where do differences lie in the referential gestures referring to concrete and metaphorical motor concepts in terms of their amount and function? The answer to this question could tell us more about the degree to which we conceptualize physical and abstract motion with the same kinds of motor imagery.

As a quantitative study, this research aims to analyze about 300 referential gestures in 10 TED talks (about 150 minutes) with the help of an automatic semantic annotation web interface-- Wmatrix (Rayson, 2009). This program automatically assigns 21 semantic fields (e.g., education, emotions) to words of a text and has been found useful in metaphor identification and analysis (Koller et al., 2008). The operational definition of a motor concept is regarded as semantic field M “MOVEMENT, LOCATION, TRAVEL & TRANSPORT.” The motor concepts related to cases of concordances detected by Wmatrix are firstly examined and coded as concrete versus metaphorical and then correlated referential gestures are picked out. The gesture coding involves the coding of its form and function using the software ELAN. Forms will be coded in terms of gesture unit, gesture phase (preparation, stroke, retraction) (Kendon 2004). Functions will be coded based on Müller (1998) and Streeck (2008; 2009), including the following methods

of referring -- pointing, modeling, drawing, bounding or measuring, shaping, handling, and acting. The expected result is that there are about same amount of referential gestures referring to concrete and metaphorical motor concepts.

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# Conceptualisation-driven Machine Translation: a Case Study for the Dutch and English Verb Phrase

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Despite major improvements in the last several years, Machine Translation (MT) is still far from perfect. State of the art statistical MT systems fail to correctly translate even simple sentences, such as the one presented in (1).

- (1) a. He has been playing . (*Original English sentence*)  
b. Hij speelt . (*Dutch translation by Google Translate<sup>1</sup>*)  
He plays .

While the translation correctly captures the lexical content, it fails to grasp the temporal and aspectual information. This failure cannot be attributed to a lack of data in the training corpus, because this kind of verb phrase is not infrequent at all. The problem is much more fundamental, namely that the language models in current MT systems are not sophisticated enough to handle more complex linguistic phenomena.

In this presentation, I will argue that insights from cognitive linguistics should be integrated into MT systems in order to develop superior language technologies. More specifically, language models need to be expanded with the rich conceptualisations that are expressed by natural language grammars. I will illustrate this approach through a case study on the English and Dutch verb phrase (VP). Concretely, I have implemented computational processing models of the Dutch and English VP in Fluid Construction Grammar (FCG) (Steels, 2011, 2012) that work for both parsing and production. The models include a reconstruction of the conceptualisations that English and Dutch speakers employ for situating events in time. The grammars consist of an automatically generated lexicon of the 80 most frequent verbs in English and Dutch, and seven grammatical tense-aspect-modality constructions.

Instead of using a form-to-form translation based on sheer statistics, the model performs a deep semantic analysis of input sentences and extracts their conceptual structure. This conceptualisation is then used for producing the translation in the target language. I will show that this conceptualisation-driven approach not only outperforms the form-based approach for correctly translating closely related tense-aspect-modality

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<sup>1</sup> Google Translate (<http://translate.google.com>). Consulted on 13/05/2014.

distinctions, but that it also successfully deals with cases in which Dutch and English use completely different constructions (e.g. the progressive tense).

The contribution of my work is twofold. On the one hand, it provides an argument for the incorporation of more linguistic knowledge into machine translation. On the other hand, it contributes to the understanding of the Dutch and English tense-aspect-modality systems, by providing an operational formalisation in Fluid Construction Grammar.

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# Viewpoint representation and legitimization in Dutch journalistic crime narratives

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## Introduction and research questions

Journalists are storytellers. In the case of criminal acts, they write narratives about the experiences of people involved in these acts; most often eyewitnesses, since they are the most relevant journalistic sources.

The objectification and legitimization of source material has not always been a professional demand, but has grown essential in the last decades. In our paper, we argue that a cognitive linguistic approach should be adopted to adequately describe how journalists have developed linguistic strategies to represent criminal acts from the viewpoints of eyewitnesses without crossing the boundaries of nonfiction.

- RQ1 What linguistic strategies are used in journalistic narratives to describe criminal acts from the viewpoints of eyewitnesses?
- RQ2 What linguistic strategies are used to legitimize these viewpoint representations?
- RQ3 How did viewpoint representation strategies and legitimization strategies develop in the last 1.5 century?

## Methodology

Building on a framework of mental spaces and blended spaces (Fauconnier, 1985; Fauconnier & Turner, 2002), we developed a model for the cognitive linguistic analysis of journalistic narratives, elaborating on Dancygier's (2012) model of narrative fiction and Author's (2010) model of news narrative. This model enables the analysis of linguistic strategies that embed and blend viewpoints in news narratives and accounts for the genre-specific conventions of factuality and legitimization. We applied our model to Dutch journalistic crime narratives that have been published between 1860 and 2010. For each decade within this period, ten narratives were selected and analyzed.

## Results

In news narratives from all periods, verbs of perception and cognition are journalists' main instruments to embed the viewpoints of eyewitnesses and relate crimes through the experiences of these persons. Only in the most recent periods, present tense narration of cognition and perception is employed as a strategy to blend the viewpoints of eyewitnesses with the journalist's viewpoint. This strategy provides an account of criminal acts through the "on-line" thoughts and perceptions of eyewitnesses.

The representation of eyewitnesses' viewpoints through space embedding and blending dramatizes and "fictionalizes" the narratives, which calls for legitimization. We argue that only in recent decades, a Narrative-External Discourse Space is represented in journalistic narratives to warrant the truthfulness of the narrative by grounding the exchange of information between journalist and source.

## Conclusion

This study shows how journalists strategically use language to describe criminal acts from the viewpoints of eyewitnesses, without disregarding the genre's demands of factuality and grounding. While strategies to embed and blend viewpoints have been employed since the nineteenth century, more recently new blending techniques as well as external discourse spaces have been developed that both dramatize *and* legitimize narrative reconstructions of reality in an ever more sophisticated way.

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# Chopping down the Syntax Tree

Remi van Trijp (Sony Computer Science Laboratory Paris)

Many linguists either explicitly or implicitly assume a tree structure (or phrase structure) when analyzing linguistic utterances. As a data structure, trees consist of nodes that have at most one parent node (e.g. in the phrase structure rule  $NP \rightarrow DET N$ ), which means that information in a tree can only trickle down from a parent to its immediate children, or percolate upwards in the other direction.

A tree structure is thus hopelessly inadequate for representing dependencies between nodes that are in the top of the hierarchy and nodes that are situated somewhere below. This problem becomes particularly apparent in long-distance dependencies, as found in topicalization patterns (e.g. *Ice cream I like!*) or WH-questions (e.g. *What did you see?*), where tree-based analyses require a lot of complex formal machinery in order to respect the locality constraint of a tree structure. The most common solution is the filler-gap approach, pioneered by Gazdar (1981), which requires tree steps: (1) identifying a “gap” at an “extraction site”, (2) communicating information about the gap node-by-node upwards in the tree, and (3) stopping the gap when a “filler” has been found; as in *What<sub>FILLER</sub> did you see\_\_\_\_GAP?*

In recent years, however, a cognitive-functional (or usage-based) alternative has started to crystallize in which long-distance dependencies emerge spontaneously as a side-effect of how constructions may freely combine with each other in order to cater for the communicative needs of language users (Goldberg, 2002). Unfortunately, this view has been criticized for being ad-hoc and not lending itself to scientific formalization. The goal of this presentation is therefore to demonstrate that the cognitive-functional alternative can be made formally explicit through a computational model of English long-distance dependencies that works for both parsing and production, implemented in Fluid Construction Grammar (Steels 2011). Moreover, the implementation shows that a cognitive-functional approach outperforms the filler-gap analysis in terms of theoretical parsimony (no special rules), completeness (competence AND processing), and empirical adequacy (particularly for explaining language change).

More specifically, I will show that rather than directly “reading off” all the information about an utterance from its tree structure, it is necessary to chop down the syntax tree and treat different “linguistic perspectives” on equal footing as is common in functional linguistics (Nuyts 2011). These perspectives include an utterance’s functional structure, information structure and illocutionary force. I will show that

construction grammar is especially adequate for representing the complex interaction between these perspectives, as constructions are capable of cutting across different levels of linguistic organization.

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# The (in)stability of familiarity judgments: individual variation and the invariant bigger pictures

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Metalinguistic judgments are often used in linguistic research. In order to provide judgments, people must draw on their (implicit) linguistic knowledge. Therefore, judgments can be used as evidence for making inferences about people's linguistic representations. It is even argued that judgment data play a *crucial* role in linguistic investigation because they provide quantitative information not readily available from other kinds of data (Schütze & Sprouse, 2013). The reliability of such judgments, however, is regularly called into question. We have conducted two studies investigating the test-retest reliability of metalinguistic judgments, more specifically familiarity judgments, for Dutch prepositional phrases (e.g. *op de bank*, 'on the couch'). Importantly, from a usage-based perspective, variation in judgments between and within speakers might be expected: with judgments based in representations, and representations resulting from input and use, both inter- and intra-individual variation are likely.

In the first study, familiarity judgments on 44 PPs offered in isolation and in sentence context were given by 86 participants—all native speakers of Dutch—in two identical test sessions using Magnitude Estimation. Our study looks at the stability and reliability of these judgments in three ways: by investigating the test-retest reliabilities, by looking at the effects of the presence and absence of context, and by examining to what extent judgments can be predicted from stimuli's frequency.

Aggregated scores (averaged over participants) are remarkably consistent (Pearson's  $r = .97$ ), and strongly predicted by corpus frequencies ( $R^2 = .55$ ). At the same time, there is considerable variation between and within participants. Judgments on items vary considerably from participant to participant. Furthermore, none of the individual participants gave judgments during the two test sessions that correlated as strongly as the aggregated scores did (mean correlation = .50, SD = .20).

Interestingly, context affected familiarity ratings differently for different stimuli: there is a significant interaction of Context\*Item ( $F_{(24, 2028)} = 14.57, p < .001, \eta^2 = .146$ ). Providing a context increases familiarity ratings, but only for items at the lower end of the frequency scale. There was no difference between isolated and contextualized items in the degree of individual variation in judgments.

To gain insight into the extent to which variation is related to the rating scale used, we conducted a follow-up study. In this second study we compare the stability and reliability of Magnitude Estimation judgments and Likert scale judgments.

We will discuss how both the stability and the instability we observed are real reflections of language: a stable system in a speech community consisting of variable and changing speakers. Our results suggest that judgment data are informative at various levels of granularity. They call for more attention to individual variation and its underlying dynamics.

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# A three-layer approach to the cognitive representation and linguistic marking of subjectivity and perspective

Yipu Wei & Jacqueline Evers-Vermeul (Utrecht University)

*Background:* Connectives function as processing instructions for readers: they indicate a type of coherence relation, and sometimes also mark a certain degree of subjectivity. An example is Dutch *want* ‘because’, which marks a subjective causal relation, and affects on-line processing (Canestrelli, Mak and Sanders, 2012). Processing studies suggest that other linguistic elements such as epistemic modals (*perhaps, probably*) and expressions with cognition/communication verbs (*John thinks/says*) also influence on-line processing and interact with the processing effects introduced by connectives (Canestrelli et al., 2012, Traxler et al., 1997). These processing instructions have previously been termed as perspective markers (Verhagen, 2005) or mental space builders (Sanders, Sanders and Sweetser, 2012).

*Research questions & Method:* In this paper we address the following questions: What is the role of linguistic elements such as connectives, epistemic modals and cognition/communication verbs in representing perspective in discourse, and establish specific degrees of subjectivity? How do these linguistic elements interact?

We will present our model and first show – on the basis of a literature study – how it relates to notions from previous studies. Then we will show how a variety of observations from previous studies on perspective and subjectivity can be accounted for in a unified and integrated approach.

*Analysis:* We propose to apply a three-layer framework, based on Halliday’s (1985) three metafunctions). According to this framework, information coded by linguistic elements is functional at different layers: the propositional layer, the discourse layer and the interpersonal layer. We will show that perspective markers can be categorized according to the layers they function at. Furthermore, this three-layer model provides a new viewpoint to understand subjectivity and perspective. Subjectivity in coherence relations is formed at the discourse layer, while the extra cognitive effort brought about by subjectivity is relieved at the interpersonal layer by the explicit marking of perspective.

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