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May 14, 2013
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Tommi Nieminen: Cognition as cognition, cognition as semiotics, and the linguist’s comfort zone (poster)

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Pelin Onar Valk: Contact-induced language change in subordination structures of Dutch-Turkish?

Tiina Onikki-Rantajaäskö: Cognitive linguistic perspective on terminological work

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Carita Paradis, Simone Löhndorf, Joost van de Weijer & Caroline Willners: Antonyms and opposing valence

Joel Parthemore: Reappraising the Relationship Between Concepts and Language

Geda Paulsen & Urpo Niskanne: Estonian and Finnish verbs expressing change of color: A Conceptual Semantics analysis

Esa Penttilä & Pirkko Muiikku-Werner: Monkey on one’s back? How Finns understand novel translated loan idioms

Ruchi Sehgal: Are Nouns and Verbs stored in different parts of the brain?

Inna Skrynnikova: Semantics and combinability patterns of posture verbs in English and Russian

Bidisha Som: Relationship of motion event structure and processing of Fictive Motion in a bilingual population

Abdelhadi Soudi, Adil Er-rady and Corinne Vinopol: Standard Arabic-to-Moroccan Sign Language Machine Translation: Does translation from a morphologically rich language reflect the interpreters' allocation of high cognitive resources? (poster)


Ida-Lotta Strömåsgård & Anton Granvik: Mental metaphors in Quechua

Piet Swanepoel: Rhetorical strategies used in South African interventions to redress social norms and behaviours related to HIV-transmission

Pirjo Söderholm: Colour compounds in Swedish fiction (poster)

Piia Taremaa: Fictive and actual motion in Estonian: Encoding space

Ewa Tomczak: Towards a profile of Fictive Motion in Polish: A look at coextension paths

Ekaterina Troschchenkova: Mental representations of complex values and their role in argumentation strategies

Natalia Tuliakova: What do legends really mean to say: cognitive aspects of the genre

Kristian Tylén & Svend Østergaard: Comprehending narratives: Cognitive and neurocognitive perspectives

Francesco-Alessio Ursini: Objects and nouns: A theory of the cognition-language relation

Francesco-Alessio Ursini & Nobuaki Akagi: The interpretation of focused predicates: The case of spatial PS
Ann Veismann: Ambiguity of word classes and polysemy of Estonian adprep üle ‘over’
Navin Viswanathan, Annie Olmstead, Pilar Aivar & Julianne Reilly: Comparing native Spanish and native English speakers’ imitation and perception of a VOT continuum (poster)
Charlotte Wollermann, Eva Lasarcyk, Ulrich Schade & Bernhard Schröder: On the role of filler and intonation for uncertainty perception in articulatory synthetic speech
Jordan Zlatev, Johan Blomberg, Benjamin Fagard and Dominique Boutet: Non-actual motion (and co-verbal gestures) in Swedish, French and Thai
Forces that shape linguistic structure in sign languages

Elisabeth Engberg-Pedersen

The iconicity of many signs of sign languages is obvious – at least when you have been told what the signs mean. Sign languages, however, reflect cognition and communicative demands in complex combinations with visual iconicity. In the first part of my talk, I shall demonstrate deaf children’s difficulties with constructions where different simultaneous articulators reflect spatiotemporal relations, enactment and affect in descriptions of interacting individuals. The second part focuses on the expression of the contrast between foregrounding and backgrounding. Constructions of foregrounding/backgrounding reflect differences in attention, bimanual manipulation and again, affect and spatiotemporal relations. In the last part I show that conventionalization may go against iconicity, but surprisingly, at times increase similarity between sign languages.

What Does Metaphor in Language Reveal About Metaphor in Thought?

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A significant claim within contemporary metaphor scholarship is that many linguistic metaphors arise from widely-held metaphors in thought, or conceptual metaphors. People speak metaphorically to the extent that they do, because they think metaphorically about many abstract ideas and events. Moreover, these metaphoric concepts emerge, primarily, from recurring aspects of bodily experience, such that metaphoric concepts and language is seen as embodied to a significant degree. But several scholars claim that metaphoric concepts emerge from tokens of linguistic metaphor. Verbal metaphors do not arise from embodied metaphoric concepts, but metaphoric concepts may arise from repeated patterns of verbal metaphor use. My talk acknowledges the possible importance of verbal metaphor in the creation of conceptual metaphors, but strongly argues that language along cannot explain the specifics of metaphoric thinking or why we talk about topics in the metaphoric ways we do.
The exbodied mind: Cognitive-semiotic principles as motivating forces in gesture

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Building on the premises of the embodied mind (e.g. Gibbs 2006; Johnson 1987), this talk presents an approach to manual gestures and full-body enactments that centers on how cognitive-semiotic principles – such as iconicity, indexicality, metaphor and metonymy – seem to drive the expression (i.e. ‘exbodiment) of ideas, inclinations, emotions, etc. in multimodal performance acts. The focus will be on how semiotic modes (Jakobson 1956; Peirce 1960) as well as related conceptual schemata may structure and thus lend some systematicity to spontaneous communicative bodily movements integrated with speech. Of central interest are the ways in which image schemas and other cognitively entrenched patterns of experience – arisen from visual perception, navigation through space, tactile exploration and other practices of bodily interaction with the material and social world – may be said to not only underpin gestural sign formation and the use of gesture space, but also guide, at least to some degree, gesture interpretation.

In particular, it will be argued that while the perceived similarity between the gestures/postures we observe in others and our own action routines and semiotic experience may determine how we cognitively and physically align with our interlocutors, iconicity (and metaphor) is only one pathway to the understanding of communicative behavior (Cienki 2010; Cienki & Müller 2008; Mittelberg 2008; Müller 2008). Contiguity relations holding between the speaker’s body and its environment, between gesturing hands and the (imagined) objects, tools or surfaces they may manipulate, or between finger tips and the invisible movement traces they leave in the air, also assume important functions in cross-modal processes of interpretation that enable us to metonymically infer both formal and pragmatic aspects of coverbal gestures (Hassemer et al. 2011; Jakobson & Pomorska 1983; Mittelberg in press a; Mittelberg & Waugh 2009; Panther & Thornburg 2003). This is where indexicality comes in through multimodally expressed viewpoint (Sweetser 2012) and material and/or spatial anchorage, e.g. through environmentally-coupled gestures (Goodwin 2011) and other practices of interacting with objects, tools, and surfaces (Streeck et al. 2011).

The second part of the talk will offer some insights into 3D motion capture studies carried out in the Natural Media Lab at RWTH Aachen University. Using a MoCap system allows gesture researchers to have multiple points-of-views of the communicating body and the movement traces produced in 3D-space and to measure the velocity of movements, distances between hands as well as between the torso and the manual articulators in motion. Studies exploring the semiotic and pragmatic structure of gesture space will be presented (Priesters 2012; Priesters & Mittelberg 2013), revealing, for instance, individual differences in people’s use of space and suggesting some of the ways in which hand configurations and motion patterns may be matched with certain image and force schemas (e.g., SOURCE-PATH-GOAL, OBJECT, CONTAINER, CENTER-PERIPHERY, and BALANCE; Mittelberg in press b).

References


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Word Generalisation in the Dog

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Although animals have been shown to lack knowledge of syntax, they do possess word knowledge: for example, a dog or a dolphin will fetch a float but not a ball if asked to ‘fetch the float’. In my presentation I will consider whether our knowledge of words is qualitatively different from word knowledge in the dog, and why it might be interesting to consider such a question.

In the first part of my presentation I will focus on common nouns: for example, words referring to objects.Humans tend to extend the meaning of a word like ‘horseshoe’ to objects that have a horseshoe shape: we primarily generalise the meaning of a word referring to an object to other objects of a similar shape, but not to objects that are similar in texture or size. Does the dog also have such a shape bias? Or may it have scent bias instead? I will present several experiments carried out with a single dog which had a history of word learning to show what biases this dog displayed, and what this may tell us about word generalisation in humans.

In the second part of my presentation I will consider prepositions: words whose core meaning refers to object location. Discussing an experiment with ten dogs that did not have a prior history of word learning I will consider whether learning and generalising the meaning of ‘to the left of’ and ‘to the right of’ is qualitatively different in humans and the dog. Is the dog as confused as some of us are when asked to pick the object ‘on the left’?

I will end my presentation by considering a set of questions relating to word generalisation, research methodology and comparative cognition that need to be addressed in order for this area of research to give meaningful insights beyond the ‘aha’ realm.

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Variation of textual interpretations: An experiment with readers of M. Lewycka’s *A short history of tractors in Ukrainian*

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The primary target of this experiment has been to analyse a variation in the interpretation of metaphors and analogies among readers of "A short history of tractors in Ukrainian". This novel is a recent bestseller describing the problems of post-war migrants to the UK and the subsequent family issues that arise with an aging relative. The text accommodates a range of figurative devices which support the characterisation and plot development. Prior to the experiment with the readers, the patterns of metaphor distributions and analogies were selected and their attribution in the text was analysed. My own interpretation and the recall of the selected patterns were compared with interpretations of other readers.

The design of the experiment was based on the research of interpretative cognition presented by Hasson and Giora (2006) and Gibbs and Boers (2005). Ten native speakers of English were asked to read the novel and to answer 22 questions on defining topics and characters, the interpretation of text segments with metaphors and analogies and on the correlation and retention of images. The survey focused on the understanding of the allegorical narration on tractors, parallels between changing shoes and habits, the images of "tug-of-war", "stilettos" "a fluffy pink grenade" and others. Readers' cognitive input into the building of analogies (Harris and Tolmie 2011, Gibbs 2011) have been examined.

Additionally, the survey has revealed discrepancies among evaluations of the characters and events in the story. Some gender differences in the evaluation have emerged though the sample size does not allow for broad generalisation. Most of the male respondents tended to focus on the socio-historical factors of the drama, while the female participants embraced the family aspects of the story. The preliminary findings on the differences among readers' interpretations and the nature of these differences will be revealed.

References

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Both sound symbolism and emotional prosody have received a great deal of attention in later years. This presentation discusses embodiment and usage based theory of language in relation to results from two priming experiments on non-arbitrary expressions, one on sound symbolic words and one on emotional prosody. One of the issues discussed is: What lexical status do non-arbitrary expressions have? (Cf. Bergen, 2004, Nygaard et al, 2008, Seddoh, 2002.)

One of the priming experiments concerns priming with sound symbolic words and the other experiment concerns cross-modal priming between nonsense words with emotional prosody and written emotional words. Results from the experiments show that priming facilitation has correlations with lexical frequency counts and with acceptability judgements of priming prosody. An interpretation of the experiment on emotional prosody is that a high percentage of correct interpretations of emotional prosodies could show that the emotional prosodies are well produced for a particular emotion, thereby causing a greater priming effect on the written emotional words, which are matching in meaning. High facilitation from priming – in matching condition – correlates with high degree of correct interpretations and with high word frequency. And conversely: lower facilitation from priming – in mismatching condition – does not correlate with correct interpretation or high word frequency, due to inhibition. Possible explanations for the results are discussed (cf. Abelin, 2012 a, b). In addition, complications of the measures will be discussed.

Iconic (onomatopoeic) and indexical (emotional prosody) expressions have qualities which differentiate them from arbitrary words. They are embodied in the sense that there is a non-arbitrary connection between form and meaning, between speech sound and objects or emotions, which facilitates word learning (cf. Nygaard et al, 2009). Expression and content are learned early in a non-arbitrary, iconic or indexical connection (and/or have a biological basis).

In the case of prosody we could talk about “emotional prosodic morphemes”, which are furthermore non-arbitrary in nature, just like phonaesthemes. The concepts of only phonological priming or only semantic priming might not be relevant for non-arbitrary expressions, since form and meaning are inseparably connected.

References
Abelin, Å. (2012 b) Relative frequency and semantic relations as organizing principles for the psychological reality of phonaesthemes, Selected articles from UK-CLA meetings, vol 1, 128–145.
Emotion Metaphors in Persian:
A Corpus-driven Cognitive Survey

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Surveying the conceptual metaphors of emotions across languages will reveal interesting facts about the ideology and the folk psychology inherent in a culture. Specifically in eastern cultures which heavily rely on emotion, there exists a question about the ways emotions are conceptualized. The present study is corpus driven, whereby the pervasive Persian database in the Institute for Humanities and Cultural Studies, is searched for the linguistic representations of conceptual metaphors of emotions in Persian, to find the prevailing paradigms for the conceptualization and representation of emotions. Different stages of analysis are supported by historical data from inscriptions or texts belonging to other periods of the Persian language. In this search for conceptual metaphors in the corpus, we did not limit the study to a specific emotion concept such as anger, love, shame, and joy. Instead we were primarily eager to find if emotion metaphors in general are structural, ontological or orientational and to analyze source and target domains; and then to present cognitive-cultural explanations.

Second language influence on entities’ introduction in narratives in First language: The case of Russian/French late bilinguals

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The use of more than one language, leads speakers to treat different linguistic systems for producing or understanding discourse. Previous work in language acquisition has shown the link between grammatical devices available in language and the way information is presented in the discourse. Recent studies in bilingualism have shown the impact of Second Language (L2) on the production in First Language (L1) in some informational domains. The current study focuses on the influence of L2 (French, in this case) on inanimate entities’ introduction in narrative discourse in L1 (Russian, in this case) by Russian/French late bilinguals.

Their narratives were analyzed with the Quaestio model proposed by Klein and von Stutterheim (1991). We are particularly interested in the way that inanimate entities are introduced in the discourse. This interest is based on the differences between the languages under consideration. French and Russian, Romance and Slavic, respectively, are typologically different. In French, obligatory determiner marks informational status of the referent in discourse. Thus the indefinite article un/une is systematically used to mark new information. In contrast, in Russian, articles, as grammatical category, are absent. The status of information is generally marked by word order. Thus, newly introduced information is generally placed at the end of the utterance following the principle “focus last” (Klein & Perdue, 1997).

Our hypothesis is “the grammaticalisation of informational status of entities in French influences the way that information is introduced in discourse in Russian by late bilinguals”. The participants of this study are 15 late Russian/French bilinguals aged between 25 and 35. They had spent around 7 years in
France. Their narratives were compared with those of the control groups, 15 monolingual native speakers of each language. The participants were asked to retell the story of a short silent film, entitled “Quest”. This methodology is also used by researchers at the University of Heidelberg in Germany (von Stutterheim & al., 2003). In this film the protagonist, a sand character, is searching for water.

The inanimate entities, as: bottle, wind, paper, puddle, water drops, rock, stone are introduced in the data by five strategies: (1) V + NP (Complement) (he grabs a bottle), (2) Existential or presentational constructions, such as *il y a* + NP or *c’est* + NP (there are stones), (3) NP (Subject) + V (leaves fly), (4) External predicate, such as *on voit* + NP (we see a rock) and (5) NP (Subject) (*wind* = it’s windy).

French native speakers regularly introduce entities as NP (Complement) (50%) and through a presentational or existential construction (30%). Less often they use an external predicate (20%). In all cases, the NP is placed at the end of the utterance and accompanied by the indefinite determiner *un/une*.

Russian monolingual speakers also introduce entities as NP (Complement) (40%). They also usually introduce them as NP (Subject) + Verb (35%). The introduction of entities through the NP (Subject) is more often in Russian native speakers’ productions than in those of French speakers. This tendency is due to the greater freedom in word order in Russian. In 96% of the cases, the NP (Subject) is placed in the post-verbal position. There are no optional determiners in their productions.

As for the bilinguals, they often introduce new information by the NP (Complement or Subject) placed at the end of the utterance and regularly preceded by optional determiners. Thus, the influence of L2 French is evident in the extent to which quasi-bilinguals feel the need to mark the introduction of new information by a determiner, an unnecessary strategy in Russian. This influence results in overmarking the new referents, both through word order (a Russian strategy) and through a determiner (as in French). The structure of French influences the conceptualization of information of bilinguals in their mother tongue.

References

How meaning potentials of speech and gesture interact in determining semantic interpretation

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The paper addresses the question of what and how gesture and speech, respectively, contribute to the interactive co-construction of meaning. A point of departure is the notion of “meaning potential” which we apply to both unimodal vocal verbal units and gestures, as well as to multimodal vocal-gestural units, Allwood (2003). The aim of the paper is to explore the different types of meaning potential and how they interact with each other in creating actual contextually relevant meaning.
A series of studies were made of gesture and speech in video-recorded spoken interaction in different social activities, such as first acquaintance interactions, political debates and informal discussions and narrations. The studies focus on the semantic contribution of speech and gesture and on how they are interpreted both in isolation and in combination. Subjects were shown unimodal auditory or visual stimuli as well as multimodal audiovisual stimuli, in order to isolate the features contributed by the different modalities and to study how they can interact through a multimodal combination of meaning potentials. Both naturalistic and experimental stimuli were used. Findings from the studies include how features, such as degree of abstractness-concreteness, various aspects of action versus object/entity orientation and affective-epistemic states are coded and interpreted in relation to the meaning potential of a gesture. Examples of results from the studies include how level of abstraction is attributed to isolated iconic gesture stimuli. Another result is that in action related words or phrases; a step versus to step or ladle the action orientation is somewhat more likely to be rendered in an accompanying iconic gesture than the object or entity orientation, and that this tendency is not as strong in iconic gestures produced by persons with aphasia, whose iconic gestures are more often object or entity related and are also, possibly as a consequence of this, somewhat easier to interpret (Ahlsén and Allwood, 2013).

The results are discussed in relation to the question of how speech and gesture are related in interaction. Theoretically, this question relates, for example, to evolutionary and cognitive perspectives on multimodality in communication (cf. Allwood, 2008). Practically, it relates to application areas, such as rhetoric, the design of embodied communicative agents (Allwood and Ahlsén, 2009) and compensatory strategies for communication disorders (Ahlsén, 2011).

References

Feeling connects body and mind

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The verb lexeme feel is heavily polysemous. It can represent a complex of active movements, perceptual experiences, emotive reactions or states, and cognitive processes, and thus illustrates how bodily actions and impressions are connected with psychological experiences of an affective as well as intellectual character. In addition, it is used in several different types of clausal constructions. In some
of these an animate agent or experiencer, prototypically a human being, occupies the subject slot and functions as the primary figure, or trajector. Other construction types present another scanning perspective, as this participant is then backgrounded, or perhaps even put offstage, and the experienced phenomenon is the thematic focus represented by the subject slot.

E.g.  I was feeling the surface, and it felt smooth and soft.
I felt something touching me.
He was beginning to feel sick.
She felt depressed.
They felt pleased with the result.
I feel like a cup of coffee.
It feels good to be home again.
It feels as if I have never been away.
How do you feel about returning?
He felt proud to be part of the team.
The air felt fresh and cold.
It felt as if it was a dream.
We could feel that we were being watched.
I feel confident that this is accurate.
The earthquake was felt as far away as New York.
They felt themselves to be part of a crusade against greed and exploitation.

This presentation will give an overview of the polysemous potential of feel within a cognitive linguistics framework, and both the kinds of meanings that feel can have and the syntactic constructions that they can occur in will be exemplified and described. The character of the polysemous links between different feel meanings will also be dealt with. Finally, the way the polysemy of feel is presented in dictionaries will be commented on, and some suggestions for improving dictionary entries for this English verb lexeme will be given.

Evaluating the role of the head and modifier in English compounds and nominal phrases

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This paper discusses the role of the head and modifier components in English compounds and nominal phrases. The majority of the literature on morphological structure and the processing of complex linguistic structures (e.g., compounds) has traditionally emphasised the important role of the head constituent, whereas the modifier is said to further specify the head (e.g., Marchand 1960, Bauer 1983, Dressler 2006). In a Cognitive Grammar framework, the component whose profile the whole structure ‘inherits’ is the profile determinant – a notion which roughly corresponds to the head in traditional terminology (Langacker 1987, 1991, 2008). Rather than being a purely grammatical construct, “the notion head is defined conceptually with respect to the semantic pole of symbolic assemblies” (Langacker 2008: 194).

The present study seeks to empirically evaluate the dominant role which has been posited with respect to the head. For this purpose 86 monolingual native speakers of English participated in a cued
recall study. In the first part of the study, they had to memorise either 12 compounds or 12 phrases, which were semantically roughly equivalent (e.g., infection risk / risk of infection). After a brief distractor period, the participants were presented with cues relating to either the whole compound / phrase (domain cues) or to one of its components (head and modifier cues, respectively). The task was to recall as many of the items in the first part and to pair them with the cue which had spurred on the speakers’ memory. Findings revealed no main effect of cue type (i.e., domain, head, modifier) or target type (i.e., compound or phrase), indicating that the type of linguistic structure and whether the cue was related to the whole or one of the parts did not make a difference with respect to recall. However, there was a significant interaction of modifier cues and target type (more specifically, phrases), which strongly suggests that modifiers are recalled better in phrases. This finding is consistent with a previous study, which revealed that modifier rather than head associates come most readily to speakers’ minds.

In conclusion, the present study casts doubt on the view that the head is the most dominant component in a complex structure. The semantic information carried by the head often serves to anchor the whole structure to a particular category. Since these categories are quite broad, the semantic information inherent in the head is rather vague (e.g., sheet in paper sheet / sheet of paper). It is therefore the modifier that provides the bulk of the semantic information. In this light, it is apparent why such associates should be significantly more frequent than head associates. In sum, the study strongly suggests that the modifier is semantically more salient, which should encourage linguists to re-evaluate their concepts of the notion head and modifier.

References

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Formal and conceptual blending in translation of neologisms

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Within Cognitive Linguistics lexical items are held to be representations of cognitive categories based on human experiences of the world and are stored in human mind as mental concepts, while meaning is constructed through our interaction with the external world and is equated with conceptualization (Langacker 2008). Viewed from this perspective, the translation process should be seen as a cognitive discourse-pragmatic phenomenon involving the transfer of cognitive categories in both the interlingual and intercultural dimensions. The process certainly does not constitute a simple code-switching between two languages as was suggested by traditional translation theories established within the structural linguistic paradigm (cf. Tabakowska 1993, Venuti 2012).

Further, since the cognitive resources giving rise to similar meanings in distinct languages may be quite different due to the fact that distinct languages have developed different ways of prompting the
required cognitive construction, the translation process involves, as Lewandowska-Tomaszczyk (2010) argues, the re-conceptualization of a source language message into a target language message, whereby the conceptualizations in both the source and target language must be equivalent to the translation to be recognized as successful.

In particular, it seems that one cannot satisfactorily account for the establishing of the equivalence of the conceptualizations referred to unless recourse is made to (i) Fauconnier & Turner’s (2002) conceptual blending theory, a fundamental cognitive mechanism playing a crucial role in structuring of conceptual knowledge and inferential processes and (ii) communicative relevance and discourse context as discussed in Brandt’s (2010) revised model of conceptual blending, are incorporated into the analysis of translation processes.

With this in mind, the paper examines, using the modified, translation-oriented Conceptual Blending Theory, a number of neologisms translated from English into Polish (and vice versa) to identify the construal shifts performed by the translators in the target texts compared with the source text conceptualizations.

References

Author’s personality in Russian and American scientific discourse

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Nowadays the interest to personality and identity constantly increases. The present research aimed to reveal how author’s personality is expressed in scientific psychological discourse.

First, self-identification peculiarities of Russian and American authors in scientific psychological discourse were analyzed. Namely, we found that in Russian scientific discourse the author identifies him/herself in terms of personal pronoun “We” (47%, 5%). In contrast, American authors use personal pronoun “I” (56%, 5%) to introduce their thoughts. At the second stage of our research subjective modality of statements was analyzed. We found differences in semantics of this category. The major difference concerns subjective modality of probability. In addition, the acknowledgements were analyzed. We found out that Russian authors tend to thank famous people who passed away. American authors express their gratitude to people with whom they plan to work further. Finally, we analyzed in which culture authors express their thoughts more assertively in scientific psychological discourse. According to our results, Russian authors present their point of view more assertively (58%
of cases). Meanwhile, American authors try to be more tolerant and flexible. That is why categorical statements are used less often, namely in 29% of cases.

To conclude, the obtained results proves that there is a special vision of the world in Russian and American cultures which is fixed in language forms. Grammatical features of a scientific discourse, author’s preference to express idea by means of certain grammatical form reflect cultural-specificity even in such highly-formalized discourse as a scientific psychological one.

Morphological Categories and Linguistic Cognition

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The paper intends to illustrate the link between collective and individual aspects of language in the sphere of morphology. In my analysis, I follow the distinction between a rule governed and a context-dependant communication. Drawing on the proposal of linguistic interpretation as contextually construed meaning, the meaning potential of *a most + Adj* and *to be + Ving* forms will be examined, including a description of their basic semantic configuration and the range of senses which they are commonly associated with and found in discourse.

On a conceptual level, it is an emotional-evaluative configuration of collective knowledge which results in transition to the sphere of individual knowledge and leads to an individual appraisal of actions, situations or objects. Emotional evaluation is a kind of certain reaction to the objects and events that affect a speaker’s personal world and that is why one treats them as important for him/herself. On a linguistic level, a non-prototypical usage is observed in morphological forms of the superlative degree (*a most attractive girl*) and progressive forms of the verbs (*She is always grumbling*).

In prototypical usage of superlative forms, we compare one person or thing with others in the same group. *E.g. First class is the most expensive way to travel.* The speaker thinks that there is no other way of travelling as expensive as this one. In his view he relies on conventional knowledge about possible ways of travelling. Using these forms non-prototypically (evaluatively), we do not compare persons and things but state a very high degree of quality. In *This is a most wonderful picture*, the speaker conceptualizes the picture as extremely wonderful, and there may be other wonderful pictures, but he doesn’t take them into consideration. The speaker relies on his individual knowledge about such things as quality of the picture and expresses his own emotional-evaluative attitude towards it.

Conventional knowledge which forms the basis of progressive semantics (continuous actions going on at the certain moment or at the moment of speaking) in (1) *Look! She is using my phone!* is configurated into individual construal of the situation which repeats too frequently and provokes emotions and evaluations in the speaker (2) *She is always using my phone!* The speaker expresses certain criticism of a certain person within more or long periods basing on individual knowledge and experience.
Laughter and cognition in conversation

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Laughter is common in spontaneous conversation and manifests itself with incredible variation, pragmatically and acoustically. People use indirect speech and other language devices in combination with paralinguistic signals such as laughter for strategic effects. The relationship between laughter and cognitive processing during social interaction is not well understood, but recent research reveals that laughter plays an important role in not only how we judge those we converse with, but also how third parties judge others in a conversation.

In this talk I will describe recent research showing that 1) laugh acoustics relate to people’s judgments of laughter intent (Bryant & Aktipis, 2012), 2) the way people laugh together can reveal quite rapidly whether they are friends or strangers (Bryant, 2012), and 3) the nature of laughter and other coordinated speech features between strangers in conversations predicts decisions in a behavioral economic game (Manson, Bryant, Gervais, & Kline, 2012). These findings will be framed in relation to how laughter signals interact with inferential communication during conversation.

References

Doing rhetoric in visual discourse:
A cognitive-pragmatic approach

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This paper aims to explore the dialogic relations between form and function in multimodal discourse by looking into the print advertisements for the Olympics 2008 released by Mainland China. Data for analysis are chosen on the grounds that, first, the wordings in Mandarin Chinese are simple, slogan-type, e.g. Aoyun re, re bian jingcheng! (‘The Olympic Fever Heats the Whole Beijing’); but creatively interweaving the Games’ logo with attractive pictures and colour symbolism concerning Beijing City through which the messages could be plenty. Secondly, they encourage the (active/imaginative/creative) audience to integrate the semiotic elements (linguistic slogans and visual images) to trigger cognitive contextual effects, namely pun, irony, metaphor and humour, and will perform various pragmatic/communicative functions thereafter. Thirdly, they are ideologically significant for conveying the frames of the Olympic humanistic spirits – harmony and peace, promoting
and enhancing traditional/wide-ranging Chinese culture, inviting and persuading the audience to recognise the prominent values in a fresh and friendly style with appeals to market orientation, modernisation and globalisation.

The audience’s mental processing/inferential processes of perception, comprehension and interpretation in multimodal communication are approached within Relevance framework (Sperber & Wilson, 1986/1995; Forceville, 2005; Noveck & Sperber, 2004). She searches for optimal relevance in the interpretation process, during which a wide array of implicatures involving feelings, attitudes, emotions and impressions would be inferred and derived from non-/verbal communication together with the contexts, depending on different degrees of involvement and shared cognitive environment. The sociocultural aspect of visual communication and language use is further explored to see the inseparable relationship between sign systems/language and social meaning. Lending itself as a symbolic arena for embracing competing ideologies, multimodal discourse displays the gist of, and adds interest to, social semiotic interpretability, reflecting the social cohesion/interaction and cognitive dynamics of communicator and audience, thus maintaining the dialectical relationship between sociocultural structures and social practice/discourse (Fairclough, 1995).

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Event structure and word order in gestural communication

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The motivation for conceptual structure in language and cognition is a hotly debated topic. Gestures lend itself as a particularly interesting window to conceptualization due to their affordances for spatial, iconic and symbolic representation and how they unfold in time. Previous studies have indicated that people of any linguistic background will use only one specific gesture order (SOV – subject, object, verb) when asked to describe transitive events using only gesture (Goldin-Meadow et al 2008). This is presented as evidence for innateness in the conceptualization of events, thus transcending acquired linguistic structure. However, a competing explanation not considered in the literature is the extent to which responses are influenced by the event structure of the referent situation itself. Some types
‘transitive’ activities thus logically presuppose the existence of the object while for others – such as ‘creation activities’ – the object appears as an effect of the activity.

We will present data from an experiment in which pairs of subjects engaged in a simple referential game matching stimulus pictures only using hand gesture. Results suggest that the event structure of the referent situations indeed affect gesture ‘word order’ (syntax). While simple transitive situations (e.g. ‘a ballerina throwing a paper airplane’) motivated a SOV structure, creation events (e.g. ‘a ballerina painting an airplane on a canvas’) rather motivated SVO. The results will be discussed in relation to motivations for conceptual structure in language.

Overhearing the Literal:
The Role of Awareness in Semantic Change

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The relation between literal and figurative meaning in language comprehension has been studied from a variety of perspectives, including the ways in which language is represented, accessed, processed and produced (Giora 1999; Récanati 1995; Sprenger et al. 2006). Studies of the non-compositional nature – the ‘syntactic frozenness’ (Gibbs & Gonzales 1985) – of fixed expressions have suggested that a different type of mental lexicon processing is involved. The semantics of fixed expressions, in which even the literal meaning of a lexical item is, in effect, meaningless, can also be seen as a special case of the arbitrary nature of the sign. The ambiguity of homophones similarly suggests that literal meaning is suspect: as with fixed expressions, the transmission of meaning is beholden to contextual concatenations. Coupled with the overwhelming opacity of language, fixed expressions and homophones train speakers to ‘overhear’ otherwise uncamouflaged words: thus ‘highway’ does not invoke ‘high’ and ‘way’, though metalinguistic awareness may surface in puns and other language-reflexive forms. Phonological and morphological awareness (i.e., ‘hearing’ what is typically ‘overheard’), particularly with reference to homonyms and fixed expressions, has also been shown to be a robust indicator of reading competence (Zipke 2011; Cain et al. 2005; Corthals 2010; Solesa-Grijak 2011) and second-language learning (Ramirez 2011; Domínguez & Nerlich 2002). By examining the different ways in which literal and figurative language encode and deliver meaning I hope to throw light, more generally, on the role of awareness in semantic change.

References

Beyond Intelligent Expert Systems:  
A cognitive method for linking worlds of knowledge

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Many types of knowledge (e.g. tacit knowledge and know-how) are harder to access or understand for those from outside the social context of the experts in a particular domain. Moreover, experts need not (and often do not) know or believe the propositions that characterize their expertise. That is, experts often have difficulty in consciously delineating their knowledge. This is a major bottleneck in developing programs that do what experts do. Accordingly, this talk provides a method to create a multidisciplinary framework for mapping between different systems of expert knowledge.

As an illustration, consider the sort of know-how possessed by expert healthcare providers in assisted-living communities for the intellectually disabled. In one such case investigated by the author, simply by monitoring a stream of sounds coming from a room to their station, healthcare professionals effectively categorized a wide array of sounds. These experts can, for example, separate “safe” coughs from those that likely indicate the need for medical follow-up simply by listening for a fraction of a second. A similar scenario is attested in ecological monitoring and resource management in Canada in which aboriginal communities contribute to the scientific discourse on environmental impact and mitigation reports. Like the healthcare professionals, these experts may not use propositional knowledge, but instead rely on know-how and tacit knowledge.

The challenge is to extrapolate the essence underlying conceptualizations of such knowledge systems as encoded in both language and practice and develop a conceptual bridge between one another in such a way that facilitates the development of expert systems. This is accomplished by (i) an emic procedure of consultant-led corpus creation and subsequent cooperative semantic analysis (designed to determine the cognitive content and structure of the selected domains) in conjunction with participant observation (aimed at identifying kinds of know-how) followed by (ii) an etic procedure of statistical analysis and verification aimed at facilitating mapping between the two.

The feasibility of this approach is demonstrated with a series of real-world examples arising from the aforementioned healthcare experts and aboriginal communities as well as from the author’s linguistic fieldwork while simultaneously highlighting some potential pitfalls and providing workable solutions. This presentation will offer a novel way to exchange knowledge and permit cooperative, scientific work between experts of all types, thereby providing the tools and methods for new era of dynamic scientific collaboration.
This study presents a contrastive cognitive study of the uses of the verb ‘eat’ in Tunisian Arabic (for short) TA, English and French. This study investigates the metaphoric use of the lexical unit ‘eat’ in the above cited languages. The different metaphorical expressions of the verb ‘eat’ are taken from general language and specialized dictionaries in English and French. The TA expressions are, however, collected from speakers of this language through interviews. The analysis produces two clusters of meanings; one in which the meaning is built on the FULL-EMPTY schemas and the eating experience serves to conceptualize the disappearance of the eaten element and in the other cluster the human body, whether partially or totally, is either the eater or the food. In the three languages, the eater and the food play a crucial role in creation and understanding of metaphors, metonymies and related tropes.

In the first cluster of meaning the eating experience describes entities eating one another. This move from the state of being full to being empty is framed in terms of eating experiences.

- tractors eat petrol.
- Cette activité mange beaucoup de temps. ‘This activity eats a lot of time’.
- l-kaïba t-akil essence. ‘The car eats petrol’.

These examples are governed by the conceptual metaphor EATING IS CONSUMING. The feature of eating characterising living beings is transferred to objects. Accordingly, food in itself turns into a range of consumed entities.

The second cluster of meanings builds on the embodied experience of eating as it plays a crucial role in the creation and understanding of metaphors. The different expressions involved in this cluster capture many abstract experiences by conceptualizing the human being as the eater of other human beings and the food of other human beings at the same time. The human body is exploited partially by eating human organs or wholly through eating the self. The following table illustrates some of the metaphorical meanings of the eating experiences as it is used in the three languages.

<table>
<thead>
<tr>
<th>Relevant senses associated with eating</th>
<th>TA</th>
<th>English</th>
<th>French</th>
</tr>
</thead>
<tbody>
<tr>
<td>- eat one another (dominance)</td>
<td>+</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>- eating with the eye (avidity)</td>
<td>+</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>- eating the heart (grief / sufferance)</td>
<td>+</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>- eating the face (embarrassment)</td>
<td>+</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>- eating the head (death)</td>
<td>+</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>- eating the self (anger)</td>
<td>+</td>
<td>-</td>
<td>+</td>
</tr>
</tbody>
</table>

Table1. Examples of some relevant senses associated with eating in TA, English and French.

These examples show that the embodied experience of eating serves to conceptualize different concepts. The understanding of these different terms is mediated by the culture. Throughout these examples, we notice that the three cultures/languages agree in framing emotions metaphorically through the eating experience but each culture selects its own ‘meal’. While eating the heart expresses a feeling of sufferance in TA and English, the French culture does not select this organ for eating. The interaction between the embodied action of eating and the cultural context accounts for this difference among the three languages.
The implication of the present study will be bringing about a further claim in support of the increasing role of socio-cultural context in shaping the creation and understanding of metaphors. The present study points to the importance of the context in determining the configurations of conceptual metaphors governing the understanding of eating in particular and food metaphors in general.

References

Swedish national identity as viewed by the political party “Swedish Democrats”

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This paper considers Swedish national identity as viewed by the political party “Swedish Democrats”. Among criteria characterizing Swedish identity like basic values (children upbringing and equal rights of men and women) special attention is paid to the behavioral patterns as not to speak loudly, not to interrupt and not to stand out in any occasion as well as to behave in a reserved manner and show respect to other people. These fundamental values and extralinguistic features are included into social capital – the notion that was in occasional use from about the end of the 19th century, but became widely used in the late 1990s. Social capital is defined as shared norms or values that promote social cooperation, instantiated in actual social relationships (Fukuyama, 2002). It is interesting that this notion is now extensively popular among politicians and used as a scientifically-proven term to justify their political viewpoints as in the case with the Social Democrats. It has to be noted that among the obvious benefits of this social phenomenon there are other factors that might prove to be challenging. There have been identified four negative consequences of social capital: exclusion of outsiders; excess claims on group members; restrictions on individual freedom; and downward levelling norms (Portes, 1998). Judging by the categorized behavioral patterns it can be elicited that it may be difficult even for an inborn Swede to be considered Swedish because he / she may occasionally violate these cultural
norms. Besides the way Social Democrats use this term is to some extent restrictive because they speak of an entitled group of people speaking (or able to speak) one language, sharing the same cultural values and behavioral patterns which makes it complicated if not impossible for an outsider to enter and eventually be accepted in this group if he / she lacks necessary features.

It still has to be mentioned that it is a delicate matter to speak about identity preservation in nowadays politically-favoured multicultural world. This paper illustrates how Swedish Democrats conceptualize the notion of Swedish identity.

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Topic expressions in Swedish:
A corpus-based analysis of prepositional synonymy

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Marking the topic of speech or a conversation is an essential part of the linguistic system, in the sense that most of what is ever said is usually said in relation to, concerning or regarding a certain subject. This is what Halliday (1967) calls theme in a broad sense. Languages typically have various means of expressing the topic relation, depending on context and communicative necessity. In English the default way of expressing topic is using the preposition about, the Swedish equivalent of which is om, as in tala om politik ‘talk about politics’. The four Swedish participial expressions angående, beträffande, rörande and gällande included in the title of this paper can be considered to form a group of marked topic expressions, beside the unmarked om.

According to this classification the expressions under study can be considered near-synonyms (cf. Arppe & Järvikivi 2007: 8). As example (1) shows, the synonymous status of these four expressions is uncontroversial in some contexts. And, in fact, even om is possible in (1).

(1) Till följd av statens avtal med Landstingsförbundet beträffande / angående /gällande / rörande finansieringen av länsmusiken är det rimligt att (med tanke på uppsägningstid m.m.) tillämpa det nuvarande systemet under 1997. (PAROLE, v.g. beträffande)

(2) ‘As a consequence of the agreement with Landstingsförbundet regarding the financing of regional/areal music it is reasonable to follow the present legislation (when it comes to let-off times, etc.) during 1997’.

Further characteristics that point at the synonymous status of these expressions are the fact that beträffande, angående, gällande and rörande are verb-based participial expressions on the verge of becoming lexicalized as prepositions. Furthermore, they all bear connotations of a formal, bureaucratic
and legal register and their use is widely discouraged as “rigid and formal” among language planning professionals. In this sense, focusing on a written corpus is clearly motivated.

I propose to analyze the prepositional uses of beträffande (N=472), angående (N=196), gällande (N=90) and rörande (N=211) in the Swedish PAROLE-corpus, in order to find out to what degree they can really be considered synonyms. By performing a detailed syntactic and semantic annotation of the examples, I address the question of corpus-based prepositional semantics and synonymy analysis. The data have been annotated using a number of different variables. After determining the word class of both the syntactic head and the governed element, the examples were annotated according to eleven formal, syntactic characteristics of the usage context: number, definiteness (two classes), modification (two classes) and complexity. These were applied separately to the head and the governed elements. When the syntactic head was a verb, other formal attributes such as transitivity, tense, voice, subject position and subject complexity were used. Both the syntactic head and the governed element were also annotated using semantic criteria, including animacy, semantic verb/noun class, abstract/figurative use (cf. Tuillier & Danlos 2012).

The distribution and interaction of these variables is analyzed both qualitatively and quantitatively. The results show that despite belonging to the same semantic class and communicative register, there are nonetheless certain differences between the expressions. For example, among the purely formal criteria, the syntactic head seems to distinguish the four topic prepositions, while the characteristics of the governed element are highly similar. On a collostructional level, several verb/noun + topic preposition collocates fall out, revealing distinct lexical-semantic preferences. Beträffande is the only topic expression in my corpus that appears in sentence initial position, thus functioning as a discourse level topic marker.

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PAROLE corpus: http://spraakbanken.gu.se/korp/.

The category of Transitivity from perspectives of Cognitive Linguistics

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The research attempts to define the category of transitivity anew in terms of Cognitive and Functional grammar, Frame Semantics and the Theory of Prototypes. The material under study are the resultative constructions, in which an intransitive verb takes a ‘contracted’ sentential complement (What a ludicrous story – I laughed my head off), the cognate object constructions, formed by a combination of

1 It goes without saying that an analysis of spoken language uses of these expressions would also be enriching, especially if one were able to contrast and compare different registers.
an intransitive verb and a noun derived from it (*Mowgli laughed* a little short ugly *laugh*), as well as the structures with labile (ambivalent) verbs, where they can function either as transitives or intransitives (*He broke the cup* – *The cup broke*). The aim of the research is to provide a new interpretation of the category of transitivity, revealing linguistic and cognitive factors allowing the use of the above mentioned cases in the English language.

The results of the research showed that there are quite a few purely transitive or intransitive verbs in English, while the majority of them can function both as transitives or intransitives. It is worth noting that transitive meaning of some intransitive verbs does not appear unless they are placed in a specific context. The formation of the utterance sense can be connected with the realization of any conceptual characteristics, not necessarily fixed in a system meaning of the verbs. The realization of the characteristics, not innate to the system meaning of a verb, leads to its transposition. The basis of transposition is metaphor, understood as transfer of the structure of one concept on to another. In other words, the categorization of verbs can be conducted on two layers – system and functional, the latter is provided by the usage of the definite words in their definite combination within the framework of the definite syntactic structures. As a result, the word can be related not to a prototype but a periphery of a category or another category. So, it is concluded that the category of transitivity is treated as a semantic-syntactic category on the level of a predicate expression with regard to the connection of the semantic roles with their expression on the surface level. The binary approach fails to explain the cases when one verb can function both as transitive and intransitive, that is why it is suggested viewing the category as a continuum with its prototype and periphery.

**Back**

**Phrasal adjuncts in Construction Grammar**

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In this paper, I will consider two possible descriptive motives how Construction Grammar (CxG) might deal with free phrasal adverbials (i.e. adjuncts). The one, already available, would be so called *pattern of coining* (see Fillmore 1997, Kay 2010) and the other a novel construction type, or rather a constructional complex: *Event Structure Constructions* (ESCs).

Referring Fillmore (ibid.) both coining and constructions represent “two kinds of "creativity" in language” and in a sense a quite opposite to each other: by coining “a speaker uses existing patterns in the language for creating new resources” and by constructions a speaker uses “existing resources in the language, to produce and understand novel expressions”. Because being neither prototype patterns of coining nor prototype constructions, adjuncts with their sentential context have some features from both styles of creativity. Here though the latter will be preferred.

In essence, adjuncts in ESCs describe valence-external frame features other than participants (*AGENT, PATIENT, RECEIVER* etc.), namely circumstances such as *TIME, PLACE, MANNER, MEANS* and so on (Fillmore 1994). Further, in ESCs “core events”, verbs and their valence participants (or argument structure constructions), are anchored in spatial or temporal locations (spatial and temporal adjuncts), are characterized by some qualitative aspects (manner and means adjuncts), or are presented with regard to conceptualizer’s stance (modal adjuncts) etc. In my presentation, above mentioned adverbial functions will be exhibited more closely with Finnish data and, particularly, their common frame will be demonstrated under the term *scope*.

Since Goldberg (1995), *Argument Structure Constructions* (ASCs) have been stood for independent syntactic schemata which have their own abstract meanings separate from their individual lexical sub-
structures. However, ASCs by definition say quite little about frame-external elements (or free adjuncts). Even though ASCs in principle have valence slots for different kinds of adjuncts which specify where, when, why, how etc. some event takes place, in terms of traditional valence, these slots are usually semantically quite hollow from the point of view of ASCs. Thus, these abstract places can be freely and optionally instantiated when needed but which as such do not tell much about their real qualities and effects. Then, a more prolific, though still mostly tentative, suggestion would be that adjuncts operate as predicates which take “core events” (or ASCs) as arguments (also Fillmore 1994: 166–167; Croft 2001: 272–275; Kay 2005: 88, 95). This would form a basis for a preliminary technical definition of Event Structure Constructions.

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Describing language structure:
Implications for connectionist modelling

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Commenting on the analysis of the English past tense Nida (1968 [1948], pp. 262–263) points out that “different linguists describe the same structure somewhat differently”. However, there may still be differences as to how much the chosen way of describing that structure – the adoption of a certain model of grammatical description (see, e.g., Hockett 1968 [1954]) – contributes to our understanding of the structural characteristics of the language. Different types of language may require different models of description in order to bring out appropriately their “patent structural features” (Robins 1959, pp. 139–144; Matthews 1970, p. 110). A morphological analysis based on paradigms is justified in a grammar of Latin but out of place in a grammar of present-day English (Huddleston 1984, pp. 77–88; see also Blevins 2006, p. 569).

There is another point made by Nida (1968 [1948], p. 262): “It is the observable structural patterns of a particular language, not its general phonological tendencies or the mere statistics of occurrence, that constitute the chief criterion for any given analysis.” In the analysis it is the structural patterns that are first decided on; only after this the tendencies or the statistics of occurrence can be made use of. The former phase of the analysis is an example of a ‘pattern explanation’ which aims to show how the different parts of the research object hang together (Itkonen 1983, pp. 36–38). The latter phase, an
example of a ‘statistical explanation’, complements the first; yet the tendencies or statistics of occurrence are not in themselves explanatory (ibid.).

These two facets of analysis, the choice of the model of grammatical description according to the structural characteristics of the language and the priority of the ‘pattern explanation’ over ‘statistical explanation’, are given surprisingly scant consideration in connectionist accounts of inflectional morphology. The network in a connectionist model of the English past tense is invariably set up to represent a combination of the lexical stem and the derived past tense form. Some of the stems – their phonological representations – are mapped as such to their past tense equivalents with an added allomorph of the regular -ed suffix, others undergo various non-affixal transformations from stem to past tense forms. This modelling scheme is in keeping with the model of grammatical description outlined by Huddleston (1984) for English. It does not follow, however, that it can be applied universally (see Westermann & Ruh [2012, p. 664] for recent claims to this direction). If a particular ‘pattern explanation’ is decided upon ahead of a proper structural analysis of the language being modelled, it appears to limit the types of inflection systems that are amenable to connectionist modelling.

References

On the tip of the tongue:
The effect of first syllable cues in word finding failures

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The tip-of-the-tongue (TOT) phenomenon refers to the state in which a speaker is temporally unable to retrieve a familiar word. Speakers in a TOT state can often give some information about the target (e.g., initial letter(s), number of syllables) but cannot retrieve the complete phonological form. TOTs offer insight into the architecture of the language production system and give evidence for the existence of two stages (lemma/lexeme) in speech production (Caramazza, 1997; Dell, Chang, & Griffin, 1999; Levelt, Roelofs, & Meyer, 1999). James & Burke (2000) demonstrated that phonologically related cues boost activation of the target word. White & Abrams (2002) showed that it is the first syllable of the target (presented in a cue word), which leads to significantly more TOT resolutions, compared to the middle and last syllable. Abrams et al. (2003) demonstrated that TOT resolution requires the entire first syllable and not only the first letter.
In the present study, reaction-time experiments were performed to investigate whether the correct first syllable of the target facilitates TOT resolution and whether another first syllable with similar frequency inhibits TOT resolution. The syllables were presented individually, which means not in another word to avoid providing any semantic information. With the correct first syllable, TOTs were positively resolved approximately five times as much compared to a wrong syllable. The results indicate that the presentation of the correct first syllable of the target word strengthens the weakened phonological connections that cause TOTs, and facilitates word retrieval – with syllables presented in a cue word and also with syllables presented individually. These findings show the importance of the initial part of a word, and support the transmission deficit model (Burke et al., 1991) which states that TOTs are caused by week connections between lexical nodes and phonological nodes.

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Linguistic encoding of spatial orientation – use of cardinal directions in Danish dialects

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The use of cardinal directions (north, south, east, west) in the linguistic encoding of spatial orientation is well-known and has been subject to thorough studies within recent years, not least by Levinson and colleagues (cf. for instance Levinson 2003, and the description of three “frames of references” in the conceptualization of space, intrinsic, absolute and relative, relating the use of cardinal directions to the absolute frame of reference; cf. also a slightly different typology by Talmy (2000.I:213), relating the use of cardinal directions to a “field-based” localizing of the figure, i.e. localizing on the basis of an “encompassive secondary reference object”). In this presentation I discuss the use of cardinal directions in Danish, especially Danish dialects. Data stem from dialectal archives and modern corpora of written and spoken language.

In modern standard Danish it is not uncommon to make use of the cardinal directions. The ground is most typically a named geographical location (town, river) (north of Copenhagen, west of Storebælt (‘The Great Belt’), or a significant building (east of the church), site (west of the lake) or line (south of
However, in the traditional Danish dialects the use of cardinal directions is much more common and multi-faceted. Examples include for instance the following:

- **combinations of cardinal directions and prepositions** (well known in standard Danish but more frequent in the dialects): sydøst, ‘southwards’, nordfra, ‘north-from’ (i.e. from north, etc.), østerefter ‘east-after’ (i.e. -to).

- **combinations of cardinal directions and directional adverbs** (rare in standard Danish): nordsø, ’north-out’, vesterned, ‘west-down’; vi skal nærmøre og fiske, ‘we are going north-out fishing’; and even more complex: vinden kommer ned nordfra ‘the wind is coming down north-from’ (i.e. down from the north) (cf. Pedersen 2001).

- **use of cardinal directions instead of left/right** (very rare in standard Danish): når du kommer til det sidste hus, drejer du nordgang ‘when you come to the last house, you turn north-walk’ (i.e. you should turn to the north).

- **possible combinations of the absolute and intrinsic frame of reference** (rare in standard Danish): den nordre længe/gavl/lo .. ‘the northern wing/gable/barn ..’, den nordre vej/mark .. ‘the northern road/field ..’, høladen, den var i den østre længe op mod den nordre gavl ‘the haybarn, it was in the eastern wing up against the northern gable’, taget er dårligt på den norden side (af huset) ‘the roof is bad on the northern side (of the house)’.

In my presentation I relate the uses of the cardinal directions in Danish to other systems of spatial orientation (cf. Levinson & Wilkins 2006), and I also touch upon typological questions, discussing alternative descriptions to the prevailing typology by Levinson (cf. for instance Terrill & Burenhult 2008).

References


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**Abstract Setting, Virtual Reality and Cognitive Experience:**
**On the Relation of Conceptual Content to Higher-Level Structures in the Meaning of Impersonal It**

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It has been established in cognitive grammar that all linguistic expressions are structured by pairings of phonological and symbolic poles (Langacker 1987; 1990) and that, consequently, there are no meaningless items. As mentioned in Langacker (2000: 347) with reference to previous research (Bolinger 1973; 1977), this assumption holds true for the pronoun it in a number of its impersonal and/or non-referential uses (see also Hamilton 2011; Kaltenbock 2003). Langacker’s further analysis of the pronoun’s meaning along several cognitively relevant parameters (Langacker 2007: 179 – 180;
2008: 451–453; 2011) shows the following (a) the conceptual content of *it* is highly schematic and can generally be described as “abstract setting”, or the relevant scope of awareness for apprehending the clausal process; (b) the pronoun represents the extreme case of vagueness and non-delimitation in the current discourse space; (c) the use of *it* invokes a generalized experiencer or conceptualizer.

This paper takes up the above mentioned points on the semantic import of impersonal *it* and aims to reveal those facets of the pronoun’s meaning that motivate the choice of *it* over other possible alternatives in three interrelated, and yet distinct, types of constructions: (1) constructions with demonstrative *it*: *It is a picture of the city*; (2) clauses with impersonal *it*: *It was blowing*; (3) clauses with anticipatory *it* that introduce a conceptualizer’s interpretation of a situation (based on perceptual, communicative, social or other kind of experience): *It was as if everything was forgotten*.

The study draws on 573 examples culled from English-language fiction. The analyzed corpus has included both the listed usage types of *it* and correlative uses of function words or lexical items that occur in precisely the same syntactic structures and serve to describe identical or similar situations. The grouping of linguistic data has brought into focus the following three types of alternations: (i) *It* vs. *That* was a picture of the city; (ii) *It* vs. *The wind was blowing*; (iii) *It was as if* vs. *He had an impression that everything was forgotten*.

The proposed contrastive analysis of the mentioned types of alternative uses has revealed that the choice of *it* over other correlative expressions is motivated by factors pertaining to higher-level structures in the pronoun’s meaning, namely, **type of reality** that the pronoun invokes, as well as **type of cognitive experience** that *it* activates as an item which points to a clausal trajector, the latter in turn being conceived with respect to the corresponding landmark (designated by the clausal proposition). Specifically, linguistic data reveal that the pronoun *it* places its conceptual content in the plane of virtual reality (as understood in Langacker 1999), whereas the pronoun’s counterparts invoke the plane of actuality. On the other hand, as evidenced by the analyzed data, *it* conjures up the cognitive experience of identifying the invoked conceptual content, whereas the pronoun’s correlative expressions tend to activate the experience of direct reference in the plane of actuality - to the content in question.

Results of the study suggest that different uses of one and the same pronoun may represent instantiations – at higher levels of cognitive processing – of one common conceptual framework shaped, on the one hand, by the type of reality (actual or virtual) in which the pronoun’s referent is placed and, on the other hand, - by the type of cognitive experience which provides mental access to the activated conceptual content.

References

Metaphors in the narratives of L2 students – not just a question of language

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As stated by ben-Aaron (2005), there are two main ways of looking at metaphors. First of all, there is the traditional way of regarding metaphors as a purely linguistic phenomenon, i.e. as metaphoric language. The other way, presented by Lakoff and Johnson (1980), regards metaphors as a cognitive, conceptual phenomenon. According to this view, the human conceptual system is metaphorically structured; this entails that our conceptual metaphors affect our way of looking at life, as well as our interpretation of what happens in our lives.

In my presentation, I see metaphors as a conceptual phenomenon that can be studied through metaphoric language. I am interested in the metaphors used by Finnish L2 students of Swedish when they describe Swedish as a language. My data consist of narratives written by students at the University of Helsinki during the years 2008–2012. As a result of my analysis, I have been able to group the metaphoric expressions used by these students into some basic categories that I see as conceptual metaphors. In my presentation, I discuss these categories, showing several examples from students’ text.

Segmentation in the text production of translation

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In translation process research, segmentation refers to the phenomenon of cognitive processing in which information is broken down into manageable portions. These portions can be words, groups of words or even sentences; but they can equally well be as small as word parts. The need for segmentation arises from attentional and storage limitations of the working memory. Segmentation occurs in the translator’s mind and it is therefore not directly observable, but information concerning this mental activity can be detected from online performance data recorded during the language production process.

Segmentation research in translation has aimed at, inter alia, identifying the size of the segments that translators work with while translating. Often segments have been determined as chunks of language produced between two longish pauses. Until now, the minimum length of the segment boundary pauses has been chosen more or less arbitrarily.

The present research approaches segmentation by analysing the linear progression of pause time distribution during passages of fluent text production. The data for this study was elicited from 28 professional translators who performed a translation and a monolingual text production task using Translog software. Translation is compared to monolingual text production in order to find the characteristics of segmentation in translation. The results show that pauses form a hierarchy of at least three levels irrespective of writing task. In this study, the three levels are tentatively named 1) the motor processing level, 2) the linguistic processing level, and 3) the textual processing level. Likewise, segmentation seems to take place at all three levels.
A presuppositional hierarchy of descriptive methods in linguistics

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‘Methodological monism’ is the idea that there is one single scientific method, namely the one that is best illustrated by physics. As a corollary, the adherents of this doctrine must maintain that that there are, or at least should be, no significant differences between descriptive methods in linguistics. This is the standpoint of e.g. the Chomskyan generativism and the Lakovian ‘mind/brain’ cognitivism.

A contrary view was defended in Itkonen (1980), where a distinction is drawn between ‘qualitative’ and ‘quantitative’ linguistics. The former, identical with the different varieties of traditional grammatical description, is a precondition of, or presupposed by, the latter, which is in turn divided into observational-statistical sociolinguistics and experimental psycholinguistics.

Gonzalez-Marquez et al. (2007) is also concerned with the classification of descriptive methods in linguistics. In particular, Talmy (2007) distinguishes between introspection, audio- and videographi analysis, corpus analysis, and experimental method. Yet no clear ordering of the descriptive methods emerges from this collective volume.

Precisely this kind of ordering results from a close analysis of eye-fixation experiments (e.g. Vainio, Hyönä & Pajunen 2008, 2009). These experiments are so designed as to make a group of subjects read a set of sentences that differ on one (formal) parameter only. The sentences are meant to be comparable in all other respects, which is achieved in two steps. First, corpus data (= B) has been adduced to ascertain that the dissimilar target expressions which occur within identical sentence frames are equally frequent. Second, it has been ascertained by means of questionnaires (= C) given to a group of subjects that there are no semantic (or ‘connotational’) differences between the target expressions. It is only after these preliminary steps that the actual experiment (= D) has been conducted. But prior to anything else, the corpus data must have gone through the ‘normative filter’ constituted by the experimenter’s linguistic intuition (= A) — not ‘introspection’! —, which has also been the basis for choosing the target expressions and inventing the (grammatically correct) test sentences, in the first place. Taken together, these four methods exemplify the following ‘presuppositional’ hierarchy (in which the temporal order coincides with the logical one): A < B < C < D. This result summarizes the argument of Itkonen & Pajunen (2010).

The relation ‘A < B’ deserves special attention. Pajunen (2006) notes that in her corpus of c. 31'000'000 word tokens there are 8'011 verb lexemes. When this transition — c. 31'000'000 ª 8'011 — is analyzed very closely, it turns out to contain no less than five ‘normative filters’ exhibiting varying combinations of intuitional-cum-theoretical elements.

The (non-empirical) stage A is typically characterized by the striving after descriptive simplicity, or axiomatics (cf. Itkonen 1978), whereas the common denominator of the (empirical) stages B & C & D is the search for causal explanation (cf. Itkonen 1983). On reflection, the entire history of Western linguistics is seen to be governed by an implicit tension between these dissimilar, and even contrasting, descriptive goals (cf. Itkonen 1991, 2013).

References
In my opinion, but on what grounds?
Corpus analysis of abstract in and on construals

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What abstract concepts are cast as containers (i.e. used with in), and what abstract concepts are cast as supporting surfaces/objects (i.e. used with on)? What is the relationship between the basic spatial meanings of in and on and choice of construal? What is the relationship between choice of construal and quality of abstract domain?

This paper is corpus linguistic analysis of the English prepositions/particles in and on in talk about abstract concepts. The study is based on 1000 random in and on instances from the British National Corpus. The aim is to find out if the uses of the prepositions/particles in this type of context are explicable in terms of a match between type of construal and quality of abstract domain (cf. Lindstromberg 1998/2010).

Cognitive linguistic studies of English prepositions/particles in and on in talk about abstract concepts abound (see e.g. Brugman 1981; Lakoff 1987; Vandeloise 1994; Herskovits 1986/2009; Lindstromberg 1998/2010, Tyler and Evans 2005; Dewell 2007). These studies, however, tend to focus on spatial meaning rather than on abstract meaning, and on polysemy rather than on systematicity related to the immediate context of use.

The present study shows that abstract uses are more frequent than spatial (65% of in instances, and 71% of on instances, are used in talk about abstract concepts) and systematically related to a number of different fields. Abstract concepts related to specific body parts (e.g. thoughts, feelings, qualities, opinions, memories) are typically construed as containers. The same is true of abstract concepts connected with communication (e.g. terms, phrases, verbal statements; cf. Reddy), ongoing activities or processes, categories (e.g. pairs, marriages, feature categories), various types of fields and areas, parts of wholes (e.g. bits and pieces, sectors, departments), and problems (e.g. dilemmas) etc. Abstract concepts related to a basis, ground, or support, or to light, force, sides, and perspectives etc. are construed as objects/supporting surfaces. Some temporal aspects are construed as a room, and others as a supporting surface/an object.

References
The Givenness Hierarchy and atypical indefinite expressions.

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The Givenness Hierarchy provides a framework in which lexical items in referring expressions are assumed to conventionally signal both conceptual information about the speaker’s intended interpretation of a referent and procedural information about where and how that interpretation is to be accessed (Gundel, Hedberg & Zacharski 1993; 2012). Rather than being a hierarchy of degrees of accessibility (c.f. Ariel 1990; Givón 1983), the Givenness Hierarchy defines a scale of six implicationally related cognitive statuses, which are organised in relation to their degree of informativeness. Further, because each status entails all lower statuses, forms that signal a certain cognitive status are merely underspecified for higher statuses; they do not exclude them (Gundel, Hedberg & Zacharski 2012). Forms which typically encode lower statuses can therefore also be used for referents with higher statuses. Thus, although an indefinite noun phrase typically encodes ‘type identifiable’, it may just be underspecified for a higher status.

The purpose of this paper is to define and describe a certain type of indefinite noun phrase within the framework of the Givenness Hierarchy. I show that, in certain contexts (e.g. in British English journalistic opinion writing), a particular A+NOUN expression, when coupled with a restrictive relative clause attains a higher cognitive status than its indefinite coding conventionally signals. For example:

(1) [From his complete letters a remorseless self-portrait emerges of] a man who from his youth onwards found it very difficult to coexist with others or find a productive place in his 19th-century world. (Jones, 2011)

Out of context, indefinite expressions such as that in (1) are unproblematic: they satisfy the criteria for ‘type identifiable’ (i.e. the addressee is able to retrieve a representation of the type of entity described), as predicted by the Givenness Hierarchy. A problem arises however, when this type of expression is considered within its surrounding co-text: these expressions are part of an identity chain of references to a specific referent (Martin 1992) and are thus more activated in the addressee’s mind than their indefinite form suggests; they are doing more than simply signalling a ‘type’.

Through an empirical analysis of 30 opinion articles from the Guardian newspaper using the Givenness Hierarchy coding protocol (Gundel, Hedberg & Zacharski 2006), I show that these particular expressions meet the criteria for the higher statuses of ‘in focus’, ‘activated’ or ‘familiar’, but are underspecified. Further, I provide evidence from two studies that readers also do not, on the whole,
interpret these expressions as referring to a ‘type’ but rather to an entity that is, at the very least, ‘familiar’.

I then explore the idea that the underspecification of the form of these expressions seems to serve two purposes, depending on the amount and detail of conceptual information expressed in the relative clause. I conclude that there are two possible cases: in some cases underspecification can create an ambiguity as the conceptual information is not specific enough for a quick retrieval, and the processing effort required to retrieve the specific referent would be too high. In other cases, the underspecification can help disambiguate from two potential referents (i.e. a ‘type’ or the ‘familiar’ entity) as the conceptual information in the relative clause is so detailed that the expression can only refer to one referent, of which the reader has already built up a solid mental representation.

References


Reciprocity and empathy: Exploring the cognitive and linguistic properties of reciprocal actions

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Reciprocity is central to human interaction and society (Majid et al.’11), so it is not surprising that languages have different means of expressing reciprocity, such as the English reciprocal ‘each other.’ However, pinning down the meaning of ‘each other’ is challenging (e.g., Dalrymple et al. ‘98). A sentence like ‘The children pinched each other’ can have a strong reciprocal meaning where each child pinched every other child (see ‘strong’ figure on right), but can also be used in a weaker ‘ring’ configuration where each child pinches someone and is pinched by someone (but does not pinch everyone and is not by everyone). Reciprocals also occur in even weaker situations, e.g. ‘chain’ configurations (‘The children followed each other into the room’). (Terminology and figures are from Majid et al.’11; see Dalrymple et al. ‘98 for different terms). Conceptually, the strong configuration is more reciprocal than the ring, which is more reciprocal than the chain (where A is only an agent and D is only a patient):
We investigated what influences whether people construe a stronger or weaker interpretation. Sabato & Winter (2012) hypothesized that lexical meaning, world knowledge and context all interact (see also Dalrymple et al.’98, Kerem et al.’09). We investigated experimentally whether the conceptual structure of verbs influences the strength of the reciprocal interpretation that comprehenders construct (Aim#1). Do verbs whose conceptual structure is prototypically asymmetrical (e.g. follow) trigger weaker reciprocal interpretations than neutral verbs (e.g. lick)? Following is prototypically asymmetrical: If X follows Y, typically Y does not follow X (see e.g., Dalrymple, Sabato/Winter on acyclic graphs). In contrast, licking is neutral: If X licks Y, Y may or may not lick X. If people’s interpretation of reciprocals is sensitive to this, asymmetrical verbs (ex.2a) should trigger weaker reciprocal interpretations than neutral verbs (ex.2b).

<table>
<thead>
<tr>
<th>(2a) asymmetrical verbs:</th>
<th>The lizards are {following/chasing/pursuing} each other.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(2b) neutral verbs:</td>
<td>The lizards are {licking/biting/smelling} each other.</td>
</tr>
</tbody>
</table>

Our second aim was to explore whether the strength of the reciprocal interpretations that people construct is correlated with individual differences in empathy (Aim#2). Individuals with higher empathy levels might be have a preference for stronger reciprocal interpretations and a dispreference for configurations where someone is ‘left out’ (e.g. in the chain configuration, A and D are not fully engaged).

**EXPERIMENT**-Participants (n=23) arranged sets of small toy animals according to sentences read aloud by a lab assistant facing them (ex.2a,b). Targets used asymmetrical (chase/pursue/follow) or neutral verbs (lick/bite/smell), and consisted of 3 or 4 animals (12 target trials). (We also had trials with 2 animals, as well as trials with various other types and numbers of objects and animals.) Afterwards, people filled out the Interpersonal Reactivity Index (IRI, Davis’80) a standardized, well-established questionnaire which measures empathy. The ways in which participants arranged the toys were videotaped and double-coded.

**RESULTS**-We find effects of verb semantics (Aim #1): Neutral verbs result in more (p<.01) ‘strong’ arrangements than asymmetrical verbs (neutral=9% vs. asymmetrical=0%); asymmetrical verbs result in more weakly-reciprocal ‘chain’ arrangements (neutral=7% vs. asymmetrical=35%, p<.01). ‘Ring’ arrangement rates do not differ significantly for the two verb types. **INDIVIDUAL DIFFERENCES (Aim #2):** There is a positive correlation (p<.035) between individuals’ IRI empathy scores and their preference for ring over chain arrangements: More empathetic people show a stronger preference for ring configurations over chain configurations—i.e. tend to interpret reciprocal pronouns so that every animal is both performing and receiving the action (no one is ‘left out’).

**SUMMARY**-To explain the strength of the reciprocal interpretation that comprehenders construct, theories of reciprocal interpretation need to (i) include information about verbs’ conceptual structure, and (ii) acknowledge individual differences: Interpretation of reciprocal pronouns is correlated with non-linguistic cognitive empathy traits, with more empathetic people tending to opt for stronger (more reciprocal) interpretations.

**References**
Language and space: 
Effects of visuo-spatial grouping on narrative processing

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Understanding the relations between events and entities is an important aspect of discourse-level linguistic processing (e.g. Kehler et al.,’08). How we conceptualize and recognize events is also of interest to cognitive psychologists: When we observe the world, we are faced with a continuous ‘stream of activity’ that we segment into meaningful events (Zacks/Swallow’07). We explored whether and how visuospatial cues – e.g. those provided by panels/frames in comics – contribute to our understanding of narrative representation and event segmentation. How narratives are segmented into panels is a key aspect of comics (Eisner 1985/2008, Cohn’12). Generally, this work can shed light on the relationship between linguistic narrative representations and visual/spatial representations.

We conducted a psycholinguistic experiment investigating how segmenting visually-presented events into panels in different ways – in other words, changing their visuo-spatial encoding – influences readers’ conceptualization of narratives. In particular, we wanted to explore whether and how differences in framing/visuospatial grouping influence what aspects of the event are regarded as more important/cognitively prominent, as measured by people’s expectations about upcoming discourse.

We tested whether depicting a transitive event in two panels or one panel (examples below) influences readers’ mental representations, by means of a fragment-continuation task: The closing panel shows two new characters, one of whom says “…and then…”, and participants wrote a continuation for this fragment. Fragment continuation can probe people’s expectations about upcoming discourse and measure how prominent/salient/important different aspects of the event are in people’s minds. Do people write about (i) the pictured event (e.g., …and then Lisa tripped Mary), (ii) a consequence resulting from the event (e.g., …and then the girl sprained her wrist), (iii) subsequent events that are not causally related (e.g. …and then the mean girl also tripped Andy) or something else? (Names of characters were not prespecified, participants could refer to them however they wished).

DESIGN Twenty-eight native speakers of American English participated. Each person saw 24 comics (8 targets, 16 fillers). To control semantics, the eight critical strips depicted active events with agents and patients (e.g., tripping, tickling, punching). The only difference between one-panel/two-panel versions was
the ‘gutter’ between the characters in the two-panel version; physical distance was unchanged. We manipulated the visuospatial properties of the critical event by grouping both the agent and patient in one frame/panel or by separating them into two panels. (Two-panel versions had “subject-to-subject” transitions, in McCloud’93’s terminology.) No participants saw the same event twice (Latin Square design).

RESULTS-Two-panel sequences resulted in significantly more result/consequence-type completions than one-panel sequences (two-panel = 47% vs. one-panel = 30%, p’s<.02): When the visual information was split into two panels, participants were more likely to focus on the result/consequences of the event than in one-panel versions. In contrast, one-panel versions resulted in significantly more continuations describing the pictured event than two-panel versions (two-panel = 28% vs. one-panel = 43%, p’s<.02). Time permitting, we will also discuss participants’ use of pronouns vs. names/full nouns, as well as likelihood of mentioning the agent vs. the patient.

DISCUSSION-Visuospatial grouping/segmentation guides expectations about discourse: Isolating the patient in its own panel makes the consequences of the event (even when not explicitly shown) more prominent/salient (more likely to be mentioned). In contrast, depicting agent and patient together emphasizes their interaction (the pictured event). Thus, these results provide experimental evidence that the information conveyed by visuospatial grouping can play an important role in processing narrative. Psycholinguistic models of discourse should include information about event segmentation, in addition to already-known factors such as coherence relations, verb semantics and referent salience.

References

Second language acquisition and cognition:
A CL-based approach to teaching phrasal verbs

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Situated at the crossroads of different academic disciplines, this paper aims at shedding light on the question how core issues of Cognitive Linguistics (CL) and Learning Psychology can contribute to SLA research focusing on the teaching of phrasal verbs (PVs). Traditionally, PVs are considered to be idiomatic expressions displaying the arbitrary nature of language. In contrast, CL theory stresses the basically conceptual motivation of language (Langacker 2008) and thus also questions the idiomatic opacity of PVs (e.g. Kövecses & Szabo 1996, Gibbs 2008). CL findings might therefore facilitate learning and enhance learners’ aptitude to understand, retain and reproduce PVs.
Although quite a number of CL-oriented studies on teaching PVs already exist (e.g. Kövecses & Szabo 1996, Boers 2000, Kurtyka 2001, Littlemore & Low 2006, Condon 2008, Alejo 2010), further empirically based research is needed that critically reflects the applicability of CL tenets in this context. Especially the more difficult aspect of production, i.e. how PVs can become part of a learner’s active vocabulary, has so far been neglected. The present empirical study investigates how CL-inspired teaching methods and material, especially developed for learners below university level, can be implemented in the curriculum of a German secondary school context (grades 9 to 11).

Theoretical CL insights such as radial categories and conceptual metaphor theory (Lakoff & Johnson 1980, Lakoff 1987) provide the scientific backbone for this study. In many instances radial categories, which are organised in semantic networks, help decode the polysemous nature of prepositions/particles in verb particle constructions, a first step in systematically understanding the meaning of PVs, which may then facilitate the retention process (Tyler & Evans 2003, Tyler 2012). Similarly, raising metaphor awareness has also proven to be a useful didactic tool to enhance deep cognitive processing, a prerequisite of memory storage (Rudzka-Ostyn 2003, Boers 2004, Juchem-Grundmann 2009). Since non-native speakers even at an advanced level tend to avoid using metaphorical language (Littlemore 2009), figurative extensions of word meaning require explicit teaching. Inextricably intertwined with an applied CL approach to PVs are aspects of visualisation and mental representation, which are therefore also key issues of the present study.

References
Non-professional translation as multilingual resource: cognitive explanations

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Non-professional translation, performed by multilingual individuals with no special training for it (see Harris 2009), is a new emerging area of research in translation studies. With its focus on aspects that have mainly been neglected in the study of professional translation, the study of non-professional translation has opened up new perspectives on translating and interpreting. The wide array of situations where non-professional translating has been found to occur (e.g., community interpreting, immigrant children as language brokers between families and societies, fan translating etc.) are also of interest in the fields of contact linguistics and second language acquisition research. However, while it is obvious that translating and interpreting always involve language contact and second language use, the role of translating/interpreting has not been examined much in language contact situations or in second language acquisition.

In this paper we approach non-professional translation by investigating the role of translation in language contact situations and in second language acquisition (SLA). We propose that translating can be viewed as multilingual resource that arises from multilingual cognitive processing. At the heart of this phenomenon lies multilingual individual’s (conscious or unconscious) perception of equivalent forms between two languages (cf. interlingual identification, Weinreich 1953). By discussing evidence from the fields of translation studies, contact linguistics and SLA research this paper examines the following questions:

1) What kind of a cognitive process is (non-professional) translating?
2) How is translating/interpreting involved in actual, everyday language contact situations and in second language acquisition?
3) What kinds of evidence do we find for interlingual identifications in language contact situations and in second language acquisition contexts?

The evidence discussed in this paper suggests that translating and interpreting constitute a part of multilingual individual’s language abilities, and may be seen as natural outcomes of cross-linguistic influence in multilingual individuals. By combining the perspectives of translation studies, contact linguistics and SLA research this paper aims at showing that dialogue between different fields helps to provide a more comprehensive view of complex linguistic phenomena.
I. Language in a world, language in a mind.

Laland et al. (1999) suggest that organisms modify their environment, creating and maintaining complex environmental niches. Our – human – world is surely a world of symbols and utterances. A cognitive agent’s behavior is influenced and shaped by words and sentences e.g. in the form of ads, signposts, signboards etc. These language utterances constitute linguistic cognitive niches created by the agent or other language-using agents. There are two different stances concerning the notions of language and a cognitive niche. Clark (2005) declares that to explain the influence of language on cognition we should treat words and sentences as a material phenomenon, relatively independent of mental representations. Language is a cognition-transforming animal-build, physical structure [Clark 2005, 264]. On the other hand, Pinker (2010) delivers an alternative explanation, according to which language -- as a mental faculty -- is an adaptation to a cognitive niche. I suggest the path between those two stances that treats language as a cognitive niche (vs. Pinker), that is, however, strongly and assymetrically dependent on internal representations (vs. Clark). In particular, I will argue that:

1. although the very idea of language as a thought-enhancing cognitive niche is a fruitful one, Clark's arguments are dubious and insufficient;
2. instead we can explain the functioning of language as a cognitive niche in terms of our ability to externalize mental models in the form of cognitive niches build from (among others) linguistic units.

II. Properties of cognitive niches and doubts.

I will discuss the three roles of linguistic cognitive niches in thought and reason (as presented in [Clark 2005]):

i. words and sentences create a new realm of perceptible objects, ipso facto augmenting our world -- in my opinion the key function of natural language utterances is to replace rather than to augment (aspects of) our world (cf. Peirce);

ii. language is a tool for scaffolding actions and attention -- admitting such a function, we need an answer “why and how”. Clark doesn’t deliver any answer;

iii. words are anchors for thinking about thinking in virtue of their very materiality. As many researchers indicate, external, material phenomena (such as language utterances) need to be individualised at each use [Sterelny 2004, 13]. As Sterelny suggests [Sterelny 2004, 17]: without mental representations of language phenomena the words are silent. The importance of internal representations is also indicated by the fact that the language use is cognitively demanding.

III. A possible explanation.

As mentioned above, one can explain the functioning of language as a cognitive niche stipulating an interactive and assymetric link between internal and external aspects of language, between a mental model and a cognitive niche. My proposal is that language scaffolds actions, because linguistic cognitive niches are externalizations (e.g. implementations) of our mental models [Johnson-Laird 1983] in the world. In other words: we have external scaffoldings, because we’ve had internal scaffoldings. In consequence, cognitive niches inherit some properties of mental models, among others: cognitive niches are not random, but organized according to some rules; they directly
influence our behavior and survival; they facilitate cognitive functioning (reduce the cognitive cost); they also influence learning. Finally, I would like to support above claims presenting selected outcomes of the research in cognitive modeling of NL-using agents acting in a real or simulated environment (based on SNePS/GLAiR architecture) and modifying both: their environment and their behavior.

References


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Imagine that you have to communicate your evaluation of a nicely prepared dish of food that has just been cooked for you and that you tasted some seconds before. How can you share this evaluation with your audience if it is not physically present, cannot taste the food, nor smell it? – This is the communicative challenge that is met by the BBC TV programme – MasterChef – The Professionals – a kind of casting show for aspiring professional cooks.

This paper is interested in the multi-modal display of emotional evaluations in such tele-mediated discourse (Alvarez-Pereyre 2011). It starts from the social constructionist assumption that emotions are not merely internalized psychological states, but that emotional evaluations are to a considerable extent bound to rhetorical communicative practices (Planalp 2002) that are in line with socio-culturally accepted feeling rules (Hochschild 1983) as well as display rules (Ekman & Friesen 1975). Along these lines, the paper pursues the question of how the dishes in MasterChef are ‘emotionalized’ through complex and dynamic multi-modal evaluative statements.

To scrutinize the communicative structure of these statements, the paper follows the analytical framework proposed by Fiehler (2002: 84): “What we commonly call emotions or emotional processes can be understood as a specific procedure for the solution of such tasks of evaluation”. These specific procedures involve that the emotional displays are targeted at some referent X on the basis of a normative benchmark (expectations, desires, norms or morals, etc.). Along these dimensions, the referent is being evaluated as either favorable or unfavorable. Extending Fiehler’s framework by the dimension of dynamic and multi-modal emotional displays in tele-mediated discourse, I would like to show how the structure of such evaluative statements in MasterChef is based on the complex rhetorical orchestration of multi-modal, i.e. facial (Ekman & Friesen 1975, 1978), vocal (Reber 2012), verbal (Ochs & Schieffelin 1989; Schwarz-Friesel 2007) and bodily (Streeck 2009) affect cues. For this purpose, the emotional displays occurring in the ‘speech events’ of
appraising the dishes in the cooking programme are multi-modally transcribed and analysed by means of the ELAN (Language Archiving Technology) transcription system.

One of the central theoretical motivations of this paper is to open cognitive linguistics up to the analysis of the intriguing emotional dimensions of language use. Having primarily focused on the conceptual dimensions of meaning construal, cognitive linguistics has so far grossly neglected the analysis of emotional displays and their evaluative meanings (for valuable exceptions see Foolen 1997, 2012; Niemeier & Dirven 1997; Schwarz-Friesel 2007; Wilce 2009). The paper thus engages with the affective turn in the social and cognitive sciences that has begun to affect (cognitive) linguistics only recently (see, e.g., Foolen et al. 2012). In line with a radically embodied view of cognition (Pfeifer & Bongard 2007), the paper sees the complex structure of emotions in the form of dynamic and multi-modal evaluative statements as a perfect example of how human beings can externalize cognitive and feeling states through complex semiotic practices (Clark 2008). Along these lines they can create the televised 'illusion' of an emotionally arousing dish that is not physically graspable for an audience sitting in front of their TV screens.

References


The meaning as a linguistic and mental structure

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The meaning is the unit of the elements of mental and linguistic nature. We suppose that there are interconnections between mental and linguistic components: both are formed and develop in the limit of a concrete culture, which also depends on special conditions of people’s life and their activities, both have the trace of national character, both have a complicated structure. Therefore, we suppose that there is some correlation between different level of consciousness and different types of meaning. In this work we will try to present the meaning of a word as the unit of mental and linguistic elements.

For this purpose, we conducted the semantic differential experiment with the group of French students who do their studies in Russia. As the object of the experiment we chose the value of “success” because on the one hand it is an important social phenomenon, and on the other hand it obtains value for every person. In other words, we think that this helps us to demonstrate the correlation of different levels of the meaning and different levels of people’s consciousness. Since consciousness finds reflection in language and it realizes itself in semiotic way, in signs, including linguistic signs, comparing the meaning of two words of different languages, we normally can find a common part in a “body” at the level of denotation meaning. This corresponds to the “social” level of consciousness, and different elements at the periphery of the meaning, which are reflected, for example, in associative and connotative part of meaning and correspond to the “individual” and “common” level of consciousness.

In this work, I compare the meaning and sense of the word “success” in Russian and French languages at different levels of the meaning. For discovering the sense of this notion the most precisely, not only in part of fixed consciousness but in perception not always reflexed of every native speaker of a language, I use data of different dictionaries, including dictionaries of association and phraseological units, and data of psychosemantic experiment (experiment of psychosemantic differential) and data of “perception experiment” (participants of experiment were proposed to give three answers on a question: What does “success” mean?). Data received with all these methods will help us to discover the difference between equivalent concepts in different languages, not only at the level of linguistic but also at the level of mental representation of the meaning, and eventually to create a piece of world-view of native speakers.

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Political discourse between global and local knowledge

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The latest developments in discourse studies raising the issue of subjectivity (van Dijk 2009) as well as the definition of discourse based on knowledge (Wodak 2009) have encouraged us to look at this study of political discourse from the perspectives of the socio-cognitive approach. The nature of
event reflected in political discourse and the way of thinking affect human behavior accompanied by a number of the subjective factors. As a result, political discourse is conceptualized depending on the individual psychological characteristics in the relevant cognitive blocks. Such conceptualization in the individual consciousness is related to the formation of the relations between the concepts which are the structures of knowledge and have common type and nature. Metaphors and metonyms (Ahrens 2009, Zinken & Musolff 2009, Hart 2011, etc.) are considered as the products of those relations fulfilling the double function of globalizing and localizing.

The aims of the paper are twofold. Firstly, we wish to introduce some theoretical perspectives on the problem. Secondly, and equally importantly, we hope to give certain ways in which metaphors and metonyms represent global and local knowledge in political discourse. Thus we are going to discuss each of these factors and ultimately contribute to revealing the in-depth of the cognitive system of humans and cultures. It is also essential to the understanding of human communication in general as well as of intercultural communication. For this purpose we carry out a contextual analysis of the metaphoric and metonymic expressions used in the speeches of politicians with different cultural background.

References


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Acquisition of Persian reflexives by English and Japanese speakers: L1 transfer or UG

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This study investigated the interpretation of Persian reflexives in L2 with regard to the Governing Category Parameter (GCP). The locality condition of Persian reflexive xodash was examined in the first experiment as 83 and 70 Persian monolinguals answered a test containing this reflexive in context-free and contextualized sentences respectively. The findings suggested that Persian reflexives are locally bound and therefore compatible with the least inclusive value of the GCP. In the next two experiments, languages with locality conditions different from and similar to Persian (i.e., Japanese and English) were chosen to test the role of L1 transfer and the adequacy of no access, indirect access, and full access hypotheses. Data from 15 Japanese-speaking and 20 English-speaking learners of Persian revealed that the interlanguage grammar is within the possibilities allowed by UG. Furthermore, the trace of L1 was not detectable. In addition, 20% of English participants allowed ambiguous interpretation of Persian reflexives, which is not allowed in their L1
nor L2, but is a legitimate value according to GCP. The results of this study support the proposal that adult second language learners have access to UG.

Concepts, language, and consciousness

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I am approaching the eternal problems of concepts, language and consciousness from the point of view of Scientific Mental Realism (SMR). As a realist I see man as mentally steered biological, social, and rational actor created by the physical, chemical, biological, and cultural phases of the evolutionary processes. As a scientist I am trying to make an understandable description, a logical explanation, and a reliable proof of the substance, structure and functions of the referents of the above theoretical terms.

In my dissertation work (Martikainen 2004), I maintained that human concepts and mind are our memory representations. In our cognition they are functioning as dynamic sets of attributes connected with the subject’s object of attention. I am supposing also that our concepts are formed and used processually and in most cases situation relevantly without any greater conscious attention.

This processual formation and situation relevant and automatic use of concepts has made it difficult to find out what their substance and role in the human cognition really is. In my system model of concepts the roles of sensory and structural attributes of concepts are seen as creations of the early phases of the human and other actors’ evolutionary development.

Signs, words, and other linguistic expressions function as search attributes for recalling the situation relevant set of concepts and their attributes to explain the meanings of the sensed environment. Consciousness in turn can be seen as concept-based mental state. It is our normal everyday mental state enabling us to perform our daily duties without any greater problems. The processual is made possible by our brains ability to transform the afferent action potentials or the electrochemical information our senses are encoding from the energies they meet. This transformation means that the existing material is transformed into a new ontological form or to subsisting mental experiences, cognitive, emotional, volitive etc. The brain’s ability to make this transformation on line has been the key criteria when the survivals have been selected in the processes of evolution. The sensory information must become interpreted and fast. That is why the human concepts are dynamic and in most cases also situation relevantly filled with those attributes which explain the different meanings of the subject’s object of attention.

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Abstract nominees concepts representation in the language

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This paper is dedicated to the phenomenon of abstract nominees concepts and means of their representation in the language. The object of the study is an abstract concept of FREEDOM in the modern English language and in the discourse of two English novelists J. Fowles and J. Joyce. Abstract nominees concepts (such as “time”, “life”, “freedom”, “destiny”) don’t refer to particular objects in the reality and thus are difficult to classify and describe by means of logical analysis or reference to empirical data. Abstract nominees concepts (as opposed to concrete concepts) can hardly be represented by one word, usually they require detailed definitions or a complex of various linguistic means to appeal to the mental phenomenon which stands behind them. The main peculiarity of the abstract nominee concept is the fact that its variant individual component is much bigger than its invariant national one.

To reveal and describe an imaginary notion or abstract idea represented by such types of concepts two main methods were developed by linguists. The first is the study of combinatory power of words representing the concept (this method was introduced and developed J. Lakoff and M. Johnson). The second is a complex stylistic analysis of the contexts of their usage in order to reveal metaphoric means of the concept representation.

Analysis of combinatory power of the nominees of the abstract concept of FREEDOM in the English language shows that the abstract notion of freedom is perceived by English people as a concrete entity, which you can “give”, “take”, “have”, “test” etc. Thus, freedom is understood as a state which a person may acquire or loose during his life as a result of some actions, but not as an inborn quality.

To discover metaphoric means of the concept of FREEDOM representation and to prove that its an individual component exceeds its national one two novels were studied: Daniel Martin by J. Fowles and A Portrait of the Artist as a Young Man by J. Joyce. The concept of FREEDOM occupies the central place in both of the texts. The analysis shows that the list of images and stylistic devices used by the authors to represent the notion of freedom is different even if the subject-mater of their novels is similar. For instance, Joyce’s constant reflections on the place religion should occupy in a person’s life and his personal difficult relations with the Catholic Church leads to the use of considerable amount of allusions to Bible, which help him to represent the notion of freedom, particularly its characteristic “freedom is soul”. Concurrently, J. Fowles, who spent the second half of his life in a solitary place near the sea, emphasizes such characteristic of freedom as “freedom is solitude”.

Back
Bilingualism is on the rise in the world. Globalization, migration and the rise of English and other languages as lingual-francas are many reasons of bilingualism. Historical forces have made bilingualism an accepted phenomenon at many places like learning of English in erstwhile British colonies or the French speaking Canada. Psycholinguistics have taken specific interests in understanding how the bilingual mind processes both the languages, and if the bilingual lexicon is a single merged lexicon. Recently several studies with experimental methods have shown that bilinguals activate both their languages in different scenarios. Many people learn a second language and become bilinguals for different professional, social as well as cultural reasons. In countries like India bi- and multi-lingualism is a norm rather than exception. Interestingly, knowing two languages not only offers some linguistic and social advantage, it also strengthens his/her executive control system.

There have been recent demonstrations that bilinguals spontaneously activate translations in the task irrelevant language during listening, speaking and reading. However, most evidence till date have come from language pairs that have cognates and that share scripts. In two visual word eye tracking studies we show that Hindi-English unbalanced bilinguals suffer interference during an oculomotor visual search task as they activate the phonological cohorts of the translations equivalents.

In experiment one, Hindi-English bilinguals were asked to programme a saccade towards an object that changed color among three distractors. However, on some critical trials, one of the distractors was a phonologically related word of the translation of the spoken word. For example when the spoken word was ‘GUN’ in English, the critical item was ‘BANDAR’ (Monkey), which is cohort of ‘BANDOOK’ (translation of GUN in Hindi). Saccade latencies to the object that changed color were higher on such trials compared to control conditions, indicating covert activation of the translations interfering with the primary visual task. The spoken word was presented 500ms after the onset of the display. The color change was, however, simultaneous with the onset of the spoken word.

In experiment two, we presented the spoken word before the appearance of the display and the results showed similar interferences with the saccades towards the object that changed color. Taken together, these two experiments show that bilinguals automatically activate translations equivalent of the spoken words in the task irreverent lexicon which interferences with the primary visual task. Subjects were told that spoken words were to be ignored as they were not relevant for the main task. We discuss the results in the context of bilingual lexical organization and language mediated eye-movements.

These results suggest that even non-balanced bilinguals who have learnt their second language later in life nevertheless develop a merged semantic memory system that allows them to activate both the lexical words of a concept together. However, language proficiency may play a modulating role in this cognitive behavior. These are the first studies on Hindi-English bilinguals where scripts and languages differ from one another. Therefore, these results extend past findings with language pairs that had cognates and belonged to one language family.
Body-part Idioms, Variation and Productivity: Evidence from German

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Traditionally, German idioms have been described as conventional multi-word expressions that are not only semantically more or less opaque but also structurally fixed. Lexemes denoting parts of the human body appear frequently in German idioms (so-called body-part idioms, see Niemi et al. 2010). The body-part idioms account for the biggest group of German idioms in general (cf. Schemann 1993: CIII). A lemma frequency analysis of extensive corpora of English, German, Swedish, Russian and Finnish VP idioms shows that one third or two fifths of the instances are covered by three nouns: ‘hand’, ‘head’ and ‘eye’ (German: 35 per cent) (Niemi et al. 2010). An example of a body-part idiom is jmdm. fällt das Herz in die Hose ‘to take fright’. In other words, these three nouns mentioned above are the most idiom-prone nouns in German as well.

A typical body-part idiom in German contains – at least – a body-part noun and a verb. In addition, idioms are lexically restricted expressions. Nonetheless, there have also been attempts to make idioms relatively flexible (cf. Fellbaum 2007), showing that idioms include more variation than hitherto assumed.

The present paper considers the interaction between data and lexicographical description. First, lexical variation of German body-part idioms based on case studies will be examined. Second, the current study is based on extensive corpora (IDS-Korpus, Google-Groups) and questionnaire studies. Variability is evident in corpus and questionnaire data, but it is under-represented in dictionaries. The paper looks at recurrent types of variation and considers some lexicographical consequences. In addition, the notion of productivity of idioms will be addressed based on data retrieved by different methods.

References


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Sensory-specific anomic aphasia following left occipital lesions: Data from free oral descriptions of concrete word meanings

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Nouns with a high degree of semantic specificity (e.g., ‘robin’) can be assumed to be more closely related to sensory information as opposed to more non-specific nouns belonging to the same lexical semantic hierarchy (e.g., ‘animal’) (Rosch, 1978). As the majority of concrete nouns denote things that can be experienced visually, activation of visual information might be necessary for concrete noun processing, in which case damage to visual (occipital) cortex might selectively affect more specific nouns. Supporting this idea, nouns (e.g., ‘table’) and verbs (e.g., ‘kick’) have been found to activate brain regions involved in experiencing their referred objects and actions (Pulvermüller & Fadiga 2010).

Individuals with lesions in visual brain areas have previously been shown to have difficulties accessing words related to the visual modality (Manning 2000; Gainotti 2004). In these studies, the focus has been on comparing different modes of presentation (e.g., visual/tactile/verbal). However, it could further be hypothesised that when visual areas are damaged, the degree of visual semantic content would also affect performance.

The present study investigated hierarchical lexical semantic structure in free oral descriptions of concrete word meanings produced by a subject (ZZ) diagnosed with anomic aphasia due to left occipital lesions. The focus of the analysis was production of a) nouns at different levels of semantic specificity (e.g. ‘robin’–‘bird’–‘animal’) and b) words describing sensory or motor experiences (e.g. ‘blue’, ‘soft’, ‘fly’).

Results showed that in contrast to healthy and aphasic controls, who produced words at all levels of specificity and mainly vision-related sensory information, ZZ produced almost exclusively nouns at the most non-specific levels and words associated with sound and movement, suggesting that his anomia is sensory-specific and dependent on the modality of the semantic content of words.

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By its very nature, psychotherapy seems to give rise to a unique style of discourse. While the distinctive quality of communication in this domain is interesting to explore, and evidently important to characterise, this presentation will focus on a more common aspect of therapeutic interactions: the use of non-literal language.

Metaphor has long been noted as a prevalent and valuable feature of verbal exchanges in the psychotherapeutic situation. Nevertheless, practical approaches for therapists recommending instructions regarding the figure’s application have remained largely indifferent to advances in metaphor theory. Similarly, explanation concerning the motivations behind the attested use of such language has been given little theoretical grounding, with hypotheses based primarily on intuitive reasoning. This latter observation is perhaps a result of the somewhat scarce literature on metaphor production, scarce in comparison to comprehension literature that is.

It is the belief of many that clients’ metaphoric utterances occur because the concepts, images and feelings associated with that language are ‘a reality’. It thus follows that their words are to be seriously entertained in their literal sense. This idea mirrors that of philosopher Samuel Levin who claims that metaphors arise due to an inherent inadequacy of conventional language, that is, its inability to fully express certain complex and profound thoughts (1988). I shall argue in favour of this claim: that our thoughts are often metaphorical and that since metaphorical utterances represent some ‘truth’ for the speaker, to an extent they should be literally interpreted. Such a proposal has important implications for cognitive accounts of metaphor, namely the ad hoc concept account (formulated within the relevance-theoretic framework, see Sperber & Wilson, 2008) and Carston’s recent proposal of a second processing route for understanding extended or other complex metaphors (Carston, 2010).

References


1 Taken from an anonymous interview with a psychotherapist, carried out as part of this research project.
Eponymous idioms in two languages

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Idioms often carry indexical markers, such as unpredictable use of a grammatical category. An English example of this is the eponymous idiom construction that refers to recurrent action and contains the verb do followed by a proper noun (e.g., Penttilä 2006). The construction is indexed by an indefinite article a/an that precedes the proper name usually referring to a person, e.g., do an Obama. Interestingly enough, Finnish, a non-IE language, contains a construction highly similar to the English one. Here the plural is used as the marker of idiomaticity (as it is in several other Finnish idiom types, see Niemi et al., 1998), e.g., tehdä obamat ‘do an Obama’. The constructions can be presented as do a/an Xprop and tehdä Xprop+ PL ‘do Xprop + PL’, respectively.

The meanings of these eponymous constructions are highly context-dependent. In our presentation we compare the meanings of the widely-spread do an Obama to its Finnish equivalent tehdä obamat. The data is collected from Internet discussion forums.

References


Light Verbs: An Empirical Attempt to Define the Notion

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Intuitively, some (morpho-)lexical items are more multifunctional and general in their semantic domain than the prototypical representatives of the same syntactic/lexical category. Among verbs, the notion of the light (or empty) verb has attracted linguists’ attention at least since Jespersen’s monumental series of volumes on the structure of English (Jespersen 1909-1949). In our five-language study Cross-linguistic Studies of Phrasal Idioms we have systematically collected large corpora of verb phrase idioms of German, English, Swedish, Russian and Finnish and have analyzed their overall lexical composition (Niemi et al., 2010) and the idiomaticity of the noun complement (Niemi et al. 2013). The total number of the body-part idioms in our corpora is about 5,300 (German: ca. 1,300, English: ca. 550, Swedish: ca. 1,800, Russian: ca. 800, Finnish: ca. 830).
Since the notional attempts at defining the “light verb” have been shown to be difficult, if not impossible (Pottelberge 2000), we aim at explicating the category using an empirical method, i.e., by analyzing which verbs in language X (German, English, Swedish, Russian or Finnish) tend to appear in VP idioms with “diluted meaning” of their own (if any).

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Cognition as cognition, cognition as semiotics, and the linguist’s comfort zone

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Paradigm shifts always tend to polarise the scholarly debate. For the last couple of decades, “functional” explanation has increasingly been equated with “cognitive” explanation in linguistics, even to the point where linguistic arguments lacking cognitive (or cognitively-based) terminology have been labelled “formalist” and thus old-fashioned. This not only does blurs the line between functional explanation in general and cognitive-functional explanation in particular, but it also creates a state of scholarly discourse where cognitive terms are used when not appropriate or even completely lacking a firm background in cognitive science, just because linguists wish to remain in their “comfort zones”.

Even during this paradigm shift, studies of language often follow the traditional “autonomous” linguistic pattern. The argumentation is perhaps more thoroughly based on actually occurring language data now than before, but the data is still primarily behavioural, not psychological per se: it is based on observations of linguistic habits of a discourse community and interpretations of those habits by members of the same community.

In my (poster) presentation, I am going to present two examples of linguistic studies of my own where cognitive-functional explanation would either be an overkill or just theoretically redundant, just to show that there’s still room for functional but not cognitive-functional explanations in linguistics. The first of these studies is deep inside traditional linguistics and concerns the ongoing emergence of a new Finnish terminative case-form of the three singular demonstrative pronouns tämä ‘this’, tuo ‘that’ and se ‘it’: tähäksi, tuohoksi, siheksi. The explanation of the formation of the -hVksi form from previously existing illative (-hVn) and translative (-ksi) case endings would not gain anything with cognitively-motivated argumentation. The grammaticalisation process involved is neither from more concrete to more abstract usage or vice versa but remains on the same level of abstractness. The motivation for the choice of case-form can conveniently be formulated in semantic-pragmatic terms, without the need to resort to more or less ad hoc “cognitive” metaphors.
The second study concerns localisation of computer software (the KDE SC desktop environment) where source language is English and the target language Finnish. The field of lexicon involved so new and in a constant state of flux that localisers cannot blindly rely on the pre-existing lexical inventory but have all the time to create new “ways of saying” (to borrow Hasan’s phrase) for the target language. It demonstrates neatly the phenomenon of “linguaging” in actual linguistic practice and also, how the social factors guide it toward the emergence of (new) language.

Effects of Number of Stem Allomorphs on Performance in Lexical Decision and Event-related Potential Experiments

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The crux of our study is located in the notion of (formal) complexity as used in grammar (i.e., scientific analysis of core aspects of language) versus complexity in actual online processing of linguistic forms. The main question to nature here is: Are lexical items with stem allomorph variation (e.g. foot \textasciitilde feet) processed in perception in the same way as items without variation (e.g. table)? The majority of psycholinguistic literature concerning (ir)regular morphology concentrates on the processing or storage of inflected forms (e.g., feet vs. tables or thought vs. walked) in relation to their (grammatical) base forms. Our experiments deal with the recognition of base forms of words in relation to their paradigmatic complexity (stem allomorphy) by asking questions like: (i) Do words like foot have some benefits in their recognition because of stem allomorphy, or (ii) do they rather cause an inhibition effect because of competition in form variation? (iii) Or could it be that there is no activation of the allomorph feet when we process the word foot, and thus no influence on the base form? With these and related questions in mind we investigated the temporal dynamics of processing Finnish monomorphemic nouns with rich stem allomorphy versus nouns with no stem variation by conducting an event-related potential (ERP) experiment during a single word lexical decision task.

Behaviorally, items with rich stem allomorphy received shorter latencies than the items without stem variation. To explain this response pattern – somewhat counterintuitive to most, if not all grammarians – we propose that relatively rich activation of stem allomorphs at the lemma level (cf. Taft, 2003, 2004; Taft & Kongious, 2004) in fact facilitates lexical access from form (visual input data) to meaning analysis (here: “is the word-like pattern a word in language X or not”). In the ERP data, the difference between these two groups was a modulated centro-parietal N400 component consistent with the view that any factor that facilitates lexical access should reduce the N400 amplitude (Lau et al. 2008). On the other hand, the global field power waveforms derived from the ERP data suggest that the brain allocates more processing power to the items with rich stem allomorphy.

To sum up, in processing inflectional paradigms relative formal complexity within a lexical entry/lemma is associated with briefer, but more energetic events.
Gestures – precursors for language development?
A longitudinal descriptive study of accompanying gestures in one child with autism spectrum disorders

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As gestures are known to accompany speech, they may be a possible precursor to language development (Iverson & Goldin-Meadow, 2005). Babbling has been linked to onset of rhythmic hand movements and word comprehension with emergence of deictic gestures (Bates & Dick, 2002). According to recent theories of prediction, humans need sensory feed-back in order to learn movements. Sensory feed-back and integration is impaired in autism spectrum disorders, which has consequences for the development of speech and language and manual gestures. There are substantial reasons for believing that imitation would be interconnected with theory of mind. Both aspects, imitation and theory of mind, involve translating the perspective of another individual to oneself.

In the human brain, there is a neurological overlap concerning hand/arm and mouth motor function in Brocas area (Buccino, Binkofski & Riggio, 2004). We may therefore look upon Brocas area as a core area of autism spectrum disorders, as an area for speech production, mediation between production and perception, manual gestures, sensorimotor integration and theory of mind.

In the current study of gestures we examine accompanying gestures in a Swedish 5-year-old boy with autism spectrum disorders who is living in a bilingual family. The boy is followed longitudinally over 1 ½ years during an intervention with stimuli (minimal pairs). A corpus was collected from videofilm, transcribed and annotated for gesture data in PRAAT. The purpose is to describe gestural performance, timing and accompanying gesture types in the corpus.

References
Contact-induced language change in subordination structures of Dutch-Turkish?

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While Turkish immigrants in Western Europe are often said to orient themselves to the norms of Standard Turkish, their Turkish is nonetheless constantly being influenced by the European language they also speak (Backus, 2004). As a result of language contact, slowly but surely, new varieties of Turkish seem to be evolving. In this talk, I will focus on Dutch Turkish in the Netherlands, with an emphasis on my recent work on clause combinations, specifically subordination; an empirical domain not investigated much before in the Dutch context but which seems to be heavily affected by contact.

This study presents data of corpus-based and experimental research on Dutch Turkish and on Turkish in Turkey. First, six bilingual group-conversations were recorded and analyzed. The follow-up experimental study consisted of individual tasks, executed by second generation Turkish-Dutch bilinguals and monolinguals in Turkey. The tasks are a sentence repetition and a judgment task containing likert scale and forced choice items, both in bilingual and monolingual mode, and using the ‘attested’ data (from the previously-recorded group conversations).

Turkish subordinate clauses are claimed to be mostly non-finite (Göksel & Kerslake, 2005). Spontaneous group conversations displayed an abundance of finite subordination in Dutch Turkish at points where a non-finite option had been possible, which suggests avoidance of non-finite subordination. Remarkably, there was not a single instance of non-finite indirect Reported Speech (RS). Language contact has apparently led to an increased use of the finite RS construction, the option that is closest to the Dutch equivalent. The sentence repetition task confirmed this preference for finite constructions for bilinguals in the Netherlands, whereas the results reflected the opposite for monolinguals in Turkey.

Lastly, I will also go over the results of the acceptability judgment tasks and compare them with the findings from my production data to investigate how entrenched the changes, suggested by the spontaneous speech data, really are in people’s linguistic competence.

In conclusion, contact-induced change is taking place in Dutch Turkish subordination structures. Subordination in Dutch Turkish is clearly different from subordination in TR-Turkish. Finally, I investigate how these results are accounted for in Cognitive linguistics.
Cognitive linguistic perspective on terminological work

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In her sociocognitive approach to terminological research Rita Temmermann (2000) has pinpointed that it is possible to analyse terminology from a cognitive linguistic point of view. Issues of contextuality, prototypicality, encyclopaedic view to concepts and other basic principles of cognitive semantics are applicable to terminology as well – which is not a surprise for a cognitive linguist but represents a radical discrepancy between her view and some principles of traditional terminological work by for example the School of Vienna.

This paper introduces the Bank of Finnish Terminology in Arts and Sciences, a MediaWiki platform for cooperative multi- and interdisciplinary terminological work. Some examples are taken from the cognitive linguistic concepts in the term bank. The paper raises the issue of research questions which could be approached on the basis of the term data and discussions in the BFT. These are as follows:

- The question about the nature of categories on the basis of definitions and explanations: Are scientific terms presented more like classical categories or as prototype-based ones?
- What do we learn about knowledge frames or cognitive models in the background of a term on the basis of concept pages in the BFT?
- How is the meaning negotiated in the discussions and changes in the BFT? What does this negotiation tell us about the nature of concept formation?

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www.tieteentermipankki.fi


Depth of Lexical Knowledge in Young Finnish Adults

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In the light of various international assessments, the Finnish school system seems quite successful in providing the majority of its students with a solid reading ability (Linnakylä & Arffman 2007). Writing results do not, by contrast, reach the same level (see e.g. reports by the Ministry of Education). For ex. over 40 % of ten-year old boys are not able (or willing?) to write a coherent story (Pajunen 2012), which is clearly below what can be regarded as the standard in the Western societies (Berman 2007). This difference is astonishing. It might depend on assessment methods, teaching, motivation
or linguistic problems. It is the overall purpose of the research project **Later Finnish development: school-aged children and young adults** to investigate what is, on the average, the linguistic knowledge possessed by children and young adults (8–12, 15, 18 or over), and at what age they learn to master it. One more specific aim is to find out whether or not bad writing results are to be explained by problems of language mastery, i.e. in the mastery of lexicon, morphology or syntax. In our talk, we are going to discuss the depth of lexical knowledge tested on young adults who, in our study, represent the standard which school-aged children are supposed to achieve.

We tested 120 young adults’ knowledge of word meanings. All of the subjects had finished the high school, passing their matriculation examination in Finnish comparatively well (= cum laude approbatur / laudatur). They were asked to define the meanings of nine common Finnish words (pöytä ‘table’, esine ‘object, thing’, silmä ‘eye’, polvi ‘knee’, kansi ‘lid, cover, deck’, reuna ‘edge, side, rim’, juosta ‘run’, itkeä ‘cry’ and ajatella ‘think’). The words were chosen so as to exemplify a scale of concreteness. They also differ as to the type of lexical hierarchy and word class they represent.

The hypothesis is that concrete words, nouns and hyponyms are the easiest to define (Marinellie 2006, Nippold 2006), whereas abstract words, verbs and meronyms are more difficult. Young adults are supposed to be able to define words using general and specific semantic criteria in conformity with the so-called Aristotelian schema at the age of 18 (Seung 1982, Snow 1990) (for ex. “a table is a plane that has four legs and that is used for eating and working”).

The definitions (1089) were analyzed using the criteria developed by Snow. Statistical analysis was applied to the form of the definition, the general vs. specific semantic criteria, mastery of morphology, and background information. The result seems to be that Finnish young adults have more problems with word definitions than we had initially assumed. Moreover, the ability to define word meanings does not seem to correlate with the level of matriculation examination in Finnish.

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Antonyms and opposing valence

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According to ancient Chinese philosophy, there are three characteristics that are fundamental to human thinking. They are (i) the bipolar organization of dimensions of cognition, (ii) the attribution of positive polarity to Yang and negative polarity to Yin and (iii) the parallelism in the orientation of the dimensions in terms of positivity and negativity (Osgood & Richards, 1973). The literal meanings of Yang and Yin are ‘light’ and ‘dark’, and in Chinese philosophy, they are used to describe how such opposites are interconnected and dependent on one another in real life, and how they thereby also give rise to one another, suggesting that opposites only exist in relation with one another. This is also a very apt description of antonyms in language. In accordance with the cognitive-functional approach that meanings of words in language are evoked at the time of use in text and discourse, our definition of antonymy states that two words or two constructions are antonyms when they are used to express binary opposition in discourse. Word meanings are fostered and constrained through their use. In some cases, valence is foregrounded, e.g. good–bad and ugly–beautiful, while in other cases valence may be more covert and fostered through the usage patterns in human communication, which may be the case for pairs such as fast–slow and hot–cold.

The purpose of this study is to find out to what extent antonyms such as fast–slow and hot–cold are in fact associated with opposing evaluative polarity. We are comparing results of 8 pairs of antonyms from a corpus-based study of antonym use in discourse, using the British National Corpus, with the results from an experiment where we adapt the Implicit Association Test (IAT) to measure whether speakers in fact associate such antonym pairs with positivity and negativity, and if they do, which is positive and which is negative. The pairs under investigation are large–small, heavy–light, soft–hard, long–short, slow–fast, cold–hot, thick–thin, and high–low.

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Reappraising the Relationship Between Concepts and Language

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A surprising number of philosophers of mind and language have either stipulated that concepts (as, roughly speaking, the building blocks of systematically and productively structured thought, or else the ability to think in a structured manner) are co-extant with language; or they have concluded that concepts and language are co-extant as a matter of empirical observation. Without further
elaboration, the second position amounts to little more than a variation on the first. On either view, one of the core properties of concepts is their articulability. Associated historically with such philosophers as Wilfred Sellars and Donald Davidson, it remains remarkably widespread today, creating a huge cognitive watershed between humans and other species if not, in fact, an unbridgeable divide. I believe that John McDowell takes concepts require articulability in this sense (see 1996: 125, 108-128); Zoltan Torey goes further in making thought in general (2009: 46) and indeed mind itself (2009: 123) dependent on language.

In this paper, I argue the case that concepts and language pull apart and attempt to diagnose the continued resistance to such a move. Although one must, unavoidably, use language to talk about concepts, and language unavoidably colours how we think about concepts, it is I think a mistake to see language as underlying conceptual thought: the reality is more the other way around. Such an assumption is at the heart of Merlin Donald's (2001, 1993) account of cognitive-cultural evolution. It is an article of faith among the growing community of philosophers advocating so-called "animal concepts" -- I have in mind researchers such as Albert Newen, Andreas Bartels, and Colin Allen -- who reason from strong evidence that at least some and possibly many species have flexibly organized cognitive patterns that can only reasonably be described as "conceptual", even though they lack language in any but the loosest and most metaphorical sense. The key criteria are:

- Evidence of an ability to derive general categories from specific instances;
- Demonstration of a flexible pattern of behaviour based on this ability, especially when confronted with novel situations; and

None of these criteria, prima facie, require language. Putting them another way, one should attribute (at least minimal) conceptual abilities to an agent when the most parsimonious explanation for that agent’s behavior is that, when presented with the same circumstances on different occasions, that agent makes different choices based on some calculated awareness by that agent of its past experiences. Rather than making conceptually structured thought possible in the first place, language transforms and extends an agent’s concepts and conceptual abilities, allowing existing concepts to become more abstract and facilitating more abstract concepts than were possible before. The lingering dogmatism that concepts require language or reduce to language – with the consequent divide it establishes between human beings and all other species – may be little more than an artefact of an earlier era when humanity was seen as a separate creation from the rest of nature.

References

Estonian and Finnish verbs expressing change of color: A Conceptual Semantics analysis

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Colors are typically expressed by adjectives. Consequently, both language-specifically and cross-linguistically, the research of color expressions has concentrated on adjectives. In Finnic languages, color adjectives can be derived into verbs that can be divided into three situational classes: causatives, inchoatives and statives (Koski 1983, Pennanen 1978). We will focus on the color verbs in two Finnic languages: Finnish and Estonian. Both languages have the abovementioned verbal color types: (i) causatives: Est valgendama, Fi valkaista ‘make sth white’; (ii) inchoatives: Est mustenema, Fi mustua ‘become black’; (iii) statives: Est sinama, Fi sinertää ‘appear blue’.

The tripartite verbal system thus reflects an aspectual division of verb forms, expressing different kinds of states-of-affairs. The tripartite color verb derivation does not treat the basic color terms equally: there are gaps, overlapping of forms and parallel forms in the lexical arrangements of both languages. (On the basic colour terms of Estonian and Finnish, see Sutrop 1995, 2002, and Uusküla 2007). In addition, the NP expressing the participant being colored (e.g. posket ‘cheeks’ in posket punertavat ‘cheeks appear-red’) plays a central role in the semantics of a color verb expression.

We will discuss the semantics of Finnish and Estonian verbs within the framework of conceptual semantics (Jackendoff 1990, 1997, 2010; Nikanne 1990, 1997, 2008). Conceptual Semantics aims at a formal analysis of the human cognition as a whole. The aim of our study is a formal description of the lexical conceptual structures (LCS) of Estonian and Finnish color verbs. We will discuss the following more specific questions: How the LCSs of color verb expressions are linked to the event structure? How do color verbs encode gradual vs. abrupt change of state and how to analyze this encoding formally? What are the consequences of our analysis for the theory of the lexicon and morphology in Estonian and Finnish? What are the differences and similarities in Estonian and Finnish?

References

Monkey on one’s back?

How Finns understand novel translated loan idioms

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Throughout history idioms have been translated and borrowed from one language to another. Typical sources of loan idioms are the Bible, popular literature, and various historical incidents. When language skills improve and language contacts increase, this seems to lead to an increased number of loan idioms in a language – with the assumption being that everyone understands them. Some of such loan idioms are found in restricted contexts, such as sports language (Fi apina selässä < En monkey on one’s back), while others are used in more common contexts (Fi pala kakkua < En piece of cake). We aim to study how Finns of different ages and backgrounds recognized such directly translated borrowed idioms. And if they are not familiar with these expressions, what strategies they use to decipher their meanings.

The study is based on a questionnaire survey where Finnish native speakers of different backgrounds and ages were presented different types of idioms, some of which were more traditional, while others were novel translation idioms. The informants had tell whether they knew the idiom or not, and if they did not they had to give a possible meaning for the expression and explain what was their conclusion based on.

The idea is to discuss how the motivation behind idiom meaning helps people to interpret idioms. According to the traditional definition, the meaning of an idiom is more than the compositional combination of the meanings of its parts. Taken to its extreme this would mean that it would not be possible to understand a novel idiom only on the basis of its parts. This view, however, has been questioned, e.g., by Langacker (1991: 264), Geeraerts (1995: 60) and Nenonen (2002: 19), and it seems that idiom meanings are often motivated by the meanings of their parts. If this is the case, it would mean that novel idioms would also be interpretable at least to some extent.

Preliminary results from our study indicate that novel loan idiom interpretation to some extent depends on sex and age of the informants. Especially, if the informant does not speak English, it is difficult to understand the meaning of even such transparent expressions as rampa ankka ‘lame duck’ which are used fairly commonly in general media.

References
Are Nouns and Verbs stored in different parts of the brain?

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For more than three decades various studies have been conducted engaging various imaging techniques to establish a correlation between the noun-verb processing and various neural systems. However the results are more or less conflicting with each other. The study of lesion location in aphasic patient suggests that the left temporal lobe plays a crucial role in the processing of nouns, while the left frontal lobe is necessary for verbs (Perani et al., 1999). Thus the present study aims to re-examine this statement by studying action and object naming in Progressive Supranuclear Palsy (PSP). PSP is a rare brain degenerative disorder which primarily affects the frontal lobe. Participants or the patients in the experiment were declared cases of PSP by neurologists of G. B. Pant Hospital, New Delhi. The stimuli/test consisted of black and white action and object pictures. The action pictures produced more errors than object pictures. But the answer set for object pictures was not error free either. These findings pose a question towards the role of frontal cortex in action naming. It also poses a question towards the neural correlates of language. A detailed analysis of the action object naming test leads us to the conclusion that there is no substantial support to the localization model or the neural segregation hypothesis. The results help in providing an alternate structure for the organization of the language in brain.

Semantics and combinability patterns of posture verbs in English and Russian

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A great body of research has been done on the cross linguistic differences in space conceptualization and description (Levinson 2003, Ameka 2007, Regier 1996). Yet, the verbal component of locative constructions is still a relatively neglected topic in recent studies (Svorou 1994; Newman 2002), with more preference being given to the analysis of spatial prepositions and deictics (Talmy 2000, Feist 2010, Vandeloise 2003, Hanks 2009). However, posture verbs serve as an important source of lexicalization and metaphorical extensions (event structure metaphors).

This paper provides a detailed corpus-based analysis of the semantics and combinability patterns of Russian and English posture verbs ("stoyat" – “stand”, “sidet” – “sit”, “lezhat” – “lie”), by not only focusing on their use in locational expressions, but also on their metaphorical extensions as well. I assume that spatial orientation of humans and objects can be described by one of these verbs, but there are certain unpredictable constraints on their usage in unrelated languages. The present paper is an attempt to more closely identify the components of the meanings of these verbs and to reveal the experiential basis (Lakoff, Johnson 1999) which underlies them.
The analysis shows that being mostly similar in describing canonical human postures, these verbs demonstrate significant differences in semantic extensions in the languages under consideration. I explore the types of extensions with each of the posture verbs in Russian and English, assuming that other languages, when considered in terms of combinability patterns, serve as the mirror, which highlights the contrast, imperceptible within the lexical system of a single language. The paper explores the application of posture verbs to varied scenarios, with different objects and arrangements in relation to different ground objects, emphasizing that there is some internal coherence and motivation of different uses of posture verbs in the languages in question, based on their image schematic organization.

References


Back

Relationship of motion event structure and processing of Fictive Motion in a bilingual population

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Figurative expressions in language reflect many cognitive and perceptual structures inherent in mental processing. These expressions manifest the embodied nature of meaning generation and processing and are considered crucial to language understanding. Embodied experiences are at the root of construal operations that, in turn, constrain meaning of words in a language and hence their understanding by its speakers. These theories of language comprehension hold that a mental simulation (of the events as described in the language) accompanies comprehension. Fictive motion sentences are a type of figurative language where an essentially static scene is described in a dynamic fashion. Fictive motion sentences accord agenthood to otherwise non-biological entities i.e.
the road runs through the walley. Research has shown that processing fictive motion sentences is accompanied by simulation of motion (even though actual motion is impossible in these cases) in language comprehenders.

In this presentation I will focus on the processing of Fictive Motion structures in Bodo. Bodo is a language of the Tibeto-Burman family, spoken in the North Eastern part of India. There are not many cognitive linguistic studies on this language yet. Bodo is an S-Framed language. This language allows dynamic construal of static objects involving figurative language very sparingly, resulting in very few FM depictions. This paper reports the findings of both off-line drawing tasks as well as online RT studies regarding the processing of Fictive Motion sentences by Bodo speakers. The results of the experiments show no or rare cases of motion simulation while processing FM sentences by the speakers of this language. The author attempts to account for the findings in the light of the motion event structure in this language. In the motion event structure in Bodo, there is more stress on location rather than on path information of the motion event. Rather than detailing the path information in the motion verb structure in terms of T-motion (translational motion), Bodo encodes it in terms of CoL (change of location); where ‘going to the market’ is encoded as ‘becoming located at the market’. Motion events with a specific goal almost always make use of this structure. The author argues that because of the domimant CoL structure of the motion events in the language, it does not allow FM constructions and even when we do find some instances of FM sentences (perhaps owing to the influence of other neighbouring languages), their processing is not accompanied by motion simulation. This paper also seeks to examine if the Bodo speakers' conceptualization of motion events has an impact on the way they process FM sentences in their L2 (that makes use of a larger repertoire of such constructions).

Back

Standard Arabic-to-Moroccan Sign Language Machine Translation: Does translation from a morphologically rich language reflect the interpreters' allocation of high cognitive resources?

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We describe some challenges in an ongoing project on Standard Arabic (SA)-to-Moroccan Sign Language (MSL) machine translation. Arabic morphology represents a special type of morphological system. In Arabic, word structure is not built linearly as is the case in concatenative morphological systems, which results in a large space of morphological variation. The language has a large degree of ambiguity in word senses, and further ambiguity attributable to a writing system that omits diacritics. (e.g. short vowels, consonant doubling, inflection marks). The lack of diacritics coupled with word order flexibility are causes of ambiguity in the syntactic structure of Arabic. The problem is compounded when translating into a visual/gestural language that has far fewer signs than words of the source language.

The special characteristics of Arabic pose bigger computational complexity than it is the case for Latin-based languages. Jensen (2008) demonstrated, in his PhD thesis on allocation of cognitive
resources, that more cognitive resources are required when translating a difficult source text. We used the diacritization test to measure both the level of computational processing by our translation system as well as the level of cognitive processing by humans with average translation and reading skills. For our own purposes, we have chosen humans with only average reading skills. The initial results show that the translation of undiacritized sentences took more time. Obviously, it took our subjects (with average reading skills) sometime to figure out the correct reading of the undiacritized words in context.

In this presentation, we show the architecture of the system and provide a demo of several input examples with different levels of complexity. Our Moroccan Sign Language database has currently 1400 Graphic signs and their corresponding video clips. The database extension is an ongoing process task that is done in collaboration with MSL interpreters, deaf signers and educators in Deaf schools in different regions in Morocco. As is shown in Figure 1 below, the system enables an user to:

1. Scan from paper,
2. Type
3. Generate that text with sign supports in real time,
4. Provide the user with the ability to have this production edited and/or printed,
5. Have the option of seeing the signs “played” as video clips
6. Provide the user with the ability to have this production edited and/or printed,
7. access a bilingual dictionary Standard Arabic-MSL (video and graphic)

![Figure 1: General architecture of the translation system](image)

The core component of the system is the incorporation of Natural Language Processing tools (morphological analysis, parsing etc.) which are required to process the Standard Arabic input.
Reading What You Think You See. Good Enough Representations and Lingering Effects of Error Correction: Evidence from Antonymic Pairs using Eye Tracking Methodology

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How does the reading process react to detection of errors, and how does this differ from cases where an error is missed or if no error is present? This study sets out to investigate these questions using eye-tracking methodology. In order to determine the influence of detection of errors during the reading process, native English speakers were asked to read short news items containing antonymic incongruities in an eye-tracking experiment. Canonical antonym pairs evoke meanings along the same meaning dimension, but express opposite properties. The advantage is thus that failure of error detection can be identified as being caused by the opposing properties. Another advantage of using antonym pairs as stimuli is that, when detected, an incongruity is recognized as erroneous with no previous cultural knowledge, such as knowledge of the Bible or current events.

Two groups of participants received different antonym incongruities, designed to be easily overlooked. Fixation durations, number of fixations, and pupil dilation on undetected incongruities were compared to detected ones as well as control conditions. The eye-tracking experiment found no difference in first fixation duration for undetected incongruities compared to the control condition. This supports the Good Enough approach to language processing, which argues that heuristics providing an analysis of what is expected from the text is capable of dismissing an error before the semantic analysis encounters it. However, a significant increase in the total number of fixations on the word immediately prior to an undiscovered incongruity was found, as well as a marginally significant increase on the incongruity itself, compared to the control condition. This suggests that the reading process is capable of compensating for textual errors by interpreting them as the expected, correct word, which allows processing to continue unhindered. However, a lingering effect of this error correction is still present, evidenced by the increase in number of fixations.

A significant decrease was found in first fixation duration on the discovered incongruity compared to the control condition. This implies that language processing was instantaneously interrupted by detection of an error, in order to revise the construction of the Good Enough representation of the text. This also suggests that the data from the undetected trials was valid.

Finally, a trending effect of detection was found with regards to gender. Female participants noticed a larger number of incongruities compared to male participants, suggesting that females might process language differently than males and therefore have a higher sensitivity to textual incongruities.
The mind and its processes, such as language, thinking and speaking are first-order examples of abstract domains which are typically conceptualized by means of metaphors. Furthermore, thinking and speaking can reasonably be considered universal domains, i.e. they include concepts which exist in all languages independent of culture.

The aim of this paper is to present an inventory of Quechuan metaphorical expressions belonging to the domains of thinking and speaking. A first example can be found in the expression *runa simi* which is used to refer both to language in general and the Quechuan language in particular. The expression involves the same metonymy that is found in European languages, in which an organ of speech, typically the tongue, as in Spanish *lengua* or Finnish *kieli*, is used to refer to the act of speaking. Another example is Quechuan *qillqa*, which in its most basic use refers to any written character, such as a letter. From this meaning others are derived, such as ‘anything written’, ‘letter’ and ‘book’.

This single lexical item thus shows us how a Quechuan concept is extended to include a variety of originally foreign notions, which were introduced as part of the tradition of written communication in the Andes by the Spanish colonizers.

Previous research on conceptual metaphor in Andean languages (mainly Quechua and Aymara) has mostly focused on the (alleged) peculiarity of their temporal frames of reference, where the past is supposed to be conceptualized as lying ahead of the speaker/conceptualizer and the future behind him/her, a conceptualization which is the opposite of the one found in most European languages (cf. Núñez & Sweetser 2006, Godenzzi 2005, Faller & Cuéllar 2003). But there is little research on the metaphorical expressions of the mental domain, although it is, in fact, a very interesting area of research from various points of view. For example, diachrony poses interesting questions regarding the so-called computer metaphor of the mind, which is ubiquitous in present day Western societies (cf. Granvik 2011). And although it probably builds on an earlier mechanistic machine metaphor of the mind (cf. Lakoff & Johnson 1980, 1999), both metaphors have clearly limited explanatory power in historical terms. Furthermore, in a culture such as the Andean, computers or machines are hardly appropriate source domains for the mental operations even today.

In order to reach as broad representativeness as possible of the linguistic data described, our analysis is based on different sources, including colonial age grammars and chronicles for diachronic data as well as present day grammars, dictionaries and popular literature, such as collections of short stories. Many of these materials include considerable extents of parallel texts in Quechua and Spanish, thus offering the additional opportunity of comparing two typologically and culturally very different languages, which nevertheless have been in contact for almost 500 years.

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**References**

1 For obvious reasons, the “literal” use of *qillqa* was generalized only after the arrival of the Spaniards. Previously, the word was used to refer to different kinds of pictures, engravings and carvings, even simple coloured pieces of wood. According to Porras Barrenechea (1999: 134), *qillqa* can be considered synonymous to ‘pictograph’ in the modern sense.
Rhetorical strategies used in South African interventions to redress social norms and behaviours related to HIV-transmission

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Social marketing interventions have been negatively evaluated in a number of recent publications with regard to the processes followed in the design of these interventions, the design of their messaging, and especially the nonrigorous evaluation of these interventions (cf., for example, Paluck & Ball 2011; WHO 2009). As a consequence, we still know very little about the design factors that positively support the norm and behavior change goals of these interventions and which of them have a negative effect.

In this paper the focus falls on one crucial factor that determines the (in)efficacy of an intervention: the design of the messaging. The paper discusses the rhetorical strategies intervention designers have used in a corpus of media texts (brochures, pamphlets, bill boards, advertisement, etc.) to change norms and behaviours that have been found to increase HIV infection. The corpus of texts is from a number of South African campaigns (e.g. Khomonani, Soul City, loveLife, Sonke Gender Justice Network, the No Violence against Women and Children Campaign). The norms and behaviours targeted relate, for example, to sexual abstinence, condom use, gender equity, gendered violence, concurrent partnering, health care, and alcohol abuse.

For the analysis of the rhetorical strategies used, a distinction is made between message briefs for interventions (i.e. what the messages are that have to be brought home) – usually an injunctive norm and associated behaviours – and the way these messages are designed to persuade target audiences to except the message (cf. the Intervention Mapping Protocol in Bartholomew et al. 2011). For the latter a number of rhetorical – rational and peripheral cue-based – techniques are used, for example, to raise target audiences’ awareness of the fact that they stereotype, presenting arguments for the rejection of negative norms or to support adoption of a norm, techniques to increase or decrease the salience/centrality and validity of norms, and use of authoritative figures to
convey messages. The rhetorical efficacy of some of these techniques as they are used in social marketing interventions has been researched and will be discussed.

Using Fishbein’s Integrative Model of Behaviour Prediction as point of departure, it is argued, however, that a number of other equally important variables will determine the outcome of any social marketing of norms.

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According to Wierzbicka (1990) basic colours have prototypical meanings. Thus, there is a conceptual association between e.g. the colour red and fire, green and “things growing out of the ground”, blue and the sky, yellow and the sun. The colours white and black can be referred to as different shades of light. My interest lies in colour compounds with the mentioned colours or shades of light as latter part and with a describing first part of the compound in older and modern Swedish fiction, e.a. eldröd ‘blood red’, gräsgrön ‘grass green’. My aim is to study if there are prototypical meanings among the colour compounds in Swedish fiction according to Wierzbickas description. My hypothesis is that there are several instances of prototypical colour compounds especially in fiction and I intend to investigate if there are instances of colour compounds in my material which go even further in their prototypicality and show variation, e.a. brandbilsröd ‘red as a fire engine’. This example can obviously be interpreted as a cultural compound, but its origin lies in the red colour which reminds us of fire.

The material is available in the Swedish Language Bank at the University of Gothenburg, Sweden: http://spraakbanken.gu.se/swe/start.

References
Fictive and actual motion in Estonian: Encoding space

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Fictive motion (FM) is a linguistic phenomenon whereby linguistic elements describing actual motion (AM) are used to depict static situations. As a result, static and dynamic situations may be expressed alike. However, it is argued that compared to AM the encoding of space in FM sentences is restricted (Matlock 2004, Matsumoto 1996, Ruppenhofer 2006). Research to date has focused on what must be expressed in FM sentences (e.g., landmark) rather than how it is expressed.

The current corpus-based study aimed to examine the differences and similarities in the constructions of FM and AM focusing on the choice of spatial relations (i.e., source, trajectory/location, goal) by comparing Estonian FM and AM sentences containing the verbs viima ‘take’, minema ‘go’, suunduma ‘head’, tõusma ‘rise’, põörama ‘turn’, ületama ‘cross’, kulgema ‘~run’, and looklema ‘wind’.

The results of the study indicate that the semantics of the motion verb determine the preferable spatial relation both in FM and AM sentences; the impact of the type of construction (i.e., FM or AM) as well as the impact of the goal-over-source principle (Verspoor et al. 1998) to the preferable spatial relation exhibits a much smaller effect. Path verbs inherently reflecting direction (i.e., viima ‘take’, minema ‘go’, suunduma ‘head’, tõusma ‘rise’, põörama ‘turn’) tended to be used together with elements referring to direction or goal, while manner verbs (i.e., kulgema ‘~run’, looklema ‘wind’) and the verb referring to the trajectory of motion (i.e., ületama ‘cross’) mostly occurred together with elements depicting location or trajectory. Based on these findings, and developing Talmy’s (2000) approach to the path windowing the consistent windowing hypothesis is proposed: The path is windowed in a way that is coherent with verb semantics.

References
Towards a profile of *Fictive Motion* in Polish: A look at coextension paths

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The term *fictive motion* has been utilized by cognitive linguists to refer to dynamic descriptions of static scenes. The existing taxonomies of fictive motion events accommodate a type of fictive motion called *coextension paths* (Talmy 1996, 2000). *Coextension paths* feature a motion verb that is coupled with a spatially-extended entity which is inanimate and incapable of self-movement, e.g. *The path wanders through the jungle*,

The last decade has witnessed a notable surge in the number of publications related to fictive motion, with its type *coextension paths* attracting the most attention. The main streams of current research have been oriented by two essential questions: (1) what are the mechanisms underlying the understanding of fictive motion expressions?, (2) how do fictive motion patterns compare across languages?

The first question has been addressed by behavioural, psycholinguistic and neurolinguistic studies that have consistently rendered support for the simulation hypothesis, i.e. when interpreting fictive motion constructions people mentally simulate motion (Cacciari et al. 2011; Matlock 2001, 2004, 2006; Matlock & Richardson 2004; Mishra & Singh 2010; Richardson & Matlock 2007; Saygin et al. 2010; Wallentin et al. 2011).

The interest in the second question has been reflected in a number of linguistic and conceptual accounts of fictive motion constructions in languages including English, German, Spanish, Italian, French, Serbian, Finnish, Norwegian, Thai, Japanese, Mandarin Chinese, and Yucatec Maya. It appears that most languages have their means to describe a static scene in dynamic terms, however, in individual languages the prevalence and salience of *coextension paths* might be constrained. The intra- and cross-linguistic analyses of specifics of fictive motion structures pointed to, among others, [i] a negative correlation between the salience of fictive motion expressions and the predominance of posture and neutral verbs in descriptions of stationary scenes (e.g. Stosic & Sarda 2009); [ii] the necessity of path information to be expressed (Matsumoto 1996; Rojo & Valenzuela 2003; Rojo & Valenzuela 2009), and [iii] the restriction on the participation of untravellable entities (i.e. not intended for human travel, e.g. *fences, walls*) in fictive motion expressions.

My contribution to the field, therefore, is to provide a corpus-based account of linguistic behaviours of *coextension paths fictive motion* in the Polish language. Based on previous research feeding into our present knowledge of the possible conditions and constraints on fictive motion structures, I hypothesize that:

- *coextension paths fictive motion* are less salient in Polish (drawing on [i]),
- some property of path is always expressed in *coextension paths fictive motion* (drawing on [ii]),
- the repertoire of untravellable entities amenable to *coextension paths fictive motion* is restricted (drawing on [iii]).

In my talk, I will concentrate on the three areas listed above and I will report the findings from my ongoing corpus-based research.
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Back

Mental representations of complex values and their role in argumentation strategies

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The value system of any developed society is a multidimensional phenomenon with several layers of abstraction. There are simple values (like *Honesty, Love*) that are directly rooted in the corresponding marked affordances and exist as a result of primary conceptualization in socially distributed form of mental representations partly shared by the members of the language and cultural community. As a result of further conceptualization they become integrated into more complex values like *Democracy, Tolerance*. These values turn out to be interpreted very differently in different cultures, but moreover they are also subject to significant variations within one culture.
The report discusses internal structure of complex values and how variation in their mental representations among the members of a cultural community influences argumentation strategies in political discourse. Several complex values were studied in a psycholinguistic experiment with American respondents that allowed modeling their typical mental representations in this culture and cross-cultural comparison with Russian and Swedish values that have similar nominations. The results were also analyzed from the point of view of gender and age variations.

The model obtained as a result of this study was further used for the analysis of on-line comments by newspaper readers. These discourse analyses demonstrated how ideas about the complex values in question function to support group identity or, otherwise, distinguish one group from another. It was shown how these values are used to criticize political opponents.

What do legends really mean to say: cognitive aspects of the genre

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Genre is considered not only as one of taxonomic devices, but also as the way to perceive and reflect reality. In this way, genre has a cognitive nature, or grounds. The paper presents an attempt to analyse the cognitive basis of the literary legend as a genre.

The cognitive aspects of the genre seem to be revealed first of all through the plot structure. Notwithstanding the national variants of the legend, its form (prosaic, verse, dramatic), and volume, the legend constantly deals with the notions of established set of values (warning, law, superstition), mistake (sin, crime, error) and atonement (punishment, revenge, repentance). The legend mainly tells of a collision between a man and the world, which results in the personage’s and the reader’s understanding of some old truth (moral, Bible law) and accepting it. Unlike the novel, where the personage comes to understanding a new truth about the world, the legend is highly traditional.

The cognitive basis of the legend helps to define the genres in complicated cases. For example, La Légende d’Ulenspiegel by Charles De Coster, which is usually defined as a genre, can be treated as a legend due to its cognitive basis.
Comprehending narratives: Cognitive and neurocognitive perspectives

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While psycho- and neurolinguistics has traditionally been focusing on language processing on shorter timescales from phonology to sentence syntax, recent advances have begun questioning the cognitive and neurocognitive underpinnings of our reception of larger scale linguistic entities such as narratives. Narratives are interesting (and distinguishable from other types of discourse) in the respect that they consist of multiple events integrated into a larger coherent structure – often referred to as the plot. In other words, when listening to narratives, some pieces of information become foregrounded as relating to the overall plot structure (i.e. as part of the narrative schema) while others are backgrounded as being less important (incidental information). However, if events are presented incoherently, interrupting the plot formation, the listener cannot rely on any causal schema to guide attention and therefore has to pay attention equally to all information. In cognitive terms, narratives thus in interesting ways straddle the realm between attention, working and long term memory depending on the degree to which the information presented is part of a coherent plot structure or not.

Here we report from behavioral and fMRI brain-imaging experiments addressing the effect of coherent and incoherent plot structure on cognitive and neurocognitive processing of narratives. We find that experimental participants are more likely to remember plot relevant information than incidental information in coherent narratives, while for incoherent ones they have greater recall for incidental information. Besides, the continuous integration of events into larger coherent plot structures is found to modulate activity in posterior temporal areas of right hemisphere while incoherent rather narratives activate areas of dorsolateral and medial prefrontal cortex.

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Objects and nouns: A theory of the cognition-language relation

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Most proposals that aim to investigate the relation between Cognition and Language study in detail the properties of the ontological primitives that constitute these domains. It is generally acknowledged that ontological categories such as Objects, Places and Events allow us to form cognitive representations of the external world (Metzinger & Gallese, 2003; Tversky et al. 2011; a.o.). It is also generally acknowledged that syntactic categories such as Nouns, Prepositions and Verbs form the basic linguistic categories by which we communicate and exchange information about the external world (Stassen, 1997; Baker, 2002; a.o.).
Several proposals on the Cognition-Language interface build on these assumptions, and contend that there is a one-to-one mapping between these categories. For instance, Nouns are mapped onto Objects, Prepositions onto Places, Events onto Verbs (Landau & Jackendoff, 1993; Evans & Green, 2006; a.o.). We call this assumption the isomorphic assumption. This assumption is intuitively appealing, but turns to be far from unproblematic, when one looks at the fine-grained, semantic distinctions that can be defined within syntactic categories. We focus on Nouns and their semantic properties, as they offer a particularly clear and cross-cut case of this problem. Standard semantic analyses distinguish between mass and count Nouns. Count Nouns can be further distinguished between singular and plural nouns; in certain cases natural kind or group-denoting Nouns can also be identified (Chierchia, 1998; Pelletier, 2012; a.o.).

As ontological matters stand, the existence of these semantic categories opens an empirical question on whether the isomorphic assumption can be maintained or not. The question can be stated as follows. If categories such as singular and group Nouns are exclusive to Language, then the isomorphic assumption cannot be maintained, as no apparent cognitive equivalent of e.g. Plural nouns exist. Instead, if equivalent categories can be defined for our cognitive ontology, then the isomorphic assumption can be maintained. So, an open question is whether the isomorphic assumption correctly accounts the relation between Language and Cognition, at least with respect to Nouns and Objects.

The goal of this talk is to offer an answer to this question, which is articulated in four points. First, we discuss the "Fingers of INSTantion" (FINST) model of Object recognition, which claims that an Object is any visual entity that we can focus our attention on (Pylyshyn, 2003; a.o.). Second, we show that, under this definition, we can spell out a richer ontology of Objects, which includes novel sub-types such as "individual", "collective" and "type" Objects. Third, we show that our novel ontology of Objects has a broader empirical reach than previous proposals, as it captures the most recent findings on Object recognition (Scholl, 2007; a.o.). Fourth, we then show that this novel ontology also allows formulating a more fine-grained version of the isomorphic assumption, in which each semantic sub-type of Noun finds a cognitive counterpart in our novel ontology of Objects. Therefore, we argue that the isomorphic assumption can be indeed maintained, insofar as we offer a clear and thorough ontological analysis of the cognitive category of Object in Cognition.

References

The interpretation of focused predicates: The case of spatial PS

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It is generally acknowledged that in English, Phonological stress determines which syntactic element of a sentence is its Focus, the constituent that introduces topical, salient information (Szendrői, 2004; a.o.). However, a controversy pertains to the semantic interpretation of the focused element. Most proposals agree that when a focused element is an argument (e.g. subject or object), it denotes a salient individual in Discourse (Mayr, 2010; a.o.). Proposals differ, though, on how saliency is computed, especially when Predicates are the focussed elements in a sentence. Two main approaches can be distinguished: the Alternative Semantics (AS) and the Structured Meanings (SM) approach. To see how these proposals differ in their predictions, consider the sentence in (1) as being uttered in an extra-linguistic context in which four boys sit in front of a hotel, while a fifth sits behind the hotel. We mark focussed Predicate, the spatial Preposition in front, in capital letters:

(1) The boys sit IN FRONT of the hotel

The AS approach contends that a focused element offers two semantic contributions to a sentence. First, it introduces a set of Alternatives, elements in Discourse that can be marked as salient (Rooth, 1992; a.o.). Second, this element denotes the most salient element of this set of Alternatives. Hence, AS predicts that IN FRONT in (1) denotes a salient position of all the boys with respect to the hotel (i.e. its front), as opposed to other alternative positions (e.g. above, or behind the hotel).

The SM approach also includes these two semantic assumptions. However, it includes a third assumption: that the set of Alternatives for a Predicate influence the interpretation of its arguments, too. Therefore, both the Predicate and its arguments must denote a salient Alternative in Discourse. This entails that, if the definite Noun Phrase the boys must denote a salient entity in discourse, it should denote a “part” of all the boys in its denotation, those also in the denotation of the focused predicate. Hence, SM predicts that (1) and the boys, in our scenario, should receive a contextually restricted “sloppy” interpretation (Schwarzchild, 1996; a.o.), denoting four of the five boys in context. Instead, AS predicts that only the Predicate denotes a salient Alternative, so it predicts that the boys should receive its standard “maximal” interpretation, i.e. it should include all five boys. Therefore, AS predicts (1) to be false in this context of utterance, while SM predicts it to be true.

The goal of this paper is to present an experimental study that aims to investigate which proposal correctly predicts speakers’ comprehension about the interpretation of focused predicates. Participants (N=18) were involved in a variant of the Truth Value Judgment Task, based on the description mode paradigm (Crain & Thornton, 1999; a.o.). Participants were asked to observe a story in which five boys had to reach a hotel, sit and take some rest in front of this location, but one boy lost himself and ended up resting behind the hotel. After the story, participants were asked whether (1) would correctly describe the narrated events or not: whether it was true (as per SM predictions) or false (as per AS predictions). All participants judged the sentence to be true (100%). This result invites the conclusion that SM correctly predicts speakers’ interpretation of focused predicates, unlike AS proposal.

References
Ambiguity of word classes and polysemy of Estonian adprep üle ‘over’

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According to Dryer (2005) mixed adpositional systems, i.e. languages that have both prepositions and postpositions, are relatively exceptional in the world’s languages. The Finno-Ugric language of Estonian is one such example and in this presentation I will focus on the division of labour between prepositions, postpositions, adverbs and particles in Estonian on the basis of contemporary written corpus data.

Although Estonian is a predominantly postpositional language (approximately 75% of adpositions are exclusively postpositions), there are number of prepositions as well and about 10% of adpositions may occur both as pre- and postpositions (Grünthal 2003: 56-60). Most of Estonian adpositions can also function as adverbs and particles (in verb-particle combinations). On the one hand, it has been pointed out that the traditional division into adverbs and prepositions is problematic. Some earlier scholars have considered adpositions as transitivized adverbs and particles as intransitive prepositions (for an overview, see Hagège 2010: 52-53, against this view see Cappelle 2005). According to Langacker “prepositions (and prepositional phrases) function either adjectivally or adverbially, depending on whether their trajector is a thing or a relationship” (2008: 122). Elizabeth O’Dowd has elaborated a discourse-functional account of “adpreps” based on her corpus findings (1998).

On the other hand, Huumo and Lehismets (2011) have, for example, argued that all Finnish ambivalent path adpositions indicate semantic contrasts between the meanings of actual motion (typical for postpositions) vs. the directional representation of static existence or occurrence of entities along a path (typical for prepositions). Janda (2011) has analysed North Sámi adpositions miehtá ‘over, across’, čađa ‘through’, ľastá ‘across’ and mąŋŋel ‘later, after’ and has pointed out that even though there is no overall schema for the behaviour of post- vs. prepositions, it can be said that adpositions that signal both time and space show stronger distinctions between the two allostructs than adpositions that signal only space or only time.

The main differences between prepositional, postpositional and adverbial usages of Estonian gram üle ‘over’ are studied in order to elucidate whether the main difference between adpositions and adverbs is a difference in syntactic status, discourse-functional factors or the nature of trajector; and whether the difference between pre- and postpositional usages depends on semantics factors (and on what kind of factors). üle is spatial gram that expresses also temporal and abstract relations, being predominately a preposition. The paper presents the results of logistic regression analyses.
with 500 occurrences of üle used either as a postposition, preposition or adverb. It looks how well the different factors (e.g. meaning, nature of trajector) are able to predict the word class and which factor is the strongest predictor.

References


Comparing native Spanish and native English speakers’ imitation and perception of a VOT continuum.

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In both Spanish and English, unvoiced stop consonants (p, t, k) differ from their voiced counterparts (b, d, g) in voice onset time (VOT) though the boundaries separating voiced from the voiceless categories differ (Lisker & Abramson, 1963). In addition, in English, but not in Spanish, the VOT differences are accompanied by a systematic lengthening of vowels following voiced consonants (e.g., Allen and Miller, 1999). In the current study, we study the ability of native Spanish and native English speakers to imitate and categorize phones that span the VOT range found in both languages. In addition, we examine the sensitivity of English and Spanish L1 speakers to the English VOT-vowel length relationship. We explored these question by asking listeners to categorize a [ba]-[pa] continuum that varied in VOT from -60 ms (prevoiced, [b]) to + 60 ms (long lag, [p]). Each member of the continuum was followed by a short (175 ms), medium (225 ms) or long (275 ms) vowel. Results from the perceptual task show that, as expected, Spanish monolinguals are less sensitive to the VOT-vowel length relationship than English monolinguals. A second task required both groups of subjects to imitate the tokens used in the perception task. Analyses of the imitation task showed three critical results. First, both groups of speakers produced VOTs that demonstrated sensitivity to within category differences in their respective regions of the VOT continuum (prevoiced region for Spanish and long-lag region for English). Second, English speakers systematically produced longer vowels than Spanish speakers for each level of vowel length. The implications of these results for second language perception and production are discussed.
On the role of filler and intonation for uncertainty perception in articulatory synthetic speech

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Given is a communicative situation in which communication partner A asks a question and communication partner B gives the answer. If B is uncertain with respect to the answer, s/he might express this meta-cognitive state in the speech signal. Speakers signal uncertainty in question-answering situations by using rising intonation, pauses, fillers, and lexical hedges (Smith, Clark, 1993). These cues are not only relevant for the production of uncertainty but also for its perception (Brennan, Williams, 1995). Furthermore, the study of Swerts and Krahmer (2005) shows that smiles and funny faces can serve as visual cues of uncertainty and that these cues also contribute to the perception of uncertainty. With respect to human-machine communication the following question arises: Do these prosodic cues impact uncertainty perception in synthetic speech as they do in human-human communication? The development of systems with expressive abilities can help making synthetic speech more natural and therefore improve human-machine interaction.

In the previous work of Wollermann and Lasarcyk (2007) and of Lasarcyk and Wollermann (2010) different degrees of uncertainty were modeled. For these purposes the cues intonation (rising vs. falling), pause (absent vs. present) and the filler “hmm” (absent vs. present) were varied using the synthesizer of Birkholz (2005). Results showed that the combination of rising intonation & pause & filler contribute to a stronger perception of uncertainty than rising intonation alone or combined with a pause.

In the current study, we investigate the role of the filler “uh” in German. According to Batliner et al. (1995), “uh” is the filler which occurs most often in the German part of the Verbmobile corpus. Furthermore, we are interested in the contribution of intonation for uncertainty perception. Thus, we have two independent variables: the filler “uh” (absent vs. present) and intonation (rising vs. falling). Altogether, there are four different levels of intended uncertainty: i) falling intonation & filler absent, ii) falling intonation & filler present, iii) rising intonation & filler absent, and iv) rising intonation & filler present. The dependent variable is the perceived level of uncertainty by the listener. Our stimuli consist of four German one-word phrases (“Melonen”, “Bananen”, “Tomaten”, “Kartoffeln”) embedded into short scripted dialogues between a human being (user) and a robot. The user shows pictures of fruits and vegetables to the robot and asks “What do you see?”. The robot recognizes the objects. Depending on a fictitious recognition confidence score, the speech system of the robot conveys (un)certainty in its answer by using the cues mentioned above. Four further wordings are used as distractors.

105 subjects took part in the experiment. All of them were students of Duisburg-Essen University and German native speakers. They were tested in four group experiments. In each group a different subset of the stimuli was presented, the four distractors were always the same. After each dialogue was played back, subjects judged the answer of the robot on a 7-Point-Likert Scale. Based on the previous findings of Lasarcyk and Wollermann (2010), we assume that the uncertainty ratings for
level iv) are significantly higher than the ratings for all the other three levels. Furthermore, for level i), we expect that the level of perceived uncertainty will be the lowest.

Our data are currently being processed and analyzed using the Wilcoxon's Signed Rank Test. In our presentation, we will present and discuss our results.

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Non-actual motion (and co-verbal gestures) in Swedish, French and Thai

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Sentences such as (1) have been discussed for over 20 years in cognitive linguistics as instances of “virtual motion” (Talmy 1983), “subjective motion” (Langacker 1987; Matsumoto 1996), “fictive motion” (Talmy 2000) or “abstract motion” (Matlock 2010).

(1) The mountain range goes from Canada to Mexico.

For theoretical reasons, we refer to them as non-actual motion (NAM) sentences, and propose that their existence within a wide-variety of languages is motivated by at least three different kinds of dynamic experiences: (i) the enactive nature of perception, (ii) the dynamic relation between intention and intentional object, and (iii) re-enactive imagination. Thus, we hypothesize that contexts involving more of these motivations would elicit the production of a higher number of NAM-sentences for the description of static situation across typologically different languages.
To test this, we used an elicitation tool consisting of 38 pictures drawn by a professional artist. 24 of these were intended to elicit NAM-descriptions, 12 were controls, showing static locative relations, and 2 were used for training. Crucially, the 24 target pictures conformed to a 2x2 design, with half showing trajectors (e.g. roads) that afford human motion, and half showing linearly extended trajectors (e.g. fences) that do not; crossed with these, half showed the trajector across the picture, from a distal perspective, and half showed it extending to the position where the observer would be positioned if “within” the picture, i.e. proximally. We conducted a study in which 15 Swedish, 13 French, and 14 Thai speakers were asked to describe the pictures in one sentence. We predicted that (a) all picture types would elicit NAM-sentences, and that (b) the pictures which combined the factors Afford-motion and Proximal, would have the highest proportion, since these combined several motivations, while the other types of pictures targeted one or the other motivation more selectively: e.g. the distal category gave more opportunity for “visual scanning”. The elicitations were conducted by native experimenters, with the speaker, computer screen and experimenter forming a triangle, and video-recorded for further analysis.

The results were supportive of both predictions: all picture types elicited NAM-sentences. There was a higher proportion for Swedish (53.3%) than French (35%). The Thai data are still under analysis but the proportion of NAM-sentences is similar. In both French and Swedish, the combination Afford+Proximal evoked most NAM-sentences such as (2) and (3). This was especially pronounced in French: 48% as opposed to ca. 30% for the other three types.

(2) *En bilväg kommer ut ur en tunnel.*
'A road comes out of a tunnel.'

(3) *C’est une sortie de tunnel qui débouche sur une route qui s’en va vers la campagne.*
'This is the exit of a tunnel which opens onto a road going toward the country.'

Preliminary analysis of the Thai data supports the same conclusion – and we commit to reporting the accurate figures for all three languages at the conference. In addition, we are currently conducting exploratory studies of the co-speech gestures of all speakers, as an additional means of assessing the dynamic quality of the semantics of NAM-sentences. Our prediction is that the Afford+Proximal condition would evoke the highest proportion of co-verbal gestures, and that these would be more semantically congruent and temporally synchronized with the utterances than in the other conditions.

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