

**47th Annual Meeting of the Societas Linguistica Europaea**

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# **BOOK OF ABSTRACTS**



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## PLENARY LECTURES

### **SLE presidential address:**

#### ***Raison d'être* of the Natural Linguistic framework in the present and future research on language**

*Dziubalska-Kołodziej, Katarzyna (Adam Mickiewicz University, Poznań, Poland)*

Presidential address provides a rare opportunity of sharing with the large and distinguished SLE audience of linguists one's own cherished views on how to conduct research on language, based on the lifetime experience. I will argue for the advantages of the natural functional epistemology and its holistic perspective capable of encompassing a wide array of linguistic and language-related phenomena. The theory of Beats-and-Binding Phonology will be described, which is embedded in the Natural Linguistic framework, with special emphasis on the B&B-driven model of phonotactics and morphonotactics. The analysis of data (from Polish, English, and to a lesser extent from other languages) will point to a number of crucial issues to be considered in linguistic research: a constant mutual feedback between deductive and inductive approach to the study of a given phenomenon, a necessarily holistic nature of the study of language (both in the study of the system and of the external linguistic evidence), an interdisciplinary perspective providing general or universal principles of analysis, the role of statistical considerations, and openness to a variety of explanations (e.g. psychological, neurological, evolutionary) under an umbrella of a theory of preferences. Those issues will be raised with a view on stirring critical discussion on the perspectives of linguistic research.

### **'What is the plural of *mouse*?' and other unhelpful questions for morphologists**

*Bauer, Laurie (Victoria University of Wellington, New Zealand)*

In morphology – as elsewhere – the questions we ask our theory to answer make assumptions about the form of the theory itself. Sometimes, the questions lock us in to a theory which we know to be inadequate, because we have data which contradicts a basic assumption of the theory. For example, we know that *mouse* does not have just one plural form, and the implication is that we should not expect a morphological component to generate just one form to fill a slot in a morphological paradigm.

In this presentation I shall take half-a-dozen such questions which, I shall try to argue, give rise to false expectations of theoretical models in morphology. The stance I take is controversial, but if it is accepted leads to a much more cognitively oriented view of what we should expect from morphological theory.

### **Phrasal lexemes, constructions and levels of analysis**

*Masini, Francesca (Alma Mater Studiorum – University of Bologna, Italy)*

One of the reasons why constructionist models are appealing to (some) linguists is that they advocate the existence of a structural continuum that goes from words to syntactic structures, which allows to incorporate into the grammar a wide variety of linguistic facts usually deemed as problematic due to their unclear or mixed status, such as idioms of various sorts. Under this view, the question of whether an expression is a product of "syntax" or "morphology", for instance, becomes much less relevant, as there are no separate levels/modules working sequentially to produce a grammatical string. Rather, we have one big constructional space where constructions (signs) of different size, complexity and specificity are created. In this talk, I shall discuss some multiword structures from different languages that would be traditionally labeled as in-between syntax and morphology (or the lexicon), and that indeed benefit from the notion of construction and this view of the grammar architecture. I shall group these boundary phenomena under the label "phrasal lexemes" (e.g. Italian *carta di credito* 'credit card', lit. card of credit; Russian *zub mudrosti* 'wisdom tooth', lit. tooth wisdom.GENITIVE) and keep them apart from idiomatic expressions in the narrow sense. I shall show that, in some languages, phrasal lexemes are far from being peripheral or lexicalized formations, but can instead be the result of a productive system and compete with word formation processes. Finally, I shall illustrate that some of these constructions seem to work *across* levels of analysis, and raise a general question: should we totally abandon the words "syntactic" and "morphological", along with "syntax" and "morphology"?

## ROUND TABLE: QUO VADIS LINGUISTICS IN THE 21ST CENTURY

### Plenary speakers

*Peter Hagoort (MPI for Psycholinguistics, Nijmegen)*

*Martin Haspelmath (MPI for Evolutionary Anthropology, Leipzig)*

### Discussants

*Katarzyna Bromberek-Dyzman (Adam Mickiewicz University, Poznań)*

*Martin Hilpert (University of Neuchâtel)*

*Eitan Grossman (Hebrew University of Jerusalem)*

### Moderator

*Katarzyna Dziubalska-Kołaczyk (Adam Mickiewicz University, Poznań)*

The aim of the Round Table *Quo vadis linguistics in the 21st century* at the Societas Linguistica Europaea 2014 conference in Poznań is to discuss the future of linguistics as a discipline in Europe and the world. Linguists need to make a strong statement about the essential role of their field in facing global societal challenges, bringing together insights from the humanities and the sciences. The two invited speakers represent interdisciplinary research fields in the study of language. They will be asked to give a 20-minute presentation each, focusing on the pertinent topic of their choice with a view to provide rationale and support to the development and enhancement of linguistic studies. The three discussants will be asked for 10-minute long responses to the presentations, drawing on their own research perspectives. These five talks will be followed by a general discussion with contributions from the audience (20 minutes).

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### “Linguistics quo vadis? Nowhere, if not ...”

*Hagoort, Peter (MPI for Psycholinguistics, Nijmegen, Netherlands)*

I will present an outsider perspective, and I am going to be provocative. My diagnosis is that linguistics has no longer the same important role in all of cognitive sciences as it had a few decades ago. There are external and internal (e.g., the linguistic wars) reasons for this. I will discuss these reasons and suggests ways out of this local minimum.

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### The future of linguistics: two trends and two hopes

*Haspelmath, Martin (MPI for Evolutionary Anthropology, Leipzig, Germany)*

I will first talk about two trends that are likely to continue in the future: (1) linguistics is getting more quantitative, and this will lead linguists to think more in multicausal terms; (2) the world is getting flatter, and as a result linguistics will get less eurocentric. Then I will talk about two hopes that I have for the future of linguistics: (3) that linguists will find a balance between language-particular analysis and cross-linguistic comparison, something that has been sorely missing, and (4) that linguists will make better use of contemporary technology that could connect people and ideas much better than it currently does, in particular with respect to databases and publication of research results.

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### Linguistics needs to twist: go experimental and interdisciplinary

*Bromberek-Dyzman, Katarzyna (Adam Mickiewicz University, Poznań, Poland)*

To meet the new global societal challenges linguists need to get massively interdisciplinary, and dynamically align with the neighboring disciplines in exploring and explaining mechanisms and processes underpinning language and verbal communication. A global, multi-interdisciplinary perspective, rather than mono-disciplinary view seems on demand nowadays. Neuroscience has challenged the traditional division of research into humanities and the sciences. Neuroimaging research shows that language processing is not computed in a mental and neurophysiological vacuum. Quite to the contrary. The co-occurring physiological, emotional/cognitive contexts dynamically frame and modulate the linguistic and extra-linguistic contents' processing.

In my talk, I want to focus on language-affect interface, an interdisciplinary, experimentally-driven paradigm that successfully combines language and affect sciences. Affect and emotions underpin human communication. Yet, emotions

have not been traditionally considered a proper research domain for investigation in language sciences. In verbal communication, people convey the communicative import in many modalities. An important issue is how to take this multimodal load onto the modern linguistics board. How to account for affect in communication and comprehension, knowing that affect comprises physiological infrastructure (with the brain electricity and chemistry involved) that does not pertain to a traditional mono-disciplinary language view? Is there a place for affect in the realm of language studies? We need to re-think meaning in the holistic ecological view of communication, and decide whether a new architecture for language is needed, to account for emotions and their multimodal nature in verbal communication. Questions like these should be out on the table for all of us to discuss.

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## **The big to-do list: Defining challenges for 21st century linguistics**

*Hilpert, Martin (University of Neuchâtel, Switzerland)*

The mathematician David Hilbert is known to quite a few people who are not mathematicians. One reason for this is that he formulated a set of challenges for his discipline, the so-called 'Hilbert problems', which prompted vigorous research efforts, and ultimately also breakthrough successes. What I would like to discuss is whether it is possible to define such challenges for linguistics in the 21st century. Suggestions from the audience will be welcomed, but I will also point to a number of big challenges that have been already defined in other academic disciplines and that would seem to require the collaboration of linguists.

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## **Linguistics across its (internal and external) borders**

*Grossman, Eitan (Hebrew University of Jerusalem, Israel)*

For much of the 20th century, and to a lesser extent in the 21st century, two big questions have influenced much of linguistic thinking. The first, which Chomsky called "Plato's Problem", is broadly "what does it mean to know a language?" The second, which Martin Haspelmath (2014) has called "Greenberg's Problem", is "why are languages the way they are?"

I will address the growing convergence of these questions in 21st century linguistic thought and practices, which are characterized by an increasingly closer relationship between descriptive linguistics, language typology, research on language variation and change, and other empirical approaches to language, especially experimental linguistics. I would also like to highlight what seem to me to be several especially promising avenues of research in which descriptive linguistics, typology, language change research, and psycho- and neurolinguistics can bridge boundaries, both within linguistics and between linguistics and other disciplines.



## GENERAL SESSION: ORAL PRESENTATIONS AND POSTERS

### A typological survey of minimal vowel systems

Anderson, Cormac (University of Leipzig, Germany)

This paper presents the results of a comprehensive typological survey of minimal vowel systems. Although the existence of such systems has been acknowledged since the early days of structuralist linguistics (e.g. Jakoblev 1923), even today they are often neglected or misunderstood in discussions around phonological typology, and vowel system typology in particular. Minimal vowel systems pose difficulties for both computational and representational phonological theories and for vowel system modelling. For that reason an exhaustive survey of such systems is thus a desideratum; one that is addressed in this paper.

A 'minimal' vowel system is considered to be one in which the fewest phonological contrasts can serve to define the members of the set of vowels. Typically, this means that only distinctions of sonority, and not gravity, are necessary to define the set of vowels. While such systems have been described as 'vertical' or 'linear' by previous scholars, these terms are avoided here in order to include analyses with one vowel (e.g. Barreateau 1988) or no vowels whatsoever (e.g. Kuipers 1960).

The survey was carried out by conducting a review of the secondary literature on vowel systems to identify relevant languages, followed by a detailed analysis of their phonological descriptions. In some instances, minimal vowel systems have been described widely across phylogenetic or areal groups of languages, such as in Northwest Caucasian (Hewitt 2005), the Arandic languages of Australia (Breen 2001), the Sepik-Ramu languages of Papua New Guinea (Foley 1986), the Goidelic languages (Ó Siadhail and Wigger 1975; McConville 2013), and the Central Chadic languages (Barreateau 1987). In other cases, individual languages have been described as having minimal vowel systems, such as Chinese (Chao 1968), Marshallese (Bender 1968), the Caddoan language Wichita (Rood 1976), the Salishan language Nuxálk (Nater 1984), and the Arnhem language Anindilyakwa (Leeding 1989).

The great geographical and phylogenetic diversity of these languages offer fertile terrain for scholarly attention in phonological typology, but unfortunately, this has not always been forthcoming. While minimal vowel systems are described in early surveys of vowel systems such as Trubetzkoy (1939) and Hockett (1955), and are discussed in Liljencrants and Lindblom's (1972) work in dispersion theory, in subsequent overviews and attempts at modelling they have often been dismissed (e.g. Crothers 1978), or not discussed at all (Lass 1984; Maddieson 1984; Schwartz et al. 1997).

The survey shows that the majority of minimal vowel systems are two-member or three-member vertical systems, with a smaller number of descriptions with only one vowel (e.g. Smith 1999) and isolated instances without contrastive vowels (Kuipers 1960; Pulleyblank 1983). Excepting these analyses without vowels, a low vowel /a/ is ubiquitous in the descriptions examined (pace Comrie 1991), front vowels appear to be preferred over back ones, and there is often some uncertainty over whether length is a relevant distinction in two and three-vowel systems. Often, but not always, the vowels in minimal systems exhibit extensive allophony conditioned by surrounding consonants or by prosodies applying over larger phonological domains.

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## Formal differentiations in word-formation: contrastive co-reference in European languages

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In the languages of Europe we find complex formations – compounds or prefixed word, such as Italian *autodistruzione* or German *Selbsterstörung* 'self-destruction', in which the semantic contribution of the first element (e.g. *self-*, *auto-*, *selbst-*) is to manifest a relation of co-reference between arguments or non-argumental participants – between the destroyer and the destroyed referent. Besides co-reference, elements like *auto-* suggest a contrast between the specific configuration of an action and a more usual configuration: the destroyer and what is destroyed are usually different entities. Because of these two main semantic contributions (co-reference and contrast) I define the function expressed by these marks **contrastive co-reference** (Angster 2012).

Apart from sparse works on single marks in specific languages (e.g. Mutz 2004 on Italian and French), little attention has been until now devoted to this kind of formations in a cross-linguistic perspective. König (2011), a pilot study based on a cross-linguistic sample, proposes two sets of so-called "reflexive compounds" comparing the functions of intensifiers with functions performed by elements found as first constituent such compounds. The first set corresponds to "adnominal reflexive compounds" in which co-reference is connected to the remarkability of a patient (*Selbstironie* 'self-irony' = usually irony is directed toward others); the second is that of "adverbial reflexive compounds": the agent is remarkable (*Selbsthilfe* 'self-help' = usually the help is given by others).

In this paper, considering lexicographic data issued from 30 European languages, I will support König's conclusion that the main source for contrastive co-reference marks are elements which have in syntax at least one of the functions of intensifiers (König/Gast 2006). I will nonetheless show that despite the existence of different strategies connected with the expression of contrastive co-reference, in no language it is possible to find a formal differentiation connected to the functions proposed in König's work.

My claim is that, if a formal differentiation arises between two productive word-formation strategies, this differentiation is connected to the semantic class which the second element of a complex formation belongs to. Consider the distinction between *selbst-* and *eigen-* in German: *Hand* in *eigenhändig* is an OBJECT in Croft's (2001) sense and a formation like *\*selbsthändig* does not exist and would not be well-formed – *selbst* is instead productive with bases belonging to ACTIONS.

In some cases the present formal differentiations between marks specialized on the domain of ACTIONS and those specialized on the domain of OBJECTS opposes two lexically differentiated marks. In past phases of the same languages the mark today specialized on the domain of ACTIONS was also compatible with bases belonging to the domain of OBJECTS. My hypothesis is that this development is connected with two factors: the rise of scientific terminology, which enhances the productivity of compositional structures related to the domain of ACTIONS; the more idiomatic, modal meaning of the complex formations with an OBJECT base (see German *eigenköpfig* 'stubborn', Czech *svojehlav* 'stubborn', Hungarian *önfejű* 'willful': all base nouns mean 'head') limiting the production of new types.

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## The role of burst and aspiration noise in the perception of voicing in Polish and English

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Although VOT has been the primary focus of most studies (e.g. Lisker and Abramson 1964; Flege and Eefting 1986; Flege 1991; Bond and Fokes 1991), there are additional cues to voice contrasts that warrant attention in L1-L2 research. Both Polish and English discriminate between voiced and voiceless obstruents, the primary cue for this being VOT. Polish is a voicing language in which voiced obstruents have negative VOT and voiceless obstruents have short-lag VOT values (Keating 1980). English is an aspirating language with short-lag VOT for voiced obstruents and long-lag VOT for voiceless obstruents (Lisker and Abramson 1964). Based solely on VOT specifications, one might expect that English voiced and Polish voiceless obstruents would sound the same to a naive Polish listener. A previous study found that when the VOT in English voiceless obstruents was acoustically manipulated to match the VOT of voiced obstruents, Polish listeners were more successful at discriminating between the voiced and voiceless sounds than English listeners. These results suggest that additional cues may be relevant in L2 perception of voicing. Polish listeners could rely more on burst and aspiration noise amplitude as well as fundamental frequency ( $f_0$ ) at vowel onset, both of which were shown to positively correlate with the perception of voicelessness (Repp 1979; Abramson and Lisker 1985). The author has already carried out a follow up study on the role of  $f_0$  in the perception of voicing in English by native speakers of Polish. The study has confirmed that  $f_0$  is a relevant, although minor, cue in L2 voice perception. However, due to the limitations of the study failed differences between Polish and English listeners could not be assessed.

The aim of the present study is to explore the role of the burst and aspiration noise amplitude in the perception of voicing. An experiment is underway to assess the relative weight of this cue in the identification of voiced and voiceless obstruents by Polish and English listeners. A nonsense word *keef* was acoustically manipulated to yield five tokens with different VOT values: 10 ms, 20 ms, 30 ms, 40 ms, 50 ms. These tokens were then used to produce three stimulus blocks. In Block A, the stimuli had a relative amplitude of +6dB for the burst and aspiration noise and -6dB for the following vowel (relative to the original tokens). In Block B, the stimuli had a relative amplitude of -6dB for the burst and aspiration noise and +6dB for the following vowel. In Block C, no amplitude manipulations were made (baseline condition). This procedure yielded a total of 15 tokens which were used in a forced choice identification task. Perception data is being collected from two groups: over 30 native speakers of English and over 30 native speakers of Polish.

Provided that Polish listeners indeed rely more on cues other than VOT for the perception of voice contrasts, they should be more sensitive to amplitude manipulations than English listeners. Such results would warrant a more complex representation of L2 voice contrasts than the traditional VOT-based approach.

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## Explicit instruction in boundary liaison – benefits for the production of final voiced obstruents in L2 English

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Word-final devoicing counts as one of the most notorious pronunciation errors in Polish-accented English, and often leads to misunderstandings. This problem may be exacerbated in C#V contexts by the tendency in Polish for glottal-

ization of word-initial vowels (e.g. Dukiewicz & Sawicka 1995: 45; Schwartz 2013), which may be said to reinforce the context for the devoicing process. In L1 English, such sequences are typically characterized by liaison or linking of the final consonant to the following initial vowel (e.g. *find out/fine doubt*). Schwartz et al. (2013) found evidence of a robust link between the acquisition of boundary liaison and target-like production of word-final voiced obstruents, suggesting that learners may internalize cross-language differences in the placement of prosodic boundaries between segments. We suggest such differences are representable according to strictly phonological parameters. The prevalence of glottalization is the realization of a specification in Polish by which onsetless syllables are well formed prosodic constituents (Schwartz 2013; cf. Downing 1998 for discussion of prosodically ill-formed onsetless syllables).

The current study aims to investigate implications of the liaison/voicing link for L2 English pronunciation instruction. In particular, we seek to establish the benefits of meta-theoretical knowledge in L2 speech learning (cf. Wrembel 2007, Derwing and Munro 2012, Kissling 2013). We compare voicing and liaison production by two groups. Students in the experimental group received explicit instruction on liaison, whereas students in the control group were exposed to the same materials containing liaisons, but received no explicit instruction. That is, they were taught to produce final voiced obstruents according to traditional textbook descriptions. Both pre-tests and post-tests containing voiced C#V (e.g. *George always*) sequences were administered. The results are analyzed to find out whether explicit instruction on liaison is more productive than just exposure to liaisons. It is hypothesized that the control group will show a greater tendency for devoiced realizations in C#V sequences. In addition, we examine in the post-tests whether both groups employ the same strategies to avoid devoicing. The experimental group is expected to use liaison, while the control group is predicted to employ vowel intrusion to maintain voicing, producing the target sequences as Cə#V.

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## Ways of grammaticalization of the verb *gi-* 'say' in the Kalmyk language

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Kalmyk is one of the Mongolic languages spoken in the steppe regions adjacent to the northwest shore of the Caspian Sea (Republic of Kalmykia, Russian Federation; there are also small Kalmyk minorities in Kyrgyzstan and in the Xinjiang autonomous region of China). The paper is based on the material obtained from the villages in the Ketchenerovskiy region, Republic of Kalmykia from 2006 to 2008. The data were collected from oral narratives and by means of elicitation tasks: the native speakers were asked to translate a set of sentences from Russian into Kalmyk and from Kalmyk into Russian.

The Kalmyk verb *gi-* 'say' is the diachronic source of various pragmatic, syntactic, and modality markers. Some of constructions with verb *gi-* are regular for verb SAY in languages of the world, like forms of the verb *gi-* 'say' to introduce finite complement clauses, grammaticalization into purpose clause marker and developed constructions marking reported discourse, etc. (see a typological overview of the grammaticalization of quotation marks in T. Güldemann and M. von Roncador (2002)).

The paper discusses one unusual way of grammaticalization of verb *gi-* into a grammatical category that T. Kuteva (2001) calls «avertive» (or «action narrowly averted»), with the meaning 'on the verge of V-ing, but did not V'. This construction differs from other constructions with *gi-* 'say' both by its semantic and formal features. Kalmyk, like other Mongolic languages, has a system of non-finite verb forms that serves to express adverbial subordination. Complex predicates in Kalmyk usually are formed by a combination of the imperfective converb and the anterior converb and an auxiliary verb that carries grammatical markers, but avertive consist of the modal converb end-

ing with *-n* and *gi-* ‘say’<sup>1</sup>. It is shown that this innovation can be explained from the context of *gi-* constructions with intentional, prospective and proximative meanings. Kalmyk language employs a few constructions for modal semantic domain, which are, however, not interchangeable. The paper gives detailed description of distribution of these forms.

The focus of this investigation is on the semantic and morphosyntactic properties of constructions with grammaticalized verb *gi-* ‘say’. Analyzing the similarities and the differences between ways and degree of grammaticalization forms with verb *gi-* ‘say’, paper is an attempt to shed some light on the network of constructions that co-exist in Kalmyk in synchronic level.

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## Modeling language change with construction grammar

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

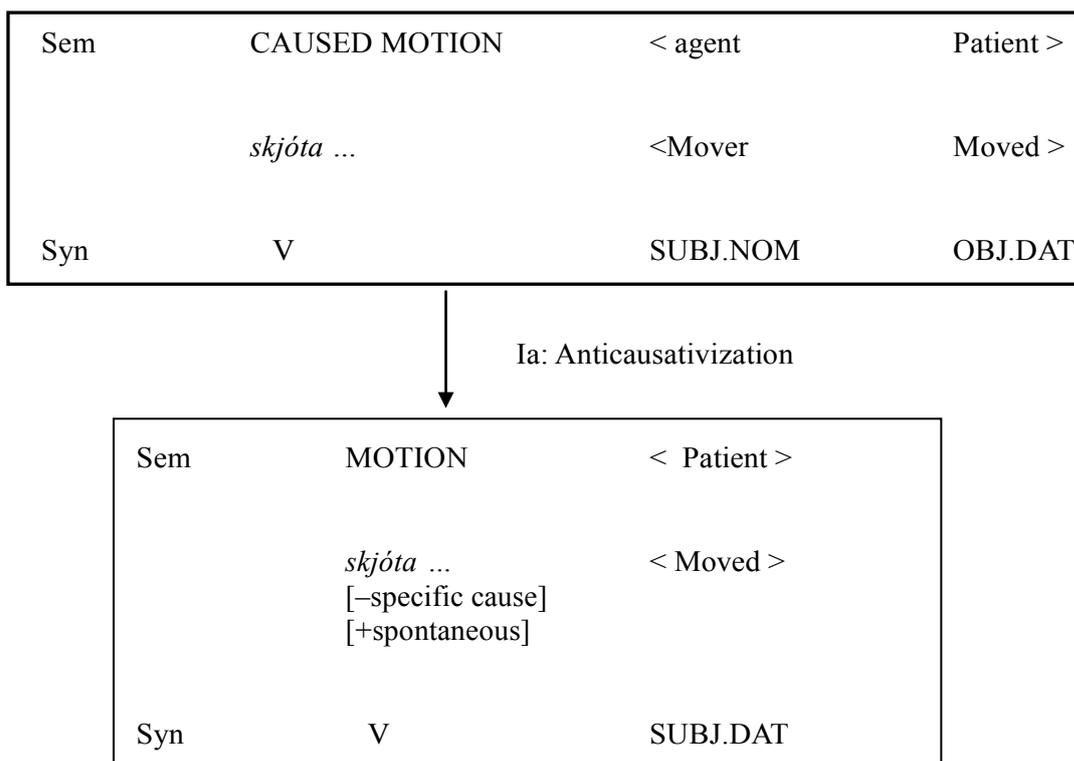
- (1a) *Búnaðurin skaut bátnum upp eftir að skipið sökk* Nom-Dat  
 Equipment.the.NOM shot boat.the.DAT up after at ship.the sank  
 ‘The equipment ... shot the boat back up after the ship sank.’
- (1b) *Öllum skaut upp úr ólgunni fyrir rest.* Dat  
 all.DAT shot up from swell for rest  
 ‘Everybody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

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

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

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

<sup>1</sup> Bläsing (2003: 243) divides Kalmyk converbs into modal, imperfective, perfective, conditional, concessive, terminative, abtemporal, final, and successive.



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

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

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## Complex stance in Kogi (Arwako)

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The presentation explores how stance-taking in Kogi (Chibchan, Colombia; ISO:639-3: kog) is achieved using a form of epistemic marking that shares functional traits with evidentiality, but which is analyzed as a separate category called ‘complex epistemic perspective’ ([Author], 2011, submitted). The crucial meaning features of this form of epistemic marking consist of a division between speaker-perspective and addressee-perspective forms, which either *include* or *exclude* the opposing speech participant’s point-of-view (i.e. the speaker or the addressee depending on

perspective) with regard to the propositional content of an utterance. Epistemic marking in Kogi thus allows the speaker to simultaneously situate the epistemic perspectives of the speech participants, as either converging or diverging from each other with respect to some event/state (cf. ‘intersubjective alignment’; Du Bois 2007). This grammatical resource parallels some evidential systems where the perceiver may be switched from speaker to hearer by a declarative/interrogative alteration. However, the marking system in Kogi differs from evidentiality in that the speaker’s assumptions of the epistemic perspective of the hearer make up the conceptual core of the forms. A change of perspective, to focus on the interlocutor/addressee, results in an “interrogative stance” where the speaker includes and indeed charges his/her interlocutors with the contents of the utterance even in cases where the propositional content otherwise is personal in nature (Author submitted).

Speaker-stance is by default calculated from the speaker’s (subjective) point-of-view and reflects the speaker’s level of commitment to the propositional content of an utterance. This is called “first-order” stance by Kockelman (2004), who argues for the necessity to relate first-order stances to “second-order” stances that allow for a reflexive component where the speaker may adopt a “meta-stance” with regard to his/her own evaluation of a state-of-affairs (cf. Evans 2005 on “multiple perspective”). The present talk aims to illustrate a specific instance of how complex stance-taking is achieved using an under-described form of epistemic marking. The analysis builds on data that was collected in Santa Marta, Colombia, between 2009 and 2013.

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## A clinical model of language for presurgical language localization using fMRI

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Functional MRI (fMRI) has been successfully used to answer a range of research questions about the relationships between the brain, cognition and behavior. Its clinical applications, however, are currently focused largely on presurgical mapping of language, particularly in planning epilepsy surgery. Here fMRI can remove two boundaries that contraindicate potentially curative surgery through determining hemispheric dominance for language or memory (lateralization), and localizing the actual extent of eloquent language cortex (localization). While our ability to lateralize language has advanced to the stage that it is arguably unethical to proceed to surgery without completing language fMRI, “fMRI language maps should not yet be routinely used for planning resection boundaries” (i.e., localization; Binder, 2011). We believe that central to this limitation is the widespread use of an outdated model of the language system focusing almost exclusively on Broca’s area’s role in language production and Wernicke’s in language comprehension. Existing literature suggests other regions including the “Basal Temporal Language Area” (naming); the Posterior Middle Temporal Gyrus (phonological selection and sequencing), “Exner’s area” (phoneme-grapheme conversion); the Supramarginal and Angular gyri (phonological processing, orthography-phonology mapping); the “Supplementary Speech Area” (speech planning and sequencing) are critical in language and can be identified with fMRI. In this study we hypothesized that (i) dynamic thresholding of clinical fMRI data by neuropsychologists with reference to this updated language model is reliable; and that (ii) the resulting data match language laterality defined by the Wada procedure, an invasive test used to assess language dominance by anaesthetizing one hemisphere at a time. Participants included 22 patients (mean age 35.6[s.d. 12.7]; 15 males; 16 right handed) seen at UCLA Medical Center’s epilepsy program. fMRI preprocessing was completed in FSL and thresholding in custom software (xds). Patient data was analyzed by two independent clinicians and reviewed by two external raters, and overlap between maps evaluated using DICE coefficients. Preliminary data will be presented which indicate that a clinician-driven method of fMRI analysis is reliable, and that a number of regions known to be involved in language function can be reliably identified using presurgical fMRI in a clinic setting.

## Feature resolution and agreement with coordinated subjects in Polish

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This paper focuses on the phenomenon of single conjunct agreement with both pre-verbal and post-verbal subjects in Polish and provides an account for the generalization that such an agreement pattern arises mainly with mass and abstract nouns, within the Agree framework of Chomsky (2001).

When coordinated subjects appear post-verbally, Polish grammar has the option of either agreeing with the coordinated phrase as a whole or with the closest conjunct (Citko 2004, Willim 2012, Kallas 1993):

- (1) Do pokoju wesłi/wszedł chłopiec i dziewczynka  
 in room came<sub>3.V.PL/3.M.SG</sub> boy<sub>M.SG</sub> and girl<sub>F.SG</sub>  
 'Into the room came a girl and a boy'

With pre-verbal subjects, however, agreement depends on the features of the coordinated phrases. Whenever two personal or concrete countable nouns are conjoined, the verb must appear in the plural resolved form. If two concrete mass nouns are conjoined, singular agreement becomes possible when both conjuncts are of the same gender or the verb does not show gender agreement:

- (2) Kurz i pył podniósł/podniosły się z nawierzchni  
 dirt<sub>M.SG</sub> and dust<sub>M.SG</sub> rose<sub>FOSE<sub>M.SG/NVIR.PL</sub></sub> self from surface  
 'Dust and dirt rose from the surface' (Zbróg 2012: 100)

Singular agreement is also available with two coordinated abstract nouns, both when the verb shows gender agreement and when conjuncts have different genders:

- (3) Głód i nędza zmusiła ją do kradzieży  
 hunger<sub>M.SG</sub> and poverty<sub>F.SG</sub> forced<sub>F.SG</sub> her to theft  
 'Hunger and poverty forced her to steal'

Availability of singular agreement in the post-verbal context (1) stems from the fact that T probe has two potential equidistant goals – either the maximal projection, or the first conjunct in the specifier position (van Koppen 2005). This option is unavailable when the subject moves to its canonical position – first conjunct cannot be moved and the Probe has to agree with the coordination phrase as a whole. I propose that coordination phrase (&P) can be optionally specified for all  $\phi$ -features, depending on the type of nominals involved. Following Willim (2000) and Bošković (2009, 2010), I assume that semantic gender on personal nouns is an interpretable feature, while grammatical gender is uninterpretable. Only uninterpretable gender can be optionally specified on &P. Conjunction of **personal** and **animate** nouns, with interpretable gender and number, will always result in plural number feature being computed on the coordination phrase, triggering plural agreement on the verb. Coordinated **mass nouns** of the same gender can either bear plural number and resolved gender, or can project the underspecified number feature (Willim 2006) and gender common to both conjuncts, resulting in singular agreement. When coordinated phrases have two different gender features, the &P is obligatorily specified as plural to ensure resolution of the conflicting features. Coordinated **abstract nouns**, however, can be optionally specified both for number and for gender. When conjuncts have different genders, the coordination phrase is specified for person, but underspecified for number and gender. If probes for gender (as in (3)), it targets the coordination phrase but it cannot value its gender features against it and the Agree operation fails. Gender is then valued post-syntactically (Marušič et al. 2012) with the linearly closest conjunct.

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## The conative alternation in English: A case of grammaticalization?

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The so-called "conative alternation" (henceforth CA), which derives its name from the Latin verb "conor", meaning "to attempt", has been analysed as expressing an aspectual difference between two constructions licensed by verbs of motion and contact, one transitive and the other intransitive (*kick the ball* and *kick at the ball*). On that analysis based on observations concerning some non-Indo-European languages (see Kiparsky 1998), the transitive construction is said to lead to an obligatory telic, or holistic, reading of the event. Conversely the intransitive construction is considered to impose an atelic, or partitive, interpretation on the latter (Anderson 1988, Pinker 1989, Levin 1993, Goldberg 1995, etc.). Although the CA is often referred to in the literature, relatively little in depth work has been done on the subject, Broccias 2003, Leek 1996, Adams 2001 and Guerrero Medina 2011 being notable exceptions in that respect.

The present paper is a bottom-up approach to the analysis of CAs. Based on empirical evidence collected from present-day sources and involving different categories of verbs, it shows that the transitive and intransitive constructions can both be used in the representation of completed events (*to gobble/snatch something* and *to gobble/snatch at something*), therefore invalidating the aspectual analysis. Similar problems arise with the conative analysis, as the oblique construction can accommodate successful events (*He slapped at the mosquito anyway, and left a bloody crumpled smudge*), just as the transitive one can express failed events (*Instinctively I slapped the mosquito, but the cell phone in hand took flight. I must say the mosquito was unharmed while the cell phone has two concrete bruises on it.*).

The alternative analysis presented here focuses on transitivity and is diathetic in nature. It shows that the *AT*-construction, which is normally used to represent Targets or Domains in the argument structure of verbs (*to shoot at someone* and *to work at something*), has come to be redeployed in the deconstruction of the traditional relation of transitivity operating between an intentional Agent and an affected Patient. The oblique construction is shown to favour events in which the transitive relation has been loosened. Two main categories of *AT*-constructions with otherwise transitive verbs can be distinguished, dividing up into different sub-categories. The first one involves various types of non-intentional or semi-intentional Agents (*The gusts punched at them and rubbed their mouths with salt*) and the second transitional, or non-targeted, Patients (*Iris bites at the inside of her mouth and is suddenly glad that Susan cannot see the look on her face.*).

In such instances, the *AT*-construction can be analysed as resulting from a case of grammaticalization of the original locative preposition used in the expression of Targets and Domains. The oblique version of the transitive construction is used to deactivate the relation which normally obtains between Agent and Patient in transitive situations, thereby following a path of development similar to that of antipassive constructions (Croft 1988 etc). This in turn will allow us to revisit the extension and properties of the class of verbs originally said to participate in the CA.

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## Constructing cross-linguistic equivalence: a reaction time study

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The Achilles' heel of every model of bilingual language use is the problem of cross linguistic equivalence. In order to produce a code-switch or a loan translation, bilingual speakers are assumed to establish not only semantic, but also categorial equivalence between linguistic units (Muysken 2005, Johanson 2002, Myers-Scotton 2007). A serious challenge to these approaches is the fact that the existence of cross-linguistic categorial equivalence has been questioned by typologists as well as theoretical linguists. From the perspective of typology, Haspelmath makes a point against pre-established linguistic categories. He argues that "descriptive linguists still have no choice but to adopt the Boasian approach of positing special language-particular categories for each language" (Haspelmath 2007: 121). Arguing typologically, Croft (2001) also notes that categorial sameness cannot be assumed.

The solution both offer in order to cope with the obvious ability of speakers to establish equivalence between two linguistic elements (and in order to make typology possible) is the semantic maps approach. Semantic maps, however, are a heuristic tool that works only for large-scale typological investigations. Two questions remain: whether it is plausible to assume that bilingual speakers rely on semantic maps when successfully or falsely constructing equivalence between elements from two languages and whether semantic maps are universal.

In this poster we want to report on two reaction time studies that try to answer this question with regards to semantic roles. We assumed that equivalence cannot be established neither through metalinguistic scientific categories neither through language-specific surface forms. We conducted two experiments which 30 Russian-German bilinguals and 20 Czech-German bilinguals to test if either semantic roles or constructions are a feasible alternative to category-dependent approaches.

In experiment 1 we presented the participants with Russian/Czech sentences based on the construction [N.NOM VERB N.DAT], where dative case was used to either refer to a beneficiary or an addressee and asked them for a grammaticality judgment. Both types were preceded by German sentences with the same underlying construction. Since the interpretation of the dative as addressee is impossible with the selected German verbs, we expect that there is significant influence on the reaction time for the grammaticality judgments of the Slavic sentences. If semantic roles are perceived as equivalent across languages, we expect the judgment reaction time to be shorter if a dative denoting a beneficiary is preceded by an analogous German prime.

In the second experiment, we presented the same bilingual groups with constructions where dative denoted an experiencer. The construction [N.DAT COP/BE ADV] which parallels in German and Russian/Czech was used as prime, while the target sentences to be judged were either of construction type [N.DAT COP ADV] or of type [N.DAT V.REFL V]. Since the latter construction does not exist in German, we expect the reaction time for grammaticality judgments to be shorter in this condition.

The pending results promise to provide insight into the way bilinguals construct equivalence across languages.

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## On "inclusive" and "exclusive" evidentiality in Nenets

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Evidentiality is an obligatory inflectional category in Nenets. It is presented by several suffixes which morphologically encode the meanings of sensory (non-visual) perception, inference, hearsay, general knowledge, absence/insufficiency of information, mirativity and foreknowledge. Some of the forms indicate only one source of information while others are polysemantic: they can encode several related sources of information.

The Nenets finite verb has the following morphological structure: Tv-(FUT)-EVID<sub>1</sub>-MOOD-EVID<sub>2</sub>-PERS/NUM-(PAST), where Tv stands for stem; FUT – for the marker of the future tense; EVID – for the evidential marker; MOOD – for the marker of a mood; PERS/NUM – for the person/number marker; PAST – for the marker of the past tense. An interesting phenomenon is that the structure of Nenets finite verb form has two slots for evidential suffixes: on the left and on the right of a mood suffix. The evidential that encode inference, general knowledge, hearsay, absence/insufficiency of information and foreknowledge take the slot on the left of a mood suffix. The evidential that encode direct sensory perception and mirativity take the slot on the right of a mood suffix. Moreover, one of the evidential suffixes, *-βi*, depending on the meaning being expressed (inference or mirativity) take different slots in a verb form.

In my presentation I will provide some explanations of this phenomenon based on the ideas suggested by (de Haan 2001, 2005) that languages may differ on whether the deictic component or the witnessing component is the underlying factor that drives the evidential system. It seems possible to assume that the structure of evidential system in Nenets is determined by whether or not a situation being described is included into a speaker's deictic space rather than by whether or not a speaker has direct evidence for his/her statement. At the form level, this opposition is expressed by different positions of evidential suffixes in finite verb form structure and can be conventionally described as "inclusive"/"exclusive" evidentiality. An indirect confirmation of the deictic nature of the evidential system in Nenets is the strategy for encoding hearsay. Languages with grammaticalized evidential tend to mark differently auditory perception of a situation being described and auditory perception of a report about a situation (de Haan 2005: 390]. This is also true for Nenets: auditory perception is marked by the suffix *-βon* while hearsay is usually marked by the suffix *-βi*. But if a situation being described refers to the present, hearsay is encoded by the marker of direct sensory perception *-βon*. This phenomenon can hardly be explained by the fact that the suffix *-βi* is forbidden for some reasons in the present tense: this form can be used in the present tense when encoding mirativity. Delegation of hearsay function to the form specialized for encoding direct sensory perception can rather be explained by the fact that when a situation a speaker's knowledge of which is based on somebody's report coincides with the moment of speech it is turned out to be included to some extent into the speaker's deictic space.

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## On the licensing of finite T

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This paper explores an analysis of two central phenomena in the interplay between T, *v/V*, and DP as are V-to-T movement and subject agreement, and for that it uses a minimalist *Agree* framework that is based on downward probing but that is a novel one in that it defends (i) that V-to-T is triggered by a *v*-feature of T, which correlates with the so-called stem or thematic vowel in the morphological paradigm of verbs, and also (ii) that it is not T but only *v* that must value agreement or  $\phi$ -features.

Regarding V-to-T movement, and basing upon the existence of languages with rich  $\phi$ -features in all tenses but no V-to-T – as has been claimed e.g. for German (Vikner 2001, 2005) – I reject the theory in seminal works mostly within the GB literature that it is gross rich  $\phi$ -feature morphology that is the cause of V-to-T, or otherwise  $\tau$ -features in combination with  $\phi$ -features (see Roberts (1985, 1993), Pollock (1989), Platzack & Holmberg (1989), Rohrbacher (1994, 1999), Vikner (1997). Also, I criticise Bobaljik & Thráinsson's (1998) account as based on the rejection of morphology as the trigger of V-to-T – though I agree that the trigger of V-to-T in a minority of languages is bound not to be morphologically driven – and I reject Biberauer & Roberts' (2008/2010) specific proposal as based on rich  $\tau$ -features above all on the grounds that it does not explain crucial diachronic facts affecting Germanic languages. I make the claim that, in order to explain the general presence of V-to-T in Romance languages vs. its general absence in Germanic languages, it is necessary to postulate an interpretable but unvalued *v*-feature on T in the form of a stem or thematic vowel, which gives rise to rich systematic co-variation in  $\tau$ -features and secondly in  $\phi$ -features.

Regarding subject agreement, I endorse the critique that Zeijlstra (2012) and Wurmbrand (2013) present of the treatment of  $\phi$ -features in the seminal work of Chomsky (2000, 2001) and also that of Pesetsky & Torrego

(2004/2007), though I assume for the present discussion that so-called *Reverse Agree* is just not a problem in that (at least non-pronominal) DPs do not value nominative Case (separate research, and see also Marantz 1991). The raising of DP into Spec,TP is accounted for by invoking Chomsky's (2000, 2001) proposal of a D-feature that T must value.

The key proposal that I defend about subject agreement consists in that there seems to be no conceptual or otherwise empirical reason why T should value  $\phi$ -features, which means that the *Agree* relation between T and DP does not depend upon the corresponding *Agree* relation between T and *v*. I argue for a downward probing version of *Agree* where it is always finite T that must have its [*i*τ] features valued against *v*, and subsequently *v* has its [*i*φ] features valued against DP. For V-to-T movement languages, the cited process of [*i*τ] feature valuation is preceded by the valuation of [*i*ν] of T against *v*, as mentioned above. I defend the view that downward probing by T is a proper way to construct morphology in the course of narrow syntax.

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## The synchrony and diachrony of anticausativization in Italian: a lexicalist approach

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This paper investigates the role played by the *lexico-aspectual characteristics of verbs* and the *nature of the Undergoer subject* in determining the reflexive and labile encoding of anticausatives in contemporary Italian and early Italo-Romance (Old Florentine).

Two subclasses of anticausative are recognised in the literature on the basis of the distribution of the reflexive morpheme *si* (Centineo 1995, Bentley 2006: 131), whilst three subtypes emerge by considering the interplay of the presence, absence and optionality of *si* with auxiliary selection in compound tenses (Folli 2002, Manente 2008, Cennamo & Jezek 2011).

Depending on the perspective taken — whether *thematic* or (*lexico-*)*aspectual* —, the presence of the reflexive (*si*) is either viewed as marking an externally caused eventuality, with verbs lacking *si* instantiating internally caused events (Centineo 1995, Bentley 2006: 130-4, building on Haspelmath's 1993 and Levin & Rappaport Hovav 1995: 89-98), or as reflecting the aspectual characteristics of predicates, the presence of a terminal point for *si*-anticausatives (Jezek 2001, 2008, Folli 2002, Cennamo & Jezek 2011). Under the *thematic approach*, only the form with *si* (e.g., *rompersi* 'break') instantiates an anticausative structure, whilst the pattern without *si* (e.g., *affondare* 'sink'), realizes an internally caused event (Centineo 1995: 67). Thus, with verbs optionally taking *si* in the anticausative pattern (e.g., *gelare-gelarsi* 'freeze'), only the structure with *si* should be regarded as anticausative (1a). Therefore (1b) would exemplify instead an intransitive verb, denoting an internally caused event (Bentley 2006: 128–31):

- (1) a. *Il lago gelò* (internally caused)  
the lake froze  
'The lake froze'  
b. *Il lago si gelò* (anticausative)  
the lake REFL froze  
'The lake froze'

The two views, however, are not mutually exclusive, but represent different diachronic stages in the development of the morphological encoding of anticausatives in Italian.

More specifically, the study of anticausativization in Old Italian (Old Florentine), shows the alternation of the active intransitive and the reflexive strategies with all verb classes (e.g., degree achievements, *umentare* 'increase', *le pene ... s'umentano* - the punishments RFL increase - 'The punishments increase' (Boccaccio, *Esposizioni*, 47, 664.20) vs. *le biade aumenteranno* - the corn will-increase - 'Corn will increase' (Boccaccio, *Filocolo*, 5, 54, 624.2), with hints of the gradual gaining ground of aspectual notions such as telicity in determining the obligatory occurrence/preference of the reflexive form to mark anticausatives (Cennamo 2012).

Thus diachronic data support the hypothesis that the main and original function of the reflexive morpheme in the anticausative alternation is to signal the suppression of the Actor. Its aspectual meaning (whereby it marks telicity) is instead a later development. The diachronic investigation also casts doubts on the nonanticausative status of non-reflexive uses of verbs allowing both strategies.

The Italian data, therefore, offer an interesting contribution to the current debate on the role played by the verb's inherent meaning and its interaction and integration with the event structure template of predicates in determining argument realization, showing the relevance of these notions for the understanding of anticausativization, both synchronically and diachronically.

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## Corpus-driven testing of a semantic-pragmatic hypothesis – Word order in spoken Danish subordinate clauses

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Recent years have seen a proliferation of studies on “main clause phenomena” in subordinate clauses (Heycock 2007, Aelbrecht, Haegeman, and Nye 2012), among them V2 word order (often called ‘main clause word order’) in Germanic languages. Danish, as well as Swedish and Norwegian, main clause word order is traditionally distinguished from subclause word order on the basis of relative placement of finite verb (V) and sentence adverbials/negations (Adv) (cp. Diderichsen 1946). In spite of terminology, both word orders are found in subclauses:

(1) (det er også en af grundene til) at vi tør næsten ikke at flytte (V>Adv)  
(that is also one of the reasons to) that we dare almost not to move

(1') at vi næsten ikke tør at flytte (Adv>V)  
that we almost not dare to move  
'that's also one of the reasons that we almost don't dare to move'

Main clause word order in subclauses has been argued to be a signal of relative informational importance, dubbed emphasis (Hooper and Thompson 1973), assertion (Hooper and Thompson 1973, Meinunger 2006, Julien 2007, Hansen and Heltoft 2011), main point of utterance (Simons 2007, Wiklund et al. 2009) and foreground (Jensen and Christensen 2013). Most studies of the word order distinction in Scandinavian are intuition- or judgment-based (see also Heycock, Sorace, and Hansen 2010, Vikner 1995), but considering usage the most important test-bed for semantico-pragmatic hypotheses, we will present the results of a large-scale, corpus-driven study of word order in modern spoken Danish.

The data for this study form part of the LANCHART corpus (<http://lanchart.hum.ku.dk/>), and comprise almost 9,000 subclauses. All subclauses have been manually coded for a range of factors relevant to hypotheses regarding foregrounding, ranging from type of matrix predicate to presence of conjunction, enabling multifactorial analyses of the relative effects on the distribution of the two word orders.

Our results show that V>Adv is much more frequent in subordinate clauses than commonly assumed (amounting to 64% for complement clauses and as much as 88% in adverbial clauses of causation/reason initiated by *fordi* ‘because’), and even found in contexts where it should be unacceptable according to the semantico-pragmatic hypothesis, i.e., clauses under factive predicates (e.g. *være sjovt* ‘be funny’, *ærgre sig over* ‘regret’), generally recognized to presuppose their complements. The distribution is furthermore in direct contrast to some of the formal constraints suggested by intuition-based analyses.

Mixed-effects modelling in R (Baayen 2008) supports the hypothesis that V>Adv signals foregrounded information in complement clauses (Jensen and Christensen 2013), though the factuality or realis value of the subclause content as signalled by the matrix predicate and the complementizer also seems to have an influence which cannot easily be explained by recourse to the notions of fore- and backgrounding.

In this paper we broaden the view and include also results regarding adverbial and relative clauses, still understudied categories of subclauses which have very different syntactic relations to their matrix clauses, requiring a different analysis of foreground and background.

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## The influence of intralinguistic factors on the usage of prothetic /v/ in the Prague vernacular

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In vernacular Czech, the prothetic /v/ could be used before word-initial or stem-initial /o/ (e.g. Standard Czech /okno/, meaning ‘window’, or /operace/, meaning ‘operation’, could be realized as /vokno/ or /voperace/ in the vernacular). This variable is especially interesting because it does not behave categorically, the usage of /v/ varies, i.e. it is quite common to find both instances of /vo-/ and /o-/ in the same speech and even in the same sentence. The variable usage of prothetic /v/ has been a phenomenon noticed in the earlier research literature (see Brabcová 1973; Dejmek 1981, 1987; Jančák 1974; Jančáková 1974; Krčmová 1981; Sgall & Hronek 1993; Townsend 1990; Wilson 2010) and various factors have been suggested as influencing the usage of /v/. However, none of these researches provided a thorough statistical analysis of the variation and as a result, it still remains unknown which factors (both

intralinguistic and extralinguistic) actually constraint the usage of /v/. The aim of this paper is to provide such analysis for intralinguistic factors.

The analysis is based on linguistic interviews (each approximately 1 hour long) with 13 native Prague vernacular speakers (aged 20–30 years). Altogether, the material comprises 1740 instances of the prothetic (v) variable. Based on a generalized linear mixed model it has been concluded that the usage of (v) is best explained by these predictors (fixed effects): word length (counted in phonemes), prefixation, word class, the position of the variable (at the beginning vs. inside the word), and borrowedness of the word. Other variables, like word frequency, sex or the rank of (v) in the interview did not show any effect. The data showed a small random effect of the speaker.

The results of this research were compared with older Prague vernacular data from the study by Pavel Jančák (1974). The older data are limited in that only the role of one independent variable (word type, with four values: pronouns, prepositions, prefixed lexical words, non-prefixed lexical words) were analysed, and furthermore, the study was based only on a group interviews with 9 children (aged 13–14 years). However, the older results suggest a significantly higher usage of /v/ in all four word types. Therefore, based on the apparent-time hypothesis (Bailey et al. 1991) it seems the prothetic (v) variable is undergoing a language change. In other words, the usage of /v/ in the Prague vernacular seems to be on a slow decline.

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## Absolute constructions in Old English and Old High German translations

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In early Indo-European languages absolute constructions are relatively widespread and their basic form – a noun or pronoun combined with a participle in an oblique case – is the same, though the preferred case used for the absolute differs from language to language (Bauer 2000: 262). In Latin, they surface in the form of ablative absolutes, whereas in Old English and Old High German dative absolutes are used, though the origin and status of this construction both in Old English and Old High German is not entirely certain. They appear much more often in texts translated from Latin, which led many scholars to assume that the structure is a syntactic calque (e.g. Scheler 1961). However, dative absolutes appear both in OE and OHG when the original does not have an absolute construction in the corresponding fragment. Also, the Latin ablative absolute is not consistently translated with the dative absolute: a prepositional phrase or a finite clause can be used instead (cf. Mitchell 1985: 928-929 and Timofeeva 2010: 33-36 for OE and Bauer 2000: 275 for OHG).

The present study aims to provide a systematic comparison of the use of absolute constructions in selected OE and OHG translations. Our analysis is corpus-based and involves both qualitative and quantitative perspectives. In particular, the following research questions are considered: a) what translation strategies were employed to render the Latin ablative absolute? b) did the translators use the dative absolute independently of the Latin and if yes – then in what contexts? c) are there any differences in the use of absolute constructions between the two languages in question and between individual translations? d) to what extent are these constructions formulaic? The analysis makes use of a parallel corpus containing samples of translated texts and their originals (*Tatian*, *Isidor* and *Physiologus* for OHG, *The Book of Genesis*, *The West Saxon Gospels* and Bede's *Historia Ecclesiastica* for OE, ca. 20,000 clauses altogether), created for the purpose of the project “The influence of Latin syntax on word order of selected Old English and Old High German translations”.

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## Rethinking the Indo-European expressions of predicative possession in a Cognitive Construction Grammar perspective: The case of the 'dative + be' construction

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The dative and the genitive in combination with a verb *be* are generally regarded as constructions indicating possession in many ancient Indo-European languages, included Old Indic, Ancient Greek and Latin. Consider the following examples from Old Indic:

- 1) *tápūṃṣitásmaivṛjinānisantu*  
burning-PL.NOM/ACC this-DAT agonies-NOM/ACC be-3PL.IMPV  
'May burning agonies be to him' (RV VI 52, 2c)
- 2) *tvásmākamtávasmasi*  
2SG.NOM 1PL.GEN 2SG.GEN be-1PL.PRS  
'You are ours, we are yours' (RV VIII 92, 32c)

Between the two constructions, the structure with the dative has been considered the original predicative structure expressing possession in Proto-Indo-European (see for example Bauer 2000:194).

In this paper, I analyze data from ancient Indo-European languages mainly focusing on the situation exhibited in Old Indic and Ancient Greek and I propose a very different reconstruction. Indeed I will show that:

- First, it is the genitive construction that should be considered the original one used for expressing prototypical possession (ownership);
- Second, the dative construction is not a possessive construction, but it is rather part of a larger construction, i.e. an oblique subject construction in the sense proposed by Barðdal (2002, 2004), Barðdal et al. (2012), where the subject-like argument is realized with the dative case, and possession is only one of the possible meanings expressed by the construction. In fact also other types of relations are conveyed by such structure (e.g. psychological or bodily states, emotions, gain and benefit).

These relations are usually considered cases of 'abstract possession' but such label is misleading. Indeed in languages like English, it makes sense to speak about abstract possession since there is an encoding strategy, namely the verb *have*, which is undoubtedly associated with the prototypical possession. If the verb *have* is used to refer to different domains than possession, e.g. *I have strength*, it is reasonable to argue that such a state, is linguistically conceptualized as possession. But crucially the dative construction is not associated with the expression of prototypical possession, i.e. ownership (which is instead the sphere of the genitive construction) in ancient Indo-European languages, and it can be better connected with other types of non-agentive events.

Following Langacker (1987), Croft (1991), and Barðdal (2001), I adopt a causal chain approach to argument realization and I propose that the basic function of the combination of the dative with *be* is to express a relation between an experiencer and a theme. The relation consists of a physical or mental experience in which the dative referent has an active role because it establishes physical or mental contact with the theme, and perceives the theme being or coming in his dominion.

The proposal will be advanced with the aid of the theoretical framework of Cognitive Construction Grammar (Goldberg 1995) which opens up the possibility of assuming a constructional family of a dative subject construction and allows for a novel analysis according to which the dative possessive structure is regarded as a subconstruction of an abstract and more schematic construction.

## From resultative to perfect: Depassivization of Persian passive participles

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The present proposal bears an attempt to investigate the emergence of periphrastic perfect construction in Modern Persian from resultative constructions in Middle Persian, drawing upon a panchronic analysis. Presenting the corpus data from Middle to Modern Persian, this paper aims to delve into the historical development of passive participles in Middle Persian that accounted for the resultative meanings of the copular sentences. Compiling the full range of passive participle constructions in Middle Persian texts, we will draw a descriptive observation that the majority of the attested passive participle constructions are agentless with essentially passive interpretations. However, the pas-

sive participles imparting active meanings routed through intransitive verbs and verbs of middle voice which similarly expressed resultative meanings based on elements of result rather than the result phase of event. The frequency of occurrence of the stative, resultative, passive pattern is much more than that of stative, resultative, and active pattern expectedly derived from frequent event schemata (e.g. *âmadan* 'to come', *šodan* 'to go', *nīšastan* 'to sit', and *êstâdan* 'to stand'). The extant Middle Persian texts do not provide direct evidence on the structural properties of the agentive passive participle constructions of transitive verbs in copular sentences. Interestingly, the latter constitutes part of perfect construction in Modern Persian pointing to an active interpretation of an agentive passive participle construction with wearing down the meaning of patient-orientedness. The findings of the present analysis indicate that the bleaching of passive meaning in the passive participles derived from the transitive verbs, the process of de-passivization, leads to the generalization of the pure resultative meanings of telic verbs to perfect meanings of both telic and atelic verbs. However, Modern Persian retains the passive interpretation of passive participles both in non-finite adjective-like attributive modifiers of nouns and in middle voice constructions. Applying the notion of orientation (adopted from Haspelmath 1994: 153), it is argued that the development of non patient-oriented perfect construction of transitive verbs in Modern Persian from its resultative patient-oriented counterparts is construed as a shift in orientation toward the verb's agent rather than verb's patient. This process started through the split in the function of passive participle stem in Middle Persian (the dual functions of passive participle and past-tense-marking) which provided a reinterpretation of passive participles from a purely resultative meanings in Middle Persian to eventive interpretations in Modern Persian. Building on work couched within the grammaticalization framework (Heine et al 1991 and Heine 1993), we assume that the process of de-passivization of passive participles which results in the expansion of contexts in use and involves eventuality rather than resultativeness is an evidence of grammaticalization process. Along the lines of Comrie (1976:56), We also agree that the meaning of perfect may usually contain the element of result, but we view perfect construction as a wider semantico- grammatical category which by no means is obliged to present the concrete elements of result.

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## ¿Se vamos o se quedamos? Morphological changes in the reflexive paradigm of Eastern Peninsular Spanish

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Typologically, there are two types of reflexive marker systems regarding the morphological marking of person. In some systems, only the third person is marked (as opposed to its non-reflexive equivalent), while in other systems all persons show marking. In Faltz's terminology (Kemmer 1993), the former are 'functionally streamlined' paradigms, since they mark the only person that may cause ambiguities between the reflexive and the non-reflexive reading, and the latter are 'strategically streamlined', since they mark every instance of reflexive verbs. Strategically streamlined systems may be of two different kinds themselves: either there is a different marker for each person (for instance, the English reflexive system: *myself*, *yourself*, etc.) or the same marker is used for every person (like the Russian morpheme *-sja*).

Most Romance languages have a functionally streamlined reflexive paradigm in which reflexive pronouns are syncretic with non-reflexive pronouns except for the third person, that has a distinctive form. For instance, Spanish reflexive pronoun *se* is opposed to the third person unstressed non-reflexive pronouns *le(s)*, *lo(s)* and *la(s)*, while the first person unstressed pronoun *me* is used in both reflexive and non-reflexive contexts. However, in some Spanish varieties a strategically streamlined reflexive paradigm seems to be emerging, by means of the extension of the form *se* to all persons. This extension has happened in other Romance varieties, like Surselvan (Kemmer 1993). The literature for this phenomenon in Spanish is, however, rather scarce (Martín Zorraquino 1979, Blas Arroyo, Boix Salvador, Gil Miguel & Tejada Tello 1992).

The aim of this paper is to describe in detail for the first time this development in one of the varieties where it is attested, namely, South-Eastern Peninsular Spanish, and to investigate the grammatical constraints that determine its distribution. Two main research questions will be addressed. First, I will investigate the emergence of the innovation: what grammatical context(s) allowed for the extension of *se* to other persons? Second, I will analyse how the innovation spread through the paradigm, showing that it initially occurred in the second person plural and then spread to the first person plural (so far, the innovation has not spread to the singular). Other constraints that may be affecting the evolution of this change (verbal tense, reflexive verb type) will also be studied.

The data of this paper comes from two different corpora, namely, the ALPI (Linguistic Atlas of the Iberian Peninsula), whose questionnaires were collected around 1930, and the COSER (Audible Corpus of Spoken Rural Spanish), whose (relevant) interviews were collected in 2013. The geographical distribution of different contexts of the syncretic reflexive pronoun will also be looked at in order to establish relationship between them.

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## Expression and perceiving vocal emotions in a L2: a cross-linguistic study

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The present research aims at highlighting an important issue in SLA namely the emotional dimension within the acquisition process. For emotional dimension we refer to two specific aspects: the perception and the expression of emotions in L2. Recent research has investigated the processes of vocal emotions in a cross-linguistic perspective (Anolli et al., 2008; Pell et al. 2009; Galatà & Romito, 2010). Although very few studies have focused on this topic, some of them confirmed that L2 learners may experience difficulty in perceiving emotional speech in the target language (Dewaele, 2006). The goal of the present work is to explore the emotional phenomena involving distant and related languages comparing the encoding and decoding processes in L2 learners and native speakers.

We hypothesize that a) L2 learners with a greater typological distance from Italian might experience some difficulties in decoding emotional speech produced by natives, and b) that the emotional content of their productions in Italian may be misunderstood by Italian listeners. On the contrary, a better level of understanding of learners' productions might be observed for learners of a language with a closer relatedness to Italian. The same speaker might have no problems in the decoding process of emotions in L2.

L2 learners of Italian from different cultures (3 Indonesians, 4 Chinese, 3 Moroccans, and 4 Spanish learners of Italian with the same level of proficiency) were involved. We took into consideration both processes of emotional speech: encoding and decoding. We developed a perception test designed for the recognition of emotions (anger, fear, joy, disgust, surprise, sadness) uttered by an Italian native speaker; students were asked to identify the emotion choosing from a set of six answers. Results confirmed that learners with a lower degree of language relatedness to the target misunderstood the emotions expressed, in particular with regard to joy and fear. On the other hand, learners of a language with a closer relatedness to Italian were more accurate in the choice of emotions recognition.

In the second part of the experiment, learners were asked to repeat a standard sentence (first in Italian and then in their L1) conveying a specific emotional state (anger, disgust etc.). A perception test containing their performances in Italian was submitted to a sample of Italian listeners. Results revealed that L2 learners' emotional speech was not always correctly identified (accuracy index was very low). Results varied according to the learners' L1. We analyzed learners' productions in L1 and L2, in order to find a possible explanation. We expect that learners' L1 affect L2 productions of emotional speech regarding parameters such as speech rate, pitch range and intensity. Results should confirm that L2 learners from distant cultures do have more difficulties both in perceiving and in expressing vocal emotions compared to speakers of a language typologically closer to the L2. Such awareness could be useful for L2 teaching practices.

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## Apologizing on YouTube video-blogs: Approaching Spanish national and sub-national varieties

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Videoblogs or vlogs are one of the two specific genres emerged in YouTube (Burgess 2011) being the other one the “spoofs”. In this genre, Vloggers have settled a set of linguistic practices that are common among them, but are not necessarily used on everyday communication outside the web. One of these practices is apologizing for not having uploaded videos in a certain period of time, which turned to be one of the vlogs parts of its structure. Nevertheless, there are variations among the vlogs when vloggers apologize. Despite the fact regional variations are present in Spanish speaking vlogs, social distance and identities negotiated between vloggers and audience are important as they describe different pragmatic varieties.

Our main question is: Which are the differences between politeness strategies in apologizing among users from different Spanish national and sub-national varieties? Our hypothesis is that such differences are related to the vloggers’ individual concepts of vlogging (which also implies the relationship with the audience) rather than to regional varieties or other macro social factors.

Our main objectives are to describe how vloggers define and treat their audiences when apologizing for not having uploaded videos in a while and to examine what are the differences among them and why they occur.

Therefore, we will transcribe and analyze 2 vlogs from each 8 YouTube vloggers chosen, all from different national and sub-national varieties of Spanish: *Holasoygerman* from Chile, *AdriaMusic* from Spain, *PabloVlogs* from Canarias, *Dross* from Venezuela, *Werevertumorro* from Mexico, and from Argentina, *Kion y Vedito* from Córdoba, *Julián Serrano* from Entre Rios, and *Alfredito* from Buenos Aires.

We will consider the pragmatical units proposed by Barron & Schneider (2008), and we will work with the definition of image from Brown & Levinson (1978), and the works from Bravo & Briz (2004) about images, negotiation, and identity.

This paper is a first approach which intends to help describing national and sub-national varieties of Spanish. Nevertheless, further research is needed for a deeper comprehension on this topic as the variational pragmatics is a new field only recently developed.

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## Bringing disparate languages closer together through intense code-switching: The next generation’s Turkish-Dutch mixing

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In bilingual communities, language contact results in various co-occurring phenomena, such as language shift, transfer, and code-switching. Code-switching, the focus of this presentation, comes in three major sub-types (Muysken, 2000): insertion (words from an embedded language are inserted into clauses framed in a matrix language), alternation (clauses in the two languages alternate), and congruent lexicalization (the two languages basically merge into

one). Turkish-Dutch code-switching is supposed to feature the first two types but not the third, because when the languages in contact are typologically distinct, there is not enough shared lexicon and structure to make the fine-grained integration of the two languages possible that is required for congruent lexicalization. Recent data of third generation Dutch Turks, however, shows many instances of code-switching in which the two languages are not kept separate. This empirical development has two important theoretical implications. First, it shows that intense contact between unrelated languages can lead to the partial merging of initially very different grammatical systems. Second, it lends support to the Cognitive Linguistic view of the lexicon (Langacker, 2008), which holds that lexical units can be of any size and complexity. Many of the relevant cases are caused by the combined use of complex lexical expressions and constructions from both languages, prompting the speaker to combine grammars in much more intricate ways than is needed in the simple insertion of a Dutch noun or verb into a Turkish clause, or the alternation between a Turkish main clause and a Dutch subordinate clause. Congruent lexicalization is a promising way of characterizing the resulting bilingual structures. An example of a regular insertion would be (1), in which the Dutch “gewoon” (‘just’) is inserted into a Turkish sentence. On the other hand, there are also examples such as (2). In this example, the “either... or...” construction is in Dutch but the verb with the person and tense marking as well as the object noun is in Turkish. The resulting construction cannot be analyzed as regular insertion, as there is no clear base language, or as alternation, since there is no clear switch from one grammatical system to the other. The presentation will assess how common these patterns are, examine their characteristics, and interpret their diachronic consequences in the light of contact linguistic theories.

(1) “Bıŝey deđiŝmemiŝ ki aynı *gewoon*” (Dutch in italics)

“Nothing has changed, it's *just* the same”

(2) *Of ddklde yapıyo of gewoon pan*

“She *either* does it in a pressure cooker *or a regular pan*”.

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## Dative sickness: A phylogenetic analysis of argument structure evolution in Germanic

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One of the problems for reconstructing syntax and grammar, and hence for modeling language change, is the alleged lack of directionality of change (Miranda 1976, Lightfoot 1979, 2002, Campbell & Mithun 1980). In this connection, a typology of changes relevant for argument structure has recently been suggested (Bardal 2014), involving changes in the case marking of noncanonically case-marked argument structure constructions found throughout the history of the Germanic languages. These include:

- Accusative subjects changing into dative
- Nominative subjects changing into dative
- Dative Subjects changing into accusative
- Accusative, dative and genitive subjects changing into nominative
- The breakdown of the case system

Given these processes, the directionality of changes in subject case marking appears as unpredictable, raising the questions of a) how we know which case to reconstruct for oblique subject predicates in Proto-Germanic, and b) how we may operationalize the directionality of these changes. With regard to the first question, it is obvious that the different languages have different weight, with Gothic carrying the most weight being the oldest attested Germanic language. Also, Old Norse-Icelandic is, case-wise, the most archaic of both North and West Germanic, which means that when there is overlap in case marking between Gothic and Old Norse-Icelandic, that case can safely be reconstructed. We also know that the so-called Dative Sickness is more common than “Accusative” Sickness, although in general non-nominative subjects have changed to nominative throughout the attested Germanic period.

The diachronic pathways of linguistic change described above can be expressed formally as a quantified model of structural evolution. The advantage of such a treatment of language change is that it renders a prose description of a process into a statistically testable – and falsifiable – model, hence bringing us to the second question of how to model and operationalize the changes in noncanonical subject marking. We suggest a computational phylogenetic analysis using the MULTISTATE method which allows us to test different models of change in subject case marking

from Proto-Germanic to the modern languages. The MULTISTATE method was originally developed in evolutionary biology and subsequently used in anthropology. In linguistics, phylogenetic methods have been used to study evolution of grammatical features (Dunn et al. 2011), lexical stability and rates of change (Pagel, Meade & Barker 2004, Atkinson et al. 2008, Pagel & Meade 2006b, Pagel et al. 2007) as well as the evolution of terminological systems (Jordan 2011).

We show how a single model of evolutionary change accounts for the history of an entire set of oblique subject verbs and how MULTISTATE correctly infers reconstructed ancestral states arrived at by the traditional philological method, but only given the proper constraints. As such, MULTISTATE is a way of testing the plausibility of the assumed directionality, hence confirming or disputing our reconstruction. It combines two different methods of studying linguistic change to answer a single question: a) the PHILOLOGICAL method through which a reconstruction of specific items may be carried out (small details' view), and b) the PHYLOGENETIC method through which processes of change are investigated (big picture view).

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## On the historical origin of Basque glottal fricative(s): phonetic evidence

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The glottal fricative /h/ or aspiration has historically been a problematic segment within the field of Basque linguistics. It has been deprived of its phonemical status and even completely obviated more than once both in phonology and in historical linguistics, despite being attested in the oldest written documents of the language (cf. the Alavese place names in the *Reja de San Millán* from the 11<sup>th</sup> century *Hilarrazaha*, *Hurizahar*, *Hagurahin*, *Udalha*, etc.). Processes with correspondences unlikely to be refuted such as /n/ > /h/ /V\_V (cf. Michelena 2011 [1977]: 171) have been brought into question more than once (cf. Schuchardt 1906: 23; Trask 1997) and even the very phonemic nature of these segments has been repeatedly obviated in the comparative work (cf. Forni 2013).

This paper aims to justify the etymological status of Basque aspiration by arguing its diverse historical origins and grounding each of the reconstructed processes on phonetically driven explanations as well as typological parallels. It also wants to justify the different modern realizations of the glottal fricative by linking them to the processes they resulted from—as well as the segments they derived from—and group them according to their context within the word boundaries.

After several historical developments affecting aspiration (cf. Egurtzegi 2013: 151-3), potential positions of /h/ have been reduced to the prevocalic onset of the first two syllables of the word, and its modern realization may be different in each context. We expect the contexts where aspiration evolved from a sonorant segment to be those where the glottal fricative is phonetically voiced in the modern language, whereas contexts where the aspiration has historically derived from voiceless segments are expected to have voiceless realizations in the modern language. Some instances of the glottal fricative that evolved from an intervocalic nasal obstruent /n/ are expected to maintain the nasalization of the segment they derived from (cf. Igartua 2008), although this feature has already been lost in the neighboring dialects.

To this end, an analysis of the speech of several informants of the Souletin dialect will be conducted, from which different tendencies will be inferred regarding the production of the aspiration in relation to its position and historical origin. In addition, evidence on the perceptual metathesis (cf. Blevins & Garrett 2004) of these segments as a consequence of innocent errors (Ohala 1993) will be presented, by showing historical processes (cf. Lat. *arēna* > \**areña* > mod. Bsq. *harea* ‘sand’) supported by the analysis of field recordings of Souletin informants. We will argue that this process is phonetically based and structure-preserving (cf. Blevins 2009), and thus biased by the phonotactic structure of the language.

In short, this paper aims to argue for the etymological status of the /h/ and ground the reconstruction of the hypothesized processes it derived from by looking at the phonetic detail in the modern realization of this segment.

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## “The ladies all sitting in the open air, exposes them to great inconveniences”: the role of free adjuncts and absolutes in the formation of English ACC-ing gerundives

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This paper examines the rise of ACC-*ing* gerundives, as in (1)-(2), in the light of recent proposals on the possible multiplicity of source constructions in language change, with change conceived as (often) involving historically distinct ‘lineages’ merging into a new lineage (see Van de Velde et al. 2013; also Croft 2000:32ff).

Like all other gerundives, ACC-*ing* gerundives have a characteristically nominal distribution. However, they differ from other subtypes of gerundives both in their chronology (their emergence in English being comparatively late) and their formal characteristics: they have a subject argument in non-possessive case, unlike ‘bare’ gerundives (3), which lack an explicit subject, and POSS-*ing* gerundives (4), whose subject argument is marked for the genitive:

- (1) HC 1698 Fiennes, *Journeys*, 152: its a very dear place so much Company living in the town makes provision scarce and dear,
- (2) COLMOBAENG 1861 Dickens, *Great Expectations*, 75: I not only prevented him getting off the marshes, but I dragged him here
- (3) HC 1550-52 *Diary of Edward VI*, 355: The duches, Crane and his wife [...] were sent to the Towr for devising thies treasons; Jaymes Wingfeld also, for casting out of billes sediciouse.
- (4) HC 1599-1601 Hoby, *Diary*, 78: then I Came hom to dimer, neccltinge my Costomarie manner of praier by reason of my Lord Ewrie and my lades being there:

In my presentation at SLE-47th, I will argue that ACC-*ing* gerundives, unlike other gerundives, do not emerge from former nominal gerunds through a gradual process of accretion of verbal characteristics, but have developed, rather, as an ‘intersection’ (cf. Trousdale 2013:493) of a number of pre-existing constructions, among them absolute participles such as those in (5)-(6); these precede their superordinate clauses and ‘control’ their subjects, to the extent that they are deleted under identity with the subjects of the absolutes (respectively, *Vaughan’s Testimonie* and *these fellows*; see further Visser 1963-1973:§§1085-1086):

- (5) HC 1554 *Trial of Throckmorton*, PI/69.C1: and so Vaughan’s Testimonie being credited,  $\emptyset$  may be the material Cause of my Condemnation, as the Jury may be induced by his Depositions to speak their Verdict,

- (6) ARCHER 1717 *Letters: These fellows letting their hair and beard grow inviolate*, ø make exactly the figure of the Indian Bramins.

Absolutes of this kind often specify the causal motivation of the event or situation in the matrix clause, a discourse function also commonly found with prepositional gerundives, whether bare or POSS-*ing*, as in (3)-(4) above. My data from several historical corpora reveal that the earliest recorded instances of ACC-*ing* gerundives inherit features from these two constructional types, such as their semantics (they too are factive and have a causal interpretation), and their placement in sentence initial position (their prevailing syntactic function being as preverbal sentential subjects); witness (1) above and (7)-(8) below:

- (7) ARCHER 1664 Bulteel, *History of Merame: Themira returning to the Court* drew us with her, for my part, I left not Coupava, but with much repugnance,  
 (8) ARCHER 1716 *Letters: the ladies all sitting in the open air*, exposes them to great inconveniences;

#### Data sources:

ARCHER = ARCHER 3.2 (2013), A Representative Corpus of Historical English Registers (1600-1999). Originally compiled under the supervision of Douglas Biber and Edward Finegan at Northern Arizona University and University of Southern California; modified and expanded by subsequent members of a consortium of universities. Current member universities are Northern Arizona, Southern California, Freiburg, Heidelberg, Helsinki, Uppsala, Michigan, Manchester, Lancaster, Bamberg, Zurich, Trier, Santiago de Compostela and Leicester.-- See Yáñez-Bouza, Nuria. 2011. ARCHER past and present (1990-2010). *ICAME Journal* 35: 205-236.

COLMOBAENG = Corpus of Late Modern British and American English Prose (1700-1879). See Fanego, Teresa. 2012. COLMOBAENG: A Corpus of Late Modern British and American English Prose. In Nila Vázquez, ed. *Creation and use of historical English corpora in Spain*. Newcastle upon Tyne: Cambridge Scholars Publishing, 101-117.

HC = Helsinki Corpus of English Texts. See Kytö, Merja. 1996 [1991]. *Manual to the Diachronic Part of the Helsinki Corpus of English Texts: Coding conventions and lists of source texts*. 3rd ed. Helsinki: Department of English, University of Helsinki.

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### The choice of forms in contact varieties: Linguistic vs. social motivation (on the base of language contacts in the Russian-Chinese border area)

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Language contacts, sometimes resulting in the rise of new language varieties (Thomson & Kaufman 1988; Romaine 1989), are usually hidden in the remote past. When studying contact-induced language changes, researchers often have to deal not with contacts as such but rather with some 'traces' of contacts that took place dozens or even hundreds of years ago. That is why the interpretations of language changes by different scholars can contradict each other: some see the given feature as a result of internal linguistic system development, while others believe some other language to be responsible for its origin. Furthermore linguistic changes can be shaped not only by pure linguistic reasons but by cultural conventions, social norms and attitudes as well, and in most cases it is not an easy matter to decide whether choice of this particular language form (e.g. Nominative case form instead of all others for nouns) should be interpreted as motivated by structural properties of contacting languages or rather by extra-linguistic factors. In some cases however it is possible to witness language contacts as a process in real time through analyzing linguistic strategies used on regular basis in interethnic communication by different languages' speakers lacking any established communicative tool. What is more, sometimes linguists have a chance to compare this data with that of the past and try to understand complex processes taking place in the course of language contacts.

The proposed paper addresses the issue of language choice in contact situations on the base of language contacts in the Russian-Chinese border area. For a long period in history this region was a place of constant and intensive cultural and language contacts resulted in emerging of trade pidgin, so called Kyakhta language, or Russian-Chinese Pidgin (Belikov 1994; Stern 2005; Perekhval'skaya 2008). This contact language spread along the whole border and on the edge of the 20<sup>th</sup> century was widely used by Russians, Chinese and many aboriginal people of Siberia and the Far East for interethnic communication. In the 1930s transborder communication was abruptly stopped as a result of changes in the Soviet state policy, and the pidgin went out of use. But 50 years later contacts resumed and now it is possible to observe communication between Russian and Chinese speakers and compare this data with sources on

the Russian-Chinese pidgin (Fedorova 2011). Linguistic strategies employed both in the pidgin and in the modern data include choosing one particular grammar form to be used instead of others. Whereas Nominative form of nouns and adjectives is rather predictable, the choices in the case of pronouns (Nominative or Accusative or possessive pronouns instead of personal ones) and verbs (Imperative or Infinitive or finite forms) pose some serious questions on the nature of motivation determining speakers' lingual behaviour. To answer these questions through comparative analysis the paper uses three kinds of data: written sources on the Russian-Chinese Pidgin; field records made by the author in 2008-2010 in the border area; metalinguistic experimental data gathered in the border area and in St. Petersburg.

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## Māori reflexivization – Possessive-reflexives and intra-sentential pronominalization

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Reflexivity in Māori is achieved by a pronoun in situ, this may be accompanied by a *support form*. The initial aim of the study was to account for the seemingly arbitrary presence of the *support form*. The examples of reflexivity, from Bauer (1993), included possessive noun-phrases. There have been relatively few grammatical analyses of Māori. As a Polynesian language, Māori has unique features which have yet to be adequately captured. In view of this, the functional model Role and Reference Grammar was applied to the reflexive. Role and Reference Grammar was created with the specific intent to be able to account for features within languages, without imposing characteristics that do not actually occur. In the Role and Reference Grammar model, Van Valin (2005: 162-167) outlines three conditions which govern the behaviour of co-reference reflexives within a simple clause. The Māori reflexive constructions were examined under these constraints listed in 0, 0 and 0.

(1) Role hierarchy condition on reflexivization:

The reflexive pronoun must not be higher on the Privileged Syntactic Argument Hierarchy (as applied to the selection of privileged syntactic arguments in the language) than its antecedent

(2) Superiority condition on Reflexivization:

A bound variable may not be logical structure superior to its binder

(3) Domain of obligatory reflexivization constraint:

Within a simple clause, one of two co-referring NPs which are semantic co-arguments must be realized as a reflexive, while one of two co-referring NPs which are not semantic co-arguments may be realized as a reflexive.

Given Bauer's data (1993: 165-185), the analysis found that the *support form* occurs under specific circumstances. These circumstances are defined by the headedness of both the antecedent noun-phrase and the reflexive noun-phrase. Talmy (2001: 105) defines possessive-reflexives semantically as constructions in which "the subject is the possessor of the object". The presence or absence of the *support form*, in possessive constructions such as 0 and 0 respectively, changes the antecedent from a primary to a dependent constituent within a noun-phrase. This raises questions as to whether constructions like 0 and 0 should be correctly categorized as possessive-reflexives or as intra-sentential pronominalization. This phenomenon does not seem to be restricted to Māori. Dixon (1994: 138) supplies the translated example "John's mother hid himself". In Dixon's example, a pronoun *himself* co-references a dependent constituent *John* of a noun-phrase. The antecedent is the modifier of the subject. This is also seen in Māori, as in 0.

- (4) I hoatu te tama o Hone i te kai mā-na (anake)  
 PST give the son P John ACC the food DAT-3SG SUPPORT.FORM  
 “John’s son<sub>i</sub> gave him<sub>i</sub> the food”
- (5) I hoatu te tama o Hone i te kai mā-na  
 pst give the son p John acc the food dat-3sg  
 “John<sub>i</sub>’s son gave him<sub>i</sub> the food”

The Māori reflexives highlight that reflexive binding theories do not adequately account for possessive-reflexives. They also beg the question as to whether possessive-reflexivity must have an obvious syntactic realization? Or should they be categorized solely semantically? This paper will outline these issues surrounding Māori possessive-reflexives.

List of Abbreviations: 3:third person, ACC:accusative, DAT:dative, P:preposition, PST:past, SG:singular

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## Subfunction variation and the Rioplatense preterit

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The preterit is expanding in Rioplatense Spanish (cf. also Howe 2013), which is different from the common expansion of a perfect observed in e.g. French (Bybee et al. 1994). The preterit is currently being used to cover functions previously associated with the perfect, such as current relevance (CR), seen in (1), illustrating experiential function:

- (1) **Conociste** Punta del Este?  
 Know-2SG.PRET punta del Este  
 ‘Have you gotten to know Punta del Este?’

A gradual and significant decrease in perfect use is documented through a multivariate analysis of spontaneous speech data of three age groups. This paper focuses on the **experiential** subcategory of the perfect, which is early in the expansion in Rioplatense, showing variation at 51% vs. 49% use in CR function in the oldest sources, decreasing to 95% vs. 5% in young/adolescent speakers, similar to distributions in Paraguayan and Uruguayan (Henderson 2010) and Mexican Spanish (Howe 2013). It is argued that this subfunction provides the tipping point of the change, and that early expansion here generated stems from the semantic properties of the experiential; it is tense-like and has an abstract CR component (Lindstedt 2000), and is thus more compatible with the original semantics of the preterit category (Croft 2012:143). The experiential is argued to be the locus of the micro-step expansion (Traugott & Trousdale 2010) of the preterit, which occurs through a two-step process; 1) the preterit is used to express experientiality as the specific time frame is assumed to form part of the semantics of the construction, and becomes semantitized through a process of pragmatic strengthening (Traugott & Dasher 2002), and 2) the hearer interprets it as expressing current relevance due to the lack of specific time frame in the new use of Preterit (Dahl & Hedin 2000).

The experiential function is thus characterized by a functionally triggered variation in its expression (or *pool of morphosyntactic variation*; Croft 2010). The initial co-occurrence of the two forms (preterit and perfect) to express experientiality in the oldest sources makes the preterit as likely to expand as the perfect (the latter’s expansion presumed predictable and regular in *The Perfective Path*, Bybee et al. 1994). The findings thus present evidence in support of a frequency-driven expansion due to variation (Croft 2010), against predictability and directionality based on the perfect’s source meaning (Norde 2009). Rather, it is shown that semantic and functional factors may trigger both the expansion of a preterit (as in Rioplatense), and the expansion of a perfect (as in French).

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## A phonologically-driven account of syntactic phenomena: the case of *Negative Concord* in Romance

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As is well known, the Obligatory Contour Principle (Leben 1973, Goldsmith 1979, McCarthy 1986, Odden (1986), Myers 1997, etc.) states that "At the melodic level, adjacent identical elements are prohibited". The OCP aims at accounting for a wide variety of dissimilatory patterns, a phenomenon which has attracted the interest of linguists at least since the pioneering dissertation of Maurice Grammont. On the other hand, the effect of dissimilatory processes on Morphology or Syntax has been much less investigated, with the notable exception of such works as Perlmutter (1971), Stemberger (1981), Menn & MacWhinney (1983), Yip (1998), Plag (1998), Neeleman & van de Koot (2006), etc. In this talk we would like to revisit some Romance syntactic phenomena showing that they may be at least partly phonology-driven. A particularly striking instance of such a phonology-based account is Negative Concord. Negative Concord has been a challenging topic since the beginnings of Generative Syntax. An OCP-based account of Negative Concord has recently been proposed by Manzini, who rightly points out that some notion of Identity is involved in such a phenomenon. We shall not discuss the syntactic aspects of Minimality and Locality touched upon by Manzini. Rather, we shall mainly concentrate on the phonological side of OCP and we'll show that it has strong relevance on the Phonetic Form of the syntactic spell-out of Negative Concord. Italian and Spanish are said to be non-strict Negative Concord Languages in the sense that Negative Words in preverbal position cannot co-occur with sentential negation: as illustrated in (1), the only option is to have the sentential Negative markers *non* and *no* in preverbal position and the negative word in postverbal position, thus allowing Negative Concord interpretation:

- (1)
- a. Nessuno è venuto ad aiutarmi [nes"suno E v"venuto ad aju"tarmi]  
'No one came to help me'
- b. Ninguno vino a ayudarme [niŋ"guno "βino a aju"ðarme]  
'No one came to help me'

We shall argue that the ban on sequences like Italian \**Nessuno non è venuto ad aiutarmi* [nes"suno non E v"venuto ad aju"tarmi] or Spanish \**Ninguno no vino a ayudarme* [niŋ"guno no "βino a aju"ðarme] is not just a matter of syntax: rather, it is a matter of Nasal Dissimilation, of which many other instances can be offered crosslinguistically. Of course the result of dissimilation may differ according the varieties taken into account: it may be deletion under haplology, non-realization or suppletion. Evidence for such an analysis is provided by the very shape of Negative Indefinites in other Romances languages: Aragonese and Andalusian *dengun*, Catalan *dingun*, Aranesse *degun*, Provençal *digun*, Gascon *digus* 'no-one' all are the dissimilated outcome of \**nec unu*.

It will be shown that other syntactic phenomena such as Negative Imperative in Romance rely on the same fundamental Principle, thus providing evidence for the centrality of OCP in Grammar.

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## Sound denoting nominalizations

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**1. Minor interpretation** Since Grimshaw (1990) most studies have focussed on the major interpretations of nominalizations (NZNs) namely the eventive and result meanings and, to a lesser extent, the means e.g. *the heating is broken* (Fradin 2012) and stative meanings e.g. *ell fovos* ‘fear’ (Alexiadou 2011). Other interpretations such as the agentive-collective (*administration*), the locative e.g. *ita entrata* ‘entrance’, and the manner interpretation e.g. *ita andatura* ‘gait’ can be dubbed minor by contrast, both because they are less frequent and because most of them can be seen as sense extension of the eventive meaning (Melloni 2011: 120-130). NZNs capable of denoting an event and a sound in addition e.g. *fra lapement* ‘lapping’ could be another instance of minor interpretation. The aim of this talk is precisely to tackle this issue and to see whether their meaning ought to be accounted for through (pragmatic) sense extension. Most data are taken from French.

**2. Sound emission verbs** Levin (Levin 1993) and subsequent works (Goldberg 1995; Roşca 2012; Levin 2000; Lupsa 2001) have shown that these Vs can head several constructions in satellite-framed languages (Talmy 2000): causative-inchoative alternation (1) *I buzzed the bell / The bell buzzed*, resultative construction (2) *She snapped her briefcase open*, intransitive directional (3) *Coins clanked into the box*, locative alternation (4) *Birds sang in the trees / The trees sang with birds*. However far less constructions are observed in verb-framed languages. French for instance allows only the basic intransitive construction, the V of saying construction (5) NP0 V NP1[content] e.g. *Le public glapissait des insultes* ‘The audience was yelping insults’ and the cause construction (6) NP0 V PP1[de], where PP1 gives the cause of the event e.g. *Elle hurle de rage* ‘She screams from anger’. In the related NZNs, only the cause argument can be kept e.g. (7) *\*?Un glapissement d’insultes* ‘an insults yelping’, (8) *Un hurlement de rage* ‘a scream from anger’.

For these verbs, I propose a finer-grained classification than the one of (Levin & Rappaport Hovav 1995), taking advantage of insights in (Lupsa 2001) and (Ma & Mc Kevitt 2005). The first distinction is between (ia) entity vs. (ib) event-based sounds. In (ia), we have an entity (artefact e.g. clock, animal, human being, natural phenomenon e.g. waterfall) to which we associate the sound it is the source of. In (ib), we have a sound verb classified in function of the event’s type it denotes: impact e.g. *bump*, contact e.g. *strike, sizzle*, breaking e.g. *crack*, bodily event e.g. *hiccup*, emission of matter e.g. *gush out*. I further distinguish between sources which are (iia) inherent vs. (iib) non-inherent. Additional distinctions are made for sounds related to human beings.

Formula (9) semantically characterizes sound emission verbs: (9)  $\lambda x. \lambda e. \exists y. \text{emit}'(x, y, e) \wedge \text{sound}'(y)$ , where a sound is something analyzable according to the dimensions of frequency, amplitude, timbre, duration, timing (plus affective properties). These Vs can be subdivided into two groups. The first (iii) includes Vs inherently denoting a sound emission, among which those expressing typical cries (*yelp*) or sounds (*sizzle*) are the most numerous e.g. (10) *fra GLAPIR* ‘yelp’  $\lambda x. \lambda e. \exists y. \text{emit}'(x, y, e) \wedge \text{cry}'(y) \wedge \text{short}'(y) \wedge \text{sharp}'(y) \wedge \text{fox}'(x)$ . The second (iv) includes Vs denoting either an event e.g. (11a) *YAWN<sub>EV</sub>*  $\lambda x. \lambda e_i. \exists y. \text{open}'(x, y, e_i) \wedge \text{one's\_mouth}'(y) \dots$ , or the sound emission causally linked with the event in question, where both events constitute a unique spatio-temporal eventuality (Croft 1991; Lupsa 2001) e.g. (11b) *YAWN<sub>SND</sub>*  $\lambda x. \lambda e_j. \exists e_i. \text{open}'(x, y, e_i) \wedge \text{one's\_mouth}'(y) \dots \wedge \text{CAUSE}(e_i, e_j) \wedge \text{emit}'(x, w, e_j) \wedge \text{sound}'(w)$ .

**3. Sound denoting NZNs** The semantics of the nouns derived from the just mentioned type of Vs straightforwardly follows from formula (9). NZNs based on Vs of the first group denote a sound as GLAPISSEMENT (12)  $\lambda y. \lambda e. \exists e. \text{emit}'(x, y, e) \wedge \text{cry}'(y) \wedge \text{short}'(y) \wedge \text{sharp}'(y) \wedge \text{fox}'(x)$  viz. the short and sharp (type of) cry emitted by foxes. Expectedly, NZNs based on Vs of the second group, e.g. *fra BÂILLEMENT* ‘yawning’, will have both an action (= ‘action of yawning’) and a sound meaning (‘sound emitted through the action of yawning’). But a third situation has been observed (many examples on the Web), where the base verb denotes an event and the derived NZN both an event and an emitted sound e.g. *fra froter* ‘to rub’ / *frottement* ‘rub’ or even an event and only an emitted sound e.g.

fra *trotter* ‘to scamper’ / *trottement* ‘patter’. This situation comes across with base verbs belonging to the classes mentioned in (ib) §2. I would claim that this situation can be seen as the actualisation of a potentiality : the base verb in question denotes an event which potentially may yield a sound, and this causal link is mobilized whenever the NZN occurs in a linguistic context which supports this reading. The following example illustrates this case: (13) (...) *sauf le piaffement d’une bête et le doux frottement des chaînes (...) il n’y avait plus aucun bruit.* (TLF s.v. *frottement*) ‘Except an animal’s pawing the ground and the mild rub of chains (...) there was no more noise’. The fact that several NZNs derived from these Vs already have a lexicalized sound interpretation may strengthen this tendency (lexical family effect). If such an account can be corroborated, it would make unnecessary to say that the minor interpretation in question results from a pragmatic sense extension, contrary to what happens for the majority of other minor interpretations.

It should be noted that a symmetrical situation to the one just described exists for NZNs of the first type i.e. those derived from verbs inherently denoting a sound emission (type (iii)). These NZNS normally denote a sound and never an event, contrary to what is the case with standard nominalizations e.g. fra (14) *Le glapissement enroué des renards* ‘the hoarse yelp of foxes’ denotes a cry, not a yelping event. Nevertheless, when the NZN heads a NP subject of Vs such as *take place*, *occur*, it gets an eventive reading, which means that its semantics selects the event variable (*e* instead of *y*): (15) *Le glapissement se produit toutes les 10 mn* ‘the yelp occurs every 10 mn’.

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## Adnominal and pronominal gender assignment to English loan words in Belgian Dutch

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Recent studies on gender assignment in Dutch have shown that the gender of pronouns can be based on referential properties rather than on the grammatical gender of the antecedent (Audring 2006; De Vogelaer 2012; De Vogelaer & De Sutter 2011; De Vos & De Vogelaer 2011). Since grammatical gender is generally least entrenched for recent borrowings and *ad-hoc* loans, changes in the pronominal gender can be expected to be particularly visible with these types of nouns. However, studies on lexical borrowing, which typically rely on dictionary data, have so far focused exclusively on the *adnominal* gender of *established* loanwords (Berteloot & Van der Sijs 2002: 47-48; Geerts 1996; Hamans 2009).

This paper aims to complement these studies by inquiring into the factors that underlie both adnominal and pronominal gender assignment to unestablished (“ad-hoc”) English loanwords in Dutch. Also, we aim to introduce several methodological innovations to existing work on the gender of loans – first, in designing an experimental set-up instead of relying on dictionary data; second, in conducting multifactorial inferential statistical analyses instead of relying on basic descriptive statistics.

More specifically, we subjected 46 Belgian Dutch students to a forced choice task in which definite articles and personal pronouns were elicited for 180 sentences. Mixed effects regression analyses were conducted to verify the effect of the characteristics of the stimulus nouns (e.g. the gender of their Dutch translation) and of the social background of the respondents (e.g. the education level of their parents) on the lexical gender assigned to the English nouns and on the gender of the personal pronouns agreeing with these nouns.

The results first reveal that, similar to what was previously found for established loanwords, the common definite article *de* should be considered the default article for *ad-hoc* loans. Neuter articles occur only rarely and are – if attested – typically influenced by the gender of the Dutch cognate of the loanword. Second, our study shows that formal clues, such as suffixes, have been given too much weight in previous analyses: in our multifactorial set-up, they do not reach statistical significance. Third, as concerns pronominal gender, we indeed find support for the existence of semantic agreement in Dutch. However, its importance needs to be nuanced: the definite article has a stronger impact on pronominal gender assignment than semantic agreement.

In sum, widening the scope from established loanwords to *ad-hoc* loans and introducing an experimental set-up and inferential statistical analyses to the study of gender assignment has allowed us to attenuate existing results and to reveal new patterns of pronominal and adnominal gender assignment in Dutch.

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## Descriptive and diachronic issues of the Old Irish verbal complex

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### 1. Relevance of the OIr. verbal complex

The Old Irish (Indo-European, Celtic, 8th-9th centuries) V1 verbal complex is a good example of ‘complex verbal morphology’ (with a cpw value, see Bickel & Nichols 2011, of 5 or 6), which has a clear diachronic interest due to its Indo-European origin.

The purpose of this presentation is to offer an overview of the structure and some general diachronic trends of the OIr. verbal complex.

### 2. Some basic descriptive facts

The OIr. verbal complex involves a theoretical template with seven slots:

1	2	3	4	5	6	7
Particle(s) preverb a	Pronominal affix	Preverb(s) (a), b, c, d, e	Verbal stem	Verbal ending	Pronominal affix	<i>Nota augens</i>

The grammatical categories expressed in this structure are those of (a)-(h), and the formal devices employed to express them are indicated in the shaded boxes of the following table: (a) Aspect: imperfective, perfective; (b) Tense: present, imperfect, future, preterite; (c) Diathesis: active, passive; (d) Mood: indicative, subjunctive; (e) Number: singular, plural; (f) Person: 1st, 2nd, 3rd person (subject and object); (g) Clause types: declarative, relative, wh-interrogative, polar interrogative, responsive, imperative; (h) Polarity: positive, negative.

		a	b	c	d	e	f	g	h
i	endings (slot 5)								
ii	morphophonemic mutations (slots 3 and 4)								
iii	affixed pronouns (slots 2 and 6)								
iv	preverbal particles (slots 1 and 3)								
v	deuterotonic (slots 1-4) / prototonic (slots 3-4)								
vi	stem modification (slot 4)								
vi	stem suppletion (slot 4)								
i									

Some attested OIr. verbal complexes analysed according to the above theoretical template are the following:

	1	2	3	4	5	6	7
<i>nád imdibthe</i> ‘who is not circumcised’	nad-		<sup>(L)</sup> -imm(e)-di-	-b(i)-	-the		
<i>nimtharberar</i> ‘I am not brought under’	nī-	-m-	<sup>L</sup> -t(o)-ar(e)-	-ber-	-ar		
<i>nímunaccammar</i> ‘we had not seen one another’	nī-(i)mm(e)-	-n-	-ad-	-ca-	-mmar		
<i>nisnulemairbfe</i> ‘you will not wholly slay them’	nī-	-s-	<sup>N</sup> -ule-	-mairbf-	-e		
<i>doforbadsí</i> [sic] ‘you (pl.) have been cut off’	do-	-b-	-for-	-bad			-sí

### 3. Diachronic observations

Many elements involved in the synthetic expression (in the strict sense of Bickel and Nichols 2011: 1#) of the OIr. verbal complex can uncontroversally be compared to elements appearing in other IE languages and can therefore be traced back to the parent language. This provides a ground firm enough to put forward hypotheses regarding the development leading to that morphological structure. The following is a brief list of changes, which is far from being exhaustive:

**Univerbation:** the negative relative pretonic particle *nad-* includes the negative particle *\*ne* and the ancient connective particle *\*de*; the 3pl. affixal pronoun *-s-* of *nisnulemairbfe* can be explained from *\*sos* < *\*sōs* < *\*sons*. Both *\*de* and *\*sons* were originally (Wackernagel) clitics, and the change leading to their ‘synthetization’ is the univerbation process as explained by Watkins (1963).

**Grammaticalization:** to mention but two cases of grammaticalization, the preverb *imm(e)-* ‘around’ (cf. Greek *amphí*, German *um*) can also be employed to express reciprocity (as in *nímunaccammar*); the connective *\*de* becomes a relative clause marker.

**Functional extension:** the pronominal affix *-m-* in *nimtharberar* comes from the clitic 1sg. object marker *\*me*, and has been employed also as the (obligatory) marker to express the 1sg. subject of a passive verb.

**Finite verb conversion:** the PIE PPP in *\*-to-* (e.g. Latin *amatus*) appears in OIr. as the preterite passive stem (*\*-bītos* > *-bad* in *do-(b)-for-bad-sí*). I assume a general change in which the crucial step has been a process of expansion (in the specific sense of Heine 2009, i.e., a non-finite participle becomes first a relative verb and, hence, takes the remaining clause type markers).

### 4. Concluding remarks

The previous selection of changes attempts to reflect the various processes which may converge and even cooperate in the creation of ‘complex verbal morphology’, a process in which no areal influence can be ascertained.

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## A short tour through the minefield of linguistic terminology

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More often than might be imagined and certainly more often than would be desired, linguistic terms turn out to be ambiguous. One linguist understands the term X to mean a certain phenomenon and uses it in this way, while another applies the term (we should rather say ‘label’ from now on) to some different phenomenon. Thus, a single label has not only varying definitions but also considerably varying extensions. When two (or more) meanings of a terminological label are in circulation, this leads to confusion, misunderstandings and misinterpretations, especially that the fact of the label being polysemous is usually hardly acknowledged. The problem is particularly acute in research work that has to refer to works relating to different languages and written from different theoretical viewpoints.

Problems of this kind have been observed and discussed with reference to a number of terminological labels in linguistics, including some profoundly basic (cf. Dixon and Aikhenvald 2002, Comrie 1989: 104-106). The paper refers critiques of some of these labels and shows different positions on the terminological problems taken by scholars. These include for example complete rejection of a given label (Haspelmath 2006, Dixon 2010: 231) or denial of one of the label’s meanings as a valid phenomenon in language (Osborne and Gross 2011). The paper also introduces a further set of similarly problematic labels and discusses their terminological complications. Among the labels included in the discussion are: government, clitic (Anderson 2005), ergative (Pullum 1991: 147-158), agglutination (Haspelmath 2009) and markedness. The labels relate to various fields of linguistics, syntax having the strongest representation (reflecting the author’s research experience). Still, the chosen labels are only exemplifications of a general terminological problem.

Building on the survey of the selected labels, the synthetic part of the paper offers generalisations of three kinds. First, it deals with mechanisms that seem to explain and account for the observed terminological chaos. Linguistic terminology proves prone to well-described semantic phenomena (as metonymy) that affect vocabulary in general. Then, there follows a detailed description of the consequences of the discussed problem for linguistics and linguists. Lastly, the focus moves to possible action that can be taken to alleviate the problem.

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## A comparative study of selected Polish aspect and Aktionsart prefixes in a parallel Polish-Swedish corpus of EU-documents

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### Preliminaries

Verb prefixes in Polish can express a change of Aktionsart (understood as the spatiotemporal and/or telic, and/or causal structure of the event), or a change of aspect only, or they mark aspect and Aktionsart shift at the same time. For example, the Polish verb *kończyć* (‘finish’, imperfective) forms its perfective variants (*skończyć*, *ukończyć*, *dokończyć*) by different prefixes, the two first marking aspect distinction, the last one differentiating Aktionsart in addition to the aspectual change.

Most morphologically simple Polish verbs are imperfective. Perfective variants are formed by prefixes or stem changes, or both. There exists also a possibility of creating marked (derived) imperfectives: *pisać* (‘write’, imp.) → **napisać** (‘write’, perf.) vs. *pisać* (‘write’, imp.) → **dopisać** (perf. + Aktionsart change: ‘write something more’) → **dopisywać** (derived imp.)

## Research Questions

- Our investigation is aimed at the following questions:
- Does a large parallel corpus reflect the difference between genuine aspectual pairs and pairs that involve Aktionsart shift (i.e. are there different patterns of translation equivalents for verb pairs with aspectual change only vs. for verb pairs with prefixes which add other than aspectual meaning?)
- How different is the basic aspectual pair from the one with derived imperfective?

Is there a significant correspondence between certain Polish verbal prefixes and Swedish particles/prepositions or prefixes?

## Method

We use translations of European Union documents, publicly available as parallel corpora Acquis in a corpus tool Culler (<http://nla.se/culler>). Our starting point is automatic extraction of verbs with the prefix *u-*. This prefix has been chosen because of its grammatical and semantic opaqueness: it expresses pure aspectual distinction in combination with many verbal stems, but there are cases where the same prefix adds certain semantic shades (*trzymać* 'hold' – *utrzymać* 'keep'). Furthermore, the same prefix is used for forming perfective verbs from adjectives and nouns (*możliwy* 'possible' → *umożliwić* 'enable').

The computer-aided verb selection is followed by a manual one, in which non-decomposable verbs are left out. The results of this selection are consulted with native speakers. For further scrutiny, we retain:

1. Verb pairs in which derived imperfective is not possible, as *czynić* - *uczynić* - \**uczyniać*)
2. Verb pairs where the derived imperfective is deemed by native speakers as odd, e.g. *motywować* - *umotywić* - ??*umotywowywać*; *regulować* *uregulować* - ??*uregulowywać*)
3. Verb pairs where native speakers judge the basic pair (simple – *u*+simple) as most natural. The derived imperfective is according to the native speaker's intuition acceptable, but is perceived as almost synonymous with the simple form (*chronić* – *uchronić* – *uchraniać*; *stanović* – *ustanović* – *ustanawiać*).

The selected simple verbs identified in this way (*czynić*, *tworzyć*, *stanović* etc.) are then checked with respect to their ability of forming perfective derivations with prefixes that are homonymous to prepositions; these prefixes are assumed to be more transparent than the prefix *-u* (*w-* 'in', *do-* 'to', *prze-* 'through'). Equivalent Polish-Swedish patterns extracted from the parallel corpus, connected to the verb groups enumerated above (1-3) as well as to their Aktionsart and imperfective derivations contribute to answers to our questions.

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## Spreading the fact: factivity and the diachrony of appositive clauses with *the fact*

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Diachronic developments in the English system of clausal complementation have been shown to be an important explanatory factor for the sometimes peculiar synchronic distribution of different complement types with different types of predicates. For instance, the clause types that Kiparsky and Kiparsky (1970) proposed as possible (e.g. (1a-b)) or impossible (e.g. (1c)) alternates of factive complements are themselves subject to diachronic shifts and competition and hence not always consistent recognition criteria (Author to appear).

Not all variants, however, have received as much attention in diachronic studies on complementation. Less well-studied from a diachronic perspective is for instance the alternation of factive clauses (1a-b) with clauses in apposition to a "shell noun" (Schmid 2000) such as *fact* (2a-b), which signals the nominal status of the complement clause and is commonly cited as a test to determine whether a clause is factive, i.e. presupposed true by the speaker (Kiparsky&Kiparsky 1970).

- (1) a. White feminist friends would not even accept *my being black!*  
 b. White feminist friends would not even accept *that I was Black!*  
 c. \*White feminist friends would not even accept *me to be Black!*
- (2) a. White feminist friends would not even accept *the fact of my being black!*  
 b. White feminist friends would not even accept *the fact that I was Black!* (BNC)

Still, appositive clauses with *the fact* also occur with predicates such as *believe* (3) which are typically considered to be non-factive, and the possibility of substituting one construction for the other is contextually constrained, as shown

by Davise (2003). Appositive clauses with *the fact that* can for example not be replaced by a simple *that*-clause when they function as object of a preposition (4a) or when coordinated with another NP (4b).

(3) I have been told, and believe the fact, that houses, in Cheltenham, will now sell for only just about one-third as much as the same would have sold for only in last October. (CLMET, 1822-26)

- (4) a. Notwithstanding the fact that he was appointed (in most cases) by the Crown, (...), the colonies generally had things their own way and enjoyed a political freedom (CLMET, 1775)  
 b. but it is just the difficulty of finding this narrow pass, so far from land, and the fact that there is a deep though narrow channel north of Prince of Wales Island, that has caused it to be abandoned. (CLMET, 1768-71)

From a descriptive point of view, this paper sets out to document the distribution and spread of appositive clauses with *the fact* by means of exhaustive extractions for Late Modern English, from the earliest occurrences in contexts that strictly require a clause with a nominal head, as in (4), to include contexts in which they alternate with simple *that*-clauses, as in (1)-(2). Particular attention will be given to, besides the grammatical function and possibility of alternation, the semantic type of predicate the appositive clauses combine with and the relation to superficially similar structures involving object or subject extraposition. From a theoretical point of view, I will re-evaluate the status of the appositive construction as a test to establish factivity.

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## Topic, focus and V2 in Modern Eastern Armenian

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**Research questions:** In this work, we consider word order in Modern Eastern Armenian, henceforth MEA. We show that MEA resorts to V2 to mark focus, moving the clitic auxiliary to the second (Wackernagel) position – cf. Anderson (1993) – and that in some cases V3 is also available. On the basis of reconstruction data, we argue that V3 can only occur when the first constituent is not moved, but base-generated as a topic in the left periphery. The goal is twofold: on one hand we aim at achieving a better understanding of MEA syntax, on the other, a deeper insight into the properties of the left periphery of the clause.

**Method:** The cartographic approach (cf. Rizzi 1997, Cinque 1999 and subsequent works) successfully predicts word order in MEA. Our analysis also supports Benincà and Poletto's (2004) view, according to which the (contrastive) focus position in the left periphery defines the threshold for syntactic movement.

**Data and results:** In MEA all verbal forms, with the exception of the aorist, are periphrastic: (clitic) auxiliary + participle. We consider here only sentences with definite objects. Indefinites exhibit different properties and distribution, which cannot be discussed in this work (see Drum-Tragut, 2009; Tamrazian, 1994):

- (1) Sirane kerel é salore  
 Siran eaten-has plum  
 (2) Sirane salore kerel é  
 Siran plum eaten-has  
 'Siran ate the plum'

In these examples, the auxiliary is cliticized on the verb and nothing can appear in between. The two sentences do not have the same interpretation. In (2) the participle is (slightly) focused, subject and object are both topics. In (1)

*the plum* is an informational focus. Hence (1) is a felicitous answer to the question *what did Siran do?* Whereas (2) is a felicitous answer to the question *what did Siran do to the plum?* An analysis will be provided for these orders.

The auxiliary can precede the verb and cliticize on any phrase:

- (3) SIRANN é kerel salore  
Siran-has eaten plum  
(4) SALORN é Sirane kerel  
plum-has Siran eaten  
'Siran ate the plum'

In (3)-(4) the phrase preceding the auxiliary is interpreted as a focus. These sentences are derived via movement of the auxiliary in the (contrastive) Focus position in the left periphery, obligatorily accompanied by movement of a phrase in its spec, a V2 process.

Phrases preceding focus are interpreted as topics. Following a long tradition of studies, we show that topics on the left of Focus are base generated (Cinque 1990). The evidence from reconstruction effects, concerning V3 phenomena, takes into account the interpretation of the possessive anaphor *ir*, in *complementary distribution* with the pronoun *nra*, in the following case obligatorily taking reference outside the sentence:

- (5) Nra hore ANNAN é barevel.  
His father ANNA-has greeted  
'ANNA greeted his father'  
(6) \*Ir hore ANNAN é barevel.  
Self's father ANNA-has greeted  
'ANNA greeted self's father'

In both cases *Anna* is a focus, as expected. The impossibility of the anaphor in (6) shows that it cannot reconstruct, being base generated, and consequently cannot satisfy its binding requirements. The complete paradigm will be presented and discussed.

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## 'Uncertain visual' as an evidential category in Yurakaré: A comparative perspective

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This paper proposes that Yurakaré (isolate, central Bolivia) has an emerging evidential category that is best called 'uncertain visual', indicating that visual evidence leads the speaker to believe that some state of affairs may be the case without being completely sure about it. Taking a comparative perspective, it is demonstrated that a similar category can be found in a variety of languages, and that it often follows similar paths of diachronic development. In Yurakaré, the 'uncertain visual' category has developed as a second reading of the 'simulative' suffix *-shi*. In its basic use, this suffix functions as a derivational marker on nouns, expressing that a referent is similar to or looks like the entity denoted by the noun to which the suffix is attached. Usually, it is used when the speaker wants to express that there is no actual identity between the compared entities, like in example 0:

- (1) *lëmmuy pëpë-shama ollo i-bürrü tejte-shi-jti-ø*  
just old-DCSD corpulent PV-dress grandmother-SML-HAB-3SG  
'Only because she wears old and wide dresses she looks like a grandmother.'

In example 0, the speaker expresses that a certain woman looks old even though she is not old in reality. In addition to this 'simulative' use, *-sh* can occur with a more evidential-like interpretation, indicating that the speaker has visual

evidence that makes him or her believe the expressed proposition to be possibly true, without being completely certain about it. This use is exemplified in 0:

- (2) *achu ineli sibbë=y li-tütü-shi-ø=se*  
 like\_that inside house=LOC V.LOC-sit/be-UV-3SG=PSUP  
 ‘It looks like he is inside a house.’

Unlike example 0, where there is similarity but not identity between the two compared entities, example 0 expresses that the speaker considers the expressed proposition to be possibly true. In this paper, a path of semantic change from ‘similitive’ to ‘uncertain visual’ is proposed on the basis of an investigation of the uses of *-shi* in a conversational corpus of around ten hours length. It is argued that the change from known falsity to possible truth is an important development in this process. A cross-linguistic comparison reveals that a category similar to the Yurakaré ‘uncertain visual’ occurs in other languages, for example in Makah (Jacobsen 1986) and German (Diewald & Smirnova 2010), and that it frequently follows similar paths of development. This finding supports the path of semantic change from ‘appearance’ to ‘uncertain visual’ proposed by Anderson (1986: 284) in his semantic map of evidentiality. It is concluded that the ‘uncertain visual’ evidential category may deserve more attention in cross-linguistic research than it has received so far.

### Abbreviations

DCSD ‘deceased’, HAB ‘habitual’, LOC ‘locative’, PSUP ‘presupposition’, PV ‘possessive verbalizer’, SG ‘singular’, SML ‘similitive’, UV ‘uncertain visual’, V ‘verbal’

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## On the use of *de* with adnominal locative phrases in Romanian

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Romanian adnominal locative PPs (including here both spatial and temporal location) must be preceded by an introductory element *de* ‘of’ – e.g. *cartea \*(de) pe masă* ‘the book on the table’. *De* is absent only in certain event nominals (complex event nominalizations in the sense of Grimshaw (1990), see Cornilescu 2001) and when the locative PP is (quasi)-argumental. Assuming that complex event nominalizations involve verbal projections (v, maybe Asp) embedded under a nominalizing head (Borer 1994, Fu, Roeper & Borer 2001, Alexiadou 2001, Cornilescu 2001), the data support the following generalization:

- (1) A locative modifier inside a nominal projection must be marked by *de*

Nevertheless, there are cases where what looks like a locative modifier of a non-eventive noun lacks *de*:

- (i) with non-specific objects of verbs related to possession (e.g. *Ion vrea / caută / a cumpărat / are o casă la munte* ‘Ion wants/ seeks / bought / has a house in the mountains’);  
 (ii) with generic DPs (*Casele la București sunt scumpe* ‘Houses in Bucharest are expensive’).

I will argue that these constructions do not contradict (1), because the PP is DP-external. This immediately explains the necessary non-specific interpretation: the situation variable of the locative predication cannot bound DP-internally and therefore is bound by operators in the clause (the modal introduced by *want/seek* with those verbs in (i) that involve modality; the generic operator in (ii)).

I propose that in (i) the PP is adjoined to a projection denoting a possession predication. With *want* and *buy*, this represents the desired/result state. I take the Romanian data as evidence in favor of a syntactic structure that reflects event decomposition, as proposed by Ramchand (2008) a.o. (the projection to which these PPs attach can be identified with Ramchand’s (2008) ResP and Pykkänen’s (2002) low ApplP).

For (ii), I propose that the locative is a small-clause whose subject is coindexed with the subject of the sentence and which is attached as a specifier of the GEN operator, in what constitutes its restriction.  
A further fact that I will address is that the use of *de* in (i) triggers a specificity effect

(2) Ion vrea o casă de la munte

Ion wants a house of at mountain

‘Ion wants a certain house in the mountains’.

I propose that *de* saturates the situation argument of the locative by a free variable with a deictic interpretation. I analyze *de* as a head introducing a reduced relative. The necessary use of *de* indicates that locatives differ from other property denoting expressions (such as adjectives) by not being able to combine with the N(P) by Heim & Kratzer’s (1998) predicate modification, as direct modifiers.

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## Mutual intelligibility in the Slavic language area

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Receptive multilingualism (RM) is a way of communication where speakers interact by each using their respective native languages. If the languages are closely related, receptive multilingualism is a viable alternative to using English as a lingua franca, as demonstrated in Scandinavia, with speakers of Danish, Swedish and Norwegian (Maurud, 1976; Bø 1978; Lundin and Zola Christensen, 2001).

A necessary condition for successful communication using RM is a reasonable level of mutual intelligibility between the languages in question. However, not much is known about the level of mutual intelligibility between Slavic languages. In most of literature, the focus is on Czech and Slovak (Budovičová, 1987a, Nábělková, 2007), and the effect of the breakup of Czechoslovakia on mutual intelligibility between the two languages, whereas there is only anecdotal evidence available for other Slavic languages. Therefore, we decided to fill that gap by investigating how intelligible different Slavic languages (Czech, Slovak, Polish, Slovene, Croatian, Bulgarian) are and what factors influence their intelligibility in both the written and the spoken mode.

The level of intelligibility was measured by a cloze test conducted online: the participants listened to a text in a closely related language where some of the words have been omitted or replaced by a beep and their task was to place them back into correct gaps. A comparable version was created for written language, in which participants had to place written words into gaps in a text. More than 2000 young adults (18 to 30 years old) took part in the test and each participant got one test language, for example a Polish speaker could get a cloze test in Croatian.

Our findings show that intelligibility in the Slavic language area has a huge range, from about 15% in the least intelligible combinations to over 99% in the most intelligible ones. If we focus on individual languages, Slovak was the most intelligible and Bulgarian the least intelligible. The biggest asymmetry in intelligibility was established between Slovene and Croatian, where speakers of Slovenian understand Croatian better than vice versa. As expected, the participants performed better on written than on spoken tasks and the genetic division into West Slavic and South Slavic languages is neatly reflected in the intelligibility results.

In conclusion, this paper sheds new light on mutual intelligibility in the Slavic language area by examining it empirically. Therefore, the results have implications not only for the field of Slavic language teaching but also for translation studies and policy making within the Slavic language area.

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## The production and perception of speech rhythm in Polish learners of English

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Speech rhythm research has been focused around the distinction between stress-timed and syllable-timed languages for decades with English traditionally classified as a stress-timed language (Pike 1945, Abercrombie 1967). The rhythmic status of Polish, on the other hand, is not so obvious as no consensus among phoneticians and phonologists has been reached with regard to its affiliation with stress- or syllable-timed class of languages (e.g. Hayes & Puppel 1985). According to Rubach & Booij (1985), Polish is a stress-timed language, while Avery & Ehrlich (1992) claim that it is a syllable-timed language. More recent investigations analysing Polish rhythmic structure tend to label it a mixed-type or intermediate language (Dauer 1987, Nespors 1990, Ramus et al. 1999, White & Mattys 2007), due to the fact that its features do not match those of typically stress- or syllable-timed languages. Namely, Polish presents a large variety of syllable types and great syllable complexity, which places it among stress-timed languages. However, it exhibits no phonological vowel reduction at normal speech rates, a characteristic of syllable-timed languages.

Assuming that Polish reveals different patterns of rhythmic organisation than the ones represented in English and that general proficiency of non-native speakers of English is a key factor contributing to the successful production of rhythmic patterns in English (Waniek-Klimczak 2009, Roach 2002), the present paper investigates how the results of rhythm measures: %V,  $\Delta V$ ,  $\Delta C$  (Ramus et al. 1999), VarcoV, VarcoC (Dellwo & Wagner 2003, White & Mattys 2007) and nPVI (Grabe & Low 2002) are reflected in perception.

Research question: Do near-native rhythm metric scores correlate with the perception of fluent speech?

The project adopts an acoustic phonetics approach, attempting to describe rhythm in terms of temporal speech measures. The data used for the analysis come from 30 Polish first-year students of English at the University of Łódź recorded reading *The North Wind and the Sun*. Four phrases were extracted from the reading passage and segmented manually into vocalic and consonantal intervals with the help of Praat (version 5.0.29), mainly according to the criteria proposed by Grabe & Low (2002). The following rhythm measures were calculated: %V,  $\Delta V$ ,  $\Delta C$ , VarcoV, VarcoC and nPVI. The mean scores for all the four phrases were juxtaposed with the ratings of the overall impressionistic fluency/proficiency of the students' performance. There were two groups of raters: native speakers of English and Polish speakers of English (academic teachers), both assessing the same speech samples in an online questionnaire.

The results concerning the relation between rhythm measure scores and rated fluency are discussed from the perspective of acoustic phonetics and verified by statistical tests.

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## Exclamative complement insubordination in Spanish

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This paper focuses on the Spanish completive insubordinate constructions with exclamatory value. According to Evans (2007: 367) *insubordination* is defined as “the conventionalized main clause use of what, on prima facie grounds, appear to be formally subordinate clauses.” This formal pattern is especially productive in contemporary Spanish, and leads to formally and functionally distinct constructions. Those that have received most attention in the existing literature are the ones expressing imperative/desiderative modality (1) and discursive connection (2) (see Demonte and Fernández Soriano 2009, 2013; Etxepare 2008; Garrido 1998; Gras 2011, 2013; Pons 2003, among others).

- (1) *Que venga.*  
‘May s/he come.’ ‘S/he should come.’
- (2) A: *Tienes que llamar al banco.*  
B: *Que ya he llamado.*  
A: ‘You have to call the bank.’  
B: ‘[QUE] I have already called.’

However, there is a third functional area that has gone almost unnoticed in the Hispaniclinguistic literature. In different varieties of Spanish, *que*-initial sentences also receive an exclamative-evaluative interpretation. In Peninsular Spanish, the pattern <*que*+ subjunctive> expresses a negative evaluation of a state of affairs (3). Meanwhile, in Chilean Spanish the pattern <*que* + indicative> negatively assesses the degree of a property expressed in the predicate (4).

- (3) *¡Que tenga que vivir para ver semejante ingratitud!*  
‘That I should live to see such ingratitude!’
- (4) *¡Que son copiones! Nosotros lo habíamos hecho primero y ellos lo empiezan a hacer así.*  
‘How copycats they are! We had done it first and they start doing it like this.’

This paper aims to fill this gap, by examining complementizer-initial sentences with an exclamative-evaluative interpretation in spontaneous conversations in different varieties of Spanish.

From a descriptive point of view, we will outline the formal and interpretive features of these constructions. From a theoretical point of view, this paper will provide an answer for the following questions: (i) in what way can the constructions in (3) and (4) be considered instances of an exclamative sentence type?, (ii) what is the relationship between the concepts of evaluation and exclamation, (iii) to what extent can both constructions be legitimately considered insubordinate.

This paper is based on the analysis of data from spontaneous conversations. For Peninsular Spanish, we analyzed data from the Corpus Oral del Lenguaje Adolescente (COLA - Madrid) and the corpus of colloquial conversations from Valencia (Briz & Val.Es.Co. 2002). For Chilean Spanish, we analyzed the section of the COLA corpus from Santiago de Chile. In the analysis, the formal constraints of each construction, the type of meaning expressed and the interactional activities that speakers are engaged in while using *que*-sentences are taken into account.

The analysis suggests that both constructions differ not only in their meaning but also in the degree of insubordination. According to Evans’ historical trajectory of insubordinate types (2007: 370), Chilean constructions can be considered fully insubordinated since no elided material can be restored. The exclamatory semantics is tied to the whole construction and not to an elided predicate. On the other hand, Peninsular constructions are located in a previous stage of the insubordination process: they often co-occur with negative evaluative predicates (*Es una vergüenza* ‘It’s a shame’), which help determine the negative evaluation the construction expresses.

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## Transitivity in language contact: multiple variation in Erzya

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Transitive clause, one of the basic clause types and semantic structures in world's languages that has been extracted from multiple angles (Hopper & Thompson 1982, Kittilä 2002, Naess 2007), is less frequently mentioned as a category influenced by language contact. In Erzya Mordvin, an absolutive non-ergative language, transitivity is manifested both in verb conjugation and the case of object, which outlines an exceptionally complex network of morphosyntactic rules (Aranovich 2007, Keresztes 1999). It combines the alternation of the case of object, characteristic of the western Uralic languages (Denison 1957, Hakulinen & al. 2004: 881–899, Wickman 1955: 11–55), and the cross-reference of the person and number of both the subject and object in verb inflection, characteristic of eastern Uralic. Paradigmatically, nominal categories tend to avoid syncretism whereas portmanteau agreement suffixes of verbs often overlap and increase the morphosyntactic cumulation of individual forms.

In colloquial Erzya speech code-switching and shifts to Russian dominate at various levels. There are several domains that trigger the use of the major language instead of Erzya that, however, is grammatically resistant in the present-day situation in which bilingualism and language shift are widespread.

In this paper, we shall examine the constraints of the variation of Erzya transitive clause in the light of spoken variants including data from both native and second-language speakers. The variation of native Erzya speakers (NES) does not show any decrease of inflectional categories involved in the transitive clause despite of heavy foreign interference. Erzya second-language speakers (ESL) that have a Turkic or Slavic language as their first language, however, are repeatedly confronted with those elements of the Erzya transitive clause in which the morphosyntactic simplification eventually begins.

Our main hypothesis is that in different language contact situations and eroding speech communities the following dynamics affect the Erzya transitive clause:

1. In the speech of NES, transitive clauses reflect both areal variation and the adoption of a literary standard.
2. In the speech of NES, inflectional morphology is resistant in the constituents of a transitive clause, whereas only the increased use of pronouns may reflect contact-induced change in individual cases.
3. In the speech of ESL the inflection of both the object and verb is simplified to some extent, although speakers tend to provide them with some index to mark transitivity.
4. In the speech of ESL cross-reference of the person in verbal inflection decreases and increases the need to use pronouns.

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## Finding a point of convergence between quantitative and qualitative discourse analysis: adopting graph-based methods in critical discourse analysis

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It has been shown in the literature that methods associated with corpus linguistics can be effectively used in critical discourse analysis (Baker et al., 2008). Collocation and concordance analyses might be easily employed to direct qualitative analysis and point to general contexts of analyzed texts.

There is, however, a limitation to the extent of how simple statistical methods associated with corpus linguistics help identify common categories of representation of certain contexts, as these methods are based only on the relationship between collocates, and not between the collocates and the rest of the text. Thus, above mentioned methods do not give the whole representation of the structure of the analyzed narrative, limiting the potential area of convergence with the scope of the qualitative analysis. There is, however, a statistical method of corpus analysis, which takes into consideration the relationship between all elements of the analyzed text and might help direct the qualitative analysis by pointing out relevant contexts and visualizing the narrative structure. The method, called text network analysis (Paranyushkin, 2011) employs graph theory to reveal the narrative structure of a text by looking at how the words are positioned within the text. Text network analysis points out the most important elements of the text, but in comparison to frequency-based corpus analysis these elements do not necessarily have to be the most frequently occurring words, but rather the words which function as junctions for the meaning circulation. These elements might be easily used as a starting point for the critical discourse analysis.

That is why in this presentation we propose combining a graph-based method of text network analysis with critical discourse analysis in order to find a point of convergence between quantitative and qualitative methods of discourse analysis. In order to do that, we gathered two corpora of news articles covering the aftermath of the 2010 crash of Polish air force presidential plane in Smolensk from two influential Polish newspapers, *Gazeta Wyborcza* and *Nasz Dziennik*, consisting of c. 260,000 words, and performed both critical discourse analysis (CDA) and text network analysis (TNA). CDA included such discursive strategies as referential or nominalization strategies (including metaphors, metonymies and synecdoches), predication strategies (including evaluation and attribution of positive or negative traits to social actors, implicit or explicit), argumentation strategies (focusing on indentifying topoi, which justify negative or positive attributions of traits to social actors or events), discourse perspectivation or framing, and lastly, intensification and mitigation strategies. TNA included such statistical graph measures as betweenness centrality, and modularity, which helped identify the main concepts, around which the narrative was build.

The results of both methods have pointed to similar discursive interpretations, thus showing that TNA might be easily used not only as a simple statistical tool, but also as an automatic way of identifying crucial elements of a discourse that help direct the CDA. As such, this presentation suggests a framework for adopting graph-based methods in critical discourse analysis that has never been used before.

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## Modern English human impersonal pronouns in typological perspective

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Human impersonal pronouns have the function of introducing non-specific, often generic, participants, avoiding the identification of specific individuals (often the speaker him-/herself) for different reasons. In this paper, we will report on corpus-based research tracing changes in the distribution of impersonal uses of Modern English *one*, *you* and

*they* (cf. examples [1]-[3]), and relate our findings to the categories and patterns established in current typological research on impersonals (cf. Siewierska & Papastathi 2011; Gast & van der Auwera 2013).

- (1) Also when sleeping in woods **one** wakes very soon, and I woke when the dawn came through the chinks of the tent on to my face. [ARCHER, 1957maca.f8b]
- (2) **You** can't understand a thing the bloody man says. [ARCHER, 1973trev.f8b]
- (3) The workhouse where **they** put me. **They** beat you there like a drum. [ARCHER, 1979pomr.d8a]

There is substantial work on impersonal reference in Old, Middle and Early Modern English (cf. Fröhlich 1951; Meyer 1953; Jud-Schmid 1956; Rissanen 1997; Seoane 2000), and it is clear that the demise of the dedicated human impersonal pronoun *man* – comparable to specialized impersonal pronouns in French, German and Scandinavian languages – in late Middle English has led to some degree of reorganization (Jud-Schmid 1956; Los 2006). In order to find out more about the long-term consequences of this turning point, we have extracted all instances of *one*, *you* and *they* from the British English portion of the corpus ARCHER (*A Representative Corpus of Historical English Registers* 3.1) and manually coded them as impersonal or personal. In addition to information about registers and diachronic stages, more specific lexical and morphosyntactic features of the data points have been coded in order to explore changes in usage conditions. Results indicate that, whereas some patterns of distribution and the general availability of these forms for impersonal reference have been well-established for the entire period covered by the corpus (i.e. Modern English), changes regarding more specific aspects of use can be observed on the basis of statistical analyses. To give an example, the overall frequency of impersonal *one* and *you* has clearly risen after 1850, yet impersonal uses of *they* as a whole have not undergone significant frequency changes. At the same time, this pronoun was associated with different verbs and context types at different diachronic stages. In the 17<sup>th</sup> century, for instance, *say* and *write* occurred remarkably often with impersonal *they*, which ties in nicely with the typological observation that third person plural impersonal constructions involving the verb *say* tend to constitute a special type. As an additional step, we will look at the competing strategy of passives used impersonally. This will enable us, firstly, to better understand the interplay of human impersonal strategies in English and, secondly, to interpret our synchronic and diachronic findings against the background of typological patterns in the field of impersonal constructions.

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## Aim and history of the Societas Linguistica Europaea

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The year 2014 brings the Societas Linguistica Europaea (SLE) to Poznań for the third time. The first time the SLE organised its annual meeting in Poznań was 1973, shortly after the founding in 1966. The second time the SLE met in Poznań was only 14 years ago in 2000.

Poznań is the only place where the SLE met three times. Therefore this 47<sup>th</sup> Annual Meeting is the right place to present an overview of the history of the SLE. Moreover Adam Mickiewicz University is the supplier of four Presidents of SLE, more than any other university in Europe. The first being Ludwik Zabrocki in 1968/69, Jacek Fisiak in 1972/73 and again in 1982/83 and now prof. Katarzyna Dziubalska-Kolaczyk. In the history of the SLE only one person served the Societas twice as president and that is the Poznaniak Jacek Fisiak, who also was one of the founding fathers of the SLE.

The aim of the SLE was not only to bring together linguists from all over Europe, but also to bridge the gap between Western and what was then called Eastern Europe, to drill holes in the Iron Curtain. The first Secretary-Treasurer, and driving force behind the SLE, the Americo-German indo-europanist Werner Winter (1923-2010), officer of the SLE from the beginning in 1996 till 1992, believed in a future in which the countries of the NATO and of the Warsaw-pact should cooperate. That is why he was for instance very active in stimulating the collaboration of his home university in Kiel and Adam Mickiewicz University in Poznań.

Because of Winter's open mindedness the SLE not only fulfilled an important role in bringing together linguists from all over Europe, but at the same time the Societas became one of the main channels for intellectual contact between East and West.

However, since some of the leading figures of the SLE, such as Eugenio Coseriu and Eugenius (Bob) M. Uhlenbeck, belonged to more traditional linguistic circles, the Societas was seen as a stubborn adversary against modern linguistic theories from the US for a long time.

In this presentation material from the archives of the SLE and from interviews with the few last witnesses will be presented.

## Language contacts of Pukina

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The present paper is concerned with the evidence for language contacts of Pukina with Takanan, Kallawaya, and Kunza and their relative chronology. The investigation will be conducted by means of an etymological comparison, drawing also on principles of the comparative method.

Pukina was spoken around Lake Titicaca (Bolivia) and on the southern Peruvian coast (see Adelaar with Muysken 2004: 350). It is unrelated to Quechua and Aymara, although relations to Arawak languages are suggested (see Adelaar and van de Kerke 2009: 126). Pukina became extinct almost undocumented in the 19<sup>th</sup> century (see Adelaar and van de Kerke 2009: 125) and the only source on Pukina is a collection of Christian texts from the 17<sup>th</sup> century (Oré 1607), which contains 263 Pukina words (see Torero 2002: 446, 448ff). However, considerable parts of the Pukina lexicon are presumably preserved in Kallawaya (see Soria Lens 1951: 35, Stark 1972: 206), a mixed, secret language of Lake Titicaca (see e.g. Muysken 2009). The Takanan languages belong to the Pano-Takanan language family, the Bolivian branch of which is represented by Araona, Cavineña, Ese Ejja, Reyesano, Takana proper, and Toromona (see Adelaar with Muysken 2004: 418). Kunza was spoken in the Atacama Desert of northern Chile, close to one of the former Pukina speaking areas (see above) (see Adelaar with Muysken 2004: 375). The data are taken from dictionaries of the respective languages.

In the lexicon of these languages, we find evidence for contact between Pukina and the other languages:

- |                    |                      |                  |                         |                    |                               |
|--------------------|----------------------|------------------|-------------------------|--------------------|-------------------------------|
| (1) <b>Pukina</b>  | <b>Takana proper</b> | <b>Araona</b>    | <b>Ese Ejja</b>         | <b>Kallawaya</b>   | <b>Kunza</b>                  |
| <i>yti-</i> 'take' | <i>-id'i</i> 'take'  | <i>ti</i> 'give' | <i>-iši-nahe</i> 'take' | <i>iti-</i> 'take' | <i>it-</i> 'to pin, to stick' |

I suggest that the first contact occurred between the Takanan languages and Pukina. Kallawaya as the providing language can be discarded, because the Kallawaya lexicon itself is derived from Pukina and as a secret language, Kallawaya probably never was the providing language. Kunza was spoken geographically removed from the Takanan area, which makes language contact between Kunza and Takanan unlikely. Therefore, I propose that language contact took place between Pukina and a Takanan language, probably Takana proper, given the phonological and semantic similarities of the two forms. I further argue that Takana proper provided for Pukina, taking into consideration that words which are phonologically and semantically comparable to Takana proper *-id'i* 'take' are attested for other Takanan languages as well. Following this line of argumentation, I propose that Pukina subsequently became the donor language for Kallawaya and Kunza, both used in or close to the Pukina speaking region. Thus, I suggest the following chain of borrowing for the word 'take':

- |                          |              |    |               |             |    |                  |             |
|--------------------------|--------------|----|---------------|-------------|----|------------------|-------------|
| (2) <b>Takana proper</b> | <i>-id'i</i> | => | <b>Pukina</b> | <i>yti-</i> | => | <b>Kallawaya</b> | <i>iti-</i> |
|                          |              |    |               |             | => | <b>Kunza</b>     | <i>it-</i>  |

The proposed presentation thus seeks to provide evidence for Pukina language contacts, using an etymological-comparative approach. This also allows statements on the relative chronology of the language contact. Finally, language contacts between Pukina and Kunza are suggested, which have not been discussed in the literature so far.

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## Two kinds of clitics in Garifuna?

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Garifuna (North Arawak) uses certain elements for the marking of tense-aspect-mood, discourse structure and adverbial information. Earlier work has analyzed these elements as “verbal particles” for some (Taylor 1956b, 141) and “suffixes” for others (Taylor 1956a, 13). However, the elements in question do not behave according to the morpho-syntactic rules that otherwise apply to inflectional formatives and function words in Garifuna.

Based on a corpus of spoken narrative and conversation recently compiled by the author, it will be argued that these elements are best described as clitics of two types: clause level second position enclitics (attaching to the right edge of the first constituent of the clause) and word level enclitics. Both types attach to hosts of various different word classes, and they are never stressed.

One example of a second position enclitic is the imperfective past =*meha*. Among the hosts to which it attaches are prepositions (1), demonstrative pronouns (heading a relative clause) (2) and verbs (3).

- (1) l-u'wagu=**meha** aban dan yagüra Li'munu  
3.SG.M-on=IPFV one time there Limón  
'(at) one time, over there in Limón'
- (2) yagüto-wn l-a'nügo-wn ha'nitiga [le=**meha** tu-mari]  
there=ALL 3.SG.M-bring-3.SG.F that.one [3.SG.M.DEM=IPFV 3.SG.F-spouse]  
'he brought her over there, that one who was her husband'
- (3) niheyne=**meha** aban ba'bunu nyen  
EXIST.3.SG.M=IPFV one monkey there  
'there was a monkey there'

An example of a word level enclitic is the adverbial =*rügü* 'just' as shown in (4-6).

- (4) pero dan le l-uwa=**rügü** lan  
but time 3.SG.M.DEM 3.SG.M-skin=just ?  
'but when it's just the skin...'
- (5) mu'rusun n-a'deyru-n orale l-un=**rügü** eygini  
little 1.SG-obtain-IRR time 3.SG.M.DEM 3.SG.M-with=just food  
'what little I come into these days is just for food'
- (6) danle di'mi san=**rügü** lan liburu m-a'dügün-tuwa ni kata  
time 3.SG.M.DEM half hundred=just ? pound NEG-make-1.PL NEG thing  
'when there's only 50 pounds, we don't earn anything'

Here, =*rügü* is shown to attach to possessed nouns (4), prepositions (5) and numerals (6), but as opposed to second position clitics, it may appear in any position in the clause.

Both kinds of enclitics may occur in strings, and when they do, restrictions apply as to the order in which they occur. Furthermore, certain combinations seem to make up composite formatives with functions of their own. One example of such a combined clitic is =*gubey=rügü* 'always' shown in (7b); an example of =*gubey* 'definitely' alone is shown in (7a).

- (7) a. l-u'wey l-a'gadeyru-n n-a'deweyha-be-y=**gubey** h-own gü'rigiya  
3.SG.M-NEG.PURP 3.SG.M-spoil-IRR 1.SG-give-FUT-3.SG.M=definitely 3.PL-to people  
'so that it doesn't go bad, I'm giving it to people'

- b. bwi-ti le man key=**gubeyrügü** [le ya-be-y]  
 good-3.SGM 3.SGM.DEM man like=always [3.SGM.DEM here-REL.CL-3.SGM]  
 ‘that’s good man, it’s like the one that (we have) here’

An attempt will be made to map the distribution and function(s) of select enclitics of both types as well as of “composite clitics”. Following Spencer and Luis’ (2012) notion that each element in a language should be defined in terms of its clitic-like and non-clitic-like characteristics, evidence will be provided to determine the degree of clitic-hood of each element under discussion.

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## The notion of non-overt subject reinterpreted: on the semantic-functional differences between *creo* and *creo yo*

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Since all differences in form are expected to reflect differences in function, there must be a semantic-functional difference between the parenthetical use of *X, creo Ø* and *X, creo yo*. So the study is concerned with the use of the Spanish cognitive verb *creer* in first person singular located in the right periphery of the utterance, and with the non-obligatory use of the subject pronoun *yo* in comparison with its non-use, as in the following examples from the *corpus del español* (<http://www.corpusdelespanol.org/>).

- (a) [...] en mil novecientos nueve, me mandaron ya a estudiar a Buenos Aires y la familia siguió viviendo en Bahía Blanca hasta el año... eh... dieciséis, **creo**. (Habla Culta: Buenos Aires: M13 A)  
 (b) ¿A usted le interesa la música de hoy? - Los compositores de nuestro tiempo no hacen mucho por el piano, **creo yo**. (Entrevista; <http://www.abc.es>)  
 (c) Entonces, posiblemente, el que ha hecho teatro... siempre es forzado... empezar a hacer cine; **creo yo**, no sé. Tal vez ésa es una de las razones también [...] (Habla Culta: Caracas: M19)

Example (a) contains *X, creo Ø*, while examples (b) and (c) contain *X, creo yo*. In all three examples the cognitive verb is parenthetically used. Parenthetically used verbs have been studied, above all, in English and French (cf. Jespersen 1937, Urmson 1952, Blanche-Benveniste 1989, Thompson/Mulac 1991, Aijmer 1997, Féron 2005, Vandellanno 2006, Blanche-Benveniste/Willems 2007, Kärkkäinen 2007, Brinton 2008, Dehé/Wichmann 2010; in Spanish: Saeger 2007, Vázquez Rozas 2006). Since in French and English the use of the subject pronoun is obligatory, attention should be paid to the semantic-functional differences between the use of *yo* and the use of *Ø* in Spanish. The semantic-functional difference between the parenthetical use of verbs with the explicitly mentioned subject and the parenthetical use of verbs with no explicitly mentioned subject has not been investigated so far. Thus, the study is concerned with the qualitative analysis of examples taken from the *corpus del español*, focusing on the opposition between examples marked by the presence of *yo* and examples marked by the absence of *yo*. The study is going to reveal that the presence of *yo* emphasises the speaker’s expression of opinion and thus subjectivity so that the broader context of the examples where *yo* is to be found can be described in terms of ‘higher subjectivity’ and ‘higher affectiveness’.

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## Grammar and discourse prominence: The effects of grammatical status and focus on change blindness and letter deletion in written Danish

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The distinction between grammatical and lexical items is a cornerstone in linguistic theory. In a recent, usage-based theory, Boye & Harder (2012) account for this distinction in terms of discourse prominence: grammatical items are by convention discursively secondary (background), while lexical items have the potential for being primary (foreground).

The present paper tests psycholinguistic implications of this theory. It was hypothesized 1) that focalized, and therefore primary, items receive more attention than non-focalized, secondary ones, and – in accordance with Boye & Harder (2012) – 2) that lexical items receive more attention than grammatical ones. These hypotheses were tested in two reading experiments.

Experiment 1 employed the change blindness paradigm (Rensink et al. 1997). 32 adult speakers of Danish read 40 target sentences (and 10 filler sentences), and each sentence was presented twice to each participant. For the second presentation, which occurred a few seconds after the first one, a target word in the sentence was omitted. The participants were instructed to report whether they had noticed any differences between the two versions.

Experiment 2 was a letter deletion task (e.g. Rosenberg et al. 1985). 84 adult speakers of Danish were instructed to delete specific target letters in two texts in which 16 experimental sentences were embedded.

For both experiments, the stimuli were constructed using a 2x2 design, contrasting 1) focal and non-focal items as well as 2) lexical and grammatical ones. Focalization was manipulated by means of Danish focus particles like *også* ('also') and *præcis* ('exactly') and, in Experiment 2, also by the use of cleft constructions. Lexical and grammatical items were distinguished in accordance with the diagnostic tests given in Boye & Harder (2012). In both experiments, lexical and grammatical items were contrasted which differ minimally in terms of distribution, graphematic and phonological structure, and frequency; for instance, the lexical possessive verb *have* was contrasted with the homonymous perfect auxiliary *have*.

The results of both these experiments support hypothesis 2, but not 1: participants exhibited a significantly greater ( $<.001$ ) change blindness towards grammatical items than towards lexical items (Experiment 1), and missed significantly more letters ( $<.0001$ ) in grammatical compared to lexical items during letter deletion (Experiment 2), while there was no significant difference between focalized and non-focalized items in either experiment. These results suggest that at least in Danish, the lexicon-grammar contrast may be a more important cue to discourse prominence than focalization (by means of focus particles or cleft constructions), which is otherwise traditionally considered a primary way of signaling discourse prominence.

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## ***I insist that light be shed on the matter: on the revival of the mandative subjunctive in American English***

Hofmann, Klaus (University of Vienna, Austria)

After having been treated as a moribund (Fowler 1926) or marginal grammatical element (Quirk 1972) for most of the 20<sup>th</sup> century by prescriptivists and descriptivists alike, the morphological present subjunctive has more recently been found to occur regularly in one specific linguistic environment, viz. mandative complement clauses (Turner 1980, Johansson & Norheim 1988, Algeo 1992). These are dependent clauses which express an order, obligation or other directive, and which are typically introduced by a trigger verb (1), noun (2) or adjective (3) in the matrix clause also carrying mandative meaning. In these contexts, the present subjunctive competes with other constructions, most notably modal-periphrasis (4).

- (1) She expected him [...] to **demand that** as his intended wife she **give up** all thought of an independent professional career. [1912 Counsel for the Defense, COHA]
- (2) William Rogers, the chief of committee counsel, in the mean time, had audibly protested Mr. Pepper's **request that** it all **be read**, saying this was "a filibuster". [1947 New York Times, COHA]
- (3) Now it's **essential that** they **not lose** hope [...]. [2000 Washington Post, COCA]
- (4) It is **essential that** the teacher **should not be kept** in any doubt or uncertainty as to his/her own capabilities. [1998 Clinical supervision in teacher education, COCA]

Recent research has concentrated on synchronic usage differences within and among the varieties of English (Crawford 2009, Peters 2009), whereas only few studies have adopted a diachronic perspective (Övergaard 1995). They conclude that the mandative subjunctive has increased in frequency during the 20<sup>th</sup> century and that it has overtaken the modal construction as the dominant variant in American English.

The proposed paper seeks to identify potential intra- and extralinguistic conditioning factors that have brought about the current dominance of the subjunctive in American English. The study adopts a diachronic perspective, drawing on data collected from the *Corpus of Historical American English* and the *Corpus of Contemporary American English*, which are analysed quantitatively as well as qualitatively. Special attention is paid to various factors that have been put forth as influential, such as the trigger's mandative force (Övergaard 1995) or the use of the passive voice in the complement clause (Turner 1980). Additionally, the extralinguistic variable 'genre' will be included in the analysis.

The evidence indicates, in line with findings from previous studies (Övergaard 1995, Crawford 2009), that the choice of subjunctive over modal construction significantly depends on the individual triggers in the matrix clause. Moreover, correlational analysis suggests that the passive voice had a major influence in re-establishing the subjunctive. Most interestingly, the variable 'genre' emerges as a particularly important factor: until the second half of the 20<sup>th</sup> century, mandative subjunctives featured most prominently in newspapers and magazines. This affiliation may best be explained by the fact that the subjunctive serves as a convenient strategy to reformulate directives, such as imperatives, in reported speech, a distinctive feature of news discourse.

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## The Semantics of Unagreement: *we X* or *the X among us*

Höhn, Georg (University of Cambridge, UK)

So-called “unagreement” (Hurtado 1985) constructions, encountered i.a. in Spanish and Greek, involve an apparent person mismatch between subject and verb, cf. (1).

- (1) Firmamos [los linguistas] la carta.  
 signed.1PL the linguists the letter  
 ‘The linguists among us signed the letter.’ [Spanish; Torrego 1996:114, (6a)]

This talk argues for a syntactic and semantic analysis of unagreement parallel to adnominal pronoun constructions (APCs; e.g. ‘you students’), pace Torrego (1996) who argues that unagreement structures crucially differ in meaning.

I suggest that languages with unagreement have a functional head Pers in the extended nominal projection (xnP) that is overt in APCs (nosotros los linguistas ‘we linguists’) or covert in unagreement, cf. (2). Following Heim (2008:37), I assume that person features introduce a presupposition that a speech act participant is included in the denotation of their complement, effectively restricting its reference, cf. (3).

- (2) [PersP Pers[+auth,+part] [DP [D los] [NP linguistas] ] ]  
 (3) [[ [+auth,+part] ] ]c =  $\lambda x e : x$  includes sc.x

According to this analysis such an expression makes reference to only one set as in (4), i.e. there is no ‘we’ group distinct from the one referred to by the nominal.

- (4) [[ (2) ] ]c = [ $\lambda x e : x$  includes sc.x] (the unique set L of linguists salient in c)  
 =The unique set L of linguists salient in c iff  $sc \in S$ , undefined otherwise.

In contrast, Torrego (1996:114f.) suggests that “the los-NP is interpreted as a subgroup of individuals included in the reference of the first person plural pronoun ‘we’ ... [The sentence in (1)] implies that at least one of the members of the first person plural pronoun ‘we’ is not a linguist”. This characterisation implies the truth conditions in (5a) for (1). The present analysis, on the other hand, derives the truth conditions in (5b).

- (5) [[ (2) ] ]c = 1 iff  
 a. the salient set of people P in c signed the salient letter in c and there is a salient set of linguists L in c, such that  $L \subset P$ , undefined if  $sc \notin L$ . [the X among us]  
 b. the salient set of linguists L in c signed the salient letter in c, undefined if  $sc \notin L$ . [we X]

While the predictions are similar, (5a) asserts that there are members of P that are no linguists ( $L \subset P$ ) and is hence more restrictive. Since the second clause in (6) asserts exhaustivity (i.e. nobody but the linguists signed the letter), the sentence would be expected to involve a contradiction.

- (6) Firmamos los linguistas la carta, pero nadie más se interesó.  
 signed.1PL the linguists the letter but nobody more REFL interested.3SG  
 ‘We linguists signed the letter, but nobody else cared.’

As this is not the case, (5a) seems to be too strong. According to the analysis in (5b), on the other hand, the subject xnP refers to only one set (restricted to include the speaker). Therefore, it is compatible with exhaustive as well as non-exhaustive situations, which seems to be correct.

This may have implications for the analysis of APCs in general in terms of either pronominal determiners (Postal 1969, Roehrs 2005), cf. (7), or as some form of apposition, cf. (8), in favour of the former, which does not introduce the pronoun as its own DP.

- (7) [DP [D you] [NP Londoners] ]  
 (8) [DP [DP you ] [XP Londoners] ]

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## The partitive A in Finnish

*Huumo, Tuomas (University of Turku, Finland)*

The Finnish partitive subject is known for its use in existential clauses, where it introduces a discourse-new referent, typically an indeterminate quantity of a substance ('There is some coffee in the cup'). However, as has often been pointed out, the partitive subject is occasionally used in transitive clauses (in the function of A), especially if the verb and the object form an idiomatic phrase (1) but sometimes in other low-transitivity expressions, too (2).

- (1) Use+i+ta            sotila+i+ta            sa+i            surma+nsa            taistelu+ssa.  
 many+PL+PAR    soldier+PL+PAR    get+PST.3SG    death+ACC.3PX    battle+INE  
 'A number of soldiers got killed (lit. 'got their death') in the battle'.
- (2) Mon+i+a            ihmis+i+ä            odott+i            satee+ssa            turhaan            bussi+a.  
 many+PL+PAR    person+PL+PAR    wait+PST.3SG    rain+INE            in.vain            bus+PAR  
 'Many people were waiting for the bus in the rain, in vain'.

At first sight, the partitive A seems to be rare, as it is difficult to find in text corpora. However, most corpora consist of edited texts, where the partitive A is considered an error. Unedited Internet texts are a more fruitful source, where it is easy to find examples, if only one knows what to search for (specific word strings).

In my presentation I will discuss Internet data to explore the partitive A. I argue that 1) the partitive A is best acceptable with a partitive (not accusative) O; 2) the typical partitive A is in the plural and includes a quantifying element ('many', 'a lot of'; as in 1–2); 3) the partitive A most typically has an animate referent, and 4) the partitive A is typical in clauses with a progressive aspect.

I argue that a possible motivation for the expansion of the partitive A may be the grammaticalization of certain infinitival constructions where the finite verb has an existential partitive S and the infinitive is a transitive verb with an O (3):

- (3) Mon+i+a            lahjakka+i+ta            ihmis+i+ä            on  
 many+PL+PAR    talented+PL+PAR    person+PL+PAR    be.PRES.3SG  
 teke+mä+ssä            ulko+politiikka+a. (Internet)  
 do+3INF+INE            foreign+policy+PAR  
 'There are / We have many talented people carrying out [our] foreign policy'.

The combination *olla* ('be, exist') + 3<sup>rd</sup> infinitive inessive ('in-the-activity-of') grammaticalizes towards the progressive meaning 'be doing', and thus in (3), the partitive S (existential subject) and O are brought close to each other, potentially understood as arguments of the same progressive predicate. Examples like (3) are acceptable in standard language, and their semantic and structural similarity to examples like (1) and (2) is clear. The prevalence of quantifying expressions in partitive A phrases (cf. 1 and 2) may reflect an analogy with (pseudo)partitive constructions where a nominative head is followed by a partitive modifier (e.g., *joukko työläis+i+ä* [group worker+PL+PAR] 'a group of workers'—since the head is in the nominative, this NP is indisputably acceptable as A); cf. with quantified partitive A phrases where the partitive is the head (e.g. *paljon työläis+i+ä* [a.lot.of worker+PL+PAR] 'a lot of workers'). Such analogies might open the A function to different kinds of quantifier + partitive NPs, even those where the partitive is the head and the quantifier agrees with it in case (4).

- (4) Use+i+ta            sato+j+a            katsoj+i+a            seuras+i            onnistune+i+ta  
 several+PL+PAR    hundred+PL+PAR    viewer+PL+PAR    follow+PST.3SG    successful+PL+PAR  
 kilpailu+j+a.  
 competition+PL+PAR  
 'Several hundred viewers were following the successful competitions.' (Internet)

## Development of the indirective in Tundra Nenets: from nominal into verbal predicate

Jalava, Lotta (University of Helsinki, Finland)

The grammaticalization of resultative state markers into perfect tense and further into indirect evidential or past tense markers is a well-known tendency attested in the languages of Eurasia, especially in Turkic and Indo-European languages (Dahl 1985: 152; Bybee et al. 1994: 68, 95; (Johanson 2000). Resultative signals a state that exists as a result of a past action (Nedjalkov & Jaxontov 1988[1983]: 6), whereas perfect is usually defined as past action with current relevance (Nedjalkov & Jaxontov 1988: 15, Bybee et al. 1994: 54, 61). In English, the difference between the two functions can be demonstrated with the following sentences: *The door is closed* (resultative) vs. *The door has closed* (perfect) (Bybee et al. 1994: 63).

This study concentrates on Tundra Nenets, where a similar change is assumed to have taken place. In Tundra Nenets, the suffix *-we* is used as a marker of two syntactically different categories, past participle and indirective (in traditional Samoyedology labelled the narrative mood). Past participle *-we* is a non-finite form, referring to state resulting from a past action or event, and it is typically used as modifier in a noun phrase. Affixed to the predicate verb, the suffix *-we* can be either the past participle in a nominal predicate or the indirective evidential in a verbal predicate, both referring to past event or action.

- (1) *ti xa-wi*  
 reindeer die-PTCP.PF.3SG.PREDIC/-INDIR.3SG  
 'The reindeer is dead/has died.'

As synchronic variation, such as the polysemy in the above example may represent gradual language change in progress (Croft 1990: 203, 225–226), in this vein, I assume that the history of the morpheme, now regarded as two separate suffixes, originate in one single construction. In this study I analyse synchrony and diachrony of the indirective and the past participle in predicate position and seek answers to the following three questions:

- 1) What are the syntactic and semantic differences of the past participle predicate and the indirective?
- 2) Which typologically comparative categories are Tundra Nenets *-we* constructions compatible with?
- 3) How has the suffix developed into an indirective marker?

The framework of the study lies in functional syntax and typology, and the data derives from fieldwork recordings and selected Nenets texts. My main findings are the following: The Tundra Nenets indirective *-we* has developed from past participle *-we* which in predicate position denotes resultative state, whereas the function of the verbal form is close to indirectives occurring in Turkic and their neighbouring languages (Lazard 2001: 361–364; Johanson 2000), as well as in eastern Finno-Ugric languages (Leinonen 2000: 419). Further, synchronically, the non-finite participle and the finite indirective have different syntactic restrictions in most contexts. Tundra Nenets gives additional evidence for the tendency attested in many languages that indirectives develop from resultatives. It seems that often in languages that use copulaless nominal predication the evolution of resultatives into indirectives or perfects, and, from state into past event, is directly linked to nonverbal predicates becoming part of verbal predication strategies—in Tundra Nenets, past participle predicates developing into a finite suffix.

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## Acquisition of adjective inflection in L2 Norwegian – what factors affect it?

Janik, Marta (Adam Mickiewicz University, Poznań, Poland)

The presented study is a part of my PhD-project that examines acquisition of adjective agreement by L1 Polish learners of Norwegian basing on cognitive language theories. The main aim of the project is to investigate the order and sequence of learning the adjectival agreement in Norwegian by L1 Polish speakers, and to find out what factors affect them. The focus of this presentation is, however, on the factors that influence the acquisition of adjective inflection in L2 Norwegian by three L1 groups: English, German and Polish. The three languages differ from each other in the extent to which the adjectives are inflected, and they show different patterns of adjective inflection in comparison to Norwegian where adjectives must obligatory be inflected in attributive and predicative position, as well as used as adverbials (in the presentation I will not discuss gradation).

The data I use in this study come from the ASK-corpus – The Norwegian Language Learner Corpus, developed by the ASKeladden-project from the University of Bergen. The ASKeladden aims to explain L1 influences in acquisition of L2 using corpus based methods. In my analysis I use 600 texts (200 texts per each L1 group, i.e. English, German and Polish). This is a quantitative study where I present the statistically significant results. The statistical analyses are carried out in the R program.

The ASK-corpus provides a set of personal information on the test-takers, besides the linguistic data and the CEFR-levels. The factors available in the ASK that I am going to investigate in terms of their eventual impact on the acquisition of adjective inflection are: L1, age, length of stay in Norway, the total number of course hours, motivation, education, occupation and the CEFR-level. Information on the informants' sex is also accessible, but I am not going to analyze it because the majority in the corpus are women (around 80%).

I have already performed a transfer investigation using Jarvis and Pavlenko's (2008) and Jarvis's (2010) methodological framework. My comparison of the performance of L1 English, German and Polish learners of L2 Norwegian provided evidence of the existence of (in some cases positive and some negative) transfer in the three L1 groups. L1 is therefore a factor that affects the acquisition of adjective inflection in L2 Norwegian both positively and negatively, depending on the L1. Moreover, in the proposed presentation, I will test a hypothesis that younger age, a longer stay in Norway, more course hours taken, higher education and higher CEFR-level influence the acquisition of Norwegian adjective inflection positively.

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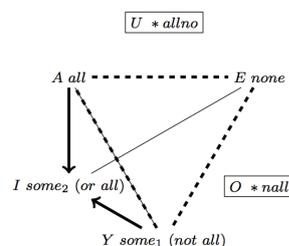
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## Not just flying a kite

Jaspers, Dany (KU Leuven – HU Brussel, Belgium)

In Seuren & Jaspers (to appear) it is argued that while a logically sound Square of Opposition can be expanded to a symmetrical Hexagon, (Jacoby 1950, 1960; Sesmat 1951; Blanché 1952, 1953, 1966; Horn 1990, 2012), the latter has to be curtailed to do justice to the logic of natural language and more specifically to restrictions on possible naturally lexicalised operators. The remaining polygon has the form of a *Kite*, as illustrated for the predicate calculus oppositions in (1).

(1)

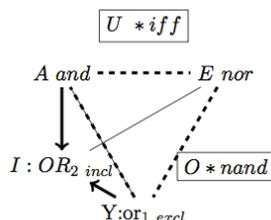


In this kite, an arrow such as from A to I represents entailment, a dotted line relates two contraries, the full line between E and I represents a contradictory relation. Whereas (propositions with) the linguistically natural operators of the calculus are in A, I, E and Y, two operators with nonnatural lexicalisations hang disconnected in what used to be

the U and O vertices of the Hexagon: *\*allno* (= all or none) and *\*nall* (= some<sub>1</sub> or none). The latter never seem to arise as natural lexicalisations, only in a specialised context.

The O-corner half of this problem (*\*nall*) is known through the groundbreaking work of Horn (1972, 1989, 1990, 2012), who dug up the Hexagonalists, gave a neo-Gricean account of the phenomenon and generalized the pattern, i.a. by including binary connectives (*and*, *or*, *nor* versus *\*nand*) in the story (cf. Horn:2012, 404). The U-half of the lexicalisation problem arose in the context of a comparison of naturalness of predicate logical operator terms and colour terms (Jaspers&Larson2011, Jaspers 2011, 2012) and was there extended to the propositional operators of (2) as well. Here again, there are two nonnaturally lexicalised operators, namely O-corner *\*nand* and the U-corner equivalence operator *\*iff*.

(2)



The analysis (Jaspers 2005, Seuren & Jaspers to appear) proposed for the Kite-pattern is that it is generated by a hierarchy of universe restrictions. Starting from E, the foundational opposition is E-I. This bifurcation is inviolable for further items in the same lexical field. Consequently, A and Y are carved out secondarily and within I, which functions as their subuniverse. Combining A or Y with E into U and O respectively then leads to nonnaturalness, as the latter breakout of the I-subuniverse.

The new focus of the present contribution is that the orientation of this growth pattern is overturned from the perspective of order of lexicalisation. Lexicalisation of the I-corner operator is prior to that of E, which often visibly incorporates the I-label (e.g., English *n-oris* built from *or*). In addition, there is evidence that the operator *and* (A) is acquired earlier than exclusive *or* (Y) (Braine & Romain 1981, 1983) and the latter earlier than inclusive *or* (I) (Gualmini, Meroni & Crain 1999), which amounts to the acquisition sequence *and* > *or<sub>excl</sub>* > *or<sub>incl</sub>* > *nor*. Interestingly, this order of lexicalisation generalizes to other lexical fields. The hope is therefore warranted that this inverse “order of lexicalisation” analysis complements the sequence of universe restrictions and hence is not “just flying a kite”.

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## **Basque today: Can/should pronunciation be standardized?**

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This paper addresses the problematic subject of prescriptivism as applied to the pronunciation of a language. It will be proposed that external normativization may be justified under certain sociolinguistic circumstances. We will argue that, in spite of the contradictory feelings such an endeavour will necessarily bring about, linguists (specifically phonologists) should be involved in the process, taking care of choices in the orientation and content of norms. On the other hand, the study of linguistic standardization may provide valuable data for a better understanding of the use of phonology.

The presentation of those theoretical issues will be based on the ongoing process of linguistic standardization of Basque. Our work will first deal with the effect of the norms for written Standard Basque (1968) and the norms for the formal pronunciation of Standard Basque (1998) on the pronunciation of Basque, spoken as L1 or L2 by bilingual speakers of Basque and Spanish, or Basque and French. We will then open to discussion the choices that we tentatively consider better from a phonological point of view.

We have observed that, in general, when speaking Standard Basque, speakers tend to avoid phonological characteristics that they identify with dialectal varieties. The result of that identification is, quite often, the adoption of Spanish or French phonological features (already present in the pronunciation of many L2 speakers). On the other hand, speakers who, due to their sociological or dialectal background, feel too distant from the Standard variety, tend to reject it altogether even in situations that would normally require a formal register. Phonological features belonging to four different profiles of speakers will be taken into account: Basque (L1) and Spanish bilingual; Basque (L2) and Spanish bilingual; Basque (L1) and French bilingual; Basque (L2) and French bilingual. Specific examples will be given of phonological processes affected by standardization (e.g. palatal assimilation and obstruent cluster devoicing).

The challenge for the phonologist is now to find the way to make Standard Basque compatible with the dialects. It will be argued that, for that to be feasible, (a) oral Standard cannot be as unified as the written one, and (b) the main dialectal characteristics to be incorporated onto those oral Standards must be very carefully chosen and graded, our basic suggestion for that being that different sociophonological and phonostylistic levels should go together with different degrees of dialect presence.

It is possible that much of what develops spontaneously in other languages needs conscious protection in a minority-language spoken by (two different subsets of) bilingual speakers. As linguists, however, we must acknowledge that perfect solutions do not exist, and that conflict is unavoidable between the abstract norm and the variegated ever-changing linguistic reality. It is our task to see and help others see things as they are in this respect.

In the time remaining until the conference, we will gather information from processes of phonological standardization in other linguistic landscapes. They will be presented for the sake of comparison and discussion.

## **“You won’t get it unless you’re bilingual, kid!”: On irony comprehension in Polish mono- and Polish-English bilingual children**

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Irony, claimed to be the most complex type of nonliteral language, is believed to require more processing than do other types of figurative utterances (Leinonen and Ryder 2008). A plausible explanation could be that irony, involving the attribution of mental states, requires higher-order Theory of Mind skills (Curcó 2000). A unique way to verify this hypothesis is offered by developmental psychopragmatic research. Testing the comprehension of irony by children, whose brain structures critical for mentalising are not yet fully myelinated (Liddle and Nettle 2006), creates an opportunity to see how the capacity for irony unfolds in time. Testing bilinguals, in turn, makes it possible to verify whether it constitutes a more general cognitive ability, available regardless of the language spoken, or whether it develops for each language separately.

To check whether there would be a difference in the performance of mono- and bilingual children on an irony comprehension task, a set of forty scenarios was devised. In each scenario, one character always did something and the other commented on this activity. Half of the comments were ironic utterances, and the other half were literal fillers, all phrased so as to represent Searle’s (1969) five major categories of speech acts. The stories were recorded and played to each child. The participants’ task was to listen to each scenario and to answer a set of simple questions

probing context comprehension, and testing the recognition of three major elements of irony comprehension: speaker belief (Theory of Mind), intention and attitude (Demorest et al. 1984; Creusere 1999; Pexman and Olineck 2002; Harris and Pexman 2003; Pexman et al. 2005; Glenwright and Pexman 2010; Pexman and Whalen 2010). Before the experiment, the participants' parents were introduced to its aim and form, and gave written consent for their child to take part in the study. Each child was tested individually, in several sessions whose duration depended on the subject's willingness to engage in the experimental task. To get the children's attention and help them focus, forty pictures illustrating the scenarios were prepared. Later, a control group of sixteen bilingual adults was tested using the same stimuli.

Initial analyses have demonstrated lower error rates for ironic comments in bilingual children than in monolingual children. No significant difference has been found in the performance on the literal stimuli across the groups. These data indicate that bilingual children are more apt at comprehending ironic utterances. Further analyses are expected to shed more light on the issue, putting the difference down to either better developed mentalising skills or more effective recognition of speaker intention. An interesting finding is beginning to emerge from the data concerning the participants' perception of speaker attitude: while monolingual children frequently gauge ironic utterances as negative and hurtful, bilinguals are more inclined to judge them as jocular. One reason for this difference may be bilinguals' better developed metalinguistic skills (Goldin-Meadow and Galambos 1990), but their higher social status may also be an important factor (Pexman et al. 2000).

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## Subject omission or information structural organization in Danish text messages

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In Danish, a tendency to omit the grammatical subject in text messages has been observed, cf. Rathje 2013. The same tendency has been observed for languages like French and Dutch (e.g. Stark 2011; van der Houwen & van Kassel 2013).

Danish – like French and Dutch - is a non-null-subject language, cf. Hansen & Heltoft 2011. Thus the omission of subjects in Danish text messages is remarkable and could be taken as the first signs of a typological shift towards null-subject language.

However, a closer examination of actual data suggests that the omission of the subject observed in text messaging should not be taken as an indication of a typological shift in a language like Danish. Rather, the observed tendency may be seen as a part of another principle concerning information structure.

In this paper, the results of a study of Danish text messages will be shown. The corpus consists of some 500 messages, some of an informal nature (chains of correspondence between friends), some of a more formal nature (notifications from the dentist etc.).

Preliminary studies of these data reveal that omission of the subject is, in fact, not uncommon. But closer scrutiny also reveals that the grammatical subject is not the only constituent being omitted. Rather, it appears that all kinds of constituents may be omitted as long as they represent redundant information. Some text messages consist of full sentences with all the syntactically necessary constituents, others contain information on a strictly 'need to convey' basis. A message such as "gørjegstraks" ('do I immediately') with overt subject but omitted object is not that uncommon. And the very short "påvej" ('on way') with everything omitted but the utterance focus is even more common.

This suggests that the omission of constituents in the text messages does not adhere to syntactic principles, but rather to principles concerning information structure (Lambrecht 1994; Valduvi & Engdahl 2013 [1996]).

The sender assesses which informations are needed in order for the message to be understood; ground information may be omitted, focus information not. This assessment is partly based on what information earlier contributions of the text message 'threads' contain. Thus it is hardly surprising that notifications from the dentist or the library contain many information units, whereas a message functioning as a reply to a friend may be as short as "nu" ('now').

These preliminary results raise the methodological question of how to analyze data taken from text messages. Mere quantitative studies as to how many messages don't contain subjects, objects etc. will not do justice to what actually takes place in the kind of language and text the messages of text messaging represent.

The approach in this study is functional-structural (i.e. a sign-theoretical approach) in the sense presented in Engberg-Pedersen et al. (1996, 2005), and Boye & Harder (2013).

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## Linguistically based approach to Old Czech tagging

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This proposal presents linguistically oriented approach to Old Czech (west Slavonic language, stage between approx. 1300 and 1500) morphology which serves for automatic analysis of Old Czech texts collected in Old-Czech Text Bank (transcribed texts in electronic format, <http://vokabular.ujc.cas.cz/>). This database is intended to incorporate all documents surviving from one stage of Czech language development. So far, 2.5M of Czech word tokens have been processed. The presented analysis is meant as a first step in transforming this collection of texts into better searchable source of linguistic research.

First, we describe motivation and main principles of our work as well as parts of adopted analysis. We argue that due to limited size of resources and lack of native speakers, the material from old stages of language desires a more precise (i. e. linguistically based) analysis than modern material (cf. also Meyer (2011)). Therefore, as opposed to approaches using tools developed for synchronic stage of language (cf. Hana et al. (2012)), we propose approach based on a description oriented on capturing change and all diversity of system in a long period. Our approach uses all available sources of information for the language stage in question (see below) and we adopted these three basic principles of morphological description: i) historical justifiability (i. e. the analysis is to the maximal extent based on forms attested in available texts or mentioned in traditional linguistics handbooks), ii) systematization (i. e. constant

regard to the system of language) and iii) systematic account for sound changes (numerous sound changes applied in stems and also in endings during the stage in question).

The analysis used for automatic processes has these five parts: a) the dictionary for the language stage in question (based on Electronic dictionary developed by the Institute of Czech language (Web Dictionary: <http://vokabular.ujc.cas.cz>)), b) the detailed description of endings based on available grammatical description (Gebauer, 1960, Vážný, 1970, Lamprecht – Šlosar – Bauer, 1986) and complemented by results of manual text analysis, c) the detailed description of stem changes accompanying declension (Gebauer, 1960 and 1963), d) the rules for sound changes (Gebauer 1963) and e) the list of exceptions.

As a second step, whole approach was tested using one declension type (o-declension neuter) with satisfying results (all forms were analyzed appropriately). The experiment included generating of all forms of stems (obtained from dictionary) according to endings description, sound changes in stems and endings and searching for all these forms in Old-Czech Text Bank as well as assigning morphological information and lemma. We plan to expand analysis to more declension types and present these results as well.

The procedure is applicable for all POS, we have worked, however, with common nouns so far. No disambiguation is a part of the work.

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## On “incoordination”

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Since Evans' (2007) proposal on the creation of pragmatic particles due to “insubordination”, a lot of literature has been dedicated to the evolution and the pragmatics of constructions where a subordination marker introduces a sentence not apparently dependent from a matrix sentence, like in (1):

- (1) Sp. Si no he sido yo!  
If not have1.SG been I  
(As you should know), it was not my fault.

In several languages, different sources and different diachronic pathways for insubordination have been identified. It seems that insubordination is a rather common phenomenon in the languages of the world and that the rather scarce information about it we find in traditional grammars of languages like Spanish or English is rather due to the fact that insubordination is a predominantly spoken phenomenon than to its actual low frequency.

Now, a somewhat related phenomenon can be observed in several languages when not subordination markers without matrix sentence but “hanging” coordinative conjunctions without a coordinated clause appear to assume pragmatic functions. Following the term *insubordination*, we will baptise this phenomenon “incoordination”. Mulder, Thompson and Williams (2009) described final *but* as a pragmatic marker in Australian English; and in the Spanish variety of Bahía Blanca in Argentina, we have observed a similar phenomenon with final *pero* as a pragmatic marker, as in (2).

- (2) S. (Arg.)      Es      lunes,      pero.  
 Is3.SG   Monday   but  
*It's Monday (you know).*

Final *pero* can be found in elliptic sentences in standard Spanish (as in standard English), but there is an obvious prosodic difference between the modal particle of the Bahía Blanca variety, pronounced as a sentence-final element (as Australian *but* in the mentioned paper), and elliptic *but* or *pero* pronounced as if the coordinated phrase was about to follow. Such a real sentence-final *pero* is ungrammatical in standard Spanish. In contact with Basque, final *pero* can be found as a calque of the Basque *baina* (possible in final position in some varieties), but the difference is here that it has still a clearly adversative function (comparable to English *though*, see Barth-Weingarten / Couper-Kuhlen 2002), whereas the modal particle in the Bahía Blanca variety can be used in contexts where only with difficulty an adversative meaning can be identified (as in (2)), and the function seems to be closer to that of a particle expressing complicity or referring to inferences of common speaker-hearer knowledge (like the German modal particle *ja*).

The aim of my paper is to (1) show that “incoordination” is a rather widespread phenomenon that can be found in several languages (2) exemplify with new empirical data (spoken corpus data and internet discussion forum data) in the case of Spanish final *pero* the grammaticalization path (including syntactic, semantic and prosodic phenomena) of an adversative conjunction becoming a modal particle, and (3) to relate the evolution of “incoordination” to other sources of modal particles.

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## What do ‘*touha*’, ‘*stesk*’ and ‘*tužba*’ really mean? Czech and Polish confrontative analysis based on parallel corpus Intercorp

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The analysis is focused on Czech synonymous substantives *touha*, *stesk* and *tužba* expressing mental states such as desire, longing, yearning or craving. The goal of the analysis is to answer whether their valence requirements and collocations can assist with establishing Polish equivalents of the substantives.

In 2013 a research concerning the ambiguous Czech verb “*toužit*” was conducted (Kaczmarska & Rosen 2013). The study was supposed to reveal if valency can influence the choice of an equivalent in the Polish language. It was assumed that for some senses the equivalent can be established based on the convergence of the valence requirements. The hypothesis proved to be true. A more extensive research (also of the synonyms of the analysed substantives) will let us confirm the hypothesis of the impact of the valency requirements (and collocations) on the establishment of equivalents (or cluster of equivalents) for a given unit (Levin 1993; Lewandowska-Tomaszczyk 1984, 2013).

The analysis proper is preceded by automatic extraction (Och & Ney 2003) of pairs of equivalents from a parallel corpus Intercorp (Čermák & Rosen 2012, see <http://korpus.cz/intercorp>). These pairs constitute a kind of bilingual dictionary (Jirásek 2011). The analysis includes automatic excerption of chosen substantives (with aligned segments) from Intercorp. The segments are analysed manually. We check (in each segment) how the key substantive was translated and what kinds of collocations it had. Subsequently we conduct semantic analysis (Mikołajczuk 1997, 1999; Siatkowska 1989). The results of both – the syntactic and semantic analyses – let us establish the semantically and syntactically closest Polish equivalents of Czech substantives.

As a result of this research, an equivalent-searching algorithm will be prepared. The algorithm will be based on a syntactico-semantic analysis. The method’s innovativeness consists in using collocations and intensity scale features. We hope that the algorithm will be applied to the analysis of different substantives expressing mental states. The method is likely to become an important tool for lexicographers.

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## Syntactic properties of indeclinable participles in Latvian

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Latvian has two indeclinable participles, which originate from the active and passive declinable present participles and are formed by means of the affixes *-ot* and *-am/-ām*, respectively. Traditional grammars of Latvian mainly concentrate on the tense and voice meanings of the participles, while their syntactic properties largely remain unstudied (e. g., MLLVG 1959, 661–664; Paegle 2003, 150–151).

Non-finite forms of verbs (participles and the infinitive) have no overt subject and are therefore used for subjecthood tests in syntax and semantics (e. g., Keenan 1976; Kroeger 2004, 103–119). In the domain of the Baltic languages this approach has been applied by Seržant (2013, 292–293), who has described the role of the indeclinable participle in *-nt* and the partly declinable participle with the suffix *-dam-* in agent testing in Lithuanian.

The proposed paper focuses on the use of the Latvian indeclinable participles in *-ot* and *-am/-ām* in syntactic constructions to establish 1) the types of constructions the participles engage in, 2) whether these participles can be used for subjecthood tests.

In contemporary Latvian, the indeclinable participle in *-am/-ām* is found in the following syntactic constructions:

- (1) *Subject-to-object raising* constructions with lexical or copular verbs:

*Es vakar dzirdēju jūs dziedam.*

I yesterday hear.PST.1SG you.ACC.SG sing.PTCP

‘Yesterday I heard you sing’

*Vecāki uzskata labu esam auklīšu dienestu.*

parents.NOM.PL consider.PRS.3 good.ACC be.PTCP nanny.GEN.PL service.ACC

‘Parents consider the nanny service to be good’

- (2) *Subject-to-subject raising* constructions:

*Tas šķita esam tikai sapnis.*

it seem.PST.3 be.PTCP just dream.NOM

‘It seemed to be just a dream’

- (3) As a predicative with the verb *palikt*:

*Vīrietis palika stāvam.*

man.NOM remain.PST.3 stand.PTCP

‘The man remained standing’

The indeclinable participle in *-ot* is mainly used in adjunct control constructions:

- (1) The performer of the participial action is the subject of the matrix clause:

*Ejot tumsā viņš svilpoja.*

walk.PTCP dark.LOC he whistle.PST.3

‘He was whistling walking in the dark’

(2) The performer of the participial action is present in the sentence but not as its subject in what are sometimes termed pragmatic control constructions (e.g., Keenan 1976; Lyngfelt 2009), because the doer can be retrieved from the meaning of the sentence and one's knowledge of the world:

*Ir svarīgi neļaut elitei glābt savu*  
 be.PRS.3 important prevent.INF elite.DAT save.INF own.ACC  
*ādu, novirzot sabiedrības uzmanību uz „grēkāžiem”.*  
 skin.ACC divert.PTCP public.GEN attention.ACC to scapegoats.DAT

‘It is important to prevent the elite from trying to save their skin by diverting the public’s attention to the “scapegoats”’

(3) The performer of the participial action is an abstraction, anybody in general in what are termed arbitrary control constructions (Lyngfelt 2009):

*Braucot uz Rīgu, ceļmalā top liela ēka.*  
 drive.PTCP to Riga.ACC roadside.LOC build.PST.3 big.NOM building.NOM  
 ‘When **driving** to Klapkalnciems there’s a large building being built on the roadside’

The participle in-*ot(ies)* is widely used in absolute dative constructions where it takes a separate doer in dative:

*Gadiem ejot, kredītu izsniegšanas kultūra mainās.*  
 year.DAT.PL pass.PTCP loan.GEN.PL approval.GEN culture.NOM change.PRS.3  
 ‘With the passing of time the culture of loan approval has changed’

Thus it is evident that in Latvian indeclinable participles are controlled by different arguments and cannot be used for subjecthood tests.

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## Are some languages more prone to vowel shifting than others?

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It has often been suggested that some languages, notably English (Lotspeich 1921, 1923), or even entire language families, notably Germanic (Donegan 1985), are more prone to vowel shifting than others. The proposed reason for this instability of Germanic vowel systems has been placed in the initial stress, as well as in the large vowel inventories of Germanic languages. Seeing the notion that languages can form types with regard to their likelihood to undergo vowel shifts as worth pursuing, this study follows the implications of this suggestion. First of all, it puts forward the question of whether it is feasible to divide languages into vowel shifting and non-vowel shifting, and, if so, whether English (or Germanic as a whole) stands out against other languages or language families as being particularly prone to vowel shifting. To do so, an investigation of the influence of the characteristics of stress, as well as of the complexity of the vocalic system of a given language, on the rate at which vowel quality changes take place in that language, is conducted.

Data are drawn mainly from extant historical phonological surveys (such as Sussex & Cubberley 2006; Comrie & Corbett 1993 for Slavic; König & van der Auwera 1994; Harbert 2007 for Germanic), as well as from accounts of present-day phonological systems (such as Fox 2005 for German or Gussmann 2007 for Polish). On that basis, it is investigated whether any differences in the rate of vowel quality changes between families (Indo-European vs. Uralic), branches of IE (e.g. Germanic vs. Slavic), or individual languages within branches (e.g. Czech vs. Polish) transpire, and whether any such differences can be correlated with the characteristics of stress and the complexity of the vocalic systems of the languages in question. A number of languages are considered, including English, German, and Icelandic from the Germanic branch of Indo-European, two representatives of its Slavic branch (Czech and Polish),

Romance (French and Spanish), as well as two languages outside of the Indo-European family, Finnish and Hungarian.

The initial results of this comparison indicate that a large vowel quality inventory, especially when accompanied by the presence of an additional phonemic vowel feature, coupled with word stress which is not influenced by morphology to a large degree, contributes to a large rate of vowel shifting. The likelihood to undergo vowel shifts can be arguably predicted from the incidence of vowel quality changes which do not result in mergers. These are the kinds of events, then, whose correlation with the kind of stress a language has and its vocalic system, has been verified. Additionally, a cycle of the evolution of vocalic systems is proposed, with languages undergoing a major transition being especially likely to undergo vowel shifts. Languages with a length-based distinction and a large vowel quality inventory might lose phonemic length in vowels. If they do so, but at the same time retain two distinct vowel classes, vowel shifts are likely to ensue.

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## Verb-second word order in *weil* 'because' clauses of spoken German: Psycholinguistics theory from corpus-linguistic data

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In current spoken German, subordinate clauses introduced by the conjunction *weil* 'because' occur with two orders of Subject, finite Verb and Object(s): Verb-Final/SOV (henceforth "VF") or Verb-Second/SVO ("V2"). "*Weil*-V2" is restricted to colloquial language registers, virtually absent from formal (written, edited) German. Detailed accounts of *weil*-V2 were recently published by Antomo&Steinbach (2010) and Reis (2013).

Current theories of *weil*-V2 take the perspective of the listener, seeking to account for the wider range of interpretations licensed by *weil*-V2 than by *weil*-VF clauses. In particular, *weil*-V2 clauses—like their counterparts containing the coordinating causal conjunction *denn* 'for'—afford "epistemic" explanations of the *explanandum* expressed in the main clause in addition to "propositional" explanations, the latter being the only ones licensed by *weil*-VF. In our paper, we take the perspective of the speaker, i.e. we investigate the sentence planning process, including self-repairs. This production-based approach will also appear to elucidate why *weil*-V2 licenses epistemic explanations.

We examined a treebank of spoken German (TüBa-D/S; Stegmann et al., 2000), which contains circa 38,000 sentences produced in face-to-face conversations. We found 372 usable sentences with *weil*, and 66 with *denn*. A majority of the *weil* clauses has V2 word order (54.8%). No *weil* clause precedes the main clause it modifies.

The data accrued from this collection strongly suggest that extemporaneous production of *weil*-V2 clauses requires more conceptual and syntactic planning effort than *weil*-VF and *denn* clauses. Two indications (from a larger set): *Weil*-V2 clauses are significantly longer than both other clause types; and they manifest overt self-repairs, whereas self-repairs are altogether absent from the other clauses. Another striking difference: Around 17% of the *weil*-V2 and *denn* clauses were produced in isolation, without main clause—presumably commenting on what the conversation partner said, or answering a question—whereas only two *weil*-VF clauses occurred without main clause.

*Theory* Sentences with a trailing *weil/denn* clause express a BACKWARD INFERENCE (from the CONCLUSION expressed in the leading main clause to the EVIDENCE expressed in the *weil/denn* clause). The conceptual content for such sentences can either be retrieved from long- or short-term memory, if the speaker made that inference before ("offline"), or s/he has to make it ad hoc ("online"). In the former, relatively easy case, the *weil* clause speaker will often succeed in planning the evidence clause IN PARALLEL with the conclusion clause. In the latter, more error-prone case, s/he often prefers SEQUENTIAL planning. The larger processing load for *weil*-V2 suggests that speakers

often plan and initiate leading explanandum clauses without sufficient look-ahead for the ensuing *weil* clause, and resort to a (c)over self-repair: to abandon the current sentence plan and express the evidence conceptual content in a new sentence—of course with standard V2.

Building on these assumptions, we have worked out a psycholinguistic framework that generates sentences with syntactic, prosodic, and pragmatic properties such as those that Reis and Antomo&Steinbach hold responsible for the interpretation of *weil/denn* clauses, without introducing another *weil*-V2 lexical entry.

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## Pronominal affixes in history of the Punjabi language

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The paper is dedicated to the typological evolution of pronominal affixes in Western Punjabi cast in the framework of Functional Grammar.

There are different explanations concerning origin of pronominal affixation in South Asian languages. According to M. Emeneau, pronominal affixes developed as a result of contacts with neighboring Iranian languages. However, the ground for that borrowing must have been structurally inherent in Indo-Aryan. G. Grierson traced pronominal affixes to enclitic pronouns of Sanskrit and to Prakritic pronouns. Many scholars discussed synchronic problems of pronominal incorporation and its interaction with agreement and discourse factors. E.g., M. Butt has shown that pronominal clitics in Punjabi are used for postverbal discourse backgrounding.

This paper brings up a problem that has not yet attracted the attention of linguists – namely, to what extent the historical evolution of pronominal affixes has followed the main trend of the syntactic development. The data analyzed in the paper have been obtained from the Sikh sacred text ‘Adi Granth’ (17 cent.) and the earliest prose texts in Punjabi (Janam Sakhis) belonging to 17 – 18 centuries. The syntactic processes in Modern Western Punjabi are analyzed on the basis of samples from prose texts and data obtained from the native speakers.

The ideal ergative pattern in noun declension got formed in Apabhramsha when Nominative vs. Accusative distinction had been destroyed by sound changes. Since that time the case marking as well as the verbal agreement in the constructions with reflexes of historical -ta-participles demonstrated maximum of ergativity. This means that in perfective tenses the transitive object (O) was grouped together with the intransitive subject (S) against the transitive subject (A). Later syntactic development resulted in the decline of ergativity. Punjabi developed the tripartite case marking system for all the nominal classes excluding personal pronouns which tended towards acquiring the accusative case marking system: ‘A=S≠O’.

The table below illustrates the system of pronominal affixes in Old Western Punjabi:

Person.	Pronominal affix	Syntactic role	Compulsory pro-drop
1	mhi / mi / mu	S, O, A	-
	āsi / āsu	S	+
2	i	A	-
	hi/hu	S, O	+
3	(a/ā)su / (a/ā)si / (a/ā)se	S, O, Possessor, Beneficiary, etc.	-
	(a)nu / (a)ni	A	-

The table shows that three of the six pronominal affixes implied certain syntactic roles each, while one of the affixes combined S or O marking on the verb. The deviations from this model became observable already in the 17-18 centuries when the pronominal affix -(a/ā)su /-(a/ā)si started being used not only with intransitives but also with transitives, thus marking both S and A.

In Modern Western Punjabi the pronominal affixes are not used in complementary distribution with the cross-referenced syntactic roles as one and the same pronominal affix may serve as marker of S, A, Experiencer, Beneficiary or Possessor. Following A. Kibrik’s idea that ergative languages are more consistently role-oriented than nominative-accusative, we may conclude that historical changes in the system of Western Punjabi pronominal affixes have followed the general tendency in evolution of Indo-Aryan towards ergativity decline.

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## The English adverbial *-ly* suffix: inflectional or derivational?

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The present paper explores the secondary grammaticalization of the adverbial *-ly* suffix, focusing on whether the *-ly* suffix is still a derivational suffix, or if it has developed into an inflectional suffix. I also discuss some theoretical implications of viewing the suffix as an inflectional suffix.

Secondary grammaticalization is said to involve a change from the grammatical to the ‘more grammatical’ (Kurylowicz 1965:69). There are at least two interpretations of what this means, one that focuses on semantic-pragmatic development, and one that focuses on morphological-grammatical development. Bybee (1985) adopts a morphological-grammatical approach to secondary grammaticalization. With regard to the development of inflectional affixes, she proposes that they typically go through the following development (1985: 12):

lexical → derivational → inflectional

I will discuss whether the adverbial *-ly* suffix belongs at the second or third stage of this grammaticalization cline. The suffix has traditionally been regarded as a derivational suffix. However, during the past half century or so there has been some debate about its grammatical status, starting with Lyons’s claim that adverbial *-ly* is inflectional (cf. Lyons 1966). A very recent proponent of this view is Giegerich (2012), which will serve as a starting point for my discussion here. I will argue, with Giegerich, that there are many good arguments – syntactic, morphological and semantic ones – for regarding adverbial *-ly* as an inflectional suffix and ‘adverbs’ as simply inflected adjectives. However, such an approach raises some questions concerning the status and function of the *-ly* suffix and the categorial status of the elements that carry this suffix. Giegerich (2012: 342) argues that “in English ‘adverb’ is not a lexical category but merely a specific modifier function performed by members of the category Adjective, associated with contexts other than those traditionally associated with Adjectives” (Giegerich 2012: 342). However, as noted by Bybee, Perkins & Pagliuca (1994), defining a gram negatively is problematic. We must assume that affixes have inherent lexical meaning, and that they developed because they make a “content-ful contribution to the utterance” (Bybee, Perkins & Pagliuca 1994: 138). Defining the *-ly* suffix as a suffix which is applied when an adjective is not appropriate goes against the requirement that affixes must be defined positively. In addition, we may wonder about the status of the large battery of adverbial categories which has been established in the literature. If ‘adverbs’ do not represent a lexical category at all, but are simply inflected adjectives, we are forced to regard this battery of categories as simply an epiphenomenon which has been given undue status as a lexical class. However, the relevant catego-

ries of adverbials share a number of properties with each other which are not shared by adjectives. Hence, if we want to define 'adverbs' as some kind of adjective, we at least need to revise the properties of adjectives and 'adverbs' and see if we can find some characteristics that unite them both, and which set them apart from other categories. The paper discusses both whether adverbial *-ly* is inflectional or not and the problems that an inflectional analysis raises.

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## A usage-based analysis of the modal and discourse marker uses of English tag questions

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We assume with McGregor (1995; 1997) that English tag questions serve two broad interpersonal functions: they express speech functions such as questions (example 1) question-statement blends (2), statements (3) and commands (4-5) (authors 1,2,3) and they convey speaker attitude (cf. Mithun 2012). It is for the attitudinal layer that we will develop a systematic typology in this paper.

Authors such as Quirk et al (1972; 1985), Millar & Brown (1979), Andersen (2001) and Huddleston & Pullum (2002) have correlated epistemic modal meanings with prosody: a rise on the tag conveys that the speaker is uncertain about the truth of the proposition in the anchor, and a fall that the speaker is certain. Whilst our study of prosodically annotated data confirms these as general tendencies, there are exceptions, e.g. tag questions in which the speaker lacks information but which have a falling tone despite the speaker's uncertainty as in (1).

(1) he looked at it# he looked at it h\as he# (COLT)

We will, therefore, start from the concepts of the primary knower, who has the information, and the secondary knower, who seeks the information (Martin 1992:48; Heritage 2012), to define the *epistemic* modal values that can be expressed. Secondary knowers are typically uncertain about the truth of the *proposition* (1), but primary knowers can manifest different degrees of certainty, varying from less certain (2) to quite certain (3).

(2) A: \*((^think we)) paid !sixty\*-'odd p\ounds# ^d\idn't we# for the ^l\ast 'lot#

B: ^sixty-n\ine \_pounds# +^for+ (LLC)

(3) they l\ike that# and# she's really c\ocky# \isn't she# and she won't take any sh\it from anyone# (COLT)

Tag questions can also be *deontic* constructions, in which speakers express *directive* attitudes towards the *acts* described in the anchor (Davies 2006), e.g. (4-5).

(4) and ^then phone Br\ian w\ill you# (COLT)

(5) well ^let's think about the pr\esent shall we# (LLC)

We hypothesize that both modal types manifest the opposition between subjective (speaker commitment), e.g. (2,4), and intersubjective (pretence of speaker/hearer consensus), e.g. (3,5), in their own ways, which we will develop in our typology.

Finally, a sizeable portion of English tag questions function as *discourse markers*, rather than as modal markers, conveying interactional and discursive meanings such as the countering of expectations (6) (cf. Martin's 1992 continuity markers), hedging (7) (Aijmer 2002), and emphasising (8) (cf. Algeo's 1990 punctuational tag questions; Mithun's 2012 Highlighting crucial points).

(6) A: I didn't walk of[sic] with Fel\icity# I walked off with S\ookey#

B: well Sookey can still come r\ound# c\an't she#. (COLT)

(7) you heard about that Lord of the Fl\ies# it's like this kind of, it's a group of b\oys# \isn't it# English b\oys# who get (COLT)

(8) ^course an!\other 'factor in ((disagr/ement# ^\isn't it#)) is the ^fact that a :th\ird# of the ^wh\ole {of the de^p\artment#}# disap^pear in (([dh@mi])) the be!ginning of M\ay# (LLC)

We will correlate our typology of the various types of speaker attitude with their typical prosodic, syntactic, semantic-pragmatic and discursive features based on a qualitative and quantitative analysis of the intonationally transcribed tag questions (992 tokens) in the London-Lund Corpus (LLC) and the Corpus of London Teenage Language (COLT).

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## The use of evidentials in declaratives and interrogatives

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Languages display obvious differences in how evidential markers are used in declaratives and interrogatives. First of all, languages may be divided into two based on whether or not evidentials may appear in both declaratives and interrogatives. Languages in which evidential markers are confined to declaratives constitute the first type (Estonian, English). The type in which evidentials appear only in interrogatives seems to be unattested. The second main type is illustrated by languages where evidentials occur in both declaratives and interrogatives. This type can further be subdivided according to the nature of evidential markers. First, there are languages, where there are no obvious differences in the use of evidentials in declaratives and interrogatives (Kathmandu Newari, Duna). The second subtype is found in languages, where evidentials may appear in both constructions, but with clear differences. For example, in Wutun, evidentials appear with first person in declaratives and in questions with second and third person. Third, there are languages like Chechen, in which the occurrence of evidential markers as such is not sensitive to the clause type, but the number of evidentials that may occur in interrogatives is lower and the nature of the markers may also be different. Finally, the form of evidential markers may be determined by the construction they appear in (Foe, Guambiano).

As the typology proposed above shows, the use of evidential markers in declaratives and interrogatives is clearly asymmetric; a higher number of evidential markers may occur in declaratives. The most important reason for this is probably found in the status of information source in the discussed clause types. The source of information is less relevant in interrogatives, because the focus is on the contents, and it is usually not important how the addressee has acquired the relevant information. Moreover, we typically do not have access to the addressee's source of information, which renders it less natural to include an evidential marker into an interrogative. In declaratives, we do have a source of our own for the information, which we may (need to) specify. It is also worth noting that languages with and without obligatory evidentiality behave differently; evidential markers are more common in interrogatives in languages where evidentiality is an obligatory category. The status of information source is clearly different in the two language types, only languages with a highly grammaticalized evidentiality system may have evidentials also in interrogatives. One of the reasons for this may be that grammaticalized evidential markers are semantically some-

what bleached, whence they may appear also in interrogatives. Also the type of interrogatives seems to be relevant, and evidentials appear more frequently in *wh*-questions than in polar interrogatives.

In my paper, the typology proposed above is discussed in light of cross-linguistic data. Moreover, I will also discuss the rationale behind the attested types in light of the semantics of declaratives and interrogatives. This also includes a discussion of the semantic nature of the evidentials that may occur in interrogatives.

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## Systems and uses of articles: Patterns of variation

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Binary systems of (indefinite and definite) articles are specifically found in Romance, Germanic, Balto-Slavic and the Balkan languages and are generally considered as an areal feature of European languages (Haspelmath, 2001; van der Auwera, 2011). As is shown in Dryer (WALS, 2005), however, this areal restriction only holds true, if the properties of the fully grammaticalized article systems of the European languages listed above are more or less taken as a standard for the identification of article systems elsewhere. Subsuming also affixes and demonstratives with a double (gestural and non-gestural) use under the term, Dryer shows that outside of Europe “definite articles” are also found in central Africa, in the Pacific and in Mesoamerica, even if the semantic opposition of the two relevant forms is frequently described as ‘specific vs. non-specific’.

It is the goal of this paper is to discuss parameters and patterns of variation in the use of ‘definite and indefinite articles’ in those languages to which these comparative concepts may usefully be applied. For ‘definite articles’ these parameters of variation can be specified in terms of distribution (co-occurrence with possessive pronouns or with demonstratives; pre-nominal or post-nominal position; single vs. multiple use in a noun phrase; arguments vs. terms of address, etc.), of semantic properties of the accompanying noun (concrete vs. abstract; specific, non-specific, generic; common vs. proper, etc.) and in terms of their relationship to and degree of differentiation from demonstratives. A fine-grained comparison (micro-typology) between languages along these parameters allows us to distinguish extremely rich systems of article use, as found in Greek, from various degrees of more restricted use (French > German > English) down to incipient systems, as found in spoken Finnish and in Sorbian, where definite articles are developing under the influence of neighboring Germanic languages (cf. Chesterman, 1991; Heine & Kouteva, 2006). These observations then lead to two further questions, viz. (i) are there implicational connections between these variant properties, i.e. patterns of variations and (ii) can the different use types manifested by individual languages be ordered on a scale of grammaticalization (cf. Nocentini, 1996)? A further question to be pursued in this paper concerns the implications of the observable variation in use for the semantic analysis of definite and indefinite articles (cf. Loebner, 2011). To all of these questions tentative, but falsifiable answers will be provided.

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## Majuscule spelling as an indication of syntactic structuring in Early New High German

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Our talk deals with the question to what extent sentences (independent clauses), complement clauses, and phrasal units are initially marked by capitalization in Early New High German. Our goal is to show that the use of majuscules develops along a line from pragmatic to syntactic motivation, cf. Bergmann/ Nerius 1998.

Our study is based on a corpus of 94 witch interrogation protocols edited by Macha et al. 2005. The corpus covers a period of roughly one hundred years, ranging from about 1570 to 1670. We limit ourselves to the analysis of two correlations, i.e. capitalization after a period and after a comma. Regarding these two issues the corpus data show remarkable oscillation.

Another focus of our study is whether certain syntactic types trigger capitalization. Our hypothesis is that capitalization is first found at the beginning of sentences, followed by complement clauses and phrasal units, and is eventually applied to the lexical category of nouns.

Finally, we discuss the function of punctuation and capitalization at the beginning of paragraphs and pages. Our analysis reveals that varying combinations of punctuation and capitalization serve the function of signaling the internal syntactic organization of a text.

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## The (a)symmetry between Sources and Goals in the expression of Motion events: a cross-linguistic perspective

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Cognitive scientists have often postulated that there is a bias towards the Goal (final point) over the Source (initial point), and that people encode the Goal more frequently and in a more-fine grained fashion in discourse than the Source. This preference given to the Goal was largely attributed to its cognitive and pragmatic salience, namely when human motion is involved the Goal is more important than the Source and, hence, it attracts our perceptual attention (e.g., Ikegami 1987, Lakusta & Landau 2005, Lakusta *et al.* 2006, Regier & Zheng 2007). Although these studies have contributed significantly to our understanding of Sources and Goals, the role of typological characteristics of individual languages in the expression of Sources and Goals has not been the subject of much study. Do all languages of the world favor the Goal of motion? What is the role of language-specific characteristics in the expression, asymmetrical or symmetrical, of Sources and Goals?

The bias toward the Goal has been recently examined cross-linguistically in the domain of (caused) *placement events* (e.g., *putting the stone into the pocket, taking the cup from the table*), and it has been shown that the expression of Source-oriented (taking) and Goal-oriented (putting) events can vary importantly not only across languages but also within individual languages (Kopecka & Narasimhan, eds. 2012). Extending this comparative research to a new domain, in this talk we present a large cross-linguistic project focused on the expression of Sources and Goals in spontaneous *motion events* (e.g., *walking into the field, running out of the sea*). This project was designed at the *Fédération de Typologie et Universaux Linguistiques* (CNRS, France), and has been carried out by colleagues at various field sites around the world.

To elicit descriptions of motion from native speakers of typologically diverse languages and to examine cross-linguistic variation in this domain of expression we used a standardized set of video-clips (Ishibashi *et al.* 2006). These clips are designed varying several parameters, namely the Figure (e.g., individual vs. group of people), the Ground (e.g., objects vs. locations), the Path (initial, median, and final portions of motion), the Manner-of-motion (e.g., *walking vs. running*), and the Deixis (*towards vs. away from* the deictic center).

In this presentation, we investigate data from 15 languages and evaluate the role of the typological factors (structural and semantic) that underlie the expression of Sources and Goals. We first provide a brief overview of the project by showing the range of languages we studied, and by presenting the method we used to elicit descriptions of motion from speakers of these languages. We then examine morphosyntactic devices speakers used to describe Path of motion and discuss the types of similarities and differences found across languages in the expression of Sources and Goals. We show that while some languages express Sources and Goals in an asymmetric fashion, by actually paying more attention to *either* Goal *or* Source, others by contrast tend to express Sources and Goals in a more symmetric fashion and do not favor one or the other portion.

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## Clausal complementizers in Teiwa: Complexity before evolution?

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In many languages, complementizers are of quite recent historic origin (e.g. less than 10 000 years). This has led several researchers to conclude that sentential complementation itself is of similarly recent origin. We show that even before the evolution of an identifiable complementizer sentential complementation exists. Our data is from Teiwa, an Alor-Pantar language (Klamer, 2010). Specifically, verbs that take a sentential complement in Teiwa are followed by what seems to be a complete clause involving the verb ‘say’ and a subject pronoun. We argue, however, that the sequence of subject pronoun and the verb ‘say’ in Teiwa is part of a complementation structure in these cases. Our proposal is corroborated by both observational and experimental data concerning intonation, syntactic extraction and the semantic scope of negation. Our results indicate that clausal complementation structures exist independently of the morphology of the complementizer system and earlier than previously assumed.

**Prior Work:** Numerous languages and language families provide evidence that verbs of speech can grammaticalize into complementizers (Heine and Kuteva, 2002; Güldemann, 2008). The date from Old-Babylonian are particularly interesting because written records exist. Deutscher (2000) claims that Early Old Babylonian (2000–1800 b.c.) didn’t have complement clauses on the basis of data like (1) (Deutscher, 2000, p. 72): The verb of speech *wrote/talk* is followed by the verb *say* with a subject pronoun *I/they-P*. Deutscher suggests that *say* is not subordinated to *wrote/talk*, and may itself be a quotative marker not a subordinating verb.

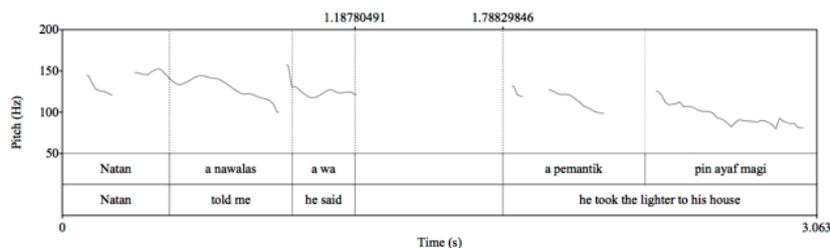
- (1) a. ašpurak-kum    umma    anāku-ma    litma’ā  
I.wrote-to.you    umma    I-P    let.them.swear  
‘I wrote to you, (and) this is what said: “. . . .”’
- b. iq̄-bi-ú ni-im-ma    umma    sunu-ma  
they.said-to    me-P    umma    they-P  
‘They talked to me, (and) this is what they said “. . . .”’ (our translation)

**Teiwa:** Teiwa uses constructions that match Old-Babylonian exactly: The verbs of speech *walas* ‘tell’, *wulul* ‘gossip’ (trans.), *ultag* ‘talk’, *yivar* ‘dream’, and *puan yaxai* ‘talk nonsense’ are in most cases followed by the verb *wa* ‘say’, which seems to have an independent subject pronoun.

- (2) a. Ben    a    yivar    a    wa    a    yir    og    hufa’  
Ben    3S    dream    3S    say    3S    water    hot    drink  
‘Ben dreamed that he drank hot water.’
- b. Hala    na-puan yaxai    hala    wa    a    ii  
other    1S-talk nonsense    other    say    3S    sick  
‘One told me as joke that he is sick.’

**Subordination:** Initially a bisentential or coordination analysis of (1) and (2) is plausible. But, Teiwa allows us a closer examination and our data show that subordination is the correct analysis. Specifically, we present three types of evidence: phonetic declination, long extraction, and scope of negation. Our evidence was gathered in targeted elicitation experiments from ten Teiwa speakers. Example (3) illustrates phonetic declination, and also shows that like in English a pause, if there’s one, is placed following the complementizer *a wa*, not at the putative sentence boundary.

- (3) Natan    a    na-walas    a    wa    a    pemantik    pin    a-yaf    ma    gi  
name    3SG    1SG-tell    3SG    say    3SG    lighter    hold    3SG-house    COME    go  
‘Natan told me that he took the lighter to his house.’ [MWE789.18]

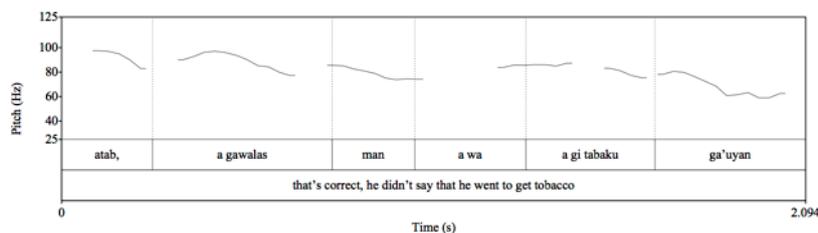


Example (4) shows long extraction of *yilag* ‘who’, which should be impossible across a sentence boundary or violate the coordinate structure constraint.

- (4) *Yilag la Ben pi-walas a wa insi a n-ua?*  
 who FOC Ben 1PI-tell 3S say FUT 3S 1S-hit  
 ‘Who did Ben tell us that will hit me?’

Finally, example (5) shows that negation affixed to the first verb takes scope over the whole sentence. In addition, we also see phonetic declination.

- (5) *atab, a ga-walas man a wa, a gi tabaku ga-uyan*  
 correct 3SG 3SG-tell not 3SG say 3SG go tobacco 3SG-search  
 ‘that’s correct, he didn’t say that he went to get tobacco.’ [AME6.148]



**Nanti:** The Arawak language Nanti provides additional evidence. The Nanti complementizer *ka* is a historically related to the verb *kaNt* ‘say’, and still agrees with the matrix subject (Michael, 2008, p. 111).

- (6) *i=N-kaNt-e i-ka-ha tomi no=ha-i no-N-kamoso-e*  
 3MS=IRR-say-IRR.I 3MS-QUOT-NEG.IRR son 1S-go-REAL.I 1S=REAL-visit-REAL.I  
 ‘He would say: I will not go and visit my son.’

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## Normalization of electropalatography (EPG) data

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The comparison of various visual feedback methods for pronunciation instruction indicates that some of the most effective visual feedback methods for teaching pronunciation of a given sound is the display of articulators in movement for that sound (Eskenazi 2009: 837). On the other hand, one of the most informative and cost-effective methods devised to visualise the movement of articulators in real time is electropalatography. EPG has been used as a source of visual feedback for therapy of selected speech defects (Hardcastle et al. 1991) and to in FL pronunciation

training (Gibbon et al. 1991, Schmidt and Beamer 1998, Bright 1999, Hazan 2005). However, the potential of EPG as source of visual feedback on subject's pronunciation has been limited by several practical and theoretical problems. Practical ones include imperfections of the technology (e.g. thick artificial palate), lack of group teaching methods and price. Theoretical problems include the difficulty of combining articulatory feedback with acoustic feedback (acoustic channel being always primary), non-uniqueness in the acoustic-to-articulatory mapping (Ananthakrishnan 2011) and the need of between-palate (between-speaker) normalization of EPG data.

The paper will address the issue of normalization of EPG data obtained through artificial palates used by different speakers. Artificial palates with grid electrode layout will be the main focus of the study. In grid electrode layout (Logometrix, Rion, CompleteSpeech, Articulate Palate by Articulate Instruments), each electrode is positioned by a fixed, known distance from neighbouring electrodes. In an alternative solution – the manually normalized layout (Rose Medical, Reading Palate by Articulate Instruments) – the number of electrodes does not vary and each electrode is aligned with an anatomical feature. In the first layout, palates of different sizes will be covered by different numbers of electrodes, which makes the comparison of the data from these palates unreliable without some algorithmic normalization. These palates, however, are easier to make and cheaper than manually normalized palates. They offer twice the number of electrodes, display velar closure patterns and provide better integrity of connections; they are also thinner and stick to teeth better (Making plaster models for EPG palates 2013). Manually normalized layout palates, on the other hand, require a professional judgement on the part of the palate maker to try to ensure comparable placement of electrodes, which makes them more difficult to make but more reliable in between-palate comparisons. However, due to the lack of reliable landmarks on the palate and individual differences in palate shapes and sizes such manual normalization is only partially reliable (Wrench 2007: 9). Further correcting it by algorithmic normalization is more difficult than in the case of grid electrode layouts due to the smaller number of electrodes. In our paper, various articulatory normalization methods will be overviewed (Hashi et al. 1998, Westbury et al. 1998, Simpson 2002) and their applicability to EPG signal normalization will be discussed. A model of articulatory normalization for grid electrode layouts will be presented.

The results of this study will be useful for phoneme recognition from articulatory data (Krynicky, in print), speech therapy and computer assisted pronunciation teaching.

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## Kopulatives *wesan* und die konkurrierenden Formen im Althochdeutschen

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**Fragestellung.** Das Verb *wesan* (*sein*) ist im Althochdeutschen in erster Linie ein kopulatives Verb: *Thaz ist uns iro-ugit . thaz got ist kristes houbit* ‚Es ist uns gezeigt, dass Gott das Haupt von Christus ist.‘ Hier verfügt *wesan* über kein eindeutiges semantisches Gehalt und verbindet lediglich das Subjekt und ein Substantiv. Es gibt Fälle, in denen *wesan* die Funktion eines Existenzverbs erfüllt, dem eine deutlichere Eigensemantik zuerkannt werden kann: *Nist er ... there . ther io thih so irfare* ‚Es gibt dort niemanden ..., der dich jemals so festnimmt.‘ Diese Gebrauchsweise

scheint aber nicht sehr ausgeprägt zu sein. Dem kopulativen *wesan* stehen noch Verwendungsweisen von *wesan* als Hilfsverb gegenüber, bei denen dieses Verb mit einer infiniten Verbform eine Verbindung eingeht: *Uuir uuarun io firlorane . ioh suntono biladane* ‚Wir waren einst verloren und mit Sünden beladen‘; *Gihorta tho ther liut thaz . thaz druhtin xpc thara queman uuas* ‚als das Volk hörte, dass Christus gekommen war.‘ Diese Konstruktionen werden in den Grammatiken als passivisch bzw. perfektisch angesehen und erhalten einen eigenständigen Platz im Verbalsystem (vgl. z.B. Eroms 1997, Schrodts 2004). Die Funktion des Verbs *wesan* ist auch hier von der als kopulatives Verb zu unterscheiden. In funktionaler Hinsicht kommen außerdem gewisse denominalen Verben als Konkurrenzformen für kopulatives *wesan* in Frage: *Er richisot githiuto . kuning therero liuto* ‚Er herrscht wahrlich als König dieses Volks.‘ Hier bezieht sich das zugrundeliegende Substantiv (*rihhi* ‚Herrscher‘) des Verbs auf die Eigenschaft der Subjektergänzung. Die Bedeutung des Verbs ist mit ‚als Herrscher tätig sein‘ zu umschreiben („Agentives Verb“ nach Marchand 1964). Das Basissubstantiv entspricht dem Prädikat einer kopulativen Konstruktion, wobei die Bedeutungsstruktur des Verbs über eine Komponente verfügt, die der Bedeutung von *wesan* entspricht. Die Relation zwischen dem kopulativen *wesan* und den genannten verschiedenen Konkurrenzformen im Althochdeutschen ist noch nicht genügend geklärt und soll deshalb unter die Lupe genommen werden.

**Forschungsansatz.** Den funktionalen Unterschieden der in Frage kommenden Formen gebührt sicher eine Aufmerksamkeit. Es ist aber auch von Interesse, wie frequent die jeweiligen Formen vorkommen. Erst nach Klärung der Frequenzverhältnisse kann nämlich klar werden, welche Funktionen des Verbs *wesan* als zentral oder peripher angesehen werden können. Dieses Referat ist ein Versuch, die Relation zwischen *wesan* und seinen Konkurrenzformen aus der funktional-quantitativen Perspektive zu durchleuchten.

**Methode.** Zu diesem Zweck werden Ergebnisse einer erschöpfenden Untersuchung eines althochdeutschen Korpus vorgeführt. Davon ausgehend soll festgestellt werden, inwieweit das kopulative *wesan* sich von seinen Konkurrenzformen (qualitativ und quantitativ) unterscheidet.

**Datengrundlage.** Die Ausgangsdaten ist das 7000 Verse umfassende *Evangelienbuch* Otfrids von Weißenburg.

**Erwartete Ergebnisse.** Durch diese Untersuchung kann der Stellenwert der genannten Formen innerhalb des althochdeutschen Grammatiksystems adäquat erfasst werden. Es ist zu erwarten, dass sich Basiserkenntnisse ergeben, auf deren Grundlage künftig der historische Funktionswandel des kopulativen Verbs *sein* und seiner Konkurrenzformen im Deutschen diskutiert werden kann. Besonders eingehend soll auf das Verhältnis zwischen kopulativem *wesan* und verbalen mehrgliedrigen Verbalkonstruktionen mit *wesan* eingegangen werden, so dass deren Grammatikalisierungsgrad erhellt werden kann.

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## Exterior and interior sides of the analytical technique in the system of English phrasal verbs

Kuzina, Irina; Bogdanova, Svetlana (Irkutsk State Linguistic University, Irkutsk, Russia)

Analytical and synthetic features can be found in all types of languages. The present paper aims to contribute to the understanding of some peculiarities of the analytical technique.

**Research question and hypothesis.** The study focuses on the cognitive basis of analytism in English. It is hypothesized that the cognitive basis of analytism is in the easiness and distinctness of categorization.

**Approach.** Two concepts play an essential role in the approach at hand: 1) the concept of analytism as the technique of connection of meaning carriers in a language; 2) ideology of conceptualization and reconceptualization of spatial relations, which have been long known to constitute one of the bases of human cognition.

**Method and data.** The example material is English, with an emphasis on phrasal verbs with spatial particles such as *cry out*, *sink down* which can be treated as lexical analytical constructions (entities). Two sides (exterior and interior) distinguished in the analytical technique [Analytism... 2005] have determined the method of investigation.

**Results.** The exterior side of the analytical technique presupposes dividedness (discriminability of meaningful segments) both in the entities written as one word (*blackberry*, *strawberry*, *gooseberry*, etc.; *landscape*, *moonscape*, *seascape*, etc.) and in the entities with distinct parts written separately (*wake up*, *get up*, *jump up*, etc.). Nomination of the objects of one and the same category by the entities with the distinguishable semantics of at least one – cate-

gorizing – component is characteristic of the English language and of all the languages with well-developed analytical tendencies.

*The interior side* of the analytical technique can be seen in 1) the deducibility of the general semantics of the analytical entities from the meanings of the categorizing components, 2) high degree of motivation of the entities, 3) a tendency for creating stable models of their formation.

Some conceptual domains, systematically represented by the English phrasal verbs with spatial particles, have one or several spatial concepts in the centre, while all the other ‘content’ concepts form the periphery. A grouping of spatial particles or other spatial elements can structure the conceptual domain as spatially oriented and serve as a formal index of the reference of the grouping to a specific category (e.g. the grouping of the particles *in* and *down* combined with the verbs of different semantic fields structures the conceptual domain ‘Depth’).

The study demonstrates that the analytical technique categorizes the world more distinctly than the synthetic one; e.g. in English the genetic similarity of spatial adverbs, particles, and prepositions makes the categories of space more explicit.

Such observations add to a deeper understanding of the cognitive basis of analytism.

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## The syllabic status of stop + yod sequences in Old Sardinian

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This work aims at reconstructing the syllabic structure of plosive plus yod in Old Sardinian with the theoretical tools offered by the Strict CV framework (Lowenstamm 1996, Scheer 2004), an approach to syllable structure that explains changes as a result of positional factors determined by two forces: government and licensing. In this theory, segments subjected to government are weak (i.e., intervocalic consonants) while those that receive licensing are strong (i.e., word-initial and post-coda consonants). In Strict CV, coda consonants are predicted to be in a comparatively weak position, but still better than intervocalic consonants: codas lack the positive effect of licensing but also the negative effects of government (Scheer & Ziková 2010: 420). Even though coda and intervocalic positions are both weak, they are involved in different weakening phenomena (Ségéral & Scheer 1999: 24). We believe that this situation is reflected in the evolution of Sardinian clusters and that it provides a tool to discriminate among tautosyllabic and heterosyllabic clusters.

Our purpose is to offer evidence for the heterosyllabic nature of Old Sardinian stop + j sequences by looking at their modern reflexes as clues of their previous syllabic status.

Southern Sardinian was affected by intervocalic lenition: voiced stops deleted while voiceless stops became voiced fricatives, e.g., FABULA > faula, FOCU > foju, (Wagner 1941, Viridis 1978). From Brun-Trigaud & Scheer (2010), we know that in Strict CV, only consonants in a governed configuration undergo lenition. This comprises intervocalic consonants as well as consonants in a tautosyllabic cluster, as in a stop-plus-liquid (e.g., FOCU > foju, SOCRU > sojru).

The Sardinian reflexes of stop + j sequences display weakening of a different kind. Compare in (1) the evolution of some consonants followed by yod with the same consonants in a tautosyllabic syllabification (stop + liquid):

(1a) Stop + yod	(1b) Stop + liquid
-T- +j PLATEAM > 'prassa	-T- +l PETRA > 'peðra
-C- +j LAQUEUM > *LACEUM > 'lassu	-C- +l SOCRU > 'sojru
-B- +j RUBEUM > rubiu > or'ruβiu	-B- +l FABRU > 'frau

Lenition was a productive phenomenon that applied to every intervocalic consonant and consonant in a tautosyllabic cluster. If the stops in (1)a were tautosyllabic, one expects the same kind of weakening encountered in (1)b: the development of a voiced fricative for the voiceless stops and the deletion of the voiced stop. The results in (1)a are not compatible with intervocalic lenition and thus with a weak governed status of the consonant. In our view, the lack of deletion of the voiced stop and the geminate fricative [ss] for the voiceless stop is due to a coda weakening effect, evidence of a heterosyllabic status for the C+j sequences in Old Sardinian. As predicted by the theory, coda stops underwent weakening but displayed a more stable situation than intervocalic stops affected by lenition.

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## Directive strategies in Korean and Japanese

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Directive speech acts, i.e. speech acts that are performed by the speaker to order someone to do something, are crucial to the establishing and maintenance of interpersonal relationship (Mauri and Sanso, 2011). Languages often adopt various strategies (grammatical markers and constructions) to perform these acts. The current study aims to shed light on some aspects of directive speech acts in our language use by exploring the directive strategies in modern Korean and Japanese. We will focus on:

- (i) What verbal resources are available for the directive strategies?
- (ii) What factors determine the use of a particular directive strategy?
- (iii) What cross-linguistic features are found between Korean and Japanese in directive strategies?

For the current study, we have collected data drawn from TV drama of around 30 hour long in total (15 hours for each Korean and Japanese). Around 2,000 cases of directive strategies have been observed. We have categorized them based on the degree of strength of the obligation involved as well as the distinction between Direct directives vs. Indirect directives (Perez Hernandez and Ruiz de Mendoza, 2002). We have also considered a variety of factors (gender, social status, formality, etc) for the choice of a particular strategy.

Korean is known to have six speech styles differentiated on the basis of the level of formality and an imperative form exists in each speech style: *-psio*, *-ayo*, *-o*, *-key*, *-a*, and *-ala* (Ko and Nam, 1993; Ko, 2003; Han et al, 2010). The study on directives has mainly focused on the use of these forms in various contexts, e.g. negative imperatives (Lee, 1979; Park, 1992), the use of imperatives for the indirect speech acts (Lee, 2001), etc. In Japanese, which has the simpler speech style, polite endings vs. plain endings, the focus has been on a wider range of expressions including the conjugated imperative form of verbs, *-ro*, and other various suggestion/request expressions such as *-te*, *-nasai*, *-tekudasai*, *-temoraitai* (Masuoka and Takubo, 1992; Himeno, 1997; Okamoto, 2000).

At the presentation we will show that, compared to the treatment in previous study, a much wider range of markers/constructions may be adopted for the directive strategies in both languages. Based on this, we will offer a comprehensive categorization of directive strategies, which, at the high level, consists of Direct directives (end with an imperative form) and Indirect directives (end with a non-imperative form); further, the former is divided into Primary imperative (a single imperative expression) and Secondary imperative (compound between an imperative and another expression; expressions of appreciation/trial), and the latter into ten subsets (expressions of desire, suggestion, obligation, etc).

It will also be shown that the level of politeness/formality plays an important role for the use of a particular directive strategy. An interesting fact, from the cross-linguistic perspective, is the prominent use of the honorific markers in Korean, and of expressions of appreciation in Japanese, to indicate a higher level of politeness/formality involved. Further, some strategies are found only in either language (e.g. the past form in Japanese, the potential-interrogative in Korean).

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## Modeling the linguistic diversification of Finno-Saamic languages

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Quantitative methods have been used to study the evolutionary relationships and divergence times of biological species, but recently, they have also been applied to linguistic data in order to elucidate the evolutionary history of language families (e.g. Gray et al. 2003 for Indo-European). In this paper we apply quantitative methods to clarify the divergence process of closely related languages, which emerge between dialect continua and fully diverged varieties. This study therefore operates between the microevolutionary (divergence of populations within a species) and macroevolutionary (speciation and extinction) levels of language lineaging. Our approach to explain diversification uses phylogenetic methods and is informed by theories of evolutionary biology. The results are compared with hypotheses from comparative-historical linguistics.

The languages under investigation belong to two branches of the Uralic family and are spoken in a vast area stretching from northern Fennoscandia (Saamic) to the Circum-Baltic region (Finnic). Whereas the dating and reconstruction of proto-forms for both branches is rather uncontroversial (see the overview in Honkola et al. 2013), a common genealogical node “Finno-Saamic” (aka Early Proto-Finnic) is not accepted by all linguists (cf. Salminen 2002). Our database includes the Finnic languages Võro, Estonian, Finnish, North Karelian and Veps and the Saamic languages Kildin, Skolt, Inari, North, Pite and South – representing all assumed sub-branches. Tests were run not only on divergent sets of basic and non-basic vocabulary, but also—as a novel approach in quantitative research on Uralic—on a selection of phonological, morphological and syntactic features.

Language phylogenetics most often employs phylogenetic tree models, which provide not only the shape of the tree but also reliability estimates of branches. Previous studies on the Uralic family (Lehtinen et al. [in press], Syrjänen et al. 2013, Honkola et al. 2013) compared tree models to networks and found discrepancies between these, especially with regard to interpreting the history of closely related languages: tree models yielded strong support values for branching, whereas networks suggested a dialect continuum between the languages. This suggests that tree models may fail in revealing the genealogy of closely related languages.

In this paper we want to test this hypothesis further by focusing on relationships within Finnic-Saamic, which according to our data are close neighbors within the clades, which themselves are sister groups to each other. We compare trees and networks and relate the outcomes to earlier qualitative studies on historical Uralic linguistics. Furthermore, we aim at disentangling the triggers of language lineaging: under which circumstances do the lineaging languages (or late phases of dialects) become isolated and when do they retain a constant flow of contacts.

Divergence of populations and species is often a function of geographic distance. We test the importance of geographic distance in promoting or constraining contacts between the speaker populations. We further study the effect of other geographic isolation factors, occurrence of administrative barriers and even (pre)historic cultural variation for the divergence process. We finally discuss how to incorporate frameworks of biological microevolution in studies on divergence of closely related languages and how this can promote the understanding of language lineaging in general.

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## Evolution of the subjunctive in Persian: from disappearance to reappearance

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In Middle Persian, the subjunctive is built with the suffix *-ā-*, whereas in contemporary Persian, it is built with the prefix *be-*. So what exactly happened between the two stages? Based on a corpus of about ten texts, this paper will demonstrate the way in which Middle Persian subjunctive disappeared and New Persian recreated a new subjunctive form.

In Early New Persian (10<sup>th</sup>-11<sup>th</sup> centuries), the Middle Persian subjunctive became the mark of the precative (see Lazard 1963). This suffix was used until the 14<sup>th</sup> century, as shown by occurrences like (1).

- (1) *haqq-i ta 'ālā arūg-i ō rā [...] sāl-hā-i bē muntahā dar kāmrānī-i 'umr*  
 God-EZ almighty descendants-EZ he OBJ year-PL-EZ without end in happiness-EZ life  
**dah-ād**  
 give.PRS-SBJV.3SG  
 “May God Almighty give to his descendants countless years in the happiness of life” (Juvainī, *Tārīx-i jahān-gušā*, 13<sup>th</sup> c.)

If the Middle Persian subjunctive was no longer used in Early New Persian, was this mood expressed by the same form as in contemporary Persian, i.e. with the prefix *be-*? In fact, this state of language displays no distinction between the indicative and the subjunctive, even in texts of the 15<sup>th</sup> century, like in the *Rauzat al-ahbāb* of Atā' Allāh Daštakī Šīrāzī (2).

- (2a) *tu rā bačča nāqa bi-dah-am ki bar ān savārī kun-ī*  
 you-OBJ child camel bi-give.PRS-1SG that on that riding do.PRS-2SG  
 “I give you this young camel for you to ride her”
- (2b) *ādam ba nazdīk-i har diraxt az diraxt-hā-i bihišt ki mē-raft tā*  
 PN in close-EZ every tree from tree-PL-EZ heaven that VAFF-go.PST.3SG in order to  
*ba varaq-i ān x'ad rā bi-pōšān-ad...*  
 to leaf-EZ that himself OBJ bi-cover.PRS-3SG  
 “When Adam came closer to each tree of heaven in order to cover himself with one of their leaves...”

The prefix *be-* (previously *bi-*) actually indicates the fundamental role of the verb in the focus until the 14<sup>th</sup> century, as I will demonstrate using several occurrences (the same phenomenon exists in other languages like Tswana (Bantu) and Imbabura (Quechua). See Creissels 1995 and Palmer 2001).

The subjunctive only reappeared at the end of the 19<sup>th</sup> century. When the prefix *mi-*, an older marker of concomitance, became obligatory for all presents, the old unmarked present (i.e. non concomitant) was marginalized and was used to express the subjunctive. This is the same evolution that Haspelmath (1998) described for many languages (see also Bybee *et alii* 1994). Secondly, at the end of the 19<sup>th</sup> or the beginning of the 20<sup>th</sup> c., the old prefix *be-* became the prefix of the subjunctive, but we do not know whether this is linked to the evolution of the old value of *be-* or if the first value weakened and the prefix became meaningless. This evolution in two stages explains why this prefix is not used for the subjunctive in Tajik: the prefix *be-* is an innovation only for a part of the Persian-speaking area.

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## Sentential arguments of derived nominal nouns: first steps towards a typology

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Deadjectival and deverbal nouns (DN) are said to inherit properties of the base verb or adjective. E.g., the noun *arrival*, derived from the verb *arrive*, retains the ability to combine with a final point designation (*He arrived to Moscow – the arrival to Moscow*).

Grimshaw (1990) claims that not all properties are inherited. E.g., if the base verb hosts a sentential argument (*He claimed that Peter is stupid*), it is not obvious that the deverbal noun can do the same, though sometimes it is the case (*his claim that Peter is stupid*).

Grimshaw and Borer (2003), dealing with English data, claim that **deverbal nouns of the ‘complex event’ type** (denoting events with a temporal localization and have obligatory syntactic arguments) cannot take sentential arguments. Knjazev (2012), basing on Russian material, proposes that only **indefinite DN** can take sentential arguments.

In my talk I consider the behavior of deadjectival nouns meaning ‘importance’ and ‘strangeness’ and some others in several languages: Russian, English, German, French, Serbian, Bulgarian, Arabic, Hungarian and Romanian focusing on their (in)ability to take sentential arguments which results in a structure like ‘Everyone understood the importance to discuss this question’. First, the native speakers translated into their languages examples with adjectives, such as ‘It is important to discuss the problem’. Then, they estimated as possible / impossible / stylistically poor constructions with a deadjectival noun (e.g. ‘importance to discuss the problem’).

A small typological study allows to make the following conclusions:

1. Grimshaw’s explanation does not work for a typological study. For instance, in Russian both *važnost’* ‘importance’ and *vozmožnost’* ‘possibility’ have obligatory syntactic arguments, but only the latter is compatible with sentential arguments, as in *vozmožnost’ eto sdelat’* ‘the possibility to do this’. Knjazev’s explanation does not work either, because in the same contexts, the French DN *importance* hosts a sentential argument, and the Bulgarian *важност* does not.
2. In general, different languages are more ‘liberal’ to sentential arguments of DNs than others: in Romanian *importanța* ‘importance’ does not allow a sentential argument. In French also a Romance language, it is possible: cf. *Je comprends l’importance de discuter toutes les choses* ‘I understand the importance to discuss all the things’.

A preliminary generalization is that languages like Russian which widely use infinitives without a special marker (like *to* in English) in general do not allow deadjectival nouns to have sentential arguments. The areal factor also plays its role: Romanian has much in common with languages of Eastern Europe (e.g. Slavic).

3. Same subject constructions (infinitive constructions in French and German, unreal embedded clauses with *da* in Bulgarian) are easier to retain than different subject constructions (constructions with complementizers like *that*). In German, according to the native speaker, *Er verstand die Wichtigkeit, das Problem zu lösen* ‘He understood the importance do solve the problem’ is better than *Er verstand die Wichtigkeit, dass unser Meeting stattfindet* ‘He understood the importance that our meeting take place’.

In some languages (French, German) this asymmetry results from the fact that same subject constructions contain a non-finite (infinitive) sentential argument which is perhaps syntactically closer to an NP than a finite sentential argument. The Bulgarian case is more complicated: Bulgarian has no infinitive, but the same subject construction is nevertheless easier to retain.

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## Pragmatics of English prophetic discourse

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Discourse studies are of a particular interest for linguistics of the beginning of the XXIst century (T. van Dijk 2008, N. Fairclough 2003, R. Wodak 2011). It is discourse which is the most convenient form of "packaging" the verbalized information in historical and social contexts.

The aim of the research is to single out pragmatic factors of English prophetic discourse. Predictions presented in horoscopes and dream books constitute a written form of prophetic discourse. They are based on traditional beliefs, stereotypes, prejudices and superstitions within community. Naïve by its nature a prophetic form of information representation enables the readers to know their future.

Besides, discursive influence in transmitting the prophetic information is revealed through: **informing** readers (*“Envelopes seen in a dream, omens news of a sorrowful cast”*), giving them **arguments** (*“There is always a choice: to look over the horizon, or dig in the garden. Gardening is really useful”*), containing **emotional evaluation** of future actions (*“The secret becomes apparent, and this is a great benefit”*), expressing **volition** (*“To clean onions means having troubles, with far-reaching dreadful consequences. Whenever possible, try to restore peace, even at the cost of your own sacrifice”*).

The communicative mode of this type of discourse is either: **informative**, emotion-free (*“To dream of clover, foretells prosperity will soon enfold you”*), **phatic** (*“To dream that you play ninepins, denotes that you are foolishly wasting your energy and opportunities. You should be careful in the selection of companions”*), **humorous** (*“You will feel like trying your hand writing poetry, but you should not disrupt your nap to act on that. Instead, write horoscopes”*), yet the dominant mode is **esoteric** conveying secret signs of fate (*“To dream of noodles, denotes an abnormal appetite and desires. There is little good in this dream”*).

In English written prophetic discourse variation of the pragmatic form of the information transmitted is diverse: imperatives – *“Don’t hide your strong points just to make someone else feel secure! Be flexible and willing to indicate many opinions in your decision-making process. ... Be flexible”*; advice – *“Try to drive away from you notes of suspicion and pessimism”*; wishes – *“Let a relationship end peacefully”*; warnings – *“The next round of life depends on what you are doing now. Be wise and careful in decision-making! If in doubt, it is better not to take any actions!”*; statements – *“A contradictory period has set in for you”*.

One cannot diminish the role of manipulative strategy, which is marked by illocutionary compulsion, explicit and implicit means of the implementation of attracting attention (*“Don’t let nerves stop you from going for what you want. Get a network or team to support you. Staying at home’s more tempting than going out”*).

Thus, the producer of the prophetic information in a way regulates the activity of the recipient. Pragmatics of prophetic discourse is revealed through illusions, mythologization and symbolization of signs from everyday life. Besides, this type of discourse influences public opinion and behavioral norms.

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## Informative structure In Old Spanish complex sentences: Conditionals and sentences with free relative clauses

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In this paper, we will propose a contribution to the study of the word order development from Latin to Romance, in terms of information structure from a discourse-based approach. We will thus intend to contribute to a rich and yet open discussion about the typological pattern in Latin and the ancient Romance languages (Fontana 1993, Benincà 2004, Devine 2006, Bauer 2009, Dufter and Jacobs, 2009, Fisher 2011...). In our paper, we will focus on two specific complex syntactic constructions, conditionals and sentences with free relative clauses, and we will analyze the position and the related focus/topic function of their principal constituents (the main sentence and the subordinate clause). Our data is extracted from a contrastive corpus of legal, historical and proverbial Spanish texts from the XIII<sup>th</sup> to the XV<sup>th</sup> centuries.

**Conditionals** have been described as typically containing a subordinate clause for topic information (the *if*-clause) and a main clause for the focus (Haiman, 1978; Ford and Thompson, 1986). Sweetser (1990) and others proposed that the *if*-clause introduces a “given” information only relative to the apodosis. Fauconnier (1984) considered that the protasis constitutes a “frame” that enables the hearer to understand the apodosis. More recently, some authors (Caron, 2006; Aptekmann, 2009) have argued that the conditionals’ information structure could be more complex than a simple topic/focus distinction.

On the other hand, **free relative clauses** have been described as semantically equivalent to conditionals’ protasis, specially when the subordinate verb is in the subjunctive mood (Pérez Saldanya 2009):

- (1) Quien calle ahora, que calle para siempre  
 ‘He who remain silent now, remain silent for ever’  
 = Si alguien calla ahora... ‘If someone keeps quiet know...’

This argument makes the free relative clause a candidate to a topic, in the Haiman view, or a frame, in others authors’ view, inasmuch as protasis are, and the main sentence then would have the same focus function than the apodosis.

But Spanish can use too the indicative mood in free relative clauses, a frequent case in proverbial and generic phrases like (2), where the topical function of the subordinate seems much more problematic, since the indicative marks here the assertive nature of the relative clause.

- (2) Quien calla otorga.  
 ‘He who remain silent is taken to agree’

The analysis of examples from our corpus, through the examination of their textual and contextual conditions of use, will help to understand which was the information structure of these two kinds of complex sentences and how it interferes with word order patterns that have been described for Old Spanish (Fontana 1993, Elvira 1993, Castillo Lluich 1996-1997, Batllori and Roca 1998, Bossong 2006, Fernández-Ordóñez 2008-2009, Sitaridou 2011, 2012). We will namely consider contrasts between word order constituents, as in (3-4), and review arguments to identify them as “canonical” or unmarked and “non canonical” or marked positions.

- (3a) if A, B  
 Si a muchos agradares en tu tracto de bevir a ty non puedes agradar (Proverbios de Séneca, 328)
- (3b) B, if A  
 Avrá el fablar efeto si fablamos onestas cosas (PS, 348)
- (4a) who A B  
 El que dize que te dio beneficio demándalo (PS, 48)
- (4b) B who A  
 Dos vezes vençe el que se vençe cuando es victorioso (PS, 54)

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## Chinese verb accommodation in Modern Uyghur

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Turkic languages have generally borrowed verbs in the form of verbal nouns and have integrated them either with auxiliaries or – less commonly – with the de-nominal suffix *-LA-*. A noteworthy exception are Mongolic languages, from which Turkic languages borrowed verbal stems and reused them as verbal stems; the reason for this is no doubt that the verbs of both language groups are exclusively suffixing, with no prefixes or infixes, no change in stems and no morphological verb stem classes.

Our paper will discuss a third type of Turkic borrowing, the extensive borrowing of Chinese verbs by Modern Uyghur, spoken in western China. Chinese verb stems are words not hampered by bound morphemes, so they can be taken over as a whole; interestingly, one Chinese verbal bound morpheme comes into secondary use in the borrowing process.

The means of integration of verbs of Chinese origin into Uyghur are synthetic and analytical: Either the de-nominal suffix *-LA-* is added to the verbal lexeme, or the auxiliaries *qil-* ‘to do, make’ and *bol-* ‘to be, become’ are used. It turns out there are three factors determining the choice between these means: Whether they consist of one or two syllables, whether they are transitive or intransitive and whether the borrowing register is the normative or the spoken medium.

Uyghur verbs are derived from monosyllabic Chinese ones by adding *-LA-*, as *zula-* ‘to hire’ from Chin. *zū* ‘to hire’; normative Uyghur appears to have accepted only single-syllable Chinese verbs. This means that if the loans are relatively early, one can assume that they are accommodated by the verbalizer *-LA-*.

In the borrowing of bisyllabic Chinese verbs (more common than a single syllable), transitivity plays an essential role: Transitive Chinese verbs are construed with *qil-*, e.g. *čuku qil-* ‘to export’ from *chūkōu* ‘to export’. Intransitive Chinese verbs can get either *qil-* or *bol-*: *tüyşü bol-* ‘to retire, go into retirement’, e.g., comes from *tuixiū* ‘to retire, go into retirement’. *ša:gaŋ bol-* ‘to get fired’ is the passive counterpart of *ša:gaŋ qil-* ‘to lay off from work’, < Chin. *xiàgǎng* ‘to lose one’s job’: In such cases, Uyghur *qil-* transforms the content from intransitive to transitive.

When a Chinese verb consisting of only of one syllable is borrowed by Spoken Uyghur, it turns up with what is, in Chinese, the perfect particle *le*; thus *zale qil-* ‘to fry’ comes from Chin. *zǎ/zhá* ‘to fry’; *soŋle qil-* ‘to present’ from *sòng* ‘to give a present’. Beside normative *zula-* we also find *zule qil-* with the same meaning ‘to hire’; however, most *le qil-* phrases do not have competing *-LA-* derivatives: *-LA-* derivatives are established borrowings, *le qil-* phrases ad-hoc creations used only in the spoken language. Chinese *le* thus appears to have been used non-semantically, to bring the syllable number up to statistically dominant bisyllabicity in the analytical construction.

## A cross-dialectal analysis of English pitch register and its influence on perceived speech friendliness

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Intonation is a pragmatically meaningful cue in evaluating speech (Grabe et al. 2003). While intonational contours may be interpreted differently depending on the context, pitch range has been named a speech parameter especially conducive to judging speaker’s friendliness. As Ohala (1983) explains, pitch range can be analysed either as *pitch span*, which is the fluctuation between the lowest and the highest pitch level in the speaker’s voice, or as *pitch register*, i.e. the average vocal frequency of an individual speaker. In our previous research, a comparison of pitch register in Dutch, English and Polish led us to the conclusion that languages with a higher pitch register are perceived as more friendly. Moreover, we noted that even a slight difference of 5 Hz in frequency is noticeable by listeners and affects their judgments. Similarly, differences in pitch range are observable across different varieties of English and can play a role in their reception (Cruttenden 1994: 141, Malarski 2013). Therefore, the present study focuses on these differences across several dialects of English with the aim to investigate the potential effect of pitch range on perceived speech friendliness.

For the present study, we recorded two male middle-aged speakers for each of the following accents of English: Southern British, Manchester, Australian, General American and Canadian. We selected short fragments of spontaneous speech and modified intonation by lowering and raising pitch register in the recordings by 5Hz and 10Hz using Praat (Boersma and Weenink 2013). The material was randomized and prepared for a listening survey. 50 stu-

dents at Adam Mickiewicz University in Poznań were asked to evaluate the recordings in terms of friendliness on a 7-point Likert scale. The additional criteria were attractiveness, self-confidence and prestige. Our predictions are that students will 1) rate the accents with higher pitch register as more friendly, 2) rate modified recordings with raised pitch as more friendly, and 3) rate modified recordings with lowered pitch as less friendly. If these hypotheses are confirmed, they will constitute new evidence for stating that suprasegmentals, and pitch register in particular, are powerful cues for listeners in pragmatic judgments of speech.

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## Theoretical underpinnings of non-absolute verbal uses: the case of Polish *roz-* transitives

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Certain subclasses of transitive verbs cannot drop their internal arguments as easily (if at all) as other subclasses. In this presentation we will ask the question, within the bonds of generative morpho-syntax, why the group of Polish prefixed verbs with *roz-* is especially persistent in preserving overt internal arguments (examples taken from the National Corpus of the Polish Language) :

- (1)
- Rozpaplają wszystko w szkole* 'They will blurt it out at school' vs. \**Rozpaplają w szkole* (without overt object)
  - roztrąbiła to rozgłośnia Wolna Europa* 'Radio Free Europe has trumpeted it' vs. \**roztrąbiła rozgłośnia Wolna Europa* (without overt object)
  - Później błyskawicznie włoscy cukiernicy i lodziarze roznieśli ten wynalazek po całej Europie*. 'Later on, abruptly, Italian confectioners and ice-cream makers have spread it all over Europe' vs. \**Później błyskawicznie włoscy cukiernicy i lodziarze roznieśli po całej Europie*. (without overt object)

while their unprefixated counterparts can shed the internal arguments easily (cf. 1 a):

- (2) *oglądały zdjęcia i paplały bez troski* 'They looked through the pictures and prattled cheerfully' (without the internal argument)

We will consider various circumstances which are relevant to the environment in which verbs realize their arguments as zero elements and analyze the behavior of our verbs under these circumstances (see Fillmore 1986, Resnik 1996; Goldberg 2006, Ruppenhofer and Michaelis to appear). Anaphoric contexts and the objects with existential indefinite interpretation will be considered as well as tight selectional restrictions or the membership in a particular semantic frame. All these factors will be analyzed in relation to *roz-* complex verbs and shown to have no bearing on the verbal behavior. Anaphoric contexts and existential indefinite objects occasionally allow our verbs to appear without overt internal arguments, selectional restrictions in the case of *roz-* complex verbs are tighter than with non-prefixed verbs, which nevertheless can drop their objects easily. Similarly, *roz-* complex verbs belong to various semantic frames, yet they behave uniformly with respect to zero complementation.

The factor which seems to matter is the presence of the specific prefix *roz-*. It will be considered as introducing a secondary predication element (Embick 2009, Rappaport Hovav and Levin 1998, Romanova 2007) in accomplishment verbs. Secondary predication, however, in the case of a significant subclass of *roz-* verbs will be shown ineffective as a mechanism explaining their behavior re zero complementation; *roz-* complex verbs do not seem to really give grounds to be analyzed as complex predicates with resultative phrase in their structure.

Finally, we will consider the proposal by Filip 2013 for Slavic prefixed perfectives as containing an instantiation of a logical operator  $MAX_E$ . This operator is seen as a requirement which enforces the maximization of semantic information concerning a given event. We suggest that the requirement that objects be overt with *roz-* complex verbs may be an instantiation of this operator, which, as Filip argues is a universal operator realized in various ways in various languages.

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## Learning it by ear: phonological loop and phonological sensitivity in aid of foreign vocabulary learning

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Phonological loop (Baddeley & Hitch, 1974) is a memory component used for storing verbal information over short periods of time. A series of studies led by Gathercole (Gathercole, 1995; Gathercole & Baddeley, 1990; Gathercole & Masoura, 2003) indicate that this component can aid vocabulary acquisition in small children and foreign language learners. However, several more recent studies question these findings (Bowey, 2001; Melby-Lervåg et al., 2012; Metsala, 1999). It is possible that the factor actually involved in word learning is phonological sensitivity (awareness): the ability to dissect words into smaller units and manipulate these units. This ability might have been accidentally tapped by the non-word repetition tasks used as phonological loop tests in most studies (Bowey, 2001). Several papers indicate a correlation between phonological sensitivity test scores and the size of native vocabulary in young children (Bowey, 1996; McBride-Chang et al., 2005; Metsala, 1999). In this study, we wanted to examine this relationship in foreign language learners. We hypothesised that phonological sensitivity (but not phonological loop) is of crucial importance for learning foreign words and that children with higher scores on sensitivity tests will learn such words faster.

We tested 30 Polish 9-year-olds on a) phonological sensitivity, b) phonological loop and c) speed of word learning. Phonological sensitivity tasks were taken from CTOPP 2 battery (Wagner, Torgesen, Rashotte, & Pearson, 2013). The phonological loop capacity was measured with ISR tasks, in which children were to recall lists of non-words, rather than single non-words as in Gathercole's paradigm. The word learning speed test included three computerised tasks. In task 1 (baseline condition) children were to learn three pairs of Polish words as quickly as possible. Task 2 was to emulate the process of learning new words of the native language. Children were taught three pairs, each consisting of a Polish word and a non-word created from the most common syllables in a Polish corpus. Task 3 was an emulation of a foreign word learning situation. Children were asked to learn 3 pairs consisting of a Polish word and a non-word constructed from rare syllables found in the Polish corpus. The non-words in task 3 were pronounced by native speakers of Russian, which made them sound like words of a foreign language. The non-words in all learning tasks were controlled for phonological structure, sonority and the number of phonemes. Upon collecting the data, we ran correlation and regression analyses to check for the relationship between the predictor variables – a) phonological sensitivity and b) phonological loop – and the outcome variable (word learning speed scores obtained in each of the three tasks).

The foreign word learning task was the only one in which any correlation with our predictor variables was detected. The foreign word learning task scores correlated significantly with the phonological sensitivity scores ( $r = 0.39$ ,  $p < .05$ ), but not with the phonological loop scores ( $r = 0.15$ ,  $p > .1$ ). This supports our hypothesis that it is phonological sensitivity, not phonological loop that is of crucial importance for learning words of a foreign language.

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## Language and blindness: the case of space categories

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In recent years, linguists, cognitive neuroscientists and psychologists have addressed the interaction of language, conceptual representations and sensory-motor information, focusing on the cognitive domain of space (Talmy, 2000; Jackendoff, 2002; Levinson, 2003; Noordzij et al., 2006; Slobin, 2009; Pietrini et al., 2009; Landau et al., 2010; Marotta, 2010; Cattaneo/Vecchi, 2011; Struiksmā et al., 2011; Ricciardi/Pietrini, 2011 among others).

Some cognitive scientists argue for embodied cognition (Gallese&Lakoff, 2005; Barsalou, 2008; Cattaneo&Rizzolatti, 2009), others for abstract semantic-conceptual representations, not completely reducible to degrees of sensory-motor grounding (Mahon/Caramazza, 2008; Chatterjee, 2010). On the other hand, in linguistics there is a quite long debate between the 'nativistic' approach (Piaget/Inhelder, 1948; Talmy, 2000; Jackendoff, 2002), and the 'relativistic' approach (Levinson, 2003; Landau et al. 2010).

In the perception of space, vision is normally assumed as the main source of information. Visual properties of the objects as well as of places are considered as fundamental for the construction of cognitive structures concerning the domain of space. Since conceptual structures of congenitally blind subjects have an experiential base deprived of the visual modality, spatial descriptions by congenitally blind subjects can offer new insights on the actual role of sight in shaping semantic representations.

We would like to discuss part of the results collected within a project of research on the semantic representations in the language of the blind, grounded on the most recent linguistic literature on space (see references below). Our blind and sighted informants have been selected and balanced on the basis of medical and sociolinguistic parameters. Linguistic data have been collected by means of three semi-spontaneous spatial tasks, set up to elicit static and dynamic descriptions of small- and large-scale environments. Spatial descriptions have been annotated both at the morpho-syntactic and semantic level by means of an XML markup language specifically developed to highlight spatial categories in Italian (Meini et al. 2012). The final result is the first annotated corpus of spoken Italian focusing on spatial categories (see Marotta et al. 2013).

We will focus on some case studies concerning spatial categories widely handled within linguistic literature (e.g. topological *versus* projective spatial relations, motion and localization events, Frames of Reference) analyzed in comparison between blind and sighted people. Our results provide evidence for both similarities and differences between spatial descriptions of blind and sighted people. Differences mainly consist of different strategies in selecting spatial categories for the expression of motion events, thus suggesting that visual deprivation may actually affect cognitive strategies relative to spatial representations. However, the large amount of similarities found reveals that language plays a basic role in the cognition of congenitally blind people and in particular in their representation of space, thus supporting the idea that cognitive structures are suitable to be grounded on sensory-motor and linguistic inputs as well.

These results seem to agree with the hypothesis of a supra-modal brain organization, which is currently drawing the attention of many cognitive neuroscientists (e.g. Pietrini et al. 2009).

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## A syntactic analysis of liaison in French IP and DP

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### 1. Possible and impossible liaisons

In this study I will show how French *liaison* is sensitive to syntax. An analysis of the syntactic domains admitting or preventing *liaison* allows us to confirm abstract hypotheses on the syntactic structure of the words concerned.

Although *liaison* is traditionally associated to formal language, some *liaisons* are obligatory (1a) while others are impossible (1b), regardless of the context of communication.

- (1) a. un bon ami [œbɔnami]  
a good friend  
b. bon à rien [bɔ̃ɑrjɛ̃]  
good for nothing

In my proposal impossible *liaisons* are blocked by syntactic constraints, i.e. *liaison* is prevented by morphosyntactic boundaries intervening between two words.

Furthermore it is important to distinguish between optional and impossible *liaisons*: albeit infrequent, optional *liaisons* are possible (2), what means that some conditions allowing them are at work.

- (2) des fouineurs italiens [defwinœʁzitaljɛ̃]  
some Italian meddlers

### 2. The liaison in the IP

While *liaison* is obligatory between a subject clitic and a verb (3a), it is impossible between a lexical subject and a verb (3b). The following examples are partly from French native speakers and partly from a data-base of spoken French (PFC) (Durand et al. 2009):

- (3) a. ils ont été inversés [ilzɔ̃tɛtɛ̃vɛʁsɛ]  
they have been reversed

- b. les rôles ont été inversés [lerolɔteteɛ̃vɛrse] [PFC: ID: 9484; Loc: 13bfa1]  
the roles have been reversed

The impossible *liaison* between a lexical subject and a verb suggests that morphosyntactic boundaries intervene between them and that lexical subjects occupy a position higher than AgrP.

Moreover the investigation on *liaison* allows us to make assumptions about the nature of French subject clitics (Kayne 1975, Rizzi 1986, Brandi & Cordin 1989, among many others). I propose to compare two different options:

- Following the tripartition of pronouns proposed in Cardinaletti & Starke (1994), Cardinaletti (1997) states that French subject pronouns are not clitics (i.e. functional heads) but weak pronouns, occurring in specAgr2P (4).

(4) [<sub>Agr1P</sub> {Jean/lui}] [<sub>Agr2P</sub> {il}] V<sub>fin</sub> [...

- Culbertson (2010) claims that French subject clitics are inflectional morphemes realising verbal features (i.e. Agr<sup>o</sup> in Belletti 1990).

### 3. The *liaison* in the DP

*Liaison* always occurs between a prenominal adjective and a noun (5a), while it is rarely attested between a noun and a postnominal adjective (5b).

- (5) a. de vieux africains [dɔvjøzafrikɛ̃]  
some old Africans  
b. des vieux africains [devjøafrikɛ̃]  
some African old men

Prenominal adjectives are direct modifiers in French and occupy the same FP as the noun after N movement has occurred (Cinque 1994, Crisma 1993, Scott 2002): this syntactic adjacency is responsible for the obligatory *liaison* between them.

Postnominal adjectives can be both direct and indirect modifiers. Some native speakers consider the *liaison* possible if the adjective is a direct modifier, i.e. if only one syntactic boundary separates it from the noun (Cinque 1994). Native speakers avoid the *liaison* between a noun and an indirect modifier, which has its source in a projection higher than the functional domain of the noun (Cinque 2010).

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## Indexes of productivity: different approaches to the assessment of some Old English affixes

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The topic of morphological productivity is a relatively recent phenomenon and different theories have emerged during the last years that make various proposals concerning the tools involved in the analysis of productivity, including the use of dictionaries and/or corpora as well as the role that types, tokens and hapaxes play in the assessment of productivity. With this background, the aims of this paper are to review some of the most significant theories of productivity and to apply some of them in order to gauge the productivity of the Old English affixes *-isc*, *-cund*, *ful-* and *-ful* in adjective formation. Depending on the requirements of the different theories, the data of analysis is retrieved from textual or lexicographical sources. On the textual side, the *Dictionary of Old English Corpus* (<http://tapor.library.utoronto.ca/doecorpus>) developed at the University of Toronto provides the tokens and hapaxes with the affixes under investigation. On the lexicographical side, the lexical database of Old English *Nerthus* ([www.nerthusproject.com](http://www.nerthusproject.com)) is used to list the number of types or lemmas with the affixes at stake. The first step of analysis consists of the assessment of three indexes of productivity. These measures include (i) the index of type frequency, based on Aronoff (1976); (ii) Baayen's (1992, 1993) and Hay and Baayen's (2002) hapax legomena and dislegomena approaches, based on the indexes of *narrow productivity* and *global productivity*; and (iii) the analysis on productivity proposed by Trips (2009) in her study in some English suffixes, which draws on Hay's (2003) index on productivity. Although the analysis is mainly synchronic, the diachronic evolution undergone by each affix is discussed briefly. The picture that emerges from this discussion is that there is continuity of the suffixes *-isc* and *-ful* into Present-Day English, in contradistinction to the progressive disappearance of *-cund* and *ful-* throughout the successive stages of the language. Overall, the synchronic analysis of these Old English affixes indicates that the suffix *-isc* is more productive than *-cund*, while the suffix *-ful* is more productive than its prefixal counterpart *ful-*. In the case of *ful-*, some of the results turned out by the application of the indexes of productivity just mentioned are not compatible with the diachronic evolution of the prefix. For this reason, the main conclusion of this paper is that an assessment on productivity that takes into account not only type frequency but also the number of low frequency words is the most accurate one since its results are more compatible with diachronic evolution.

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## Expressing predicative possession on the shores of the Baltic Sea

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In this paper I will describe how five languages, spoken in the Eastern part of the so-called "Circum-Baltic area" (Dahl and Koptjevskaja-Tamm 2001: xvi) – namely, Latvian, Lithuanian, Finnish, Estonian and Belarusian - express predicative Possession.

From a typological point of view these languages can be assigned to different types (Koptjevskaja-Tamm and Wälchli 2001: 675ff). Following Heine's (1997:45-7) terminology, Finnish and Estonian can be said to follow the "Location schema", involving a locative construction: Estonian *mul on raamat* 'I have a book', lit. 'at me is book'; Latvian the "Goal schema", involving a dative construction: *man ir māja* 'I have a house', lit. 'me.DAT is a house'; Lithuanian the "Action schema", involving a 'have'-verb: *turiu naują automobilį* 'I have a new car'. Finally, in Belarusian both the Action and the Location schema are represented: a. *maju novuju mašynu* b. *u mjane novaja mašina* 'I have a new car', lit. a. 'I have a new car', b. 'at me (is) a new car'.

However, this classification makes reference only to the constructions used to express prototypical Possession, i.e. ownership. Possession is not limited to ownership, yet. Other notions, non-prototypical but still belonging into

the conceptual domain of Possession, can be individuated: Abstract Possession, Social Possession, Inalienable Possession, Temporary Possession, Inanimate Possession.

The analysis presented here – based on corpora and on a parallel corpus of translations of the “Little prince” – shows that non-prototypical notions may be given a different encoding as ownership. As an example, Lithuanian prefers not to use *turėti* ‘have’ in expressions concerning physical characteristics, employing instead the “topicalised genitive” construction (Holvoet 2003) or a comitative construction:

Lithuanian	<i>Jų</i>	<i>juodi</i>	<i>ilgi</i>	<i>plaukai</i>
	they.GEN.PL	black.NOM.PL	long.NOM.PL	hair.NOM.PL
	‘They have long, black hair’ ( <a href="http://www.korpuss.lv/lila/">http://www.korpuss.lv/lila/</a> , search: “LT:plaukai”)			
Lithuanian	<i>Net ir gėles,</i>	<i>kurios</i>	<i>su dygliais?</i>	
	Even also flower.ACC.PL	which.NOM.PL	with thorn.INSTR.PL	
	‘(Do sheeps eat) even flowers that have thorns?’ (“The Little Prince”, VII)			

Interestingly, Belarusian also prefers to use the adessive construction and not *mec’* ‘have’ in this context: *u jaje čornyja valasy/?? jana mae čornyja valasy* ‘she has black hair’.

The expression of diseases is another source of splits: Lithuanian may use both the dative and *turėti*, Finnish (but not Estonian) alternates the inessive and the adessive case (Sulkala and Karjalainen 1992:179), and Belarusian cannot use *mec’*, but only the adessive construction.

The reasons that determine these “splits” (as they are defined in Stolz et al. 2008) in the encoding of possessive relations are several: historical, areal, and semantic. For instance, the “consistency” of Latvian – which can use its dative construction in all contexts – may be explained by the extremely flexible semantics of this case, that makes it suitable even for semi-experiential situations as the expression of diseases (contrary to the Belarusian and Lithuanian ‘have’-verbs).

In the paper I will try to present the major splits in the examined languages and to give reasons as to why one particular construction is chosen.

## Sources

### 1. Corpora

Latvian and Lithuanian parallel corpus <http://www.korpuss.lv/lila/>

Corpus of the contemporary Lithuanian language <http://tekstynas.vdu.lt/tekstynas/>

Balanced corpus of Estonian <http://www.cl.ut.ee/korpused/grammatikakorpus/>

The Tampere bilingual corpus of Finnish and English <https://www12.uta.fi/tambic/JTambic.html>

A 1,5 million words corpus of Belarusian (self-built; not available to public)

### 2. Translations of the “Little Prince”

Latvian: Saint-Exupéry, Antoine de (1995): *Mazais Princis*,

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Estonian: Saint-Exupéry, Antoine de (1993): *Väike Prints*, Tallinn: Tiritamm

Finnish: Saint-Exupéry, Antoine de (1998): *Pikku Prinssi*, Helsinki: WSOY

Belarusian: Saint-Exupéry, Antoine de, *Malen’ki Princ*,

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## Argument structure and polysemy

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The present paper explores to what extent the notion of argument structure, as defined in “projectionist” theories of syntax, can be used to account for the behavior of polysemous verbs, an issue worth addressing since verbal polysemy receives a somewhat partial treatment in such theories: Multiple senses are invoked to explain alternations in the complement structure of a verb, but typically refer to situations in which the basic meaning of the lexical item remains more or less transparent, as in the much-discussed locative alternation, for instance, or in composed events such as *The bullet whistled through the window* (Levin & Rappaport Hovav 2005).

The verbal polysemy I have in mind, however, is of a more drastic kind. My case example is the Spanish verb *alcanzar*, whose distinct senses include ‘to catch up with’ (1a), ‘to understand’ (1b), and ‘to be enough’ (1c), among other possibilities:

- (1) a. *Lo* (ACC) *alcancé* (1SG) *en la población de Charo*.  
 ‘I caught up with him in the village of Charo.’ (CREA, 1981)
- b. *por lo que se* (REFL) *me* (DAT) *alcanza* (3SG)  
 ‘as far as I understand’ (CREA, 1990)
- c. *El dinero* (NOM) *alcanzó para pagar todos los gastos*  
 ‘The money was enough to pay all the expenses’ (CREA, 2004)

Although the synchronic polysemous senses of *alcanzar* could be dismissed as irrelevant cases of homonymy, from a diachronic perspective there is reason to envisage a scenario of interrelated shifts of meaning (Sweetser 1990). And the question is how this scenario can be captured in terms of a succession of argument structures, one giving rise to another.

In view of the challenge, one wonders if a “constructional” approach to verbal polysemy might not be better suited. Within this framework (Goldberg 1995), verbs fuse with independently existing grammatical constructions, which determine the syntactic expression of the verb’s arguments together with major facets of its meaning. On the assumption that constructions function as attraction sets (Traugott 2008), we could then postulate a path of meaning extensions motivated by the use of *alcanzar* in different “constructions”.

My corpus-based study will focus on the historical development of various senses of Spanish *alcanzar* and will show that an appeal to independent constructions to account for these developments is problematic. In the suggested analysis, a fine-grained description of the source semantics of the verbal item (cf. Boas 2008) –going beyond what appears to be strictly relevant to the (original) projection of its arguments– will constitute the point of departure. The lexical semantic description thus obtained will help us identify diverging shades of meaning and inferences arising in particular contexts of use (Diewald 2002, Traugott & Dasher 2005), which prepare the verb to become associated with a new event type and a different kind of mapping to the syntax. I will argue, nevertheless, that a notion of construction, understood as a symbolic unit with a partially *non-compositional* meaning, may serve to shed light on unpredictable or irregular aspects of a verb’s behavior (cf. Nikanne 2005).

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## A sociophonetic investigation of Italian dental affricates in a multilingual setting

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This work deals with the pronunciation of dental affricates /ts dz/ in the Italian variety spoken in Bozen (South Tyrol). As it is probably known, South Tyrol is officially trilingual, and Italian and German represent the two main languages of the area. However, German is more widely spoken in the valleys, whereas the vast majority of Italian speakers are settled in the main towns (e.g. Bozen, Brixen). It is also worth to note that Italian speakers came to Bozen from different parts of Italy in the last 60 years, thus constituting a heterogeneous community without a common dialectological background (cfr. Vietti 2008).

An investigation of Italian variety spoken in South Tyrol has never been provided before. Theoretical considerations may be found in various authors, but they are not based on any spoken corpora, resulting in a wide range of definitions very different among each other (see Meluzzi 2012). In this respect, the main aim of this work is to provide a first analysis of Italian of Bozen, by analysing one single phonetic variable, the dental affricates, in order to have a first picture of the possible variations detectable inside this variety. Our main research questions concern the possibility to highlight a sociophonetic variation (Foulkes & Docherty 2006) in the Italian variety of Bozen, and the presence of influences due to contact between Italian speakers and German speakers, and contacts with other areal Romance dialects (e.g. Trentino).

The sociophonetic approach adopted in this study consists in a fine-grained analysis of 4183 dental affricates pronounced by 42 Italian speakers, socially stratified for gender, age, level of education, and social status. Each speaker was asked to read a word list and have a small chat with the researcher, even if for the moment only tokens from the word list have been studied. The analysis concentrates on three parameters: the sonority degree, the phones' length, and the place of articulation of the fricative elements of the affricates. The results have been compared with the productions of two control groups, one with speakers from Trentino, and one with German speakers from Bozen.

This study outlines how contact among different dialects and German results in specific features found in the realization of dental affricates by Italian speakers of Bozen. In particular, Italian speakers seem to have developed a mixed variety of dental affricate, which is partially voiced and partially voiceless, and this mixed phone is mostly used by old speakers, women, and speakers with low levels of education. Other features due to contact between Italian and German seem also to affect the duration of the dental affricates, as provided in our data.

In conclusion, this work aims to offer a first description of the Italian spoken in Bozen: through a fine-grained analysis of dental affricates' pronunciation, some features have been highlighted and discussed in sociophonetic perspective, by also emphasising the role played by contact between Romance dialects, Italian, and German.

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## The dual nature of person markers

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The aim of this paper is to discuss the status of person markers associated with verbs and to present a few diagnostics to distinguish between the different functions they may have in different languages.

The question has been debated ever since Givón claimed that agreement and pronominalization are “one and the same phenomenon” (Givón 1976: 151). After Givón's contribution, there have been various proposals aiming at showing that there is a set of morpho-syntactic forms, agreement markers, pronominal affixes, clitics, weak bound pronouns, that, according to the specific language and to the linguistic context, may perform either the function of grammatical agreement or of pronominal or anaphoric forms. In these terms Lehmann (1982) has proposed to distinguish between syntactic and anaphoric agreement. This raises the problem of considering person markers ambiguous elements as they are, on one side, morphological or inflectional categories with just an indexical function, and, on the other, bound anaphoric pronouns with an argument function in syntax. As Siewierska (2004: 156) has pointed out, the distinction is scalar rather than discrete, but still there is the need to establish under what conditions and in which contexts the forms perform one of the different types of behaviour. Corbett (2006: 103-106) has proposed five criteria to distinguish between the syntactic and the morphological view of what he calls ‘pronominal affixes’: 1. the number of case roles which may be indexed by the different forms, 2. their degree of referentiality, 3. the degree of

descriptive content, 4. the balance of information between full nominal phrases and the forms, 5. multirepresentation vs unirepresentation. Unfortunately these criteria do not always discriminate between the different interpretations of person markers, as the amount of information of the forms are often bound to the theoretical choices of the researcher. One of the theoretical choices and consequences is, for instance, the pro-drop vs non-pro-drop interpretation of the language whose person forms are analysed.

In this paper I will propose a three-way distinction as to the function of the various forms: a) marking exclusively arguments; b) marking exclusively agreement; c) ambiguously marking arguments and agreement. To distinguish among the different forms, the following diagnostics will be applied: i. cooccurrence with lexical NPs (even independent pronouns, not used contrastively); ii. extension of use of the forms (obligatory versus optional use; cases of non-occurrence of the forms, or gaps, not to be interpreted as  $\emptyset$ -forms); iii. use of the forms as resumptive pronouns in contexts such as ‘long-distance relative clauses’, that is relative clauses embedded in complement clauses. I will show data from different languages, such as some Italian northern dialects, Irish, and Basque and will apply the diagnostics above to each language. It will be shown that while in Basque person markers belong to the agreement type and in Irish to the pronominal type, the markers in Trentino, one of the Italian northern dialects, belong to the ambiguous type. A final consideration will concern the limited occurrence of null pro in the languages under investigation.

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## Coordinative elements in sentence periphery: the Estonian *või* ‘or’, *ja* ‘and’, *aga* ‘but’

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The linking of sentence content with the context, speaker’s assessment, and speech situation often takes place by means of peripheral sentence elements. The asymmetry hypothesis has evoked a great deal of discussion and debate; according to this hypothesis, the left periphery is occupied by elements that carry subjective meanings (speaker’s viewpoints and attitudes) and the right periphery reveals intersubjective meanings engaging the addressee (Beeching et al. 2009). The presentation seeks answers to the following questions: is the Estonian sentence asymmetric or symmetric in terms of its periphery; what functions do words with a coordinative basic meaning perform in the left (LP) and right periphery (RP); how do these two peripheries relate to one another; does the language material reveal any shifts in meaning (between functions) and positions (between different peripheries). The presentation focuses on three words that function both as coordinative conjunctions and particles: 1) the disjunctive *või* ‘or’, 2) the copulative *ja* ‘and’, 3) and the adversative *aga* ‘but’. Our analysis is usage-based and combines the syntactic and semantic approaches to sentences in discourse and text. The analysis is based on the language corpora of the University of Tartu: Corpus of Old Written Estonian, the Mixed Corpus of Estonian, and the Corpus of Spoken Estonian.

The following functions will be distinguished (Haselow 2011, Sohn 2013, Traugott 2012, Vaskó & Fretheim 1997):

- 1) Organization of text / conversation: linking with the preceding and following text; suggesting continuation to the preceding text, extension, initiation of a turn, afterthought;
- 2) subjectification: modal and affective meanings, delayed continuation, hesitation, self-addressed questions;
- 3) intersubjectification: information questions, commands, disagreement, comments about the interlocutor’s statements, softening of expression and other politeness techniques.

The material of both the standard language and dialects suggests that the Estonian sentence tends to be symmetric: all three functions are represented both in LP and RP. The main difference lies in the content of the first, organizing function: LP offers an alternative, comparison, continuation, opposition to the preceding context; RP is concerned with the possible further context. The subjective and intersubjective uses emerge mostly in LP, on a more limited scale and later also in RP. The material of written language of different periods shows that both peripheries have the same sequence of functional shifts: organization > subjectification > intersubjectification (see Traugott 2003, 2012). For example, in the case of *aga* in LP one of the shift chains is as follows: adversative link of sentence content with regard to the preceding context > supposition about the veracity of the adversative proposition > polar question

about the veracity of the adversative proposition. One can also notice that the use that emerged in LP has shifted to RP, the mechanisms of which are mostly afterthought and bridging contexts.

The Estonian tendency to highlight RP could be regarded as an areal feature because sentence-initial particles are characteristic of the Circum-Baltic languages, which differ, for example, from RP-central Asian languages (cf. Traugott 2012).

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## Romanian *ește* adverbs, between inflection and derivation???

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In Romanian, in contrast with the Romance languages, manner is expressed mainly by adverbs identical to the masculine-neuter singular form of the adjectives. Among the suffixed forms, *-ește* adverbs (also found in Aromanian and Megleno-Romanian; cf. also the Albanian *-isht*) are the most numerous (over 500 units in a thesaurus inventory).

Even though the mixed, inflectional and derivational, features of derived adverbs are a common topic in the literature (for English, Zwicky 1995, Haspelmath 1996, Cizek 2002, Payne, Huddleston, Pullum 2010: 60-65; for Italian, Scalise 1990; for French, Dal 2007; for Spanish, Torner 2005 etc.), the case of Romanian *-ește* adverbs has not been discussed so far. In fact, this issue has been dealt with only tangentially and from different perspectives (e.g. from the point of view of the etymology of *-ește*, see Pascu 1916: 197, Meyer-Lübke 1900: 686, Graur 1936: 84, Haneş 1960 a.o.).

The goals of the paper are: to analyse the features of *-ește* adverbs that are relevant for the inflection vs. derivation distinction; to address the special problems that sets apart this Romanian suffix from other adverbial suffixes; to draw some implications for the general theoretical issues on (adverbial) inflection vs. derivation (Plank 1994, Melčuk 1994: 389, Stump 1998: 14-19, Plag 2002: 18-22, Haspelmath, Sims 2010: 90-99 etc.), and to give an account of the typological characteristics of Romanian adverbs.

What is important to stress is that the diachronic and synchronic situation of Romanian *-ește* adverbs seems to be more complicated than that of Engl. *-ly* or Romance *-ment(e)* adverbs. The etymology of *-ește* is controversial (< the Romanian adjectival suffix *-esc* + the Latin adverbial suffix *-e*, Pascu 1916: 197; or < the Latin suffix *-isce*, Meyer-Lübke 1900: 686; or < Thracian, Graur 1936: 84). Another particular fact is that *-ește* ethnic derivatives can have a nominal value (*Vorbește românește* (S)he speaks (the) Romanian (language)).

The *-ește* adverbs usually have an attested adjectival counterpart ending with *-esc*. The question is whether there is an adverbial suffix *-ește* that attaches to a noun or replaces the adjectival suffix *-esc* or an adverbial suffix *-e* that attaches only to *-esc* adjectives (*câinește* adv. like a dog < *câine* n. dog or < *câinesc* adj. dog s, doggish; *suflet-ește* adv. spiritually < *suflet* n. soul or < *sufletesc* adj. spiritual). The difficulty of answering this question comes from *-ește*'s unclear etymology, as well as from certain facts that have been ignored in the literature so far: even if the transposition *-esc/-ește* is available for the neological *-esc* adjectives, some of them can be used as adverbs as such (*grotesc* adj. grotesque, adv. grotesquely; *livresc* adj. bookish, adv. bookishly); besides the *-ește* adverbial counterparts, some old adjectives in *-esc* can also be used as adverbs without any formal change (*firesc* adj. natural, adv. naturally – *firește* adv. naturally, obviously, *omenesc* adj. human, adv. humanly – *omenește* adv. humanly).

The main envisaged conclusion of the investigation is that, in the case of *-ește* adverbs, it is more appropriate to refer to the six classes of morphology identified by Bauer (2004): some of *-ește* adverbs are more likely to be related to *the transpositional morphology*, some of them, to *the lexicon-expanding morphology*. In any case, one cannot apply a homogenous treatment, either diachronically or synchronically, to the analysis aforementioned adverbs. The second conclusion is that Romanian *-ește* adverbs are more similar to case inflected forms (like in Latin and Slavic

languages, see Carvalho 2008, Ricca 2010, Ramat 2011; Cuzzolin, P., I. Putzu, P. Ramat, 2006; and Wade 2011) than to the (initial compound) forms in *-ly* and *-mente*.

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## Glocalizing narratives through images: the case of digital storytelling

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This paper focuses on the structural and multimodal characterization of a new genre of narratives, that of digital storytelling. In digital stories, people from different geographical locations, social backgrounds, and cultural traditions combine images, sounds and verbal language to tell personal experiences to the rest of the world via the Internet. Digital stories are, from their original conception, a good example of glocal activity (Robertson, 1995, Coupland, 2010). They embody the slogan "think globally, act locally", since they are created at a completely local basis, but are thought to transcend those limits and reach a global audience. Also, they narrate culturally specific events, but intend to deal with universal worries and fears. The structure and final appearance of the stories reflect the constant interaction of global and local elements. Thus, the goal of this paper is to explore the visual mechanisms by which i) local and global perspectives interact in digital narratives and ii) a global, multicultural audience can understand and get identified with the personal, culturally specific events narrated in them.

To achieve our purposes, thirty digital narratives were selected in different specialized websites on the Internet and analysed applying the traditional Labovian schema of oral narratives of personal accounts (Labov, 1972; Labov and Waletzky, 1967/1997), combined with a multimodal approach which takes into account the integration of textual, visual and acoustic elements in the stories (Kress & Van Leeuwen, 1996). A preliminary analysis showed that evaluation was the most significant textual component in our sample of digital stories. Thus, in order to analyse the main visual devices by which evaluation is displayed in our stories, we proposed a multimodal adaptation of Labov's classification of syntactic devices (1972: 378-392) used by the narrator to make evaluative comments.

Among the most interesting results, data shows that images in digital stories play a multifunctional role, structuring the narrations and also glocalizing them, that is, helping to turn personal, private experiences into universal is-

sues with a counselling, encouraging intention. Besides, images are used by narrators as evaluative intensifiers, explicatives, comparators and correlators. In some stories, the correlation of what is told and what is shown produces compelling multimodal metaphors where the narrator's evaluation on the events is manifest.

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## Target's corporate identity and mechanisms of its expression

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Language structures human representational patterns of concepts and experience (Fowler 1996: 66) – in other words, it is a key tool as far as construction of people's realities is concerned. In the same vein, admitting that identities are shaped by (linguistic) decisions of individuals inevitably leads to recognizing language as an inherent tool for identity construction. Whereas it appears that recent research on identity significantly tends to refer to identity construction through storytelling (e.g. Czarniawska, Ibarra), the study I propose is concerned with particular linguistic and cognitive strategies presented by both a company and its employees, simultaneously shifting the focus from a textual level to linguistic and conceptual one. The rationale behind this shift is motivated by the assumption that "the particular language we speak predisposes us to think and act in certain ways" (Goatly 2007: 24) and, for instance, different metaphors, which then may be used in stories people tell, force different conceptualizations of the self in various social circumstances. In this particular case study I focus on the construction of corporate identity by Target Corporation – the second-largest discount retailer in the United States. Research questions are based on Melewar's (2008) definition of corporate identity and the focus of the study aims at answering queries such as: How is corporate identity expressed? Which linguistic strategies are used and which cognitive strategies are at work in the texts answering the questions: *Who are we? What do we stand for? Where are we going?* Which linguistic/cognitive elements are repeated in employees' texts?

First of all, the means by which corporate identity is expressed linguistically by Target is explored. Next, the cognitive strategies of presenting identity by the company are discussed. The corpus is built from the data available on the Target's website (corporate.target.com/about). The outcome of the scrutiny of both linguistic and cognitive strategies of Target's identity transmission is then compared with an analogical analysis of Target employees' reviews of the company. The data in this part of analysis are taken from the website glassdoor.com which provides an inside look at jobs and companies by compiling anonymous employee reviews. The purpose of this study is to investigate the identity linguistically and cognitively presented by official Target's discourse and to unveil any structures or elements that are prominent enough to be included in the employees' either recommending or complaining about the company. As for the approach utilized in this research, it is eclectic. Namely, it is rather data-driven than data-based. Methods of Critical Discourse Analysis (Wodak and Meyer 2001) are employed and they are supplemented by Critical Metaphor Analysis (Charteris-Black 2005).

The study reveals which elements of linguistically and conceptually constructed corporate identity are prominent enough to be incorporated and reproduced by the employees in the context of computer mediated communication where they are inclined to be honest (anonymity) and are not prompted to mention any of the corporate identity elements. This, in turn, is to give insight into the level of sustainability of particular elements of corporate identity.

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## Revisiting controller and target in agreement Evidence from Early New Persian

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This paper examines an instance of (non-canonical) cross-clausal agreement which, in our view, is problematic for standard definitions given for controller and target in agreement theories. In early New Persian, just like Modern Persian, an agreement relation in *person* and *number* holds between subject and verb. The degree of the grammaticalization of the verbal personal endings, bearing the person and number feature values, is the only difference which distinguishes them in these two periods. There are evidences from Early New Persian in which personal endings can be deleted under identity. In other words, syntactic rules treat personal endings as independent units in this period, which is not the case in Modern Persian. Along the lines of Corbett (2001), if we take Early New Persian Personal endings as non-canonical agreement markers, behaving like clitics, it can have serious consequences for the standard definition of controller and target. Here, the subject controls the agreement marker of the clause-mate verb, and this verb, in turn, controls the form of agreement marker on the adjacent clause by deleting it, when identical. In other words, a verb functions both as a target, compatible with the subject in person and number, and a controller causing mismatches of these feature values with subject in the adjacent clause. The bottom-line of this analysis presents the implication that not all conceptual problems related to agreement can be solved by recourse to canonical and non-canonical agreement as proposed by Corbett.

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## Negative declarative I not say in Modern English

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Jespersen (1917) proposed the widely accepted five-stage development theory of English negative declarative sentences as follows: (OE) *Ic ne secge* > (ME) *I ne seye not* > (15c) *I say not* > (17c) *I do not say* > *I don't say*. As the position of *I not say* was obscure in this progression, it was followed by the studies of Partridge (1953 [1948]), Araki and Ukaji (1984) and Ukaji (1992). Whereas Partridge speculates that, while admitting that *not* derived from the OE indefinite pronoun *noht*, not from *ne*, *I not say* originated from Stage One, i.e. *Ic ne secge*, the latter two demonstrate that *I not say* originated as a blend sharing the traits of both Stage Three and Stage Four during this transition.

With respect to the history of *I not say* in Modern English, this negative form was, according to Puttenham (1589) as quoted in Jespersen (1917), a pardonable fault which gave grace to speech and, according to Partridge (1953 [1948]), a very common order in sixteenth century verse. After c1700, Visser (1969) demonstrates that this form disappeared from usage and, in Present-day English, it is chiefly restricted to poetry. For Late Modern English, Visser quotes five examples, and for Present-day English one example dating from c1930. However, xxxx (2003) attempts to elucidate, based upon the examples exhaustively collected from 129 volumes of diaries and correspondence, that this negative form persisted in seventeenth, eighteenth and even nineteenth century English even though it was a negligible form compared with *I do not say*/*I don't say*/*I say not*.

Thus the purpose of this present paper is to demonstrate, based upon not only the aforementioned diary and correspondence texts but also electronic corpora such as the Early Modern English section of the Helsinki Corpus of English Texts, CEECS, Newdigate Newsletters, LAMPETER, ARCHER, LOB and FLOB, how the negative form of *I not say* continued to be used in Modern English towards its expiration in Present-day English.

Evidence gathered thus far shows that, amongst others, (a) the form of *I not say* occurred even in what is thought to be non-substandard English and in non-subjunctive use; (b) the authors of this negative form tended to be men of the cloth; (c) the authors were (likely to have been) born and brought up mostly in Ireland and the north, west and east of England; (d) this type of negative form tended or tends to have a contrastive function; and (e) it often occurred in short business-like sentences. The observation in (d) has led the present writer to rethink Visser (1969)'s view that "According to Smith (Mod. Språk 27, 1933) it is still used in Modern literary English in order to contrast a verb with a preceding one". The present writer's tentative conclusion is that the form of *I not say* may have been in

somewhat convenient use and therefore useful since people did not need to have recourse to contrastive connectives such as *whereas* and *on the contrary*.

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## The role of the supine in Danish and Swedish: A semiotic chiasmus

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By examining a central aspect of the verbal system in two Scandinavian languages, this paper provides an analysis of the interplay between morphology and syntax, demonstrates the application of Peircean semiotic theory in content analysis (cf. Shapiro 1983, Anttila 1975, Andersen 2008) and shows the necessity of careful language-specific analysis of grammatical organisation even when dealing with closely related languages. Drawing on data from modern standard Danish and Swedish, the analysis of the paper adheres to the sign-theoretical perspective of structural-functional linguistics (Engberg-Pedersen et al. 1996, cf. Hjelmslev 1969).

Danish and Swedish both have a supine form of the verb, closely related to the perfect participle. The Danish supine is formed by adding *-et* or *-t* to the verb stem (e.g. *mal-et* 'paint'-SUP), the Swedish by adding *-t*, *-tt*, *-at* or *-it* (e.g. *ät-it* 'eat'-SUP). The two supines appear, prima facie, to be almost identical in form and function, cf. (1).

- (1) Danish: Hun har køb-t bogen  
 Swedish: Hon har köp-t boken  
 she have.PRES buy-SUP the.book  
 'she has bought the book'

However, closer scrutiny reveals that they are mirror images of each other's semiotic properties.

Unlike the Danish supine, the Swedish supine is inflected for voice (*ät-it-s* 'eat'-SUP-PASS). It is used exclusively in the retrospective tense construction (perfect and pluperfect) and combines with the auxiliary *ha* 'have' only, cf. (1). The meaning of the Swedish supine morpheme is the symbolic content 'retrospectivity'. Apart from being a carrier of finiteness (tense and mood), *ha* only has the indexical content of pointing to the presence of the supine, and it is optional when finiteness is expressed elsewhere, e.g. in modal verb constructions:

- (2) hon kan (ha) köp-t boken  
 she may.PRES (have.INF) buy-SUP the.book  
 'she may have bought the book'

The Danish supine is used in the retrospective tense construction, cf. (1), and in the periphrastic passive construction, cf. (3).

- (3) drengen bliver drill-et  
 the.boy become.PRES tease-SUP  
 'the boy is being teased'

It combines mandatorily with one of three auxiliaries: *have* 'have', *blive* 'become' and *være* 'be'. Contrary to what is stated in standard descriptions, retrospectivity is not coded as the content of the supine morpheme, witness (3) where the passive construction with the atelic activity verb *drille* 'tease' conveys no element of retrospectivity. In itself, the

Danish supine morpheme only has indexical meaning: it is an index of the symbolic meaning specified by the auxiliary, either retrospective temporal meaning or passive voice.

Although closely related, the two languages are structured very differently regarding their supine forms. Comparing the interplay between the supine and the auxiliary in the two languages reveals a semiotic chiasmus: The Danish supine has indexical function and combines with a symbolic auxiliary, while the Swedish supine has symbolic function and combines with an indexical auxiliary. This chiasmus is intimately bound up with the morphological and syntactic expression of voice in the two languages, and the paper shows how these facts explain the optionality of the Swedish auxiliary and the obligatoriness of the Danish auxiliary.

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## Change-of-state predicates in Livonian

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This presentation discusses the usage of change-of-state predicates in Livonian (belongs to southern Finnic branch of Finno-Ugric languages) and the grammaticalization path change-of-state >(i) copula and (ii) future (attested by Heine & Kutevain 2002: 64). It has been shown that Estonian is rich in possibilities of expressing change (see e.g. Pajusalu et al. 2004: 44). This presentation will demonstrate that so is Livonian: there are (at least) five verbs – *sõdõ* ‘get’, *īedõ* ‘remain, stay’, *lādõ* ‘go’, *tūlda* ‘come’, and *līdõ* (synchronically a future copula) – that in addition to their original meaning can express change (‘becoming’). Moreover, as is typical to several languages of Northern Europe (and to Swiss German), Livonian also uses the verbs with the sense ‘become’ for marking the future state of affairs (cf. Dahl 2000; Bickel 1992).

In the present study, the focus is on analytic constructions into which the above mentioned verbs enter. In Livonian, as in Estonian (see e.g. Ereht 2005), there are two constructions that can be associated primarily with expressing change: goal-marking construction (GM) and source-marking (SM) construction. The change experiencer is, correspondingly, in the nominal case (NOM), e.g. (1), or elative case (ELA), e.g. (2), and the result state is in the translative (TRA) case (1) or in the nominal case (2) (Pajusalu & Tragem 2007: 293–39). In addition, the sense of change can be present even in a construction that is explicitly no change construction, see (3), which expresses both senses ‘becoming’ as well as ‘being’.

- (1) *sin i'bbist ie-bād rujā-ks* (GM-construction)  
 your horse.NOM.PL remain-3PL sick-TRA  
 ‘Your horses will get sick’ (Setälä 1953: 103)
- (2) *sin-stõ tulā-b õigi kūoršindpūstiji* (SM-construction)  
 you-ela come-3SG real chimney 3sweep.NOM  
 ‘you’ll become a real chimney sweep’ (Salte 2012: 55)
- (3) *siz ta lī-b ī daks kirdõ jo piški äb ku tāmā*  
 then s/he.NOM X-3SG nine times as small.NOM not than s/he  
 ‘then s/he will become/be nine times as small as s/he is’ (Setälä 1953: 165)

There are two aims: to see (i) what meanings these verbs convey and into which constructions they enter, and (ii) what determines the possible development into a future copula. The preliminary results indicate that, for instance, differently from Estonian cognate *jäada*, Livonian *īedõ* is not restricted to ‘continuation’ and ‘negative change’ (cf. Pajusalu & Tragem 2007). The absence of a well-grammaticalized future marking device seems to be compensated for by various uses of ‘become’-verbs with reference to the future, while something could be called a true future copula only when the ‘become’ sense is not primary and no change-construction is involved.

The data originates from various text collections (e.g. Setälä 1953), but also from Bible translations, ABC-books and recordings made mainly during the second half of the 20<sup>th</sup> century. The analysis draws on Construction Grammar that considers constructions as form–meaning pairings.

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## Evidentiality in oral narrative texts in three Balochi dialects

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This paper concerns evidentiality in oral narrative texts in Koroshi Balochi, Sistani Balochi and Southern Balochi. According to Aikhenvald and Dixon's (2003: 3-5) classification of evidentiality, Balochi belongs to the broad type that distinguishes eyewitness from non-eyewitness, with eyewitness unmarked but non-eyewitness marked by the third person singular present tense form of the verb 'to say', *ašī/šīt/guštī*. This evidential is used not only at the beginning of folktales and remote life stories to indicate that the storyteller did not witness the events concerned, but also in contemporary life stories, if the narrator has seen the events but wishes to distance him/herself from them.

The oral texts which make up the corpus for the analysis of evidentiality in the Koroshi and Southern Balochi dialect were collected in different parts of Fars and Sistan and Balochestan provinces of Iran during several field journeys in the period between February 2008 to April 2012. The main part of the material consists of folktales and life stories told by male and female linguistic consultants (20 persons) of different ages (between 40 and 90) with different social backgrounds. The oral texts for Sistani Balochi come from published material.

Folktales and remote life stories in Koroshi are typically related in present tense, with the evidential used at the beginning of the story, but seldom thereafter. When narrating the same contemporary life story, however, a male and a female narrator take differing attitudes to the events being reported, and this is reflected in the choice of tense. The male uses present tense as default and repeatedly employs the evidential marker to distance himself from the story, even though he was a direct observer. In contrast, the female narrator uses the past tense and does not employ the evidential marker, thereby identifying herself with the story.

### Examples:

[Folktale]

*šī hasta yak šērē...*

They say there was a lion...

[Remote life story]

*šītyakkxānēat nāmayxudānizarxānat...*

They say (there) was a khan (whose) name was Khudanizar Khan...

[Extract from a contemporary life story told by a woman]

*Alamdārībačtaraktolīgefta...*

Alamdār's son has bought a tractor...

[Extract from the same story told by a man]

*ašī taraktolīgeftakāmōīgefta ...*

They say he has bought a tractor, (he) has bought a Combine...

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## North by East: on the importance of Middle Eastern Ibero-Romance varieties in a historical dialectology of Spanish

Octavio de Toledo y Huerta, Álvaro Sebastián (Ludwig Maximilian Universität München, Germany)

The history of Spanish locative prepositions and transitive adverbs (LPTAs) has been explored time and again over the last three decades (see for instance Alvar / Pottier 1983: 285-319, Brea 1985, Sánchez Lancis 1990, Morera 1998, Sánchez Lancis 2003, Coello 2004, García Miguel 2006, Espinosa 2010). However valuable, these works typically take the form of general overviews, privileging the study of large-scale systemic relations whilst neglecting the history of particular subsets (see Santos / Espinosa 1996: 54-65, Eberenz 2008 for two exceptions), let alone individual elements (yet cf. Corominas 1947, Arroyo 2006, Plaza 2007, Pato 2008, Enríquez / Maldonado 2011, among others). In my contribution, I will argue that the evolution of LPTAs cannot be properly traced unless individual assessment of their variational status is undertaken on firm philological ground (Octavio de Toledo 2013). I will focus here on the diatopic characterization of three (groups of) elements, namely:

- a) The vertical projective transitive adverbs formed on the nominal roots *cima* and *somo*, and how they stood as dialectal alternatives throughout the Middle Ages;
- b) the surge of the transitive adverb *bajo* and its dialectally conditioned alternation between direct and indirect regime during (Pre)Classical Spanish; and
- c) the set of adverbs that show a *de-* prefix (*delante*, *detrás*, *decerca*, *desobre*, etc.), particularly in contrast with similar elements prefixed by *a-* and *en-*.

On the basis of such phenomena, I will show how much the consideration of dialectal factors contributes to delivering a clearer picture of the evolution of LPTAs and, more generally, of the history of Romance varieties within Castile and across neighboring territories, much in line with recent proposals by Fernández-Ordóñez (2011). In particular, I will show that *somo*-derived forms, (Pre)Classical *bajo* and *de*-prefixed adverbs are all historically characteristic of the EastCentral portion of the Iberian Peninsula, and will compare the isoglosses they allow to define with those traditionally established for Ibero-Romance dialects. Finally, I will also discuss why and during which particular periods Medieval Castilian seems to have borrowed LPTAs from either Eastern or Western dialects.

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## A holistic approach to contact-induced change in Nahuatl

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Nahuatl (Uto-Aztecan) is one of the best-documented American Indian languages thanks to its corpus of colonial texts, extending from the 16th to early 19th century. The pioneering research on Nahuatl in postconquest times was done by Karttunen and Lockhart (1976), who postulated three phases of adjustment to Spanish. Lockhart (1992) further proposed a fourth, partly overlapping stage, characterized by the development of a heavily Nahuatlized version of Spanish. Four general stages along with associated typological changes were also proposed by Jensen (2008). In turn, studies of modern Nahuatl mostly deal with heavily Hispanized varieties and specific cases of language displacement (see Canger 2001; Flores Farfán 1999, 2008; Hill and Hill 1986). However, there have been no systematic attempts to relate colonial, contact-induced changes to the structural diversity of modern varieties in terms of similarity to older Nahuatl and the degree of Hispanization as well as the role of historical, social and cultural factors.

In this paper we discuss the preliminary results of a long-term interdisciplinary research project studying language change in Nahuatl from the colonial era to the present day. As part of the project, an analysis of Spanish lexical and structural influence in an extensive body of written texts in Nahuatl is complemented by present-day ethnolinguistic data from both strongly urbanized and more peripheral rural communities (Puebla-Tlaxcala and northern Veracruz). This holistic study encompasses interrelated aspects of language change, i.e., lexicon (types of borrowing, coinages), phonology (substitution, assimilation, phonotactics), morphology (pluralization, derivation) and syntax (word order, dependent and relative clauses), as well as contact-induced incorporation, grammaticalization and code-switching. The study also deals with categorial equivalence and rhetorical tropes underlying the construction and use of contact-induced lexicon. The analysis is accompanied by an assessment of such factors as the degree of bilingualism and the extent of language shift and convergence.

This holistic approach overcomes the deficiencies of previous research, making it possible to account for the prolonged period of contact, its intensity and geographic distribution, as well as the social, political and cultural settings. Specifically, we demonstrate that language change in particular localities depended not only on the degree of contact and urbanization, but also on more subtle cultural factors, e.g., the strength of local indigenous organization and the continuity of writing tradition in Nahuatl. We also document a relatively late occurrence of specific phenomena in areas of intense contact such as the Valley of Mexico and the Puebla-Tlaxcala region, including borrowing of verbs and particles, and pluralization of inanimate nouns. In addition, linguistic evidence from colonial written sources and modern field data reveals a close correspondence with earlier stages of language change both in urbanized zones, e.g., Tlaxcala, and peripheral locations, e.g., northern Veracruz, as illustrated by the continuing presence of developments otherwise recorded in the 18th and 19th centuries, e.g., the assimilation of Spanish particles, and morphological mechanisms of creating neologisms. This complex evidence suggests therefore the need for a revision of our understanding of the stages and chronology of language contact between Nahuatl and Spanish.

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## Constructional categorisation. Experiential predication in Irish

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Irish is well known for the typologically unusual features of initial mutations, VSO word order, and prepositional pronouns. A lesser known but equally unusual feature is the expression of categories of mental and physical experience in various **experiential constructions**. These constructions consist of the **experiencer** who is an “animate entity whose registering nervous system is relevant to the predication” (Longacre 1996:156) and who consciously undergoes an **experience** as a result of a **stimulus** which brings about the experience. Such **experiential predications** are often divided into constructions where the experiencer acts as an agent, a patient, or is in an oblique case and/or is marked by an oblique preposition (Haspelmath 2001:60). Irish is typologically unusual in that it seems to favour oblique constructions (Bossong 1999:4-8; Haspelmath 2001:61).

The selection of an experiential construction (and prepositions) in Irish seems to be dependent on the **experiential predicate** (O'Neill in progress). Acts of perception for instance may involve verbal predicates with or without a preposition marking the stimulus as in (1) and (2). Sensations and emotions may involve nominal predicates with the existential verb with or without a stimulus with a preposition marking the experiencer (and stimulus) as in (3) and (4).

- (1) Feiceann an fear an bhean  
 see.3Sg.Pres Def man Def woman  
 EXP(ERIENCE)<sub>v</sub> EXP(ERIENCE)<sub>R<sub>N</sub></sub> STIM(ULUS)<sub>N</sub>  
 ‘The man sees the woman’
- (2) Teagmhaíonn an fear leis an mbean  
 touch.3Sg.Pres Def man with Def woman  
 EXP<sub>v</sub> EXP<sub>R<sub>N</sub></sub> prep STIM<sub>N</sub>  
 ‘The man touches the woman’
- (3) Tá ocras ar an bhfear  
 be.3Sg.Pres hunger on Def man  
 EXP<sub>N</sub> prep EXP<sub>R<sub>N</sub></sub>  
 ‘The man is hungry’
- (4) Tá fuath ag an bhfear don bhean  
 be.3Sg.Pres hate at Def man to.Def woman  
 EXP<sub>N</sub> prep EXP<sub>R<sub>N</sub></sub> prep STIM<sub>N</sub>  
 ‘The man hates the woman’

Acts of cognition and conation may furthermore involve nominal or adjectival predicates with the copular verb with a preposition marking the experiencer as in (5) and (6). Irish exhibits a relatively wide range of experiential constructions (including causative and light verb constructions) which show systematic correlations and complex interactions between the predicates (semantics) and constructions (morphosyntax).

- (5) Is cuimhin leis an bhfear an bhean  
 Cop.Pres remembrance with Def man Def woman  
 EXP<sub>N</sub> prep EXP<sub>R<sub>N</sub></sub> prep STIM<sub>N</sub>  
 ‘The man remembers the woman’
- (6) Is fearr leis an bhfear an bhean  
 Cop.Pres better with Def man Def woman  
 EXP<sub>ADJ</sub> prep EXP<sub>R<sub>N</sub></sub> prep STIM<sub>N</sub>  
 ‘The man prefers the woman’

This paper presents the results of a corpus-based analysis of experiential predication in the Irish component of the New Corpus for Ireland (Foras na Gaeilge). The paper sketches the various experiential constructions in Irish and

the **experiential categorisations** inherent in the constructions. “There is nothing more basic than categorisation to our thought, perception, action, and speech. [...] An understanding of how we categorise is central to any understanding of how we think and how we function, and therefore central to an understanding of what makes us human” (Lakoff 1987:5-6). This paper will thus attempt to partially understand what makes Irish humans.

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## Features and phonotactics: A cross linguistic perspective on preferences in cluster formation

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This paper addresses the issue of language specific parameters which govern the formaton of consonant clusters in two Germanic languages (English, German) and two Slavic languages (Polish, Russian). Up till now two major criteria which were used consistently in the description of phonotactics in world languages, namely cluster size, defined as the number of adjacent segments forming a cluster (Greenberg 1978) and cluster phonological structure, determined on the basis of - for instance - sonority (Vennemann 1988; Clements 1990; Ladefoged 1993). Some more recent accounts proposed to top the parameter of manner of articulation with place of articulation and voicing (Dziubalska-Kończak 2009) and distinguish extra-phonological factors, such as morphology, in cluster formaton (Dressler and Dziubalska-Kończak 2006).

This contribution may be seen as a method supporting the idea that pre-conceived notions traditionally used in phonotactics (e.g. sonority) may have smaller predicting power of cluster goodness. The reason is that languages favour various (combinations of) features when forming consonant clusters. These unique preferences allow to arrive at unique phonotactics. The method discussed in this paper is the extension of the model proposed by Orzechowska and Wiese (2011). The authors make use of four properties in search of factors which are universal or language specific: complexity (COMP), place of articulation (POA), manner of articulation (MOA) and voicing (VOI). The method is empirically-based in the sense that it allows to discover language-specific preferences by a systematic analysis of phonological properties recurring across all clusters in a given language. This analysis, in consequence, allows to establish parameters representing each of the mentioned properties.

The data that was analysed contained 56 German, 62 English, 423 Polish and 210 Russian word-initial clusters. The selection of the languages was motivated by the fact that all of them are phonotactically elaborate, according to the World Atlas of Linguistic Structures (Maddieson 2011), but to various degrees. English and German allow the maximum of 3 consonants in the word-onset position, while Polish and Russian permit 4- consonant onsets. In the analysis, we firstly used the IPA categories to describe clusters. On this basis, 14 parameters for all the properties were identified. Exemplary parameters involve: cluster size and compositionality for the COMP property, number of labial / coronal / dorsal segments in a cluster for the POA property, articulatory distances between consonants forming a cluster and sonority for the MOA property and voicing agreement between adjacent consonants for the VOI property. Next, clusters adhering or not adhering to each parameter were counted, which made it possible to come up with point values for each cluster. Finally, a ranking of clusters was proposed for each language.

The method allows to trace language specific preferences in cluster formaton. The tentative analysis revealed that different parameters hold relevant in the two Slavic and Germanic languages. Generally, the place of articulation and voice feature play a greater role in Polish and Russian phonotactics, while English and German prefer sonority-based clustering (i.e. the manner feature).

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## From conjoined to particle comparative in Lithuanian

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1. This paper aims to display the source of the Lithuanian comparative suffix *-iau*. I will advance the thesis that *-iaũ* (OLith. *-iau-s*, e.g. *geriaus* 'better') goes back to the postponed focus particle *-jaũ* functioning as a marker of EMPHATIC ASSERTION OF IDENTITY (see König 1991), cf. Germ. *eben*, Eng. *exactly*. Grammaticalization of *-jau* has taken place in sentences consisting of juxtaposed and contrasted clauses, i.e. so called *conjoined comparative* in Stassen's terms (Stassen 1985: 38, 44), cf.:

(1) *Kaw-ohra naha Waraka, kaw naha Kaywerye* (Hixkaryana)  
tall-not he-is Waraka tall he-is Kaywerye  
'Kaywerye is taller than Waraka'.

2. In Old Lithuanian texts (XVI<sup>th</sup> cent.) *-jaũ* is combined with anaphoric words *tas* 'this, that', *toks* 'of this kind', cf. (2) from Dauksza's *Postilla* (1599):

(2) *Bat' tof-iaũ ne-gédz-ios ak-is / (...) tie pát-is o ne kit-i*  
but that:N.PL.F-FOC NEG-shy:N.PL.F eye:NOM.PL the same and NEG other:N.PL.M  
*pa-kél-s kancz-iq (...)*  
PRV-experience:FUT3 torture:ACC.SG  
'But **exactly those** shameless eyes (...), the same, not other ones will experience the torture (...)'

A final consonant */-s/* in *-iaũ-s* is an etymologically heterogeneous element, appearing optionally in such lexemes as e.g. Lith. dial. *nèt-s* 'even': *nèt* 'even'. The primary contrastive function of the suffix *-iau-s* can be compared to Old Greek *-τερος*, e.g. *δεξιτερος* 'right(-hand)', emphatic non-*σκαίος* 'left(-hand)', cf. *atgal-iau-s* (3) (1579):

(3) (...) *ir siunt-e ghy atgal-iaus Piloto-p.*  
and send:PST3 he:ACC.SG.M back:CMP Pilate:ALL.SG  
'(...) and sent him back to Pilate' (Luke 23, 11)  
(literally: '(Herod) sent Jesus **back** to Pilate (although he could have let Jesus stay at his court)').

As for the origin of the final */-s/*, it has been traced back to a shortened form of the verb *es-ti* 'is'.

3. While analyzing Old Lithuanian texts we may note that the Lith. comparative *-iau-s* betrays a strong predilection for the comparative constructions with connectives containing negation, e.g. *nei-g* 'than' (4):

(4) *Bet esch daug-iaus dirb-a-u / neig kurs-ai isch yũ* (VEE 102: 16-17)  
but I a lot:CMPR labour:PST-1SG than anyone-PRT from you:GEN.PL  
'but I laboured more abundantly than they all' (1 Corinthians 15:10)

Some of the connectives have been recorded in the function of sentence negation, e.g. OLith. *neig* 'than' (4), resulting from conflation of *nei* 'nor, and not' and FOCUS PARTICLE *-gi*, appears in (5) in a juxtaposed clause expressing contrast to the preceding one (1579):

- (5) *Saka-u yumus tas-ai nu-eja ap-teisin-t-as*  
 tell:1SG you:DAT.PL this:PRT PRV-go down:PST3 PRV-justified:PTC.PST.PASS.-NOM.SGM  
*nam-ūsna sawa nei-g anas.*  
 house:ILL.PL his NEG-FOC other  
 ‘I tell you, this man went down to his house justified rather than the other’ (Luke 18:14)

**Conclusion.** The comparative suffix *-iau* has been grammaticalized in sentences consisting of juxtaposed and contrasted clauses. The primary state of affair can be noted in (6):

- (6) *Griov-iau važiuo-k, kad kulipk-os ne-siek-tų.*  
 ditch:CMP drive:IMP.2SG that bullet:NOM.PL NEG-reach:CND3  
 ‘Do drive in the ditch so that bullets won’t reach us’ (literally: ‘Drive more in the ditch’)

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## The prospective participle and the benefactive case in Basque: a parallel evolution

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This paper deals with the evolution of two grammatical features closely related to each other in the history of Basque. The first of them is the prospective participle. It is used in periphrases which are one of the ways to express future in Old Basque, and the only one which has survived. It is formed by adding a suffix to the perfective participle: the local genitive *-ko* or the possessive genitive marker *-(r)en* (Trask 1995), in a distribution which ranges from the exclusivity of *-ko* in western dialects to the exclusivity of *-(r)en* in some eastern varieties. The distribution patterns have changed over the last centuries, since we have evidence of a recessive evolution of *-(r)en*.

Distribution of prospective participle (Padilla-Moyano 2013)

models	<i>-tu</i> class: <i>hartu</i> ‘take’	<i>-i</i> class: <i>igorri</i> ‘send’	<i>-Ø</i> class: <i>erre</i> ‘burn’	<i>-n</i> class: <i>izan</i> ‘be’
Western	<i>hartuko</i>	<i>igorriko</i>	<i>erreko</i>	<i>izango</i>
Central	<i>hartuko</i>	<i>igorriko</i>	<i>erreko</i>	<i>izanen</i>
Mixed	<i>-ko / -ren</i>	<i>-ko / -ren</i>	<i>-ko / -(r)en</i>	<i>izanen</i>
Eastern	<i>harrturen</i>	<i>igorriren</i>	<i>erreren</i>	<i>izanen</i>

The second element is the benefactive. In Basque, in order to express the benefactive, there were several possibilities. The specific benefactive marker (3) emerged relatively recently, especially in eastern dialects (Santazilia 2013). Before it developed, the beneficiary used to be conveyed by the sole genitive. As in the case of the prospective participle, the old benefactive was expressed by the possessive genitive marker *-(r)en* (1) or the local genitive *-ko* (2). This fact can be interpreted as a proof of the possessive-benefactive-recipient connection (Malchukov 2010). Moreover, the areas where *-(r)en* benefactive and *-(r)en* prospective participle are attested coincide, and their withdrawal proceeded in a parallel manner. This suggests a close relationship between both grammatical features.

- (1) *Opil-ez zaria beit-zen jente prauben.* (ca. 1500)  
 roll-INSTR basket.DET COMP-was people poor.BEN  
 ‘Because the basket was (full) of rolls for the poor people.’
- (2) *Cantica espiritual-ac Çubero Herri-co.* (1734)  
 Canticle spiritual-PL Soule country-BEN  
 ‘Spiritual canticles for the Country of Soule.’
- (3) *Guiçon eta emazt-ençat.* (1780)  
 man and woman-PL.BEN  
 ‘For men and women.’

Little, if anything, has been said on the evolution of the prospective participle and the benefactive case in Basque. The present research is based on a corpus of forty old eastern texts, primarily in Souletin dialect, and most of them unexplored. My aim is twofold: on the one hand, to provide an account of the recessiveness of the morphological choices involving *-(r)en*; and on the other hand, to propose an explanation of the expansion of prospective participles in *-ko* in eastern Basque.

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## Pragmatics and grammar in requests: evidence from Estonian, Finnish, French, Lithuanian and Russian

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Requesting is a linguistic and cultural phenomenon, which is a part of linguistic behaviour and is prone to contact influences. This study is trying to answer the question how does requesting differ in Estonian, Finnish, French, Lithuanian and Russian.

Our data originates from a set of discourse completion tasks (for the method, see Blum-Kulka, House & Kasper 1989) which are filled by native speakers with requests and questions representing their intuitions about appropriate linguistic behaviour in the context. Head acts of the sequences have been coded for relevant grammatical categories: syntactic type of the clause, morphological form of the verb (especially considering the mode and the tense), negation of the main verb, modal constructions and address form. We also compare our results with results of previous studies (for example, Hennoste & Rääbis 2004, Béal 2010, Hilbig 2009, Larina 2009, Tanner 2012).

In our data, the most typical head act of request in all studied languages is an interrogative clause containing a modal verb in the conditional mood. In Estonian, the head act typically contains the question particle *kas*, a modal verb in the present conditional (*võiks*, *saaks* 'could') and V-form (2nd plural, *teie*).

*Kas te saa-ks min-d lennujaama vii-a?*  
 QUEST 2PL can-COND 1SG-ACC airport-ILL drive-INF  
 Could you drive me to the airport?

In Russian, the head act contains a modal verb (*могли* 'could'), the conditional marker (*бы*) and V-form (2nd plural instead of singular, *вы*). More frequently than in other languages, the construction is negative (negative particle *не*).

*He мог-ли бы вы подвезти до аэропорта?*  
 NEG can-PST COND 2PL drive.INF PREP airport.GEN

In Finnish, the construction contains a modal verb in the conditional mood (*voisi*, *saisi* 'could'), the question suffix (*-ko*) and, more frequently than in other languages, the T-form for address (2SG).

*Vo-isi-t-ko vie-dä minu-t lentokentä-lle?*  
 can-COND-2SG-QUEST drive-INF 1SG-ACC airport-ALL

In French, requests are also typically interrogative constructions (with inversion or the question particle *est-ce que*) and contain a modal verb in the conditional mood (*pourriez*) and V-form (*vous*).

*Pou-riez -vous me déposer à l'-aéroport ?*  
 can-COND.2PL 2PL 1SG drop\_off.INF PREP DEF-airport

In Lithuanian, the most typical construction also contains a question particle (*ar* or *gal*), a modal verb in the conditional mood (*galėtų*) and V-form.

*Ar galė-tumė-te mane nuvežti į oro uostą?*  
 QUEST can-COND-2PL 1SG.ACC drive.INF PREP air.GEN port.ACC

However, despite the fact that the most typical request head acts are rather similar in the data of these five languages, the categories (the conditional mood, modal verb, negation, interrogative particle, and choice of *T*- or *V*- form for addressing the hearer) combine differently depending on the language and the situation. The main focus of the presentation will be on the influence of situational parameters (e.g. formality, degree of imposition and interruption of the addressee, habituality of the request) on the presence of the relevant grammatical categories in the studied languages.

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## Systems of nominal categorisation: How to know their metes and bounds

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### Research question

The world's languages know two ways to distinguish different classes of nouns: Classifier systems and gender/noun class systems. These differ in their formal appearance and function: Classifiers typically occur optionally and contribute to a noun phrase's semantics, while nouns are obligatorily assigned to a referential class in a gender/noun class system that patterns the nominal lexicon with respect to its form. It has often been assumed that gender/noun class systems evolve from classifier systems as a result of a process of grammaticalisation (e.g. Aikhenvald 2000, Duke 2009, Greenberg 1978, Grinevald 2000). Following from the assumed involvement of grammaticalisation in these systems' evolution, we can predict gradually developing systems and, most importantly, intermediate systems that display properties of both classifier and gender/noun class systems.

Due to the lack of commonly accepted definitions of both individual systems and nominal categorisation in general, functional and formal properties of systems of nominal categorisation in general are still mostly unknown and for the rest lively discussed. This paper aims at contributing to this discussion by the introduction of a typological method that allows us to reliably compare all types of systems by the same standard. In addition, the preliminary outcomes of a current sample study will be presented.

### Approach, method, data

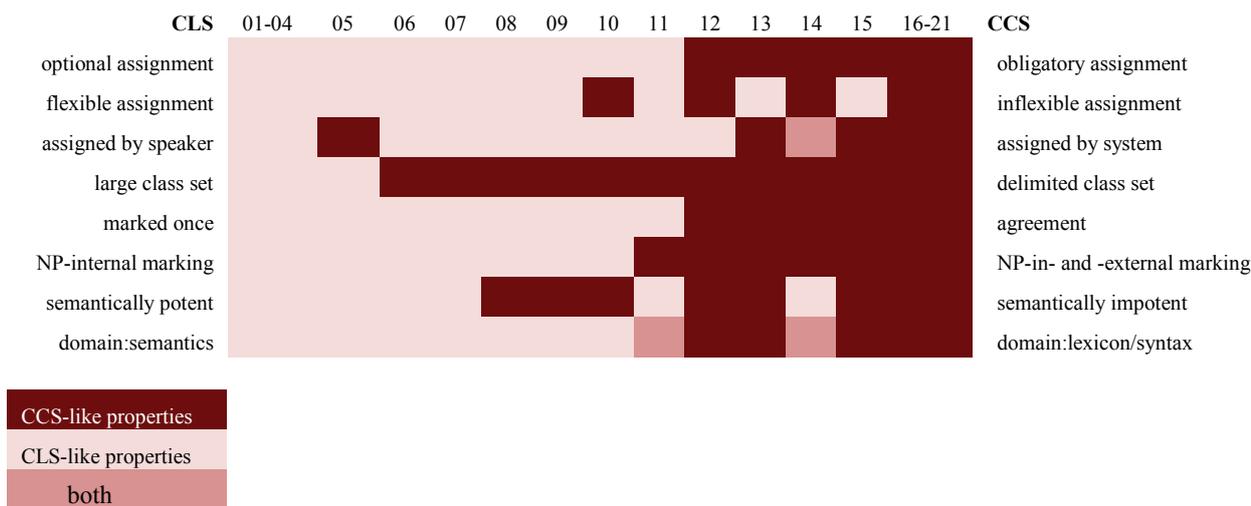
This paper introduces a typological study of 50 synchronic systems of nominal categorisation. The sampling method follows Rijkhoff/Bakker/Hengeveld/Kahrel (1993) and subsequent works; the sample covers the world's languages with a maximum genetic and typological diversity.

The comparative method at use was specifically developed as a comparative measure of systems of nominal categorisation. It accounts for some ten properties that qualify for an intersystemic comparison and that capture these systems' formally (e.g. the locus operandi and the behaviour of the systems' markers) and functionally (e.g. the obligatoriness and freedom of the class assignment or the systems' semanticity).

### Results and prospects

Due to the lack of an intersystemic tool of comparison, it was not possible so far to identify and justify even the existence of intermediate systemic types beyond the degree of mere description. In our sample study, we found that the bulk of systems of nominal categorisation belong to the intermediate "grey area" that separates classifier systems from gender/noun class systems (cf. figure 01), which shall be presented and evaluated.

Figure 01 - The properties of a selection of prototypical and intermediate systems of nominal categorisation



**Language index to figure 01**

	language	ISO 639-3	systemic type
1	Korean	kor	noun classifier system
2	Tibetan	bod	noun classifier system
3	Tiwi	tiw	incorporated verbal classifier system
4	Yidiny	yii	noun classifier system
5	Diegueño	dih	affixed verbal classifier system
6	Boumaa Fijian	fij	possessed/relational classifier system
7	Hawaiian	haw	relational classifier system
8	Dongo-Ko	doo	possessed classifier system
9	Hmong Daw	mww	noun/numeral/possessed classifier system
10	Diegueño	dih	relational classifier system
11	Chalcatongo Mixtec	mib	possessed/affixed verbal classifier system
12	Kiowa	kio	gender system
13	Nunggubuyu	nuy	noun class system
14	Tamil	tam	gender system
15	Dongo-Ko	doo	noun class system
16	Bukiyip	ape	noun class system
17	Chichewa	nya	noun class system
18	German	deu	gender system
19	Hadza	hts	gender system
20	Hausa	hau	gender system
21	Masri	arz	gender system

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## Exploring L2 fluency resources: A mixed methods approach

Peltonen, Pauliina (University of Turku, Finland)

The concept of fluency is widely used in L2 proficiency research, teaching and assessment to generally refer to smooth and effortless speech, but there is considerable variation in the specific measures, definitions and assessment criteria for fluency. Contemporary research on L2 fluency tends to favor quantitative methods and to focus on group-level differences in fluency. When only frequencies are examined, the importance of individual differences or the different functions of fluency-related features can get neglected.

In this presentation I will discuss the main results of my MA thesis and introduce the theoretical foundation for my doctoral dissertation. In the thesis, I examined 40 learners' fluency from a monologue production. A native speaker control group (N=10) was used to obtain reliable baseline measures for fluency. The purpose of the study was to examine how first language affects fluency in L2 by contrasting Swedish-speaking with Finnish-speaking learners of English. In addition, proficiency level differences in fluency were examined by comparing first year upper secondary school students and first year university students of English. In accordance with the current, multi-componential view of L2 fluency, utterance fluency was studied with several measures associated with different dimensions of fluency: speed, pausing and repair (see Skehan 2009).

The study demonstrated that speed and silent pause measures differentiated the groups clearly and were thus suitable for examining group level differences quantitatively. However, a more qualitative approach, focusing on individual differences, was used for examining filled pauses and different types of repair, since those measures demonstrated high within-group variation. The qualitative analysis showed that certain subjects with a high level of temporal fluency could use filled pauses and repetitions strategically to avoid long silent pauses. This suggests that features previously considered to be mainly indicators of disfluency may actually enhance fluency. Only a mixed methods approach, including both quantitative and qualitative analyses, can offer a comprehensive picture of L2 fluency.

In my doctoral dissertation (begun in fall 2013), I approach traditional disfluency markers (for instance filled pauses and repetitions) from a problem-solving perspective. The features are treated as potential problem-solving mechanisms, or strategies, that learners use when encountering problems in communication (Dörnyei & Kormos 1998). The aim is thus to explore the resources learners utilize to keep the flow of talking going. Even though researchers occasionally refer to the connection between strategic language use and fluency (see e.g. Segalowitz 2010: 41-42), this relationship has rarely been examined empirically (but see Götz 2013). In the dissertation, I employ a three-fold approach to fluency analysis by examining fluency features from speech samples (utterance fluency), by studying judges' fluency ratings (perceived fluency) and by collecting retrospective interview data on learners' views of their problem-solving mechanism usage (self-perceived fluency). By integrating problem-solving research with L2 proficiency research, the study aims to formulate a new framework for examining, teaching and assessing L2 fluency.

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## Constructionalising the nonfinite periphery in English: absolutes and free adjuncts hand in hand

Pérez-Guerra, Javier; Bouzada-Jabois, Carla (University of Vigo, Spain)

This paper analyses two peripheral constructions in English: free adjuncts (FA) and absolute constructions (AC), illustrated in (1) and (2), respectively:

- (1) *Not feeling at first the Pain of the Stroke*, he wondered what was become of the Ball, (DODDRIDGE-1747,10.72)
- (2) *Your Barrels being ready*, strow the Bottom with Salt: ... (DRUMMOND-1718,32.359)

FAs and ACs comply with the defining characteristics of extra-clausal constructions: (i) ‘bracketed-off’ status, (ii) lack of (full) integration in the syntactic structure of the clause, (iii) positional mobility, (iv) relatedness to the clause by rules of coherence, and (v) expression of some kind of adverbial subordination.

Despite the controversy reported in the literature as regards the origin of FAs and ACs in English (native Germanic, Latin borrowing or convergent source; see Callaway 1901 and van de Pol 2012), our standpoint will be synchronic and based on Modern and Present-Day (PDE) English. Such a theoretical perspective will allow us to treat FAs and CAs as constructions (*ie* sufficiently frequent compositional form-meaning pairings; see Goldberg 2006) and, more specifically, as two micro-constructions of a meso-construction which we call ‘nonfinite-periphery construction’. The definition of the meso-construction would be:

- Syntax: [(Introducer) Subject<sub>i</sub> NP/pronominal/∅ V<sub>nonfinite</sub>]nonfinite periphery [<sub>s</sub>] [... X<sub>j</sub> ...]<sub>(orthodox) clause</sub> (and reversed version)
- Semantics: [nonfinite periphery] R [clause], where R implies (specialised, unorthodox or even multiple) adverbial subordination; see Stump 1985: 329-330 and Kortmann 1991: 112-113)

The parameter [±∅] in the subject of the nonfinite periphery determines the ascription of the construction to either the FA or the AC micro-type.

In this paper we focus on FAs and CAs in Modern and PDE. In order to cover the Late Modern English period (LModE) and to connect the results reported by Río-Rey (2002) for Early Modern English (EModE) and Kortmann (1991) for PDE, we have analysed c2,300 CAs and FAs from the Penn Parsed Corpus of Modern British English (PPCMBE, 1700-1914). In the light of our scrutiny, we claim that FAs and ACs deserve unitary constructional treatment in Modern and PDE, on the basis of the following arguments:

(i) the wider range of verbal predicates progressively entering the nonfinite periphery in both constructions from Old English to the present (see van de Pol and Cuyckens 2013: 342-350 for ACs): present and past participle clauses and infinitives (and other nonverbal options such as APs, NPs, PPs or AdvPs)

(ii) the fixation and, on occasions, grammaticalisation of the set of introducers in Modern and PDE (see Beukema 1985: 191 and van de Pol and Cuyckens 2013: 357-359): a closed list of conjunctions/prepositions in FAs (*by*, *when* and *after* account for approximately 70 percent of the examples) and empty augmentors in ACs (*with* and *without* amount to c60 percent)

(iii) the comparable proportions of ACs and FAs semantically ‘related’ to the clause: 99.44 and 89.47 percent, respectively, in LModE

(iv) the statistically significant increase of sentence-final ACs and FAs, which contributes to the [clause]+[nonfinite periphery] prototype

(v) the adjustment of the semantic relations, same-time, cause, addition and manner now accounting for more than 70 percent of the ACs and the FAs in the database.

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## Revisiting comitative constructions and related matters: the Circum-Baltic data in a typological perspective

Perkova, Natalia (Stockholm University, Sweden)

Comitative constructions cross-linguistically tend to be semantically and/or formally close to other types of constructions dealing with the plurality of participants, e.g., coordinating ones. In this talk, I address several cases of relationship between such constructions with the major focus on some interesting phenomena found in the Circum-Baltic languages.

First, in some Circum-Baltic languages, in addition to primary comitative markers covering a wide range of functions, more specialized markers are used. Stolz and his associates argue that such markers are used in the contexts of companion-orientation, “the description of situations from the point of view of the participant who has less control over the action than the accompanee, if there is one at all” (Stolz et al. 2006: 315), cf. (1a-b). However, the analysis of the data shows that such interpretation, formulated in terms of control and participant-orientation, is not completely correct. Instead, the pragmatic perspective seems to be more accurate, if one tries to capture the essence of such comitative markers. For instance, Latvian *līdzī*, a specialized comitative marker, seems to work as a presuppositional trigger, see (2). Putting the focus on pragmatic properties allows to find the link between *līdzī*-like markers, more typical comitative markers, coordinating conjunctions and additive particles. It also explains why such markers as *līdzī* are often used in elliptical constructions.

The importance of presupposition-related properties of comitative markers seems to be overlooked cross-linguistically and can be probably taken into consideration by linguists working on languages with unordinary comitative markers.

Second, sociative-comitative polysemy, characteristic of Altaic and some other languages (Nedjalkov 2007: 16ff.), is also attested in the Circum-Baltic area. Interestingly, it is first of all manifested in verbal prefixes, cf. Russian *so-* in *sotrudničat* ‘to collaborate’ and *soputstvovat* ‘to accompany’. However, the Lithuanian data show that sociative-comitative polysemy can be extended to non-verbal sociative markers, as Lithuanian adverbs *kartu* and *drauge* ‘together’ can be used in both sociative and comitative contexts, depending on whether one uses a singular or plural reference NP.

In my talk, I'm going to analyse the abovementioned phenomena in the context of related constructions in languages under discussion and similar constructions in other languages of the world.

(1a) ...*Zinaīd-a...*                    *atnāc-a*                    *ar*                    *meit-u*                    *uz*                    *dievkalpojumu-u*.  
Zinaida-NOM.SG                    come.PST-3                    with                    daughter-ACC.SG                    to                    service-ACC.SG  
‘Zinaida came to the service with her daughter.’ (K)

(1b) *Florenc-e*                    *ret-u*                    *reiz-i*                    *bij-a*                    *gāj-usi*                    *līdzī*                    *māt-ei*  
Florence-NOM.SG                    rare-ACC.SG.F                    time-ACC.SG                    be.PST-3                    go-PA.PST.SG.F                    LIDZI                    mother-DAT.SG  
*baznīc-ā*.  
church-LOC.SG  
‘Occasionally, Florence went [along] with her mother to the church’. (K) (=joined her mother, followed her)

(2) *Vīņš*                    *vien-s*                    *ne-zinā-s*                    *ceļ-u*                    *uz*                    *stacij-u*,                    *es*  
he.NOM                    one-NOM.SG.M                    NEG-know-FUT(3)                    way-ACC.SG                    to                    station-ACC.SG                    I.NOM  
*ie-š-u*                    *līdzī*.  
go-FUT-1SG                    LIDZI  
‘He won’t find the way to the station himself, I’ll go with him.’ (K)  
→ **He will go** (to the station) (*presupposition*).

### Abbreviations

ACC – accusative; F – feminine; FUT – future; LOC – locative; M – masculine; NEG – negation; NOM – nominative; PA – active participle; PST – past; SG – singular.

K = Līdzsvars mūsdienu latviešu valodas korpuss ([www.korpuss.lv](http://www.korpuss.lv))

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## The use of pronominal subjects in Spanish: Grammar or usage of grammar?

Peskova, Andrea (Universität Hamburg, Germany)

### Topic

This paper investigates the use of pronominal subjects (PS) on a large database of spoken Spanish. There are scholars who assume that the default form of PS is an empty category *pro* or null-subject in Spanish (e.g. Biberauer et al.

2010). However, some empirical, corpus-based researches deny this approach with the argumentation that the use of PS is variable in many contexts (e.g. Posio 2012). From my point of view, we have to distinguish between grammar (morpho-syntax), which is „pro-drop“, and usage of grammar (pragmatics), where the null-overt PS is possible. The main question of this paper is: What triggers the use of overt PS in Spanish?

### Approach

Traditionally, there are four main reasons to explain the expression of PS:

- (1) a. Verb-form ambiguity (e.g. Alarcos Llorach 1994).
- b. Contrast (e.g. Otheguy et al. 2007) or Contrastive topic (e.g. RAE 2010).
- c. Emphasis (e.g. Lu 1997) or Focus (e.g. RAE 2010).
- d. Switch-reference (e.g. Silva-Corvalán 1982) or Aboutness-shift topic (e.g. Adli 2011).

The problem of these explanations is that empirical (corpus-based) investigations exhibit contradictory results: For example, some studies show that the verb-form ambiguity leads to a higher use of overt PS (e.g. Hochberg 1986), while others show the opposite (e.g. Balasch 2008). Moreover, many investigations do not use or define sufficiently the concept of pragmatic notions (as 1b, 1c). And lastly, if we speak about reasons such as emphasis or focus, we need to support this kind of argumentation by means of prosody. Thus, I provide an innovative method in the studied phenomenon: Intonational analysis of overt PS.

### Methodology

The data consist of 10 hours of free interviews of Buenos-Aires Spanish, which were transcribed and coded according to several linguistic criteria (e.g. grammatical person; verb tense and modus; information structure, i.e. different pragmatic functions of subjects). The acoustic analysis was carried out using Praat (Boersma & Weenink 2010) and applying the Spanish ToBI labelling system for the prosodic annotation (cf. Prieto & Roseano 2010).

### Results

0. The subject position was empty in 10% of all finite sentences. Thus, the null form is confirmed as a default form in the examined variety.
1. As for verbal syncretism, statistical method (logistic regression) showed that it does not play any role in the use of PS. However, PS must always be overt with ambiguous verbal forms if the context is semantically unpredictable. I propose here a new category for this PS: ‘Disambiguating topic’.
2. PS as Contrastive topic or Focus must always be phonetically realized.
3. PS as Aboutness-shift topic (switch-reference) prefers an overt form, while PS as Familiar topic (same-reference) a null form (cf. Frascarelli 2007 for Italian). Nevertheless, the latter one is also often realized overtly when it marks a new episode boundary.
4. And finally, as for prosody, there is a categorical difference between PS-focus (low-high-low tone) and PS-topics (low-high tone). This allows us to discover the role of PS in discourse, where the pragmatic argumentation may cause doubts.

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## Implicational hierarchy of multiword modifiers: synchronic and diachronic evidences from Romance languages

Piunno, Valentina; Ganfi, Vittorio (Università degli Studi Roma Tre, Italy)

Lexicological and lexicographical studies on multiword expressions in Romance languages have significantly increased in recent years -among others, M. Gross 1982, Voghera 1994, G. Gross 1996, Mejri 1997, Mel'čuk 1998, Tutin - Grossmann 2002, Simone 2006ab, Masini 2007, Lamiroy 2008, Bosque 2010 and references therein quoted-. Particular attention has been paid to multiword lexemes functioning as adjectives and adverbs -among others, Gross 1991, Català 2003, Mejri 2007, García Page 2007-. However, the structural and functional relation between these two classes has not yet been clarified.

This corpus-based investigation will explore Multiword Adjectives (MAjcs) or as Multiword Adverbs (MAjcs) consisting of prepositional phrases. According to the functional and distributional properties, this group of multiword modifiers can be distinguished into three types:

- i. **Pure Multiword Adjectives:** prepositional phrases modifying only nouns:
  - (1) IT: *tazzina da caffè* (FR: *tasse à café*; ES: *taza de café*)  
       mug     PREP   coffee  
       'coffee mug'
- ii. **Pure Multiword Adverbs:** prepositional phrases modifying only verbs:
  - (2) IT: *parlare a briglia sciolta* (FR: *parler à bride abattue*; ES: *hablar a rienda suelta*)  
       speak   PREP   rein     untied  
       'speak at full gallop'
- iii. **Mixed modifiers:** prepositional phrases modifying both nouns (2) and verbs (3):
  - (3) IT: *acconciatura alla moda* (FR: *coiffure à la mode*; ES: *peinado a la moda*)  
       hairstyle     PREP   fashion  
       'fashion hairstyle'
  - (4) IT: *vestirsi alla moda* (FR: *s'habiller à la mode*; ES: *vestirse a la moda*)  
       to dress    PREP   fashion  
       'to dress fashionable'

Employing both a synchronic and a diachronic approach, we will explore the distribution and the evolution of multiword modifiers in Romance Languages. According to data taken from various corpora (*La Repubblica* for contemporary Italian, *OVI* for Old Italian, *Le monde* for contemporary French, *Corpus of Medieval French* for Old French, *CREA* for contemporary Spanish, *Corpus del Español: 1200s-1900s* for Old Spanish and *Brepolis* for Latin), we suggest the distribution of multiword modifiers to be governed by an implicational hierarchy as in (5):

(5) Pure Multiword Adjectives > Mixed Multiword Modifiers > Pure Multiword Adverbs

On the one hand this hierarchy allows us to make synchronic predictions about the distribution of multiword modifiers in different languages. It entails that if a language admits pure MAjcs, then it will necessarily exhibit also multiword working as mixed modifiers and as pure MAjcs. Similarly, if a language admits mixed modifiers, it will necessarily exhibit pure MAjcs. Furthermore, the presence of pure MAjcs does not entail the other structures.

On the other hand the hierarchy reflects the evolution path of multiword modifiers across Latin and Romance languages. As the evidence from corpus shows, MAjcs and MAjcs do not appear equally at the same historical phase of the investigated languages: for example, while only pure MAjcs are attested in Late Latin, the earliest stages of Romance languages already exhibits a regular system for mixed modifiers and MAjcs. The final point of the evolution path is represented by pure MAjcs typical to contemporary Romance Languages.

### Abbreviations

ES Spanish; FR French; IT Italian; MAjcs Multiword Adjectives; MAjcs Multiword Adverbs; PREP preposition.

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## Co-referential chains in Czech: perspective of information and constituent structure

Poncarová, Alena (Charles University in Prague, Czech Republic)

In my conference contribution I would like to present the results of my research from 2013 September. The project was interested in examining co referential chaining in Czech.

### Research question

The main research question was whether information and constituent structures have any influence on the co-referential chaining in Czech, applying two different perspectives. First of them, the information structure perspective, examined, whether the change of word order with respect to the topic/focus position influences the interpretation of co-referential chains, or not. In case of the second perspective, the constituent structure, the examined question was whether the change of the subject/object function has any effect on the co-referential constitution.

### Approach

The methodological approach applied to the data was the centering theory (e. g. Grosz, Weinstein, Joshi, 1995; Walker, Joshi, Friedman Prince, 1998) and František Daneš (1974). Following the methodological background I postulated two hypotheses: 1. The tendency towards topic: The topic becomes an antecedent of the pronoun more often than the focus.; 2. The tendency towards subject: The subject becomes an antecedent of the pronoun more often than the object.

### Method and data

Firstly, I measured the number of co-referential edges in the specific type of context (see below) in the Prague Dependency Treebank (PDT; e. g. Mikulová et al., 2005; Nédoluzko, 2011). The second part of the research was the survey carried out under the artificial context. In both cases I examined specific language situation: Two immediately following sentences were searched (in case of PDT) or created (in case of survey) under the condition: within the first of them, there had to be at least two noun phrases with no preference for nor of them to be an antecedent of the pronoun in the second sentence. Every artificial context in all of its variants (topic/subject, focus, object) was tested for the acceptability for the native speakers of Czech to prevent the possible undesirable effects influencing the results. Thereafter the actual testing examined the co referential chaining: every context in one of its variants was presented to the respondent as shown in the following example: *Galileo veřejně podporoval Koperníka. Věřil, že Země se otáčí kolem Slunce.* [Galileo supported Comenius publicly. He believed that the Earth revolved around the Sun.] – *Kdo věřil, že Země se otáčí kolem Slunce?* [Who believed that the Earth revolved around the Sun?] – A. Galileo, B. Koperník [A. Galileo, B. Comenius]. The respondents had to choose one of the possibilities within the limit of twenty seconds.

## Results

Both the PDT (Table A) and the survey (Table B) showed, that the tendencies towards topic and subject are correct, the tendency towards subject even stronger than the one towards topic.

	T	F
sum	1 542	1 268
chi <sup>2</sup>	26.717	
p-value	2.355e-07	

Table A

	Sb	Obj
sum	1 701	1 095
chi <sup>2</sup>	131.343	
p-value	2.2e-16	

Table B

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## Human impersonals in spoken Spanish

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The present study examines two human impersonal constructions, third person plurals (3PL) and reflexive-based impersonals (SE, i.e. the “passive” and “impersonal” constructions formed with the 3rd person reflexive clitic *se*) in spoken Peninsular Spanish (cf. example 1).

- (1) *Y entonces hacen estas campañas, no... no entiendo esto, que se hagan estas campañas.* (COREC)  
 ‘And then **they do these campaigns (3PL)**, no... I don’t understand this, that **these campaigns are done (SE)**.’

The objective of this quantitative, corpus-based study is to find out (1) to what extent the use and meaning of the two constructions are differentiated, (2) whether they can be considered as syntactic alternatives in some contexts and (3) what conditions speakers’ choice between the constructions. The data consist of two spoken corpora of Peninsular Spanish coming from the COREC (Marcos Marín et al. 1992) and representing (1) spontaneous colloquial conversations and (2) conversations from radio and television (see Table 1).

In previous research, 3PL and SE have been argued to be distinguished e.g. by the speaker-exclusivity of the former and inclusivity of the latter (e.g. Fernández Soriano & Táboas Baylín 1999). According to Gast & van der Auwera’s (2014) typology of human impersonals, based on state-of-affairs and quantificational properties of the sentences, 3PL and SE should have clearly separate uses, overlapping only in generic universal sentences where both can occur.

Preliminary results from my data suggest that the previous accounts do not fully capture the difference between the constructions. SE constructions can be both inclusive and exclusive and they occur in sentence types associated with 3PL in Gast & van der Auwera’s (2014) typology. Interestingly, corporate uses (see e.g. Siewierska & Papastathi 2011) occur only with 3PL, often associated with negative semantic prosody. In the rest of the data, the choice between 3PL and SE is affected by other factors such as the type of Patients and Recipients in the constructions and the level of formality vs. contextuality of the data measured by an independent scale (Heylighen & Dewaele 2002). SE constructions represent a more formal choice to express human impersonality whereas 3PL is especially frequent in the colloquial conversations that feature a high level of contextuality (cf. Table 1). Rather than clusivity as such,

the notion of internal vs. external perspective (Gast & van der Auwera 2014), together with the level of formality, are relevant in explaining the choice between SE and 3PL in Spanish.

Table 1

Corpus	SE (normalized frequency per 10,000 words)	3PL (normalized frequency per 10,000 words)
conversations 41,637 words	41 (9.85)	165 (39.63)
radio and television 45,121 words	54 (11.97)	73 (16.18)

### Data

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## A contrastive study of impersonal passives in Swedish and Dutch.

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### Background

Although a lot of research has been conducted on impersonal passives in Germanic languages, the scope has mostly been limited to accounts of one language only (e.g. Barðdal 2004, Sansò 2006). The present study intends to widen the perspective by taking a contrastive approach including Swedish and Dutch.

Impersonal passives constitute one type of impersonal construction (i.e. with non-canonical subjects, cf Siewierska 2008:116). Formally, they consist of an overt expletive subject combined with a passive. Semantically, passive constructions encode actions with a general reference, i.e. where no agent is specified (cf Viberg 2010).

In Swedish, impersonal passives contain the expletive subject *det* 'it' followed by a morphological passive, as in (1). In Dutch, the expletive subject *er* 'there' is followed by a periphrastic passive (as in (2)).

- (1) *Det* hördes ingenting (EkmS1)  
'Nothing could be heard'
- (2) (...) *er* werden niet langer koolstoflagen gevormd. (NilsN2)  
'(...) carbon layers were no longer formed.'

### Data, aims

The account is usage-based and draws on the SALT-DU-SWE-corpus, a bidirectional translation corpus (Rawoens 2010).

The aim is to provide a description of the impersonal passives in the Swedish and Dutch data and to arrive at a classification of the impersonal passives in the translations.

### Results

The corpus analysis reveals that most of the impersonal passives in the Swedish originals contain perception verbs and communication verbs. However, only a minority is translated into Dutch impersonal passives, as in (3).

- (3) Jo, *det* känns oerhört svårt. (GuiS1)

Ja, het is ongelooflijk zwaar. (GuiN2)

The Dutch translations reveal that Dutch impersonal passives are restricted to communication verbs.

The Swedish translations reveal that Dutch communication verbs in impersonal passive constructions are most frequently translated into active constructions with a human pronoun or impersonal human pronoun in Swedish, although Swedish communication verbs in impersonal passives would be an option.

Moreover, the Dutch corpus reveals a tendency for verbs of physical activity in impersonal passive constructions, such as *zwaaien* 'wave' etc. Some occurrences regarding impersonal passives in lexicalized constructions verb + noun have also been observed.

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## Language contact and language change: A case study of the Kundal Shahi language

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The Kundal Shahi language (KS henceforth) is the ancestral language of a community of 3371 in the village of Kundal Shahi in the central Neelam Valley in Pakistani administered Kashmir (Rehman 2012). The language is closely related to Shina and has borrowed heavily from Kashmiri and Hindko, the dominant language in Kundal Shahi village and the region (Rehman & Baart 2005, Rehman 2012).

Initially, a recorded wordlist of 199 core vocabulary items was used to determine the precise nature of the language. This wordlist was based on the one used in the Sociolinguistic Survey of Northern Pakistan (Rehman and Baart 2005, O'Leary 1992). The comparison of the wordlist with the wordlists of Shina, Kashmiri, Hindko and Indus Kohistani shows that KS shares 49, 47, 45, and 34 percent lexical similarity with these languages respectively. Moreover, the language shares ergative and dative case marking with Kashmiri while it has Shina type tone (Rehman and Baart 2005). Like Kashmiri, KS has also lost the old Indo-Aryan retroflex fricatives and affricates /ʒ/, /z/, /tʃ/, /dʒ/. The ongoing influence of Hindko is evident from the fact that several words of KS origin such as *qam* 'guts', *baḥkīrikil* 'lizard', *malot* 'dirty', and *kekin* 'wife of brother', are being replaced by the Hindko loan words: *edzir* 'guts', *sabslanq* 'lizard', *genq* 'dirty', *be:b* 'wife of brother'. Only the elderly people remember these words, and very rarely use them while speaking KS (Rehman 2012).

The study has revealed that the tone of the language is rapidly being lost as a result of its contact with Hindko.

Hindko is the predominant language in the area and the KS community is adopting Hindko as a mother tongue. Only around seven hundred KS community members can still use the language fluently. If the present speed of language shift remains unchecked, it is anticipated that the language will be extinct within the next fifty years (Rehman and Baart 2005, Rehman 2012).

The relationship between Shina and KS can be explained by the fact that they are genetically related while lexical and morphological similarities with Kashmiri and Hindko are due to the close contact of Kashmiri in the distant past and the contact between Hindko and KS at the present location.

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## Middle English coda phonotactics, schwa loss and past tense formation

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This paper addresses a theoretically interesting problem in the area of Middle English coda phonotactics. In thirteenth century English, phonologically highly marked rhymes, involving branching nuclei and/or complex voiced codas, started to become frequent. Some came about through schwa deletion in weak past tenses or participles (such as /faɪld/ ‘failed’, or /ɛrnd/ ‘earned’), others through Homorganic Lengthening of vowels before clusters such as /nd/ or /ld/ (e.g. /wi:nd/ ‘wind’ (V), /hu:nd/ ‘hound’, /gɔ:ld/ ‘gold’ etc. Since such rhymes could be both morphologically complex (*fail+ed*, *earn+ed*) and simple (*wind*, *hound*, *gold*, etc.), they were both phonologically marked and morphotactically ambiguous: in complex forms, they failed to indicate past tenses or participles reliably, and in simple forms, they would – as Post et al. (2008) suggest – delay lexical retrieval. Thus, their historical stability is remarkable: as Dressler and Dziubańska-Kołodziejczyk (2006) argue, dispreferred phonotactic sequences may become historically stable when they signal morphological compositionality, because then they are more faithfully articulated and better perceived. If they are morphotactically ambiguous, however, they are likely to undergo phonological repair, and be replaced by less marked configurations even at the cost of producing morphological irregularity.

In English, a possibility of restoring the signalling function of the rhymes in words like *failed* or *earned*, would have been the devoicing of /d/s in lexical *hound*, *gold*, etc. By enhancing the contrast between their components, this would have decreased the markedness of the final clusters as well. However, according to Bermudez-Otero (2014), such a scenario is inconceivable because the required phonologization of devoicing cannot reach the level of lexical stems without being generalized to phonological words first, by which complex *failed* and *earned* would have undergone the change as well, so that nothing would have been gained.

In our paper, we investigate (a) morphotactically ambiguous coda clusters of the type SON+/d/, (b) their finally devoiced counterparts, (c) irregular past tense forms in SON+/t/, and (d) morphotactically unambiguous codas such as /md/ in *tam+ed*, in the *Linguistic Atlas of Early Middle English Corpus* and the *Penn-Helsinki Parsed Corpus of Middle English* – in order to determine to what extent morphotactic ambiguity affected their historical stability.

We demonstrate that – contrary to Bermudez-Otero’s expectations – selective final devoicing did occur, although it did not target lexical /nd/ and /ld/ rhymes, but morphotactic ones, and produced ‘irregular’ past tenses like *spoilt*, *spilt*, or *burnt*. Our data show that this kind of ‘weak verb devoicing’ (Lass et al. 2013) was more productive than generally recognized (cf. also Welna 2009). We argue that it was facilitated by the frequency of verbal past tenses such as *went* or *sent*: These had different origins, but provided models of irregular (lexical) past tenses that prompted optionally and only phonetically devoiced forms such as [spoilt] (← /spoil+d/) or [bʊɪnt] (← /bʊɪn+d/) to be reinterpreted as reflecting analogous underliers. We argue that this confirms Dressler and Dziubańska-Kołodziejczyk’s (2006) prediction, but that specific historical circumstances always need to be considered as well.

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## (The) most in Dutch: Definiteness and specificity

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### 1. Introduction

In this paper, evidence is provided that definiteness and specificity play a crucial role in the distribution and possible readings of the Dutch quantifiers *de meeste* ‘(the) most’ and *het meeste* ‘the most’.

### 2. Data

When the Dutch quantifier *de meeste* appears with a plural noun, it has two possible readings: one proportional (1-a) and the other comparative (1-b).

- (1) Jan heeft de (meeste) bergen beklimmen.  
 John has the most mountains climbed  
 a John climbed more than half of the mountains. (proportional)  
 b John climbed more mountains than the other climbers did. (comparative)

Oddly enough, the quantifier *het meeste* also occurs with a plural noun, even though *het* is a singular neuter determiner that does not agree with the plural noun *bergen* (2). The sentence can only have a comparative reading.

- (2) Jan heeft het \*(meeste) bergen beklimmen.  
 John has the most mountains climbed  
 John climbed more mountains than the other climbers did. (comparative)

Although *het meeste* is frequently used as an adverb, it is not the correct analysis for this type of sentences. It is possible to topicalise *het meeste bergen* (3), while this is impossible with other adverbs such as *het vaakste* (4).

- (3) [Het meeste bergen] heeft Jan beklimmen.  
 the most mountains has John climbed  
 (4) \*[Het vaakste bergen] heeft Jan beklimmen.  
 the most-often mountains has John climbed

### 3. Research questions

Why can *het meeste* occur with a plural noun?  
 Why can it only have a comparative reading?

### 4. Approach

Diagnostics for definiteness and specificity show that *de meeste* and *het meeste* behave differently.

The definiteness effect context is a classic diagnostic for definiteness. Sentences that start with *there is/are* may contain indefinites, bare plurals and bare mass nouns in the position immediately following the copular verb, but no definite DPs (Milsark [1974], Szabolcsi [1986]). *Het meeste* can occur in this context, but *de meeste* cannot (5), which is a strong indication that the former is indefinite and the latter definite.

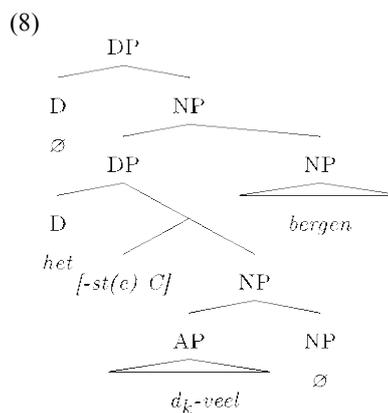
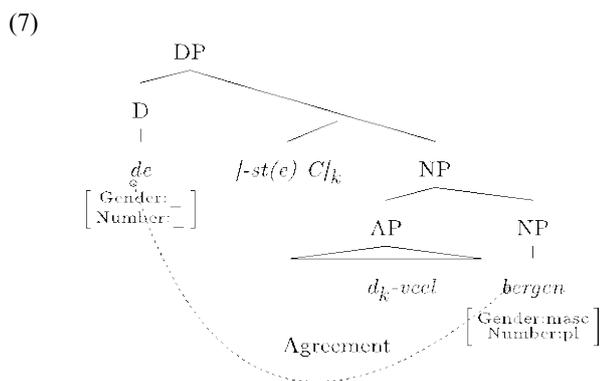
- (5) Er zijn het/\*de meeste bergen in Zwitserland.  
 there are the most mountains in Switzerland

Specificity makes a further distinction between interpretations of indefinite noun phrases. In Dutch, the direct object is base-generated in a position immediately preceding that of the verb. When the DP is scrambled and moves to a position to the left of the adverb, definite and specific indefinite DPs are still correct. Non-specific indefinite DPs, however, are ungrammatical (de Hoop [1992]). *Het meeste* follows the pattern of non-specific indefinites, while *de meeste* follows the pattern of definite DPs.

- (6) ... dat Jan [de/\*het meeste bergen] gisteren t beklimmen heeft.  
 ... that John the most mountains yesterday t climbed has

### 5. Analysis

Following Hackl [2009], I argue that *de/het meeste* are superlative forms of *veel* 'many'. The empirical observations from Dutch involving (non-)specificity and (in)definiteness form the basis of an analysis with two different syntactic structures, where *de meeste* and *het meeste* take different positions inside the DP (7-8).



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**OV-VO yield imperfect mirror-images: On the impact of length on sentence word order**

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What is the impact of constituent length on word order cross-linguistically? Hawkins (2004) claims that minimizing the distance between constituents determines word order preferences to render sentence processing optimally efficient. Specifically, Hawkins proposes the Minimize Domains principle (MiD), which predicts a mirror-image effect for VO and OV languages: VO languages will prefer short-before-long word orders, while OV languages will favour long-before-short orderings. This effect has been found in English (VO) and Japanese and Korean (OV). We tested this hypothesis in two languages with varying degrees of word order freedom: Basque (OV) > Spanish (VO).

24 Basque and 18 Spanish native speakers were presented a series of phrases of varying length in their native language, and asked to arrange them in sentences. Replicating the experimental design in Yamashita and Chang (2001), the length of NPs of transitive sentences (All-Short, Long-DO, Long-S) and of ditransitive sentences (All-Short, Long-DO, Long-IO) was manipulated. According to MiD predictions, Spanish speakers showed a preference to place short constituents before long ones and Basque speakers tended to place long NPs before short ones. However, contrary to MiD predictions: (a) the strength of the preference was greater in Spanish than in Basque, and (b) the impact of the MiD was stronger in ditransitive sentences (see Table 1).

Table 1. Percentages of **shifted (non-canonical) sentences in Basque** (transitive: DO-S, ditransitive: DO-IO) and **Spanish** (transitive: DO-S; ditransitive: IO-DO) per experimental condition.

Language	Length: Transitives			Length: Ditransitives		
	All-short	Long-S	Long-DO	All-short	Long-IO	Long-DO
Basque	3.6%	5.5%	19.7%	41.8%	33%	60.1%
Spanish	0%	0%	0.8%	10.4%	10.2%	84.9%

In sum, MiD’s predictions do not fully hold: Spanish and Basque speakers differ in the frequency and type of sentences where length dependent word order rearrangements take place. These results are not expected if length is a main factor determining word order, because it would not be expected that the degree of impact that efficient processing has on word order will vary cross-linguistically.

Following MacWhinney (1987), we will argue that when word order is not a reliable processing cue, as in languages with free word order, its efficiency to signal structure is lower. Hence, as freedom of word order increases (Basque > Spanish), the impact of MiD will decrease. More generally, our results suggest that information given by language-specific cues needs to be taken into account to explain variations in cross-linguistic patterns of sentence word order preferences.

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- English historical linguistics and translation studies: the Cinderella of interdisciplinary endeavours?

## The development of iterative verbal periphrases in Romance

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In Spanish, Catalan, and Italian, iterative periphrases of the form *tornar/e + a + INF* (henceforth TAI constructions) are attested (1–3).

- (1) Sp. *Estonce començaron los tribunos a aver su consejo por*  
 then begin.PST.PFV.3PL the tribunos to have their council for  
*establecer la ley e tornar a llamar el pueblo que*  
 establish the law and turn to call the people that  
*estava armado*  
 be.PST.IPVF.3SG arm.PTCP.M.SG  
 ‘Then the tribunos began to hold a council in order to apply the law and again call to the people, who were in arms’ (c. 1400, *LasDécadas de Tito Livio*, *apud* CORDE)
- (2) Cat. *El sector editorial català va tornar a caure un 10% el 2012*  
 the sector editorial Catalan go.PRS.3SG turn to fall a 10% the 2012  
 ‘The Catalan editorial marked has dropped another 10 per cent in 2012’ (11/12/2013, EFE / ARA Barcelona, [http://www.ara.cat/llegim/sector-editorial-catala-tornar-caure\\_0\\_1045695596.html](http://www.ara.cat/llegim/sector-editorial-catala-tornar-caure_0_1045695596.html))
- (3) It. *Un senso di serena fiducia torna a ri=stabilir=si in ogni ambiente*  
 a sense of serene trust turn.PRS.3SG to AGAIN=establish=REFL in every context  
 ‘A feeling of serene trust is again re-established in every context’ (1939, *Il Corrieredella Sera*, *apud* DIACORIS)

This talk aims at comparing the diachronic development of TAI constructions in Spanish, Catalan, and Italian, a topic that especially for Catalan and Italian has not received much attention (for Spanish, see Yllera 1980: 196–198; Eberenz 1997; Stolova 2005; Melis 2006: 908–912; Garachana & Rosemeyer 2011). Following Wälchli’s (2006) distinction between *restitutiveagain* (restitution of an earlier state) and *repetitiveagain* (repetition of an earlier event), we explore the hypothesis that due to their lexical origin, iterative constructions develop from a restitutive to a repetitive function. This assumption leads to the following specific predictions: (a) in the grammaticalisation of TAI constructions, predicates that imply a stative semantics (i.e., stative predicates such as ‘stay’ or change of state predicates such as ‘arrive’) enter earlier into the constructions, (b) the distribution of TAI constructions regarding adverbial modification changes over time, and (c) differences in the grammaticalisation of the TAI constructions in Spanish and Italian are a result from the existence of different competitors in these languages: whereas in Italian the prefix *ri-* (as exemplified in 2) is the direct competitor to the TAI construction, in (Modern) Spanish another TAI construction, i.e. *volver* (‘come’) + *a + INF*, is the direct competitor.

We present quantitative diachronic evidence for the validity of these assumptions from three diachronic corpora: the *CORDE* (Real Academia Española 2012), the *CICA* (Torruella, et al. 2013), and the *DIACORIS* (Onelli, et al. 2006). Using multifactorial regression analyses, we determine (a) the functional distribution of the TAI constructions in the three languages, and (b) the changes in these distributions. This approach allows for an identification of both similarities and differences in the development of TAI constructions in Spanish, Catalan, and Italian.

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## Vernacular universals in Germanic

Rosenkvist, Henrik (Gothenburg University, Sweden)

In Haspelmath (2001,) it is suggested that there is a European *Sprachbund*; a cluster of relatively rare linguistic properties characterize Germanic, Romance and Balto-Slavic languages, which therefore can be seen as a typological group – Standard Average European (SAE). However, only standard languages are included in the discussion. In the Germanic language area, we find a number of non-standard vernaculars that deviate substantially from the corresponding standard language, and that share a number of syntactic properties that are not found in the standard languages, although these vernaculars are not closely related. This fact suggests that there are important differences between Standard Germanic and Vernacular Germanic, perhaps due to the fact that vernaculars in general are not standardized (cf. Chambers 2001 etc., Trudgill 2009).

In this talk, I will focus on three syntactic features (null referential subjects, negative concord, and a type of subject doubling), and data from Bavarian, Zürich German, Swabian, Frisian, Övdalian, Estonian Swedish, and Yiddish will be presented. Having shown that there are notable syntactic differences between Standard and Vernacular Germanic, I will address the question why this is the case, differentiating between standardization and *Verschriftlichung* (cf. Milroy 2000, Fischer 2007:37ff). Also the question whether the syntactic properties in the respective vernaculars are to be seen as innovations or as archaisms will be discussed, and I will argue that e.g. negative concord must be seen as an archaism in Bavarian (since it is attested in Old High German), while it is an innovation in Övdalian (since it cannot be attested in Old Swedish). This, in turn, leads to the conclusion that some syntactic properties have emerged in several Germanic Vernaculars independently and in parallel.

Finally, I argue that the Germanic vernaculars constitute a valuable research object that possibly better reflect the typology of Germanic than the standard languages do, in accord with Trudgill's (2009) observation regarding standard English: "[...] for at least certain features of the English language that are found in nonstandard varieties but not in Standard English, this is perhaps best regarded as being due to unusual or idiosyncratic developments in the minority Standard English, not to some special qualities of the majority vernaculars." (Trudgill 2009:309). In other words, the concept of SAE should perhaps be reinterpreted – at least when it comes to the understanding of the term standard European; a more correct notion is possibly standardized European.

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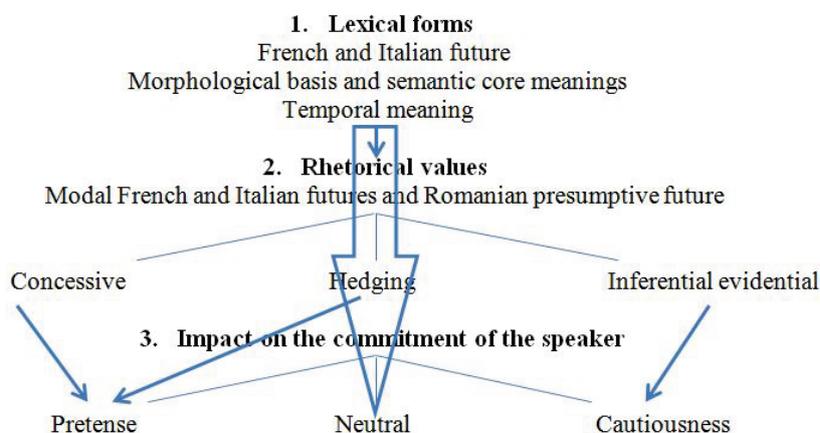
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## Modal future in French, Italian and Romanian

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Our research addresses the question of how the core meaning of the future in three different languages gives rise to different rhetorical values (concessive, hedging and evidential) and how these impact on the commitment of the speaker towards his/her utterance. We focus our analysis on the synthetic future in French and Italian as well as on the presumptive future formed with 'o' (*will*) + lexical verb at the infinitive, / 'o' + 'fi' (*to be*) + present / past participle in Romanian. The modal future in Romance languages has been dealt with in Rocci (2000) and Squartini (2004) from a comparative perspective, Dendale (2001) for French, Mihoc (2013) for Romanian. The contrasts made visible by the comparison between different future forms in three Romance languages will allow us to discriminate between three levels of analysis (lexical, rhetorical and commitment) and to identify the way they interact with each other.

Our theoretical background can be schematized as follows:



1. Core meaning level. The core meaning of a form is only compatible with some rhetorical values. French and Italian futures can convey an inferential evidential value and not a reportive one.

*À ce qu'il se dit, le président serait en train de divorcer.*

\**À ce qu'il se dit, le président sera en train de divorcer.*

\**A quanto dicono, il presidente starà divorziando.*

2. Rhetorical value level. The uses of the forms are constrained by the rhetorical value(s) endorsed through a diachronic path. The French future can be used with a rhetorical hedging value to express a request, whereas in Italian such a use is not acceptable in the same context:

*Vous me donnerez bien un morceau de ce jambon ?*

\**Mi darà un pezzo di questo prosciutto?*

By contrast, both Italian and Romanian modal futures have a concessive value whereas such a value is not conveyed by the French modal future.

*Mangerà tanto, ma è magro!*

*O mânca mult, dar tot slab este!*

\**Il mangerà beaucoup, mais il est maigre!*

3. Commitment level. Three macro types of commitment are taken into account. *Pretense*: the speaker feints to endorse a certain state of affairs, *cautiousness*: the speaker has no direct attestation of it, *neutral*: no clues indicate a particular stance. When all modal interpretations are excluded, the commitment is neutral: the future is interpreted as expressing a posterior state of affairs. Such an interpretation is possible with the synthetic future in French and Italian, but not with the analytical form 'o' + 'fi' + lexical verb in Romanian.

*Dans deux jours j'aurai 20 ans.*  
*Tra due giorni avrò 20 anni.*  
*\*În două zile oi avea 20 de ani.*

The Romanian form cannot convey a neutral commitment. It always conveys a particular rhetorical value leading to a commitment of the type *pretense* or *cautiousness*.

Our research ambitions to identify the factors enabling or blocking the association of a particular rhetorical value to the core meaning of the future, in the framework of theories of semantic change.

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## Old English morphological causatives: textual and diachronic variation

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The causative formation in OE has been the object of study in previous works such as Bammesberger 1965 or García García 2012. They dealt with this topic from a global perspective, presenting results from the period as a whole without carrying out a thorough textual analysis. The present study, part of an ongoing project on the variation in the causative formation, tries to fill in this gap. Its main objective is the study of variation in use in morphological causatives of the *-jan* type. More specifically, the focus of study has been laid on 13 morphological causative pairs in particular, including *hweorfan – hwyrfan* or *bugan – bigan*, for instance. These verbs have been selected due to the fact that they seem to present a case of syntactic merger (García García 13). This term refers to cases in which one or both members of the inchoative-causative pair take on the valency value that originally belonged only to its counterpart. This process has as a result one verbal form which expresses both an intransitive and causative pattern. Variation in this group of verbs has been studied paying attention to two main criteria, namely the type of texts and their date of composition, since initial results point to the relevance these criteria have in determining the more innovative or conservative use of morphological causatives. The data used in this paper have been taken from a selection of texts available at the *Dictionary of Old English Corpus*. All occurrences of each verb have been classified diachronically into four main periods (OE1 -850, OE2 850-950, OE3 950-1050 and OE4 1050-1150) following the division established by the *Helsinki Corpus of English Texts: Diachronic and Dialectal*. The different texts have been selected trying to conform a collection of texts as balanced as possible, not only from a diachronic point of view, but also, from the point of view of the different text types. Therefore, the selection of texts tries to cover as many genres as possible ranging from philosophy, medicine or saint's lives to history or epic poetry. In addition to exploring variation, this study addresses a recurrent problem concerning the study of morphological causatives in this period, namely the difficulty in determining whether the verb under analysis is the strong one or its derived causative counterpart, a point which is obscured by the often too clear-cut classifications offered by dictionaries. The results obtained from this study intend to contribute to a more precise morphological analysis of these verbs. Concerning variation, my working hypothesis predicts that the members of the causative pairs analysed in this study will be more merged in their function and meaning in more recent texts. The same is expected of examples found in texts whose character is less formal or intended for a less educated audience. In this sense, this paper is a starting point for a study on the influence of morphological merger in causative verbs on syntactic parameters such as word order.

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## On the polyfunctionality of evidential adverbials in Lithuanian

Ruskan, Anna (Vilnius University, Lithuania)

Evidential adverbials primarily refer to the author's source of information for the proposition. The latest intralinguistic and crosslinguistic studies into evidential adverbials in Germanic and Romance languages show that these markers may also acquire pragmatic functions (Simon-Vandenberg, Aijmer 2007; Cornillie 2010; Cornillie, Pietrandrea 2012; Rossari 2012). In Lithuanian, the potential for the polyfunctionality of evidential adverbials has been attested (Usonienė 2012; Usonienė, forthcoming; Ruskan 2013). However, more research is needed to look into the reasons for the functional variation of these adverbials. The present paper focuses on the evidential sentence adverbials *akivaizdžiai* 'evidently', *aiškiai* 'clearly', *ryškiai* 'visibly', which formally resemble the manner predication adverbials, and the adverbial *aišku* 'clearly, of course', which derives from the adjective-based complement taking predicate (CTP) clause. Consider the following pairs of examples:

(1) Evidential sentence adverbial

*Šeimininkas akivaizdžiai suglumo.*

'The host **evidently** became confused.'

Manner predication adverbial

*Akivaizdžiai matau, kad esi neramus.*

'I **evidently** see that you are worried.'

(2) Sentence adverbial

*Klausimai, aišku, pašaipūs.*

'The questions are **clearly** sarcastic.'

CTP clause

*Jau aišku, kad į mokyklą šiandien neis.*

'It is **clear**(ADJ. NAGR) that s/he is not going to school today.'

The aim of the paper is to find out which evidential adverbials under study that derive from the semantic domain of perception are prone to polyfunctionality in Lithuanian and which factors trigger this behaviour. The research is conducted applying a corpus-driven methodology and the data are obtained from the Corpus of the Contemporary Lithuanian Language (<http://donelaitis.vdu.lt>), namely from the sub-corpus of fiction, and the Corpus of Academic Lithuanian (<http://www.coralit.lt/>).

The preliminary results of the study show that out of the four evidential adverbials considered, the adverbial *aišku* 'clearly, of course' turns out to be the most polyfunctional. Apart from its inferential evidential functions, it acquires interactional and textual functions (Brinton 2008). In contexts of common knowledge, especially in academic discourse, it signals interaction with the reader and links units of discourse. In fiction, the functional change of the marker is apparent in emotive contexts, where a speech act and its participants are emphasised. The loss of evidential functions correlates with the positional variability of the marker. It appears sentence initially, medially and finally. Despite the clear instances of the evidential and pragmatic uses of the adverbial *aišku* 'clearly, of course', it is not always easy to distinguish the two functions because they can be closely related (Wichmann, Simon-Vandenberg, Aijmer 2010). In contrast to the sentence adverbial *aišku* 'clearly, of course', the adverbials *akivaizdžiai* 'evidently', *aiškiai* 'clearly' and *ryškiai* 'visibly' primarily denote inferences drawn from perceptual and conceptual evidence. They do not reveal proneness to the acquisition of pragmatic functions but rather show functional ambiguity with the corresponding manner adverbials. Lack of polyfunctionality of these adverbials is compensated by the adverbials that come from verb-based and adjective-based CTP clauses, which make up a common source of evidential and related functions in Lithuanian (Usonienė, forthcoming).

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## Variable case marking with German two-way prepositions: a corpus-based approach

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This talk discusses the variable case marking with German prepositions that can govern both accusative and dative (*an, auf, in, hinter, neben, über, unter, vor, zwischen*). The focus is on verbs whose case alternation cannot be explained by the traditional distinction between directional movement (ACC) and location (DAT), because the predication can be interpreted directionally with either case, e.g. *aufprallen* ('to crash on/into'):

- (1.) Sie sind hart **auf den<sub>ACC</sub> Boden der Wirklichkeit aufgeprallt**.  
'You have crashed violently on the rocks of reality'
- (2.) Das Wunderkind **prallt** mit fast tödlicher Wucht **auf dem<sub>DAT</sub> Boden der Wirklichkeit auf**.  
'The child prodigy crashes on the rocks of reality with almost lethal force'

It has been observed that case distribution varies between verbs, even when they are near-synonymous (Willems 2011), but precise figures about such preferences do not exist. In contrast to previous accounts (Smith 1995, Olsen 1996, among others), the present study is corpus-based. It addresses: i/ the relation between the semantic and syntactic properties of the verbs, their accompanying PPs and case marking, ii/ the extent to which the case marking reflects the role of the PP in the verb's valency, and iii/ whether factors such as perfectivity and diathesis affect case marking.

A corpus study of 30 verbs with variable case marking was conducted, evenly divided over three semantically coherent groups: verbs that depict 1) a relation of inclusion (e.g. *versinken, eingraben, integrieren*), 2) attachment (e.g. *anheften, befestigen, aufhängen*), or 3) collision (e.g. *aufprallen, niederstürzen, krachen*). Sentences (300 tokens/verb) were extracted from the German Reference Corpus (DeReKo) and annotated for case, verb, verb sense (e.g. *aufsetzen*: 'X lands on Y' vs. 'X is based on Y'), preposition, diathesis, transitivity and perfectivity. The effect of these variables on the case marking was evaluated by means of a classification tree analysis. Additionally, for each verb sense, the valency relation with the PP was determined on the basis of scrambling behavior, preposition variability (e.g. *aufsetzen auf/hinter/neben*: 'X lands on/behind/next to Y' vs. *aufsetzen auf/\*neben/\*vor* 'X is based on Y') and the proportion of sentences without a PP.

The analysis shows that the verb sense is significantly associated with variable case marking, but also that near-synonymous verbs can have opposing case preferences (e.g. *anhängen an*: 88% ACC vs. *anbringen an*: 99% DAT), which indicates that the effect of verbal semantics is relative. Additionally, PPs with verb senses that prefer DAT show more 'adjunct-like' behavior: scrambled sentence position, higher preposition variability and lower overall occurrence of a PP. It is argued that these findings can be accommodated by Coseriu's (1975) theory of 'conventionalized norms of language use': ACC and DAT reflect two contrasting constructions, i.e. [X Verb Y Prep Z<sub>ACC</sub>] vs. [X Verb Y]+[Prep Z<sub>DAT</sub>], but the corpus data indicate that specific verbal lexemes may be conventionally linked with one case, to the extent that the use of the other case is considered ungrammatical, even it would make perfect sense semantically (e.g. *\*auf das<sub>ACC</sub> Dach landen*).

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## Sentence information structure – contextual boundness of subordinate clauses in Czech based on the corpus analysis

Rysová, Kateřina (Charles University in Prague, Czech Republic)

The paper deals with the theme of word order and sentence information structure (topic-focus articulation). All speakers or writers have to encode their message (their thoughts and intents) into “a chain of words” – they have to also decide which piece of information will be mentioned first and which one at the end of the message/sentence etc. Especially in languages where the word order is considered to be “free” (i.e. grammatically not much fixed) – as in Czech – the authors have large space for the decision how to build the sentence. It is quite common in Czech that the contextually bound members (supposed to be known for the addressee) stand at the top of the sentence (in the topic part) and the contextually non-bound members carrying the new information or new connections among the conveyed facts are placed at the end of the Czech sentence (in the focus part). In Czech, the (surface) word order often copies the sentence information structure.

The sentence information structure (the contextual boundness of the individual sentence elements as well as the communicative dynamism) is manually annotated in the Prague Dependency Treebank (PDT; Bejček et al., 2012) of Czech journalistic texts. PDT contains almost 50 thousands of sentences with annotated sentence information structure. The corpus is based on the theory of Functional Generative Description (cf. e.g. Sgall, 1964, 1967, 1979; Sgall et al., 1986, 2005) which was established by Prague generative linguists.

The Prague Dependency Treebank enables to study (on a large linguistic material) which types of sentence elements the Czech journalists often put at the top of sentence as its topic and which types are often put to the focus part.

We have carried out research on information structure (contextual boundness) of subordinate clauses. The research was done on the data of the Prague Dependency Treebank – a scale of contextual boundness of all types of sentence elements (participants) expressed as a subordinate clause has been developed. The results demonstrated that some types of subordinate clauses tend to appear more often as contextually bound (e.g. conditional clauses, temporal clauses) than others (e.g. object clauses, clause of manner, clause of cause), see Examples (1) and (2). From this, we can deduce that some semantic categories expressed as subordinate clauses appear also more often as known for the addressee and some are supposed to be new or bringing the new relations among the facts in the majority of cases.

- (1) *Je příliš teplo. **Pokud bude mírná zima**, conditional clause (contextually bound) *nebude dobrá úroda.*  
It is too warm. **If the winter is mild**, conditional clause (contextually bound) *there will not be a good harvest.**
- (2) *Co mají očekávat zemědělci? Podle teplot v zimních měsících poznáte, **jestli bude dobrá úroda** object clause (contextually non-bound)-  
What should the farmers expect? According to the temperatures in the winter months, you will know **whether there will be a good harvest** object clause (contextually non-bound)-*

Example (1) demonstrates the placement of contextually bound conditional clause – it often precedes the main clause. On the contrary, the Example (2) shows that the contextually non-bound object clause often follows the main clause.

The paper deals with the established scale of contextual boundness and we try to find the reasons why some types of categories are more often presented as known than others by the Czech writers.

Since in Czech, the role of sentence participants in functional sentence perspective is strongly connected with word order, the scale indicates also the general word order tendencies of sentence participants expressed as subordinate clauses in Czech.

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## Classification of language means expressing textual relations in Czech: Difference between discourse connectives and their alternative lexicalizations

Rysová, Magdalena (Charles University in Prague, Czech Republic)

The paper focuses on various possibilities of expressing textual relations in Czech. This possibility is held mainly by discourse connectives, i.e. (in traditional conception – cf. e.g. Halliday and Hasan, 1976) expressions like *therefore*, *however*, *then* etc., but also (as some relatively new research projects demonstrated – cf. Prasad et al., 2010) by their alternatives lexicalizations like *the reason is*, *because of this fact* etc. – see an example with textual relation of reason and result signaled by the expression *because of this*:

- (1) *Giga created itself some programs, or encouraged their development by other companies.*  
*Because of this, Giga has a complete business today.*

(Translated from the Czech original: *Některé programy vytvořila Giga sama, anebo podnítila jejich vývoj u jiných firem. Díky tomu má dnes k dispozici doslova podnikatelský komplet.*)

The existence of these alternative ways of expressing relations within a text has been already described (e.g. for English – Prasad et al., 2010; for Czech – Rysová, 2012).

The aim of this paper is to compare the two categories of discourse expressions, i.e. to analyze the differences between connectives and their alternative lexicalizations – in other words, what alternative lexicalizations can do in the text and connectives cannot. This practical analysis may be useful for theoretical discussion whether we should capture two different categories for means expressing textual relations (discourse connectives on one side and their alternative lexicalizations on the other) or whether we should unify them under one umbrella category.

The research has been carried out on the annotated data of the Prague Dependency Treebank, i.e. on approximately 50,000 of Czech sentences. For the quantitative analysis, we use the PML Tree Query (Štěpánek and Pajas, 2010) that enables making statistics based on large corpus texts. This corpus is very useful for this research, as it contains the annotation of both connectives and their alternative lexicalizations at once.

The main differences between these two groups are (for example):

- (i) alternative lexicalizations of connectives (shortly AltLex's) may form a separate sentence: *I will not go to school tomorrow. The reason is easy (= AltLex). I am ill.*
- (ii) AltLex's may be syntactically higher than the second argument of the relation (i.e. the second argument is syntactically dependent on the AltLex expressed by the main clause) – *I will not go to school tomorrow. The reason is (= AltLex, main clause) that I am ill (= the second argument, nominal content subordinate clause).*
- (iii) AltLex's are much more modifiable than connectives – *Another reason is more complex and in essence philosophical.* On the contrary, connectives are modifiable only partly – e.g. *simply/mainly/easily because*, but not *\*philosophically because*.

The paper will introduce the individual differences between discourse connectives (like *and*, *or*) and AltLex's (like *to give reasons*, *the condition is*) in detail and will bring many Czech examples. The complex analysis will be based on annotated data of the Prague Dependency Treebank and will show how practical annotations of discourse relations may be used for theoretical research.

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## Full and reduced pronouns in Maltese

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The typology of personforms (Bresnan, 2001; Siewierska, 2003 & 2004), categorizes personal pronouns along the dimensions of independence and reduction:

(1) zero → bound → clitic → weak → (full) pronoun

This paper deals with the rightmost part of the typology, the border between weak and full pronouns. While the general usefulness of this typology is not contested, the exact definition of weak pronouns is still a topic of debate. Siewierska (2004: 34) posits that “[...] weak forms are not attached, either phonologically or morphologically, to any other constituent” and that “[...] they are not just unstressed versions of independent forms but rather differ from them both phonologically and in terms of syntactic distribution” while Cardinaletti & Starke (1999) put forward other restrictions for the term *weak* pronoun including the inability of *weak* forms to be modified or coordinated. In the Maltese system all full singular pronouns have reduced counterparts, while the plural only has one unreduced form per person.

Person	Singular	Plural
1	jien(-a)	aħna
2	int(-i)	intom
3.M	hu(-wa)	huma
3.F	hi(-ja)	

Free Personal Pronouns in Maltese (Borg & Azzopardi-Alexander, 1997: 198)

This study tackles the question of whether the reduced pronouns in Maltese can be classified as traditional *weak* pronouns, as another, albeit reduced, set of full pronouns, or as a class which lies in between the two established categories of the typology. First, this paper will establish the status of the reduced pronominal forms using several of the proposed criteria: independence, stress, syntactic distribution, coordination, and modification. Second, using the *Maltese Language Resource Server* (MLRS) corpus, the paper analyzes the distribution of reduced forms regarding text type and person. A Configurational Frequency Analysis (CFA) is used for this corpus study, which analyses the distribution of variable configurations, in this case *form* (full - reduced), *person* (1 – 2 – 3) and *text type*. Furthermore, the notion of markedness is put to a test in comparison with the general and text type specific frequencies of Maltese pronouns (Haspelmath, 2006). These analyses show interesting splits in the use of full and reduced pronouns in Maltese with respect to person and text type, which can only be explained by also taking into account notions of politeness and information structure.

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## Sound alternations in Soikkola Ingrian inflectional system

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This research focuses on (morpho)phonological phenomena that cause stem alternations in the inflectional system of the Soikkola (Soykin) dialect of the Ingrian language. Ingrian belongs to the Finnic branch of the Uralic languages, and its Soikkola dialect is spoken in a narrow area of the Soikkola Peninsula, close to St. Petersburg in Russian Federation. Ethnologue lists Ingrian as nearly extinct (8b) (<http://www.ethnologue.com/language/izh>) – according to the Census 2010 there are 120 Ingrians, all good speakers of the language represent older generation.

Previous research on Estonian inflectional system has clarified that the sound alternation matrix consists seven different positions in 3 x 3 space:

	I	II	III
I	ude	ute	`utte
II	uude	uute	
III	`uude		`uute

The objective of this presentation is to identify via acoustic measurements the sound alternation space of Soikkola Ingrian. Preliminary results show that in comparison with closely related Estonian language the analogical matrix of sound alternations consists of different positions.

Often Ingrian has been considered closely related with Finnish, however, phonological features of the language make it clearly distinct. The peculiar phenomena characteristic to Soikkola Ingrian are, for example, 1) *gradation* (grade alternation) – phenomena that depend on the (historical) openness or closeness of the syllable (this feature is common to most of the Finnic languages); 2) different *prolongation phenomena* (general gemination, special gemination, gemination of the three and five syllabic words etc.) (Laanest 1986; Sovijärvi 1944; Saar 2008, Markus 2010); 3) alternation of stem ending sounds (aposcope, replacement, adjunction). Investigation of Soikkola verbs has shown that all those phenomena may appear independently in an inflectional type (word class) or also simultaneously in another type (Saar 2008). In Soikkola Ingrian, in addition to consonant alternations also vowel alternations occur.

An important task when investigating the inflectional system is to clarify the space of all possible alternations in different paradigms, i.e. the opposition of single consonants, strengthened single consonants, short geminates and long geminates, and also opposition of short and long vowels. For doing this, acoustic measurements will be carried out, and as a result a matrix of possible sound alternations will be presented.

The presentation pays special attention to the alternation of short and long midhigh vowel, which has a tendency to raise (Sup *jõmā* ~ *jūmā* ‘to drink’ : Inf *jõvva* ~ *jūvva* (?) : IndIpfSg1 *join*), and therefore the quality of the long midhigh vowel in different forms needs specification.

The linguistic material to be analysed has been collected during fieldwork by the author of this paper at the Soikkola peninsula.

Abbreviations: Sup – Supine; Inf – Infinitive; IndIpfSg – Indicative Imperfect Singular

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## Issues in the transcription of initial learner varieties

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This contribution aims at presenting some peculiarities of the transcription of initial interlanguages, in view of the considerable distance separating the target language and the developing system.

Within the VILLA project (Dimroth *et alii* to appear), 31 learners with Italian L1 and no experience of Slavic languages were exposed to a 14-hour Polish course: thus acquisition is monitored from the very first moment of exposure to the target language. All input was recorded and transcribed so as to correlate the development of the interlanguage with features of the input.

Numerous features of initial interlanguages are particularly challenging for transcribers, as an univocal projection of interlanguage forms onto target language words may not always be possible, nor legitimate (MacWhinney 2000). The lexicon, for instance, is sensitive to frequency and saliency effects, so that certain items may overextend onto others. In a form like [dʒedʒe tʃelka], two items may be recognised: the target item /dʒɛf tʃɪŋka/, ‘little girl’, and /naʊtʃi tʃelka/, ‘teacher’, not expected in that context. Similarly, the second item in [portu galka dʒɔ vjɛntʃ dʒiv tʃɛnka] is phonetically closer to /dʒɛ vjɛntʃ/, ‘nine’, than to the target item /tɛɔŋne/, ‘pulls’.

Further, it is central to the objectives of VILLA to accurately document the first appearance of the rich nominal morphology of Polish, initially absent in the learner variety (Klein & Perdue 1997). A number of examples will be presented that show how what could initially appear as disfluencies may provide useful hints as to the processing of

the target grammar. [teatrə], for example, already shows a contrast between the disyllabic basic word-form /'teatr/ and the tri-syllabic inflected forms.

Moreover, interlanguage forms may sometimes resemble more than one target form. Thus, it might not be clear whether the form [itʃ] is an occurrence of /'idʒe/ “goes” or /iɛtə/ “to go”; similar difficulties are raised by [po'zdra-vjen], in which the ending is not part of the target paradigm, or /'jɛres/, which represents a rather deviant realisation of the verb /jɛst/, “is”. Other interesting examples include analogical formations such as [jɛstɔn], resulting from a merger of /jɛst/ and /sɔw/, “are”.

Finally, transcription may provide useful information on the learners' segmentation of the input stream: in [puka 'dɔtʃvi], elicited in interaction, the learner repeats the interlocutor's utterance /dɔ dʒvi/, “to the door”, as an unanalysed word.

Projecting interlanguage forms onto hypothetical target words can obscure pronunciation details (Jefferson 1983) which may provide useful hints as to the learners' processing of the target grammar. It will be argued therefore that initial interlanguages should only be analysed on the basis of accurate, albeit broad, phonetic transcriptions.

On the other hand, searchable corpora require that all items be attributed to a normalised citation form in order to be automatically retrieved. It will be shown how the VILLA database strives to concile the contrasting needs of scientific accuracy and automatic retrievability, while also taking into consideration practical aspects such as transcription time and economic resources.

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## Signal coordination and subordination: An evolutionary perspective

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**Introduction:** Human language is *compositional*: Signals have an internal structure consisting out of parts that can be assigned meaning of their own. The composition of independent sentence always corresponds to coordination. Within a complex sentence, however, subordination (possibly as functional application) can apply. What is the evolutionary function of having two modes of composition? Formal work on compositionality from a broadly evolutionary perspective may apply either to historical development or to language acquisition. Two perspectives have been developed. On the one hand, Kirby (2000) and Kirby et al. (2008) start with the assumption that thought is compositional and show that there is an evolutionary advantage for language to be isomorphic to thought. More interestingly, Nowak et al. (2000) propose an analysis that does not require a compositional system of thought, but predicts compositionality solely on the basis of the communicative use of language.

We adopt the more principled perspective of Nowak et al. (2000), but argue that the analysis of Nowak et al. (2000) confounds the effect of multiple (coordinated) signaling with that of complex (subordinated) signals. We propose to capture this difference by order-sensitivity and show that in the revised model, compositionality only confers an evolutionary advantage to a species under very special circumstances: Either the range of discrete sounds (basic signals) produced must be very small, or the evolving compositional system must be recursive from the start. The two pathways may be in evidence for Diana-monkeys (Zuberbühler, 2002; Arnold and Zuberbühler, 2006) on the one hand and humans on the other.

**Multiple Signaling vs. Compositionality.** Nowak et al. analyze the learning advantage a compositional language confers. They compare species A that has  $m$  basic signals and doesn't allow combinations thereof with species B that has  $\sqrt{m}$  basic signals but allows pairs thereof as messages. Species A and species B can then communicate the same number of distinct sentence meanings, namely  $m$ . Nowak et al. point out that species B can in some circumstances learn the meaning of the  $\sqrt{m}$  basic signals of its language more quickly than species A can learn its  $\sqrt{m}$  basic signals. If in addition, both species benefit from communicating a large number of distinct sentence meanings, species B has an evolutionary advantage due to the fact that it can learn its language more quickly.

However, Nowak et al.'s analysis is based on the assumption that species A cannot signal repeatedly, while species B can. Animal communication systems are rarely restricted in this way, and mammalian species generally allow repeated signaling (Hauser, 1996), so repeated signaling must have evolved independently before compositionality. Because of repeated signaling, species A is predicted to produce sequences of sentences, though not the internally

complex sentences species B can produce. We propose to capture this distinction as one of order-sensitivity. Human languages are typically order-sensitive within the sentence: ‘whale-killer’ and ‘killer-whale’ differ in meaning. In discourse, however, sentence sequences are in many cases order insensitive (cf. the common ground discourse model of Stalnaker 1978). Assume that ‘Leopard’ and ‘Eagle’ are among the basic signals both species A and species B are capable of. Then for species A, the order of the signal sequence is irrelevant, while for species B, the order can be associated with a difference in meaning.

- (1) a. Species A (coordinating):  $[[\text{Leopard. Eagle.}]] = [[\text{Eagle. Leopard.}]]$   
 b. Species B (subordinating):  $[[\text{Leopard-Eagle}]] \neq [[\text{Eagle-Leopard}]]$

**Message Numbers and Reproductive Advantage.** We assume that species A and B have the same limit on total message length. The following table shows how many distinct messages the non-compositional species A and B can form assuming either the fixed message length 2, fixed length  $k$  or open message length:

	length 2	length $k$	arbitrary length
Species A	$n(n-1)/2$	$\binom{n}{k} + \binom{n}{k-1} + \dots$	$2^n - 1$
Species B	$n^2$	$n^k$	$\infty$

The present the results of a transfer of Nowak et al.’s model to this setup. We first show that if  $k$  is finite the reproductive advantage of composition is greatest when  $n$ , the number of basic messages, is small. Our second analysis assumes that there is no upper limit on message length. In this case, the reproductive advantage of the compositional species B depends on whether the number of states  $c$  is sufficiently larger than  $2^n - 1$ .

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## Epistemics-evidentials, subjectivity and assertive force: The Secoya experience

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Some East Tucanoan languages are well known for their complex grammaticalized(epistemic-)evidential systems (Barnes 1984, Aikhenvald 2004, Stenzel2008, de Haan 2011, and others). In this talk I contribute to this Tucanoan reputation with some less known details by describing the epistemic-evidential inflectional system in the West Tucanoan language Secoya spoken in Ecuador and Peru by around 1000 people. Secoya has some less familiar and seemingly unusual features which can only be understood when we recognize the communicative functions behind the puzzling phenomena. After outlining the mayor design of the epistemic-evidential inflection in this language, two research questions will be focused on:

1. Did thereportative/hearsay marker (-*ña*) develop out of a basic verb of perception and cognition (visual perception “see”) rather than from a speech verb or anything else?
2. What is the epistemic-evidential status of suffix -*ni* (dialect variant -*ri*) which is very common in content questions (Idiatov & van der Auwera 2004) and which also serves as a common rhetorical device?

The questions and their answers result from extensive field studies in the Ecuador-Peru-Colombian border region and a large corpus of annotated discourse. I show that Secoya verb inflection is based on an epistemic-evidential di-

chotomy that entails an assertive split. I argue that the suffixes in question serve to explicitly mark the speaker's stance in specific epistemic-evidential conditions and gradually differ in assertive force due to their empirical or intuitive supportive nature (Nuyts 2001).

I further indicate how such epistemic-evidentially marked predicates differ morphosyntactically and semantic-pragmatically from related lexemes and constructions, such as from conative expressions (*ñaa*s experiential "trial"), from the quotative construction involving a speech verb, and from the alleged "negative" morpheme *-ma* (Johnson & Levinsohn 1990: 64, 71) which actually marks the lack of (subjective) knowledge.

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## Noun to verb ratio and word order

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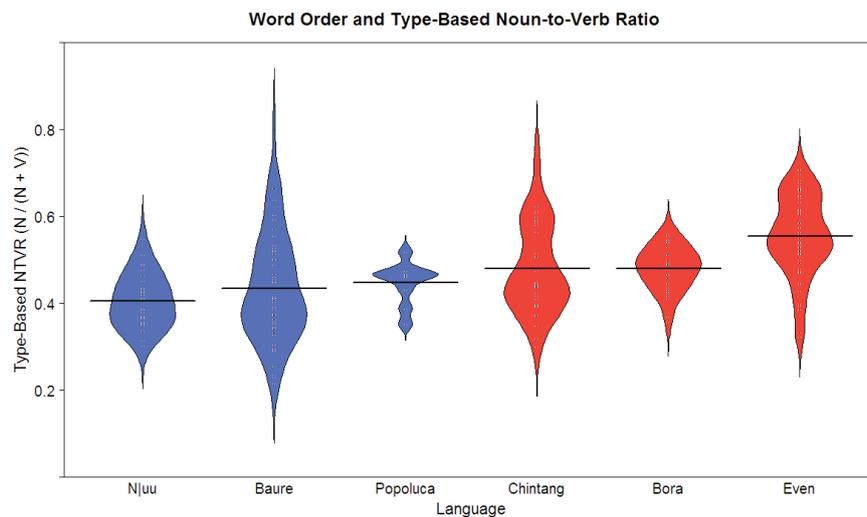
In this paper we investigate the relation between Basic Word Order, as a structural-typological feature of languages, and patterns in the use of nouns and verb in discourse, from a cross-linguistic perspective. We test the hypothesis that discourse in verb-final languages displays a higher noun-to-verb ratio than in non-verb-final languages, i.e. that speakers of verb-final languages use a larger number of different nouns (i.e. noun types) relative to the number of different verbs (i.e. verb types) than speakers of other languages.

We investigate this hypothesis using corpora of spoken language from six genealogically and areally diverse languages (see table below). For each language, our corpora comprise a total of around 30,000 words, from between 63 (Baure) and 8 (Popoluca) individual texts (mostly narratives, some procedural texts and conversations). All data are annotated manually for part-of-speech by experts on the language. This set of languages includes three verb-final languages and three languages with nonfinal position of the verb.

LANGUAGE	FAMILY	LOCA-	WORD	V-FINAL vs. V-
Chintang	Tibeto-	Nepal	SOV	final
Lamunkhin	Tungusic	Siberia	SOV	final
Bora	Boran	Peru	SOV/OS	final
Nluu	Tuu	South Af-	SVO	nonfinal
Baure	Arawakan	Bolivia	VSO	nonfinal
Popoluca	Mixe-	Mexico	VSO/VO	nonfinal

We calculate the ratios of nouns to verbs for each text as follows:  $N(\text{nouns}) / (N(\text{nouns}) + N(\text{verbs}))$ . Horizontal lines in the following figure indicate the mean noun-to-verb ratio value for each language, bulging shapes indicate density of values for individual texts. This Figure shows that speakers of verb-final languages (at right, in red) tend to employ more nouns relative to verbs than speakers of non-verb-final languages (at left, in blue).

We suggest that the key to explaining this finding lies in the relative informativeness of nouns vs. verbs as a function of the number of different nouns vs. verbs used in a text: using many different nouns in one text means that these nouns are relatively informative, or specific, while using only few nouns means these nouns are probably relatively general. When for structural-typological reasons verbs come at the end of a clause, speakers are prompted to provide more information about the contents of the clause in parts-of-speech that precede the verb, namely nouns, in order to create coherent discourse. This is in line with Polinsky's (2012) finding that languages with different Basic Word Orders have different ratios of nouns and verbs in their lexica. However, by using corpus data, we provide a direct account for a specific relation between grammatical structure (word order) and usage patterns.



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## From a monolingual to an increasingly bilingual mainstream pop music: code-switching and borrowings in “Spanglish,” “Italo-English” and other languages

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Code-switching refers to the mixing of two or more languages in discourse by bilinguals or multilinguals (Poplack 1980, Myers-Scotton 1993, Romaine 1995, Grosjean 2008). While mainstream literature has dealt with oral code-switching, this study provides a contribution to a new research field: an “in-between” situation, where code-switching is considered at the intratextual level in the production of songs. These possess a kind of permanence, a reproducibility as they are performed for an audience, thus differing from bilingual conversations which develop sequentially (Sebba 2012: 7). A remarkable increase in bilingual songs emerged in the mid-70s and continued throughout the 80s and 90s. Nowadays, songs with code-switches are an essential part of mainstream music.

The main research aims are to investigate the different functions that code-switching fulfills in these texts, and also to seek whether code-switching is a powerful device in developing bilingual “hits” as effective as their monolingual counterparts. The approach sources studies in oral code-switching (e.g. Poplack 1980, Romaine 1995, Grosjean 2008), written code-switching (e.g. Sebba 2012), and code-switching in music (e.g. Davies & Bentahila 2002, Sarkar et al. 2005, Babalowa & Taiwo 2009, Gorichanaz 2011). A purely qualitative methodology is adopted as the scope of the study is to provide an overview of several “case-studies” that have proved to be the quintessential examples of bilingual music.

In detail, focus is placed on pop music songs mostly in English as the base language (Grosjean 2008) with code-switchings in other host languages (Spanish and Italian), and borrowings (words or collocations nearer to the base language than to the host language or terms incorporated by now in the lexicon, given their frequent use) will be analyzed. The materials used refer to 17 songs released between 1975 and 2010 in English-Spanish, English-Italian, English-Cameroon, Italian-English, English-French, French-English by both international and national singers. Code-switches are used in more controlled backgrounds, including written communication and literature, as well as rhetorical devices to convey a sense of estrangement, exoticism or to avoid banality, but also to exploit the prosodic patterns and features of the host language (Selvaggi 2012). Thus, I will show how many of the switches are metaphorical (Blom and Gumperz 1972) because they do not really add to the message content (Mahootian in Sebba 2012: 200). Others possess an explanatory function (they clarify some piece of language which the listener would not otherwise understand). Yet other switches are expected to have a conversation-internal function, which only some listeners (bilinguals) might fully understand (Jonsson in Sebba 2012: 218). Additional ones are simply repetitions of previous texts.

Nowadays, an open-minded vision enhancing multilingualism in monolingual and multilingual contexts paves the way to several “hits” in both anglophone and latinophone countries. In our age of globalisation, the deliberate act

of mixing languages in media can represent a way of delineating socio-political territory and reversing the power imbalance between languages (Sebba 2012: 19).

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## Internal and external datives

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In this paper it is argued that, in English and Dutch, the internal dative (*I gave John a book*) and the external dative (*I gave a book to John*) are not simple syntactic variants expressing the same meaning but that internal datives are part of the argument structure of the verb at issue, while external datives represent scope-bearing operators in semantic analysis (SA). In French, Italian and other languages the external dative has been reanalysed as an argument type dative, but this has not happened in English and Dutch, which have many verbs that only allow for an external dative (e.g. *donate*, *reveal*). When both datives are allowed, there are systematic semantic differences, including scope differences. A closer look at the latter reveals that external datives behave like peripheral prepositional phrases (PPs): when postposed they create scope-ambiguity, when preposed they do not. To give just two exam-

ples, *I met two champions on every occasion* is scope-ambiguous, while *On every occasion I met two champions* is not. Likewise, *I read two stories to every child* is scope-ambiguous, while *To every child I read two stories* is not. This is accounted for by treating external datives as PPPs and PPPs in general as scope-bearing operators in SA, lowered by the grammar into the matrix clause. (The technical details are not gone into; see Seuren 2013, Section 3.7.2.2.) This analysis solves Bowerman's (1988) 'no negative evidence' dilemma: how do first learners of English and Dutch acquire knowledge of the fact that some verbs only allow for an external dative when there is no negative evidence? The answer is that all they have to do is decide whether a verb of the appropriate semantic nature takes two or three arguments. The rest is done by the machinery. This answer is, therefore, of a strongly innatist nature. The data of this study have been gathered by systematic, problem-driven observation over many years. The method used is of the classical hypothetico-deductive kind: to explain the data a hypothesis is formulated that is maximally integrated into a coherent whole of notions and theories regarding language and related fields, and from which the known data are formally derived and unknown data are predicted. The results are relevant for a number of theoretical issues: innatism versus relativism, the nature of grammar, the role of the lexicon, language acquisition, and a few more.

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## Building a database of Czech derived words

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In the paper, we describe the development of a database of Czech derived words, focusing on linguistic aspects of this task.

In Czech, which is a Slavic language with both rich inflectional and derivational morphology, derivation is the most frequent and most productive word-formation process (Dokulil et al. 1986). An elaborate theoretical approach to Czech derivation was carried out by Dokulil (1962); it has become a widely respected and, in fact, the only common ground of word-formation descriptions in Czech linguistics during the last 50 years (Čermák 2012). Our decision to develop a large resource of derivational data was motivated by the fact that the available descriptions do not provide important, esp. quantitative information needed for theoretical research (e.g. information on the number of possible bases is required for determination of productivity of an affix; cf. Dokulil 1962, Aronoff 1976, Lüdeling – Evert 2005) and, moreover, they are hardly usable in Natural Language Processing (derivational data, which are still rather rare, have an applicational potential in Machine Translation, paraphrasing etc.; Pala – Hlaváčková 2007; Zeller et al. 2013, Weller et al. 2013).

The database of Czech derived words was designed as a lexical network, which consists of lexemes and derivational relations (links) between them, oriented from the base to the derived word. The network was initialized by inserting more than 180 thousand lexemes (from a big corpus; Bojar et al. 2012). Due to the size of the data, the derivational relations were processed automatically under a thorough manual supervision in order to ensure efficiency and consistency on the one hand and theoretical adequacy on the other.

Derivational relations were added into the database in two significantly different rounds. In the first round, a list of base-derivative candidate pairs were generated automatically, based on the assumption that if two words share a sufficiently long sequence of characters, they are likely to be derivationally related. Instances of such pairs were extracted from the database and used for acquiring more general suffix substitution rules (18 most reliable rules were selected manually out of around 400 automatically generated candidate rules, they led to about 11,000 new derivation links belonging to the most regular and most frequent derivational types).

The second round was focused on less regular and less frequent, or even peripheral derivational types. As a starting point a list of derivational rules was compiled from a representative grammar book of Czech (Karlík et al. 2000; for instance, more than 450 rules were listed for derivation of nouns only). Development of an efficient extraction procedure of candidate pairs from the database was complicated both by features of the Czech language (consonant and vowel alternations, vowel insertion) and by specific features of the theoretical description which we had started from (some affixes were described several times due to subtle semantic nuances vs. description of irregular coinages was rather underspecified). A detailed confrontation of the theoretical description and our formalized approach to Czech derivation is the core part of the paper.

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## The worst Case scenario

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Minimalist approaches often implicitly assume some version of the Case Filter (Chomsky 1981, Vergnaud 1977), whereby, even in languages lacking morphological case, DPs need to be Case-licensed. ‘Case’ thus potentially accounts for the distribution of (overt) DPs and motivates phenomena such as A-movement. However, from a Minimalist perspective, we might **expect Case features to be parameterized** to be present/absent in a given language, just like other formal features, e.g. phi-features. This has recently been claimed by Diercks (2012), based on 4 arguments from Bantu languages:

### (1) Case Parameter

Uninterpretable Case features are/are not present in a language

Taking this unconventional proposal seriously, our research questions are:

- How can we tell whether a language has abstract Case?
- What does the parameterization tell us about the distinction between morphological and syntactic C/case?

In this talk we propose a **comprehensive list of 11 Case diagnostics** and apply them to three languages without morphological case, arguing that while Lusoga (Bantu) may lack abstract Case, Mandarin Chinese and Jamaican Creole do not. The data come from the available literature, in addition to elicitation based on a uniform questionnaire. We conclude that it may be that ‘Case’ features are parameterized, but the deciding factor is *not* the presence/absence of morphological case. Our diagnostics thus enable us to go beyond the initial observations of parameterized Case.

We illustrate two of these diagnostics (cf. Diercks 2012) here:

1. *Non-finite clauses*. If Case is unavailable in non---finite clauses, as generally accepted, the grammaticality of an overt subject DP in such clauses argues for the absence of Case. This is tested in complements of raising---to--subject verbs, complements of object raising verbs without Exceptional Case Marking and sentential subjects. Whereas an overt subject DP is allowed in Lusoga (2), suggesting the absence of Case, this is ungrammatical in Jamaican Creole (3) and Mandarin (4).

- (2) Ki-ikiliz-ibwa    Tenhwa    okutambul-ila    mu    maadhi?  
 7<sub>SM-allow-PASS</sub>    1.Tenhwa    15.walk-APPL    18    6.water  
 (\*) ‘Is it allowed Tenhwa to walk in the rain?’ [Lusoga]

- (3) a. It luk    laik (se)    John lov    Sara.  
 It look like that    John love    Sara  
 ‘It seems that John loves Sara.’

b. \*It luk laik (se) John fi lov Sara  
 it look like that John to love Sara  
 (\*)‘It seems John to love Sara.’ [Jamaican Creole]

(4) \*Hui Zhangsan zhunbei wancan.  
 will Zhangsan prepare dinner  
 ‘Zhangsan will prepare the dinner.’ [Mandarin, Lin 2011]

2. *Agreement*. Nominative Case is associated with subject agreement, so the presence of non-agreeing agent DPs argues for the absence of Case. This is tested in non-agreeing inversion constructions like (5), where it is unclear what would Case-license the postverbal DP. This is not a problem if Case is not active in the language.

(5) Wa-tuuka abagenhi.  
 16SM.PAST-arrive 2.guests  
 ‘(The/some) guests arrived.’ / ‘There arrived guests’ [Lusoga]

In our talk we discuss all 11 diagnostics in more detail, presenting results for Yoruba and Thai too, and indicating the consequences of these results for theories of argument licensing.

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## A study on cross-linguistic influence of stop voicing in Japanese acquired as an L3 by Korean, Chinese and Thai speakers

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The present study examines cross-linguistic influence in the acquisition of stop voicing in Japanese which Korean, Chinese and Thai speakers learned as a third language (L3). These speakers have been in Japan as university students, and have studied Japanese as an L3 in addition to English as a second language (L2). It has been an issue how cross-linguistic influence is manifested in the acquisition of an L3, i.e., these learners have experiences in learning from their native language (L1) and English (L2) and might have acquired considerable metalinguistic knowledge in learning an L3. The influence has been examined in terms of the relation between an L1 and L2, and the question is if this relation can be applied in the acquisition of an L3, i.e., in terms of the relation between L1 and L2, or in terms of the relation between L2 and L3.

Japanese is known to have a two-type of stops: voiced and voiceless stops, and the voice onset time (VOT) of voiceless stops shows a mid-delayed onset of voicing, while voiced stops show a prevoicing or short-lag voicing. Three languages have different categories of stop voicing from Japanese and English, and it will be significant to examine how cross-linguistic influence appears in the acquisition of stop voicing of L3 (Japanese). Data on VOT was gathered from their speech of English and Japanese stops in word-initial position. The number of subjects is 12 for Korean, 7 for Chinese (Mandarin) and 11 for Thai. Measurements of VOT were made on word-initial stops in minimal or triplet words in each language (L1), English as an L2 and Japanese as an L3.

Based on the acoustic analysis of Korean, Chinese, and Thai speakers, VOT functions in distinguishing the major categories of three languages, though some overlapping of VOT values was seen in between tense and lax stops in Korean, depending on the subject. In learning L3 stops, the two learning strategies were observed: the one is to use their own L1 stops whose VOT values are close to those of L2 and L3, while the other is to adjust the values of L2 stops whose VOT values are close to L3. Korean speakers produced L2 and L3 voiced stops with the values which are close to those of their L1 tense stops and produced L2 and L3 voiceless stops with the values which are close to their lax stops. Thai speakers used their L1 voiced stops /b, d/ to produce L2 and L3 counterparts. On the other hand, Chinese and Thai speakers produced L2 and L3 voiceless stops with the VOT values which were shortened from those of their L1 voiceless aspirated stops, and which are close to those of L3 voiceless stops. From these results, it can be said that there are two phonological interferences in learning L3 stop voicing: the one is the influence from L1, while the other is the one of L2, with the adjustment of the VOT values.

## The processing basis of typological distributions: A survey

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There is wide agreement in linguistics for assuming that typological distributions are affected by cognitive biases to some degree. Generative approaches assign a lot of weight to such biases, whereas usage-based approaches more readily acknowledge that typological distributions may arise as a result of multitude of factors, ranging from preferences in language processing to preferences in conversational interaction (e.g. Christiansen and Chater 2008; Culbertson 2012). Despite the differences in the theoretical accounts there is wide agreement on the decisive role of language change in providing the link between processing preferences and typological distributions: what is preferred in language use and/or acquisition tends to be grammaticalized across languages and also shown in typological distributions (e.g. Bybee 2009). However, what is often missing from the assumed processing-typology connection is an evaluation of the extent to which experimental research provides converging evidence with typological distributions.

My aim in this paper is to review the experimental literature for tracing the processing-typology connection. I review research that uses different experimental methods, such as eye-tracking, reading times, event-related brain potentials (ERP), and functional magnetic resonance imaging (fMRI), and assess the extent to which their results are in line with the major findings of modern typology.

There are two main findings to this review. First, different typological patterns have received very uneven amounts of attention in experimental research. One of the strongest typological generalizations achieved is the so-called subject-preference: languages tend to position the subject before the object and to relativize the subject more easily than the object. This preference is also the most thoroughly studied typological pattern in experimental research – and probably the best-supported as well (see Bornkessel-Schlesewsky and Schlewsky 2009 and references there). Other well-known patterns, such as the Greenbergian word order correlations between the phrasal head and its modifiers, are surprisingly little studied (see Christiansen 2000; Culbertson et al. 2013).

The second result arising from the survey is that the more the body of relevant experimental work is increasing, the more evidence it seems to provide for the processing-typology connection. For instance, recent research using elicited pantomime or artificial language learning methods has provided initial evidence for the suffixing preference (Hupp et al. 2009) and for the prevalence of case marking in SOV languages and of zero-marking in SVO languages (Gibson et al. 2013; Hall et al. 2013). However, the results produced especially by artificial learning methods should be interpreted with caution because they simulate a limited type of language use, namely, second language learning by adults under strong pressure for comprehension by strangers, whose effects on language may differ markedly from those by other types of language use (see Trudgill 2011).

Despite the traditional gap between studies on language typology and language processing the reviewed works propose that fruitful possibilities exist for researching the connection between the two disciplines. Several methodological challenges remain, however, and these are briefly discussed.

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## Refunctionalization in Italo-Romance spatio-personal deictic adverbs

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This paper discusses changes which have taken place in the history of the Italo-Romance system of spatio-personal deictic adverbs and suggests that they support the view that refunctionalization takes place according to a principle of ‘core-to-core’ mapping, in which some element of the old opposition is retained in the new one.

Latin had a system of spatio-personal deictic adverbs based on three stems (also found in demonstratives): H- (speaker), IST- (addressee), and ILL- (non-discourse-participant), and four endings: -IC (static point), -AC (movement towards, atelic), -UC (movement towards, telic), and -INC (movement away from) – thus, for instance, HIC ‘here’, HAC ‘this way’, HUC ‘hither’, HINC ‘hence’. Reflexes of the last two endings do not survive in any systematic way in Italo-Romance; however, both the -IC and -AC forms survive in many Italo-Romance varieties, yielding pairs of adverbs which are sometimes regarded as synonyms or stylistic variants – thus, in Tuscan, which has retained a three-stem system, *qui/qua* (speaker orientation), *costi/costà* (addressee-orientation), *li/là* (non-discourse-participant orientation). (The *qu-* and *cost-* stems arise from reinforcement of Latin H- and IST-, respectively, by a preceding presentative \*ECCU.)

In fact, the *-i* and *-a* forms are not synonymous. I shall concentrate on northern varieties of Italo-Romance (including standard Italian spoken in northern Italy), in which the three-term system has been replaced by a two-term opposition between proximity and remoteness – this *qui/qua* ‘here’ vs. *li/là* ‘there’. In each case, the *-i* form is more precise or ‘punctual’ than the *-a* form (a similar distribution can be found, *mutatis mutandis*, in Spanish). In many varieties, additional changes have affected *li* and *là* (but not *qui* and *qua*). In some varieties, *li* comes to encode spatial reference intermediate between *qui/qua* and *là* – thus *qui/qua* ‘here’ (proximate), *li* ‘there’ (middle distance), *là* ‘there’ (remote). In a further development, a subset of these varieties have reinterpreted this system as a discourse-based system, similar to the one which existed in Latin – thus *qui/qua* (speaker orientation), *li* (addressee orientation), *là* (non-discourse-participant orientation). For relevant data, see Rossini (1979), Vanelli (1992), Vanelli & Renzi (1995), Irsara (2009), and Sauva (2009).

Three developments are involved here. First, the Latin forms which encoded the opposition between static location at a point and atelic movement towards that point lose the stasis/motion distinction and come to encode an opposition between a precise area and a diffuse area, whether location or ‘movement towards’ is involved. Subsequently, the exponence of the distinction between precise and diffuse remoteness may come to encode a distinction between middle distance and greater distance. Finally, the same morphology may come to encode a distinction between addressee-orientated deixis and deixis orientated outside the discourse. All these developments conform to the account of refunctionalization proposed by Smith (2011), in that they involve a process of ‘core-to-core’ mapping, in which some element, however abstract or vestigial, of the old opposition is carried forward into the new one, in this case following the pathway ‘punctual/atelic >precise/diffuse >near(er)/far(ther)> addressee/non-discourse-participant’.

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## New strategies for the Nahuatl language research, teaching and revitalization

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Although many varieties of Nahuatl culture continue to flourish in traditional communities, attesting to the strength and vitality of native traditions, the number of speakers is decreasing due to the dominant language ideology, discrimination against native speakers and the widespread denial of the continuity between ancient cultures and contemporary indigenous traditions. In the great majority of Nahua communities, inter-generational transmission has

been broken within the last two or three decades. This paper discusses the methodology and strategies we are developing within a long-term team project in order to build a comprehensive model for integrating research on Nahuatl with revitalization efforts.

The most important aspect of our revitalization proposal involves creating an educational model in which native speakers of Nahuatl can develop their intellectual and creative capacities within their own language and culture. We have created a monolingual space for conducting teaching and research in which our students are currently compiling extensive language documentation of both a historical (archival texts) and a contemporary (digital recordings) nature – not as informants, but as peers alongside Western researchers. By facilitating native speakers' access to the vast corpus of colonial writing produced by their ancestors, we help them to resume the exploration of their historical identity. We have also launched a new monolingual editorial series and sponsor interdialectal encounters for speakers of Nahuatl.

An essential part of our strategy is to raise awareness among both indigenous and non-indigenous people alike of the results of current research in cognitive linguistics and psycholinguistics showing the benefits of multilingualism, thus providing a strong rationale for programs of language revitalization. Recent research demonstrates strong influence of language on cognition and especially suggests that differences in language structure result not only in differences in construal, but are also significant for the performance of nonlinguistic tasks and activities (Gumperz and Levinson 1996; Kövecses 2006; Pütz and Verspoor 2000). These results are further supported by psycholinguistic research that demonstrates a strong correlation between multilingualism and enhanced non-verbal processes (Bialystok and Martin 2004; Bialystok and Senman 2004; Bialystok, Craik, Luk 2012; Costa, Hernández and Sebastián-Gallés 2008; Kovács 2009).

Summing up, our proposal for the revitalization of Nahuatl combines several complementary strategies: linguistic research; new forms of collaboration with indigenous scholars, students and members of native communities; international collaboration and exchange between members of groups striving for the preservation of their languages; reinforcement of historical identity and positive language attitudes through the restoration of the culture of literacy and the publishing of monolingual research materials; development of new models of teaching, including the creation of monolingual university programs; and awareness raising of the benefits of multilingualism and cross-cultural exchange.

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## Precategoriality in classical Chinese between Construction Grammar and metaphor

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Classical Chinese (5<sup>th</sup> – 3<sup>rd</sup> centuries BC) has been described as a precategorial language with flexible lexical items that fit the definition of both nouns and verbs. Thus, a lexical item like *xin* can function as a verb 'be honest/trustworthy [intr. stative], believe, trust [tr.]' or as a noun 'trust/confidence, oath [of alliance]'. Similarly, a word like *you* can mean 'friend [N]' as well as 'to treat/consider someone as a friend [V]'. This situation is reflected in the lack of any markedness distinctions across Croft's (2000) conceptual space for parts of speech.

Bisang (2008) tried to account for this typologically and theoretically remarkable fact by combining Goldberg's (2006) Construction Grammar approach with pragmatic implicatures. In the case of the argument structure construction, a lexical item that denotes an object takes on a verbal function if it occurs in the V-position (coercion). Its concrete meaning can basically be derived through stereotypical implicatures that depend on the semantic class of objects to which the lexical item belongs (humans, man-made objects/instruments, places/buildings, etc.).

The paper will show on the basis of an extensive corpus study (2.400 sample sentences with lexemes from 10 semantic classes of objects) that the above account works as a productive mechanism for using object-denoting lexemes in a verbal function. In spite of this, quite often additional interpretation is needed for getting the specific

meaning of a lexical item within the argument structure construction. For that reason, the present paper will go one step further by showing how concepts of metaphor in terms of Lakoff play a role in generating non-literal interpretations of lexical items in the V-position and thereby produce additional meanings to a given construction when stereotypical implicatures are not sufficient for the interpretation of that construction. With the integration of metaphors, the present paper takes up a suggestion of Zádrapa (2011). The data will show that only a limited set of metaphors discussed by Lakoff (1993) is relevant for the context of precategoriality in classical Chinese and that their application includes culture-specific knowledge.

More generally, the paper will show that a typologically rare phenomenon like precategoriality can only be understood by integrating a wide range of different aspects, both linguistic and non-linguistic. The components that are needed for precategoriality include constructions (form/meaning pairings), semantics (Croft's conceptual space), pragmatic implicatures, metaphors and world-knowledge as it is reflected within a culture.

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## The development of non grammatical prosody perception of synthesised speech in children

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Depending on the type of task and the testing methods, prosodic development in children has been shown either to match the general linguistic development, and be related to SLI, or to be relatively independent from these conditions (Marshall 2009, Van der Meulen et al. 1997, Fisher et al. 2007). The paper reports on a study on passive prosodic skills of 66 Polish children between 3 and 10 years of age based on computer generated (CG) material. We used text-to-speech software (IVONA) to create CG speech samples of popular Polish nursery rhymes. Compared to similar samples of recorded human (RH) speech, the CG ones displayed distorted rhythm, less emotional and less natural intonation (with generally correct nuclear stress, placement – “grammatical” prosody), occasional segment duration problems (concatenation points). These prosodic distortions were not very salient, but distinctive enough to make the recognition task trivial for young adults (95% average correctness).

We hypothesised that children with poorly developed language (detected, among others, by a sentence repetition and non-word repetition tasks) would also fair poorly on the task of distinguishing between CG and RH speech, as opposed to the children with well developed linguistic skills, who, we predicted, would score similarly to the adults. What we found, instead, was a developmental pattern summarized in Table 1. The discrimination task was too difficult for most of the younger children (35% average correctness), among whom 2 had SLI symptoms and scores of 43% for the discrimination task. Among the older children, all of whom had high language skills, two maxima could be found corresponding to 69 and 99 months.

The study seems to suggest that “non-grammatical” prosody competence measured by computer generated speech recognition ability is unrelated to general linguistic competence and is subject to developmental changes with peaks at ages parallel to musical (Gordon 1982) and cognitive development of children.

We are currently testing two additional age groups; teenagers and elderly people. Although we do not have the full set of data yet, the initial results seem to indicate that after reaching its peak value in young adults, the discrimination ability decreases.

Table 1. One-way ANOVA correct\_guesses by age\_group for children grouped into three levels: 37-69, 70-99, 101-120 months (partition indicated by F-ratios). Variance check between the groups reveals significant differences between groups 0 and 2 as well as 1 and 2.

age_group_F	age_range in months	Count	Average	Standard deviation	Minimum	Maximum
0 (3-5;9)	37-69	26	0,35	0,245357	0	0,9
1 (5;11-8;3)	70-99	21	0,557143	0,283851	0	1,0
2 (8;3-10)	101-120	17	0,876471	0,125147	0,7	1,0
Total		64	0,557813	0,314115	0	1,0
Comparison	F-Ratio	P-Value				
0 / 1	0,747163	0,4854				
0 / 2	3,84376	0,0072				
1 / 2	5,14447	0,0017				

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## The constructionalization of *hell*: Tracing the constructional network of the *hell of* construction

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In this paper it will be argued that *hell of* construction is an instance of what Aarts (1998) calls the Binominal Noun Phrase (BNP): a form of the *N of N* syntagm characterized by its evaluative function and ascription of properties from the initial noun onto the second noun, e.g. *an angel of a child* or *the jewel of a city* (cf. Aarts 1998; Den Dikken 2006; Keizer 2007). Although *hell of* is often exclusively associated with the BNP(1), a synchronic analysis of this syntagm clearly shows that it has an intensifier usage (2) and is also linked to other *of*-binominal examples such as quantifiers denoting size, e.g. *a lot/ a bit/ loads of* (3a-b) (e.g. Brems 2011, 2012; Denison 2002, 2005; Traugott 2008) and complex noun phrases, such as a NP with a PP postmodifier (4a-b).

1. **BNP:** *You better cut her loose right away or she's gonna have a hell of a lawsuit on her hands.* [2004 *Catwoman*, COCA]
2. **Intensifier:** *We're certainly not getting rich doing this, but we have a hell of a good time.* [1991 ABC Nightline, COCA]
3. **Quantifier:**
  - a. *His brain started to tick at the challenge. It would be a hell of an effort, though. And for what?* [2000 *Analog*, COCA]
  - b. *There has been lots of publicity over the years about how good it is for you –and it saves on cooking bills* (Brems 2012: 203)
4. **Complex noun phrase:**
  - a. *Yes, of course, but he too must suffer through this hell of fish.* [1995 *Rapture of the Deep*, COCA]
  - b. *Where a powerful Social Democratic Party emerged, the lot of the working man was improving, not getting worse as Marx had predicted* (Brems 2012: 203).

Based on cognitive construction grammar theory (Goldberg 1995, 2006), which conceptualizes language as a network of constructions, this study tracks the *hell of* construction from Middle English to Present Day English, mapping its diachronic branching and development. More importantly, because this construction is the only BNP to develop the quantifier function (Trousedale 2010), this study will attempt to track the inheritance links between this

phrase and other *of*-binominal constructions in order to trace the network's influence on *hell of*'s constructionalization.

The proposed analysis is based on a corpus study of *hell of* using the *Penn-Helsinki* corpora (1150-1914), the *Corpus of Historical American English* (COHA), and the *Corpus of Contemporary American English* (COCA). The findings from the initial study are then compared to the results from previous research on the *of*-binominals. Although the *hell of* construction is attested in Middle English, it is anticipated that it appears primarily as a complex noun phrase; the other functions develop in the Early Modern and Modern English period. It is, furthermore, demonstrated that constructionalization of other *of*-binominal constructions has greatly influenced the development of this phrase.

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## The limitations of corpus-based methods in cross-linguistic studies

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The usefulness of parallel (translation) corpora for cross-linguistic research is widely accepted, and the number of corpus-based cross-linguistic studies is constantly growing. Parallel corpora provide large quantities of bilingual or multilingual aligned authentic language data, offering interesting perspectives for language comparison.

The number of bi- and multilingual corpora is also growing rapidly. Nowadays, there exist parallel corpora for many language pairs, and the technology used for their development is quite advanced. Many of the existing parallel corpora are lemmatized and annotated morphosyntactically, meaning that research questions of the following kind can now be addressed, and the results analyzed quantitatively:

- What are the equivalents of lemma / word form / phrase W in language L1 in languages L2 ... Ln?
- Can lemma / word form / phrase W1 in language L1 be expressed by lemma / word form / phrase W2 in language L2?
- How can chains of the grammatical categories C1 ... Cn in language L1 be expressed in language L2?
- How can expressions bearing the grammatical features F1 ... Fn in language L1 be expressed in language L2?

But research questions of this kind necessarily draw on form-based searches. Semantic queries of the type below cannot be performed using the corpora currently available:

- How is REFERENCE / PREDICATION / QUANTIFICATION / REFLEXIVITY / POSSESSION / PARTITIVITY etc. expressed in languages L1 ... Ln?

Precisely this kind of research question, however, has been addressed in our project. The principal goal of our project is to elaborate a grammar of German in comparison with other European languages. The first phase of the project, running from 2001 to 2013, was devoted to the nominal domain. In the second phase, started in 2013, the verbal domain is the subject of investigation. Alongside German, which is the central focus, the core languages for comparison are English, French, Hungarian and Polish, which represent different typological classes. Occasionally, for illustrative or explanatory purposes, other European languages are consulted, such as Albanian, Basque, Estonian, Finnish, Italian, Dutch, Romanian, Russian, Spanish, Swedish or Turkish.

Unlike the traditional contrastive grammars available for German, which usually cover language pairs, namely German and one another language, and are based on the classical parts of speech and grammatical categories, our grammar is developed rather in the spirit of functionalist typology. This implies that instead of formal criteria, cognitively motivated functional domains are used as a *tertium comparationis*.

This paper discusses the limitations of using parallel corpora in functionalist-oriented contrastive language studies, and presents the conceptual design of a multilingual database of parallel text sequences annotated with functional domains and variance parameters to be compiled in our project.

### Word stress in New Englishes: An African case study

Ugorji, C.U.C. (University of Benin, Nigeria)

Developments in the growth of English as the modern world's lingua franca give rise to different challenges not explained in earlier linguistic research, which modelled the metropolitan canons. The present study examines one of these challenges, arising from new Englishes, exemplified by Nigerian English, in respect to the assignment of lexical stress. It shows that the assignment of stress assumes a pattern of variation different from the metropolitan experience; and that this pattern cares less about morpho-phonological licencing but relies on phonological syllable weight preferences. To highlight this research consideration, the study synthesises the contributions of earlier scholarship to explaining the phenomenon and demonstrates their shortcomings in handling synchronic data. Consequently, the study suggests an approach which may more elegantly explicate the phenomenon, situating its findings and conclusions within the New Englishes paradigm and the English as a Lingua Franca framework.

### One's death, another's bread: did case loss enable the functional expansion of the English absolute construction?

van de Pol, Nikki (KU Leuven, Belgium)

The absolute construction (AC) is a non-finite construction consisting of two principal elements: a (pro)nominal head and a predicate. In Old English the AC is marked by a dative case ending on both elements and predicate types are limited to present and past participles (1). The construction typically expresses adverbial relations of time or accompanying circumstance.

- (1) *Dæt Mercna mægð, ofslegenum Pendan hyra cyninge, Cristes geleafan onfengon.* (OEBede, Index)  
 'The Mercians received Christ's faith, when their king Pendan was slain.'

By contrast, the number of predicate types (addition of PrepP, NP, AdjP (2), AdvP,...) and the semantic variety (new elaboration meanings (2) and more frequent occurrence of causal, concessional and conditional relations) of the AC appear to have increased by the Early Modern English (EModE) period, as has the potential for augmentation (i.e. the use of a preposition to introduce an AC) (Author 2013). This strengthens the assumption that the Middle English period has been pivotal in the AC's development.

- (2) *Here was a pretty almond tree in bloome, the flower not unlike a rosemary flower.* (PENN)

An expansion similar to that of the English AC can be observed in the transition from the reconstructed Proto-Indo-European AC to the one found in Latin, which saw an increase in predicate types as well as a broadening of its semantics. This development, according to Ruppel 2013 (217-218), may have been enabled by the syncretism of the Proto-Indo-European instrumental, locative and ablative cases into the Latin ablative. The merger of three cases into a single one which retained the combined functional possibilities of all three removed certain case-imbued restrictions on the AC; i.e. ablative ACs could now potentially express locative and instrumental functions whereas this had previously been impossible. This paper, then, investigates whether the same mechanism of case syncretism, and especially the resulting case loss, may have been crucial in enabling AC expansion in Middle English.

After mapping out the semantic and syntactic/structural expansion of the AC from OE till EModE on the basis of a corpus analysis using the YCOE corpus and the PENN-parsed corpora, I will examine the effect of case loss on English ACs. It is shown that the gradual loss of cases facilitated the AC's functional expansion since after case loss we can observe

- that the strong restriction of ACs to adverbial and necessarily subordinate meanings disappeared as the nominative/dative distinction was lost, thus enabling quasi-coordinate uses (paraphrasable by *and*) (e.g. *this hill is six miles, the way so vneuen ... that a dogge with three legs will out-runne horse with foure* (PENN))
- that the array of prepositions potentially introducing the AC was expanded, leading to an increase in augmentation types
- that the AC could modify a single entity within the matrix clause rather than being restricted to providing background to the matrix as a whole (e.g. *nature haue ordeyned two Pannicles, the one harde, and the other soft* (PENN))

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## The diversity of agency and its validity as a grammatical concept

Van Hooste, Koen (Heinrich-Heine-Universität Düsseldorf, Germany)

In this presentation, I will present the Role and Reference Grammar analysis of agency, with proposed refinements. Agent is usually assumed to be semantically primitive and is often defined as the entity “instigating the action”. Fillmore (1968 & 1977) assumes semantic translations of real-life concepts: One can describe and identify the action or state-of-affairs and its participants. Such prelinguistic assumptions are translated into semantic concepts useable in the grammar. However, in the long debate on semantic roles the notion of “agent” is often a) ill-defined and b) an overgeneralization of a more subtle semantic reality. RRG treats semantic roles differently; as functions of the argument positions in the logical structure. RRG is a grammatical framework (Van Valin 2005: 3ff & 2009) where every verb is decomposed into its logical structure using a system of decomposition based on Dowty (1979). Consider:

(1) John ate snails                      **do'** (John, [**eat'** (John, snails)])

RRG even posits that there is no “agent” role (Wilkins & Van Valin 1996). Rather, it proposes the more basic “effector”. There are four possible readings of the effector: agent, force, instrument and plain effector. This rather different view on agency was inspired by instances where the nature of the participants and their characterization as agent conflict:

- (2) The wind blew down the door.
- (3) John accidentally killed the deer.
- (4) The knife cut the bread.

In (4), “the knife” is Instrument in Fillmore’s analysis. However, it undeniably has agent-like properties: It can occupy the syntactic position normally occupied by an agent-phrase. In RRG, an NP must meet certain criteria in order to qualify for a reading. Forces, for example, are inanimate and are not under control of another effector. By contrast, instruments must be under control of another effector. In logical structure-terms, an effector controls another if it ranks higher in the chain than the effector. These four readings are governed by (a) NP-properties, (b) the occurrence of other effectors and their relative positions in the decomposition and (c) Holisky’s pragmatic principle. This principle states that a human effector is always interpreted as agent unless there is evidence to the contrary. There are, however, several contexts that fall outside the explanatory scope of this model. The sentences in (5) and (6) contain a “human instrument”. In sentences like

- (5) The centurion destroyed the city with 4000 soldiers.
- (6) The wizard protected the village with his militia.

the with-PPs cannot be analyzed as instruments, agents or forces. Human instruments differ from other effectors in that they cannot undergo the same semantic-syntactic operations. In (4), the instigating effector is left unspecified (in RRG’s view), “promoting” the instrument to subject. That does not work for human instruments, as Holisky’s principle predicts that they be read as agents. I thus contend that there is a fifth reading, which can account for “human

instruments?”. In this presentation, I describe the RRG-approach to agency and provide arguments for expanding it with a fifth effector reading.

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## Information structure and its contribution to definiteness effects

Varley, Nadia (*Bergische University of Wuppertal, Germany*)

Definiteness Effects (henceforth DE) has been a fairly well exploited research topic in the literature. There is broad consensus over the fact that genuine existential constructions of the kind “There are (\*the)mice in the kitchen” are incompatible with presuppositional/definite DPs (list readings aside). This restriction seems to be valid not only in English:

- (1) a. Na kuxne est’ (\*éti) myški. (Russian)  
       on kitchen be/have[-AGR] (\*these) mice-INDEF/\*DEF
- b. Ima miški(\*te) na kuxnjata. (Bulgarian)  
       have[-AGR] mice-INDEF/\*DEF on kitchen-DEF.F
- c. Es gibt (\*die) Mäuse in der Küche. (German)  
       it give-3SG (\*the) mice-INDEF/\*DEF in the kitchen

In this talk I develop a structural approach towards the much discussed phenomenon of DE while relating it to the workings of Information Structure (IS), more precisely Topic-Focus partition. Along the lines of Leonetti (2008), I assume that definiteness/specificity is intrinsically bound to Topic syntactic positions, while indefiniteness/non-specificity is related to Focus.

While drawing on existential constructions of the kind presented in (1), I turn my attention to the apparent lack of DE in Bulgarian negated existentials. Bulgarian comes in handy because in this language the definite/specific arguments of negated existentials are both unambiguously marked by a definite marker and obligatorily clitic-doubled. Pronominal accusative clitics in Bulgarian are characterised by the features [+topicality] and [+specificity] (Franks & Rudin 2005). Furthermore, they  $\phi$ -, Case-, and NUM-agree with the internal argument:

- (2) a. [<sub>TopP</sub>Miškite \*(gi) [<sub>TP</sub> NEG njama (na kuxnjata)]]]. (Bulgarian)  
       mice-DEF.PL CL-ACC.PL NEG-have[-AGR] (on kitchen-the)
- b. [<sub>NEGP</sub>Njama [<sub>TopP</sub> \*(gi) [<sub>VP</sub>miškite (na kuxnjata)]]].  
       NEG-have[-AGR] CL-ACC.PL mice-DEF.PL (on kitchen-the)  
       ‘There are no (specific) mice in the kitchen.’

As example (2) demonstrates, in the scope of negation, the internal argument can allegedly escape the restricting effects posited by the domain of existential closure ( $\nu$ P or VP in the sense of Diesing 1992) and surface as a definite DP. I will be arguing that this DP is forced to move out of the domain of existential closure to a designated Topic position:

- (3) [<sub>CP</sub> ... **Top**... Foc... Top [<sub>TP</sub> ... NEG [<sub>VP</sub>... [<sub>TopP</sub> **Top**... [<sub>FocP</sub> Foc ... [<sub>TopP</sub> **Top**... [<sub>VP</sub> (DP) ..... ]]]]]]]]
- ←—————  
 existential closure

Thus, articulated Topic/Focus positions in split  $\nu$ P and CP can explain the distribution of definite vs. indefinite DPs in Bulgarian (negated) existentials.

To sum up, definiteness restriction is to be maintained as a universal constraint that natural grammars resort to and IS principles are essential for deriving the (In)Definiteness Effects observed across languages. In this regard, Information Structure is a crucial negotiator between the semantics of (in)definiteness and syntactic structure.

Last but not least, the novelty of my approach consists in relating well-known empirical facts about clitic doubling and specificity in Bulgarian to the phenomenon of DE in (negated) existentials. To my knowledge, this particular connection has gone unnoticed in the literature.

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## Gendering authorial stance: adverbials in self-study texts

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A great many studies in the field of gender and language research have been concerned with interactional styles of men and women in communication. As a result, different ways in which men and women are construed in interaction and align themselves with their interlocutors/readers have been described. However, one recent study on stance and gender in conversation reported more similarities than differences between men and women and thus emphasized the need for a more in-depth analysis of stance patterns used by them (Precht 2008). In order to get a more comprehensive picture of stance from a gender perspective, the goal of the present paper is to investigate gender-related patterns of authorial stance in written professional discourse as opposed to spoken interpersonal discourse.

Stance refers to an array of grammatical and lexical devices employed by a speaker/writer to convey nuances of their attitude to the propositional content of a message, such as affect, value judgments, certainty/doubt, etc.

Although the typology of stance expressions comprises a diverse range of linguistic elements - including lexical, syntactic and prosodic features - the present study is more narrowly focused. It is restricted to a category of stance adverbs in order to highlight gendered aspect of stance rather than the multifariousness of its grammatical and lexical realizations. The semantic group of stance adverbs under investigation comprises epistemic, attitude and style adverbs (Biber et al., 1999: 854) and their syntactic role is that of adverbials (disjuncts) functioning as overt stance markers.

Stance adverbs for analysis were sampled from a specialized corpus of texts written by men and women. Also, thematically, the texts form two subsections broadly entitled as "Computers" and "Business". The total size of the corpus is 518796 tokens to which male- and female-authored text extracts contributed almost equally. Overall, 1105 occurrences of stance adverbials were examined. The texts are intended for self-study and their primary goal is educational. These texts seem to be particularly well-suited to an investigation of how gendered authorial stance might shape writer/reader relationship.

The preliminary analysis of data has revealed a quantitative gender-specific distribution of stance adverbials in the corpus. They consistently occurred more often in M- than in F-authored texts with corresponding frequencies of 3.0 and 1.4 occurrences per 1000 tokens. The distribution of stance categories was similar in both M- and F-authored texts with epistemic adverbials being the most prominent category followed by attitude and style adverbials.

The paper will present an analysis of distribution of stance adverbials in relation to gendered authorship and to the text topic "Computers"/"Business". Applying Hyland's model of writer/reader interaction (Hyland, 2005: 177), stance will be examined in the text corpus. Although the focus will be on stance gendering, it will be shown that stance markers are inevitably associated with engagement markers in the texts. At the present stage, the study indicates that the use of stance adverbials in texts of the same genre may be gendered pointing to a complex interrelation between stance, gender and text type.

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## An African perspective on clause typing and embedded questions

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Karttunen (1977: 39) considers ‘indirect alternative and yes/no questions and single and multiple wh-questions as belonging to the same syntactic category.’ The Clause Typing Hypothesis (Cheng 1997) essentially states that the clause type/force of a sentence is determined in overt syntax. We show that both claims cannot be upheld. The evidence comes from the syntax and semantics of embedded questions in Bantu languages (Tumbuka), and Benue-Congo languages (Igbo). We show that in these languages embedded questions are syntactically different from root questions, and that embedded questions are not syntactically marked as questions, but realized as relative constructions instead.

In Tumbuka, two different syntactic constructions are used to form indirect questions, a, so-called, *kuti*-construction (1a) or a relative construction (1b):

- (1) a. *Mwanakazi wa-ku-zizwa kuti Mary wa-ka-cita vici mayiro.*  
1.woman 1SBJ-PRES-wonder that M 1SBJ-PST-do what 6.yesterday  
b. *Mwanakazi wa-ku-zizwa ico Mary wa-ka-cita mayiro.*  
1.woman 1SBJ-PRES-wonder 7.REL M 1SBJ-PST-do yesterday  
BOTH: ‘The woman wonders what Mary did yesterday.’

The *kuti*-construction embeds a root question; the relative construction is not possible with root questions. This gives the apparent mismatch between the syntax and semantics of the relative construction. This raises two research questions: (A) Is there a difference in interpretation between the two constructions? (B) Why can relative constructions be interpreted as embedded questions?

Semantic approaches to embedded questions predict an asymmetry in the interpretation and distribution of these two constructions. To answer (A), we investigate two semantic distinctions that could potentially set apart the two embedded question strategies of Tumbuka: Extensional vs. Intensional distinction (in the sense of Groenendijk & Stokhof 1984), and Concealed Questions (Nathan 2005, Frana 2010). We predict that: (a) if the extensional/intensional split plays a role in Tumbuka, only intensional verbs like *kuzizwa* (=‘to wonder’) are able to embed the *kuti*-construction, and (b) if the relative construction corresponds to a concealed question, only extensional verbs like *kumanya* (=‘to know’) should be able to embed the relative construction. These expectations are not borne out, however, as illustrated in (2a-b) and (1a-b):

- (2) a. *kuti-construction*  
*Musepuka wa-ka-manya kuti aŵo ŵa-ka-mu-pa vi-wangwa m-baani.*  
1.boy 1SBJ-PST know that 2.REL 2SBJ-PST 1OBJ-give 8-present COP-2.who  
b. *relative construction*  
*Musepuka wa-ka-ŵa-manya aŵo ŵa-ka-mu-pa vi-wangwa.*  
1.boy 1SBJ-PST-2OBJ-know 2.REL 2SBJ-PST-1OBJ-give 8-presents  
BOTH: ‘The boy knew who gave him presents.’

To answer (B), we argue that it is the semantic selectional criteria of the embedding verb that allows a relative clause to be interpreted as an embedded question. Furthermore, we will demonstrate that the relative constructions are not headless relatives, but one with a covert pivot. The question word interpretation of this pivot is due it being in the scope of the question-embedding predicate, thereby turning the whole relative construction into an embedded question.

Cross-linguistically, we show the same strategy occurs in Igbo, the only difference being that in this language the pivot is overt. Like Tumbuka, the embedded constituent is not formally marked as a question, and the question semantics comes from the matrix predicate.

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## On the lexical and super-lexical status of the mass/count distinction – Evidence from corpus studies and sentence rating tasks

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About the localization of the mass/count distinction, two types of competing accounts have been proposed in the literature: the lexicalist view, in which ‘mass’ and ‘count’ are lexical features, located at the level of N, that can be overridden by syntax in some contexts (Gillon 1999, Nicolas 2002, Cheng *et al.* 2008, Zhang 2013) and the grammatical/contextual view, in which ‘mass’ and ‘count’ are grammatical features, realized through syntax at the level of NP alone (Allan 1980, Borer 2005, Bale & Barner 2009). Both views have their merits, but fall short on some crucial issues: on the one hand, in a lexicalist view, it is unclear what the nature of the lexical specification of ‘mass’ and ‘count’ is, and how ‘shifts’ from one usage to the other precisely work (directionality, productivity, restrictions), while on the other, a grammatical view does not easily account for interpersonally shared intuitions about the mass/count status of most nouns, restrictions and markedness effects on purportedly ‘shifted’ uses, mass/count effects in syntactically unspecified contexts (Galmiche 1989, Le Bruyn *et al.* 2011 ms.) or ERP-evidence for early discrimination between mass and count nouns in lexical comprehension (Mondini *et al.* 2008).

In this contribution, I will argue for an improved version of the lexicalist view, in a framework of functionally-oriented, usage-based linguistics. In this view, the (intuitively recognizable) preferences of nouns for either mass or count syntax are a function of their distributional profiles in usage: a noun that is usually used as mass will tend to be recognized as such, and the other way around. That constitutes the lexical specification of the mass/count distinction, which I thus suggest is of a distributional, statistical nature. Besides, in order to account for the flexible behavior of most nouns, I will introduce an additional level of specification of ‘mass’ and ‘count’ features, namely a supra-lexical level of semantic-pragmatic categories, halfway between the lexicon and the grammar. Hence, the mass or count realization of a noun in context will be described as the result of the interaction of two factors: its distributional profile (i.e. lexical preference), and the feature associated with the supra-lexical category it is a part of (in that particular context). I will tentatively call this the Double Inheritance model.

This position will be argued for based on the results of four corpus studies of the morphosyntactic behavior of a total of 104 nouns in French (from three lexical domains – fruits and vegetables, materials, and beverages – as well as a group of control count nouns), and the results of two acceptability surveys conducted in a quasi-experimental design. From these studies, it will appear that 1) intuitions about acceptability do indeed correlate with distributional information, 2) the acceptability of so-called shifted (i.e. less frequent) usages is highly dependent on context, and 3) despite differences between distributional profiles of individual lexemes, semantic effects associated with mass and count syntax are the same throughout each semantic-pragmatic category. I will show that these results are best accounted for in the Double Inheritance model.

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## Information structuring by multilingual speakers: Code-switching, word order and grammatical aspect

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Alternational code-switching (CS) (Muysken 2000) is one of the most carefully analyzed manifestations of multilingual speech (Bullock & Toribio 2009; Gardner-Chloros 2009). It refers to a switch of the Matrix Language (ML), the language defining the grammatical frame for a particular utterance (Myers-Scotton 1993). In (a), the ML switches from *Turkish* to *Dutch* (see Backus 1996):

- (a) A: *Bir baktım. Ja, ik heb daarvoor niet de opleiding gedaan, weet je.*  
 ['I gave it a look. Yeah, I haven't got the right education for that, you know.']

Alternational CS has often been characterized as a non-verbal element which serves to discursively mark contextual change (Gumperz 1982). Contextual factors may not only be linked to macrosocial concepts (identity, power), but may also be conversation- or discourse-related (i.e., turn-structuring principles (Auer 1998)). Up to now, most researchers dealing with these dimensions of CS have employed a rather descriptive approach, focusing on the ad hoc nature of CS (Li Wei 2002). However, relying on 18 transcripts of Dutch-Turkish spontaneous interaction in Tilburg (the Netherlands) (Backus 1996), this study wants to illustrate that a bilingual speaker's choice with respect to the ML can be systematic to some extent. In the Dutch-Turkish data, ML choice turns out to be governed by general discourse-pragmatic principles, i.e., by speakers' assessments dealing with Information Structure (IS) (Lambrecht 1994; Van Valin 2005) and with the distinction between (b) *categorical* and (c) *thetic* propositions in particular.

- (b) X: *Tell me about John.* - Y: [*As for John,*] *he is a linguist.*  
 (c) X: *What is happening?* - Y: *John is writing a research proposal.*

*Categorical* (topic-comment) propositions add a qualification to a discourse referent (i.e., person, object). In (b), Y presumes that the addressee is able to identify *John* and utters a clause expressing a proposition about John. *Thetic* propositions present an entire event/state-of-affairs as new information in the discourse context. In (c), Y does not attribute a property to an identifiable discourse referent, but reports an event (i.e., *the writing of an abstract by John*) bounded in a temporal and/or spatial setting (*here-and-now* in the case of (c)).

Speakers organize the distinction between categorical and thetic propositions through a range of linguistic resources. In our analysis, we focus on (i) the choice of (non-)canonical word order (Birner & Ward 1998; Erteschik-Shir 2007) and on (ii) markers of grammatical aspect (Comrie 1976; Smith 1997; Johanson 2000). First, we demonstrate that topicalization strategies (i.e., preposing, left-dislocation) significantly more often occur in Dutch utterances than in Turkish utterances (in which the word order is predominantly canonical throughout the data samples). Second, we point at a significant preference for expressing general and habitual states in Dutch and contingent events in Turkish. Both observations lead to the overall conclusion that multilingual speakers in interaction, apart from other conversational goals, can also systematically use alternational CS in order to mark a transition from categorical (in Dutch) to thetic propositions (in Turkish) (or vice versa).

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## Inferred causation: conceptual differences between finite and infinitive complements of causative verbs in European Portuguese

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As can be seen in the following examples (1a-2b), Portuguese causative verbs may be followed either by a finite or an infinitive verb form in the complement structure:

- 1a) Uma jovem *deixa cair* uma pasta cheia de papéis [a young girl *lets drop*-3P.S. INF a folder full of paper]  
 1b) Uma jovem *deixa que uma pasta cheia de papéis caia* [A young girl *lets that a folder full of paper drops*-3P.S. PRES SUBJ]  
 2a) Bruno *faz a bola sair* [Bruno *makes the ball go out*-3P.S. INF]  
 2b) Bruno *faz com que a bola saia* [Bruno *makes with that the ball goes*-3P.S. PRES. SUBJ. out]

The present study, adhering to the paradigm of Cognitive Grammar (Langacker 1987, 1991, 2008), rejects the generative approach in which syntax is considered autonomous and non-semantic in character. On the basis of a corpus of natural examples (*Linguateca*), we will demonstrate that the occurrence of two complement structures is motivated by conceptual considerations and represents a prime example of linguistic iconicity, i.e. formal distance and complexity corresponds to conceptual distance and complexity (cf. Haiman 1980, 1985; Lakoff and Johnson 1980; Langacker 1987). Hence, we will show that the conceptual differences between finite and infinitive complements of causative verbs correlates with the distinction between direct and indirect causation, prototypically manifested in *direct physical causation* vs. *mental inductive causation* (Kemmer and Verhagen 1994; Verhagen and Kemmer 1997; Shibatani 2002; Shibatani and Pardeshi 2002). Also, we will argue that the indirect causation designated by the analytical causative construction VERB + FINITE COMPLEMENT frequently exhibits inferential features, i.e. the conceptualizer creates a causal relation that is not so easily detected in the outside world (cf. Author 2008, 2010).

The conceptual differences between finite and infinitive complements of causative verbs will further be explained by the notions of *grounding* and *subjectification*. The grounding of the finite complement creates a relation between the *ground* and the complement event: the complement event is conceptualized as an event on its own and designates a proposition about processes in the outside world. On the other hand, the analytical causative construction VERB + INFINITIVE COMPLEMENT designates the conceptualization of a complex causal event (cf. Langacker 2004, 2008; Shibatani 2002; Shibatani and Pardeshi 2002). This leads to a higher degree of subjectification in the construction VERB + FINITE COMPLEMENT. From Traugott's perspective (1989, 1995, 1996), it includes pragmatic strengthening, internalization and subjective judgments. From Langacker's (2003, 2006), it subsumes semantic attenuation and the shift in perspective from an active subject to the mental scanning of a subjectively construed conceptualizer. The following semantic and structural properties will be given special attention: the causer and the causee in terms of control; the aspect of the effected predicate; the degree of transitivity of the complement verb and the degree of profiling of the causer, and general features related to the clause and the utterance. A corpus-based regression analysis allows us to compare the relative impact of these semantic and structural components. Moreover, additional experimental tests will be discussed.

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## What is the function of satellites in a satellite-framed language? The case of particles meaning 'in', 'out' and 'up', 'down' in Swedish from a crosslinguistic perspective

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Recent studies have shown that most languages have at least some characteristics that cut across Talmy's (2000) division between verb-framed and satellite-framed languages (Beavers et al 2010). One alternative is to look separately at various parameters underlying Talmy's typology. Several studies have shown that manner salience forms a continuum (Slobin 2004, Hasko 2010, Kopecka 2010). Another parameter is the degree of dependence on the verb of spatial notions expressing path in various ways often distributed across several interacting elements at clause level: conflated in the verb root, in verbal affixes, verbal particles, adpositions and spatial cases. In Swedish, verbal particles play a prominent role in the general structure of the language (see Johannisson 1954, Norén 1996, Strzelecka 2003). The present study focuses on the uses of the verbal particles ('satellites') *in*, *ut* and *upp*, *ner/ned* ('down') in Swedish as a case of intra-typological variability based on two parallel corpora: The English Swedish parallel corpus (Altenberg & Aijmer 2000) and The Multilingual Parallel Corpus (MPC), which is being compiled by the author consisting of Swedish original texts (around 700 000 words) and their translations into English, German, French and Finnish. Directed motion IN, OUT, UP and DOWN is in Swedish primarily expressed by a stressed verbal particle as in the simple example (1) adapted from the MPC.

(1)	Swedish	Han gick <b>in i</b> köket	in 'into'/Particle + i 'in'/Prep
	English	He went <b>into</b> the kitchen	
	German	Er ging <b>in</b> die Küche	in 'in'/Prep + Accusative
	French	Il <b>entra dans</b> la cuisine	IN=MOVE + 'in'/Prep
	Finnish	Hän meni keittiö <b>ön</b>	Illative

In Swedish, the particle *in* signals direction, whereas direction in German can be signalled by using the accusative case after certain prepositions such as *in*. In French, direction is conflated in the verb and in Finnish, the illative case signals direction. Additional alternatives exist. The following applies to Swedish: (1) Directed motion IN-OUT, UP-DOWN is primarily signalled with free verbal particles. (2) Some alternations occur. Certain caused motion verbs such as the verbs of putting can use locative prepositions without including a directional particle: *Per ställde väskan i köket* 'Per put the suitcase **in** the kitchen'. (3) Free particles can be used with a literal or figurative meaning as in *Peter gick upp* 'Peter went up' / *Priset gick upp* 'The price went up'. (4) Bound forms of verbal particles are almost exclusively used to express figurative meanings: *Hans skulder uppgick till 20000 euro*. 'His debts amounted (lit. up-went) to (totalled) 20000 euro'. (5) In spoken language and fiction, free particles are usually (much) more frequent than the corresponding bound forms, whereas the opposite tends to hold in non-fiction (news, academic prose) as evidenced by monolingual corpora (see References). With respect to the bound/free dimension, European languages form a continuum. The Romance languages are verb-framed but historically many of the directional verbs have developed from prefixed verbs in Latin (Lepetit & Schøsler 2009). Germanic languages are characterized by contrasting patterns of alternation between free and bound forms. Spatial prefixes in Slavonic languages to various degrees have been grammaticalized as aspect markers (Sussex & Chubberley 2006). In Swedish, bound forms of spatial particles primarily are used to fill lexical gaps in various abstract domains.

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- Göteborg Spoken Language Corpus (GSLC). For a description see: <http://www.ling.gu.se/projekt/tal/index.cgi?PAGE=3>
- The Swedish Language Bank (Språkbanken): <http://spraakbanken.gu.se/>

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## Contact factors on valency and transitivity between Indo-European and Semitic

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The present paper investigates how phenomena of valency and transitivity in some early Indo-European languages may have been influenced by the historical contact, and particularly by adstrate factors, with Semitic languages.

Both Proto-Semitic and Proto-Indo-European are traditionally assigned an accusative alignment. For the earliest stages of Proto-Indo-European, however, an original active-stative alignment has been hypothesized on the basis of non-canonical marked structures such as Latin *me paenitet* “I repent”, which are more or less attested in the entire Indo-European domain (cf. Bauer 2000). Without discussing the tenability of this hypothesis, we limit ourselves to observe that in the historical period the ancient structure of non-canonical marking has a very different areal distribution in the early Indo-European languages: it is productive in languages such as Celtic and Germanic, for example, but is only residual in other languages such as Hittite, Old Persian, and Ancient Greek, where canonical marking is the more common strategy to represent bivalent predicates.

The advanced decay of non-canonical marking in eastern Indo-European languages may be explained as an internally motivated change, which later occurs by independent drift also in the other Indo-European languages. However, it is nowadays accepted that internal and external factors are not mutually exclusive, and that an internally motivated change may be strengthened by external influence (Heine & Kuteva 2003). We argue that the relatively rapid spread of canonical marking and transitivity in Ancient Greek, Old Persian and in Hittite may have been favored by the contact with Semitic, where certain predicates may select the accusative even for the nominal predicate of a verb such as the preterit of “be” (*kāna*), e.g. Arabic *kāna aṭ-ṭālibu mujtahidan* (was the-student: NOM diligent: ACC) (Lipiński 2001:494ff). Accordingly, a typically intransitive propositional situation of Indo-European is structured as transitive in Semitic. Moreover, we will discuss some typical usages of the Semitic accusative, such as the internal accusative and the accusative of respect, which are more often found in eastern Indo-European languages than in their western related languages and may be due to a syntactic calque (or at least to the external reinforcement of an inherited residual construction) from Semitic. While the accusative of respect is very frequent in Ancient Greek, for example, to the point of being called “Greek accusative” in the western grammatical tradition, this construction is not so frequent in Latin, where its natural rendition would be an ablative of limitation.

All this shows how canonical marking and the transitive structuring of a predicate with two arguments are the preferred choice not only in the history of a language (cf. Aikhenvald et al. 2001), but also in situations of language contact.

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## ***He's only gone and come back – Hendiadic GO AND and the development of ONLY in contemporary British English – a case of dual grammaticalisation?***

*Walker, Jim (Université Lyon 2, France)*

This paper will start from the observation that the adverb ONLY would appear to have developed a discourse marker function, in contemporary British English at least, whereby it can serve to mark a form of mirative or counter-expectational stance on the part of the speaker, as in the following examples:

He's only gone and come back round again. Now don't get me wrong. I'm not reckoning that Paul Lambert is the future of football.

Unbelievable, he's only gone and done it! Well done Andy! Sporting hero!!!

I don't believe it – he's only gone and made a podcast!

When we got him back into the Pit, he's only turned round and said that the racing game wasn't what he thought it was, and he was jacking it in

This is a usage which seems not have received any coverage in the literature, and we will therefore examine it as a possible example of pragmaticalisation. However, it cannot fail to be noticed that, while exceptions exist, it is overwhelmingly the case that what I shall refer to as the 'extraordinary ONLY' collocates very significantly with the hendiadic GO AND construction, as in the above examples. This is a feature which has received more coverage in the literature (Hopper and Thompson 2002; Nicolle 2009; Bachmann 2013) and has at times been cited as an example of grammaticalisation. This research therefore attempts to establish whether the two constructions or usages have entered into some form of co-development.

While grammaticalisation as a theory has proved immensely powerful in recent years, it has quite rightly been subject to growing criticism from a number of quarters. Among the criticisms (Walker, forthcoming) are firstly its failure to adequately thus far take dialectal features into account in a polycentric language such as English, and secondly a tendency perhaps to cite textbook cases of grammaticalisation (GO TO + V, the development of the HAVE-perfect in various languages, the rise of the future tense in the Romance languages) as self-contained phenomena, without sufficiently accounting for effects that parallel or contemporary grammaticalisations may have had on one another. This paper will explore the idea that two grammaticalising phenomena may emerge and reinforce one another, and will further add to the aforementioned critique of grammaticalisation, inasmuch as it will be shown that both these phenomena are very much British in origin, and do not seem as yet to have any parallels in other varieties of English, which raises an considerable problem for theorists.

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## **Developing pragmatic competence with refusals in an EFL context**

*Wannaruk, Anchalee (Suranaree University of Technology, Thailand)*

The speech act of refusals has been recognized as a face-threatening act which can lead to unintentional offense and communication breakdowns due to its complicated characteristics. To perform refusals appropriately, EFL learners' pragmatic compe-

tence needs to be developed. Although pragmatic competence has been proved to be teachable, more research concerning teaching methodology and content of instruction is still needed. The present study aims to investigate how pragmatic competence is developed. It compares pragmatic competence resulting from two methods of instruction, explicit and implicit. Sixty Thai EFL undergraduate students from two intact groups, thirty in each, participated in the study. The teaching targets consisted of refusals to four types of act: invitations, suggestions, offers and requests. The content of instruction was developed based on an earlier cross-cultural study comparing refusals between Thai and American native speakers. The present study adopted a pretest, posttest and delayed posttest design to measure the effects of instruction on participants' pragmatic competence. The instrument used for the tests was a written discourse completion test (DCT). Quantitative results revealed the advantages of both explicit and implicit instructional approaches in raising pragmatic competence, though the explicit instruction seemed to be a little more effective. Qualitatively, it was found that the explicit group tended to be better than the implicit group in terms of level of formality and strategy choice. The delayed posttest results suggested that participants retained the pragmatic competence after three months of instruction, although the level of achievement decreased, probably due to the lack of practice outside the classroom. Finally, pedagogical implications concerning how to improve the EFL learners' pragmatic competence are suggested.

## On imitation as a global strategy in bilinguals

Wasserscheidt, Philipp (Humboldt-Universität zu Berlin, Germany)

Bilinguals are known to use their two languages simultaneously so that they can produce utterances with phonological segments from both languages or structures that use linguistic resources of one language while phonologically showing up in another one. Researchers developed important theories in order to capture this second strategy, including the code-copying framework (Johanson 2002), the transfer approach (Clyne 2003) and various accounts of loan translations or loan syntax (Backus & Dorleijn 2010). These approaches have two major drawbacks: they do not refer to any linguistic theory and their cognitive plausibility has not been proven independently.

In this talk I want to present a constructionist model for bilingual language use which combines grammatical theoretical insights with psycholinguistic findings. The core of the approach is construction grammar and related understandings of language developed in the works of Langacker (1987), Goldberg (1995), and Croft (2001). The overarching principle of construction grammar is that the whole linguistic system is comprised of more or less complex and schematic pairings of signifiers and significates, where meaning is strictly tied to surface form. While the model handles overt contact phenomena as well as covert ones, this talk will focus on the latter.

Since constructions are characterized as signs, copying or transference of only form or only meaning from one language to another is ruled out. I hence suggest a process which I call *imitation*. The term imitation has a long tradition in the description of bilingual processes (Meillet 1921, Haugen 1950, Johanson 2002). It is not only an intuitively fitting characterization of what is going on in the speakers mind, but is also well grounded in other humanities.

In the case of bilinguals I define imitation as a synchronic strategy, where phonological forms from language B are used to signify the components of a complex semantic structure that is conventionalized only in language A. While the interpretation of an imitation is only possible with the knowledge of language A, the form of the imitation has to be sanctioned by existing constructions in language B (cf. Langacker 1987). As I will show, an imitation account of phenomena like loan translation, syntactic transference or combinatorial copying can model the processes and the outcome more exactly than previous theories, since both the "innere Inhaltssyntax" (internal semantic syntax, Johanson 1992) and the phonological form have a traceable source in the constructions of the languages involved.

In this talk, I further want to show on examples from various Serbian bilingual communities, how the strategy of imitation interacts with the degree of schematicity and complexity of a given construction.

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## Kasusverfall bei sententialen Objekten im Deutschen

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Sententiale Objekte, Objekt- oder Komplementsätze also, können im Deutschen nicht nur die Argumentstelle eines direkten oder Akkusativobjekts besetzen, sondern auch die eines Genitiv- oder Dativobjekts (von Subjekt- und Präpositionalobjektsätzen wird hier abgesehen).

Genitiv- oder Dativobjektsätze sind allerdings viel seltener als Akkusativobjektsätze. Bei ersteren liegt der Grund dafür in der Seltenheit des adverbialen Genitivs, der vom Akkusativ oder von Präpositionalkonstruktionen abgelöst wird:

(1) Sie erinnert sich des Vorfalls/an den Vorfall/ erinnert sich (dessen), was vorgefallen war.

Semantisch unterscheiden sich die Genitivverben nicht von denen mit direktem Objekt. Beide haben EXP-Subjekte, bezeichnen kognitive Vorgänge.

Bei Dativobjektsätzen beruht die noch größere Seltenheit dagegen auf der Semantik des Dativobjekts, das i. a. auf belebte Wesen referiert, wogegen Objektsätze auf Sachverhalte referieren. Deshalb wird die Existenz von Dativobjektsätzen sogar bestritten (IDS-Grammatik). Anhand von Korpusdaten (Internet und DWDS) lässt sich jedoch zeigen, dass sie bei zwei kleinen Verbklassen auftreten: aktiven Wahrnehmungsverben (2) und Korrespondenzverben (3):

(3) Alle schauten dem Schiffsuntergang zu/ schauten (dem) zu, wie das Schiff unterging.

(4) Sie stimmte seiner Begleitung zu/ stimmte (dem) zu, dass er sie begleitet.

Im Gegensatz zu nominalen Objekten können sententiale im Deutschen nicht kasusmarkiert werden. Insofern scheint die Idee von Kasusverfall hier fehl am Platze: Wie kann von Kasusverfall gesprochen werden, wenn kein Kasus realisiert ist?

Welches Argument die Objektsätze besetzen, kann zwar nicht durch ein Kasusmorphem am Satz, aber an einem fakultativen Korrelat abgelesen werden, das dem Nebensatz vorangeht (in Klammern in (2)-(4)).

Sowohl für Genitiv- als auch für Dativobjektsätze bestehen Restriktionen, welche Subjunktionen und *w*-Wörter die Nebensätze einleiten können. Diese Restriktionen sind verbsspezifisch und semantischer Art: Simultaneität der in Matrix- und Nebensatz beschriebenen Handlungen, (Nicht)Faktizität des Nebensatz-Sachverhalts, negative Polarität des Kontextes etc. Etwa kann *zustimmen* oder *sich erinnern* keinen ob-Satz einbetten.

Zwei Phänomene in den Korpusdaten deuten nun auf einen eventuellen Kasusabbau zugunsten des unmarkierten Akkusativs hin.

1. konstruieren die Sprecher diese Verben mehrheitlich ohne ein den Kasus anzeigendes Korrelat. In diesen Fällen ist formal nicht klar, um welche Art von Objektsatz es sich handelt. Da Akkusativobjektsätze mehrheitlich ohne Korrelat auftreten, entspricht dies dem unmarkierten Fall.

2. konstruieren die Sprecher Genitiv- und Dativobjektsätze bisweilen, ohne die Restriktionen hinsichtlich der Subjunktionen zu beachten.

Beide Phänomene könnten bedeuten, dass die betroffenen Verben derzeit ihre syntaktischen Konstruktionsmöglichkeiten um Komplementsätze mit bisher nicht selegierten Subjunktionen erweitern. Dabei würden die Sprecher Genitiv- und Dativ-Objektsätze zunehmend wie Akkusativobjektsätze realisieren. Die sententiale Objekte könnten einen Konstruktionswandel dieser Verben befördern, der dann eventuell auch die nominalen erfasste. Für den Genitiv ist eine solche Entwicklung historisch belegt: Nach Ebert 1978:51 spielten Objektsätze im SpätMhd für den Übergang von Genitiv- zu Akkusativreaktion eine Rolle: da sie keine Kasusmerkmale trugen, beförderten sie diesen Wechsel hin zum unmarkierten Typus. Eine solche Entwicklung scheint sich heute fortzusetzen und auch den Dativ zu erfassen.

Als Evidenzen für die vermutete Entwicklung wird der Beitrag Korpusbelege aus Zeitungstexten und dem Internet sowie Statistiken für den Einsatz von Korrelaten präsentieren.

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## Epistemic modality and evidentiality as persuasion strategies in political speeches

Xu, Zhongyi (Lancaster University; Zhejiang Yuexiu University of Foreign Languages)

Political speeches are traditionally studied from the perspective of rhetoric (i.e. the art of verbal persuasion), which was considered as a sort of 'political science' in the ancient Greek and Norman empires (Chilton & Schäffner, 1997). That is mainly because the purposes in political speeches are closely concerned with persuasion (Fotheringham, 1966, p. xi; Adrian, 2002, p.35), in terms of their strategic functions such as coercion, resistance, opposition, protest, dissimulation, legitimisation and delegitimation (see Chilton & Schäffner, 1997; Chilton, 2004).

Based on Aristotle's classification, the means of persuasion fall into three broad categories (Cockcroft & Cockcroft, 1992): (1) persuasion through personality and stance ('ethos'); (2) persuasion through the arousal of emotion ('pathos'); (3) persuasion through reasoning ('logos'). In fact, the first two categories mentioned here are concerned with modality and the third one is closely related to evidentiality. That is why modality is an important way to express stance (Biber & Finegan, 1989) and evidentials play an indispensable role in the reasoning process. However, there is little work involving modality and evidentiality in political speeches from the perspective of persuasion (Hart, 2011; Marín Arrese, 2011). Against this background, this paper aims to explore how the politicians persuade their audiences through their different choices of epistemic and evidential markers in political speeches from the perspective of (de)legitimization.

This paper will be an attempt to answer two main research questions: (i) How do politicians persuade their audience by (de)legitimizing their assertions through different epistemic and evidential markers in their speeches? (ii) How does evidentiality interact with epistemic modality during the process of persuasion/(de)legitimization?

This research combines qualitative and quantitative research. English political speech data of three famous politicians from different countries have been collected as the basis for case studies. Each case consists of a corpus of ten speeches (around 26,000 words) from the same politician, with topics ranging from war, racism, education, economy, election, to foreign relations and weather change, etc. The data analysis of this study can be divided into four steps: (i) defining and classifying epistemic modality and evidentiality; (ii) retrieving forms of epistemic modality and evidentials; (iii) coding the data; (iv) analysing the data quantitatively and qualitatively.

The results of this study show the similarities and differences of persuasion/legitimization strategies taken among three political speakers in terms of epistemic modality and evidentiality. It reveals how different choices of epistemic modality and evidentials present the speakers' epistemic stance and rhetoric styles.

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## C-to-V place feature spreading

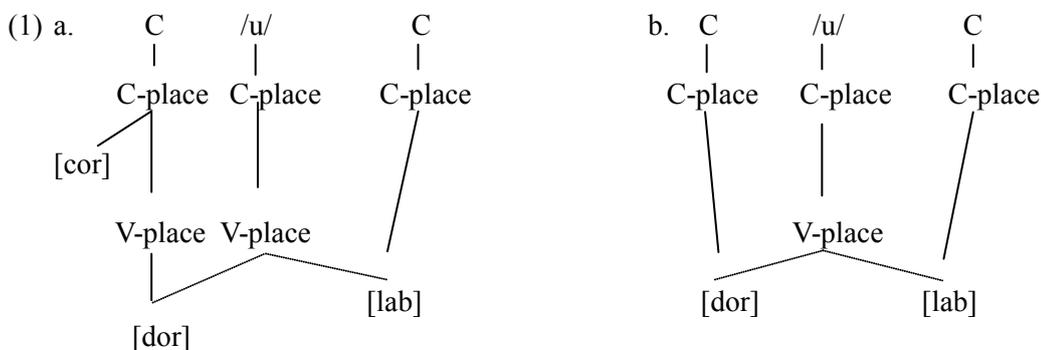
Youssef, Islam (Telemark University College, Norway)

An influential contribution to feature geometry is Unified Features Theory (UFT; Hume 1992, 1996, Clements and Hume 1995), which proposes that the same place features are linked to two distinct, but hierarchically related nodes. The most salient motivation for UFT is to capture place assimilations associated with consonant-vowel interactions (called *cross-category assimilations*). While these interactions are usually claimed to be restricted to vocalic features spreading from consonants to vowels or vice versa (see Padgett 2011), there is evidence that feature spreading from a C-place node to a V-place node also takes place. This paper presents an example of such evidence and provides a principled mechanism for C-to-V feature linkage, which in the broader context can be a favorable adjustment to the theory.

I examine a number of morphological contexts in Baghdadi Arabic that exhibit complementary distribution between /i/ and /u/ (Erwin 1963, Blanc 1964, Bellem 2007), including the epenthetic vowel in CaC(v)C derived nomi-

nals and the first stem vowel in their corresponding CVCaC (measure I) verbs. The interesting observation in these patterns is that the emergence of surface /u/—i.e. labialization—is largely dependent on the nature of the flanking consonants. If the consonants are a labial /p, b, f, m/ followed or preceded by a velar /g, x, ɣ/, uvular /q/, liquid /r/, or emphatic /t̤, s̤, δ̤, l̤/ (collectively, *back consonants*), the target vowel is always /u/. The presence of an adjacent /w/ is also sufficient to activate the process. Otherwise, the target vowel is /i/—even if one of the adjacent consonants is labial or back.

I propose that the /i~/u/ distribution is the result of default feature specification combined with place feature assimilation. Target /i/ has a V-place [coronal] feature that it receives by default fill-in, and target /u/ has both V-place [dorsal] and V-place [labial] that it receives from surrounding consonants specified with [labial] and [dorsal]. While the spread of [dorsal] from emphatic consonants is straightforward (V-place to V-place, as in (1a)), the spread of [labial] and [dorsal] from labial and non-emphatic back consonants is perhaps less so. Since the theory does not allow vowels to have C-place features, we must allow features to migrate from a consonantal to a vocalic node (à la Clements 1991). As a result, labials and non-emphatic back consonants will align their respective C-place features to form (vocalic) /u/-domains, as shown in (1b). This, of course, builds on the premise that features such as [labial] and [dorsal] characterize consonants and vowels alike, even if these features associate with different positions of the segment-internal structure. And whereas spreading “one tier up” seems revolutionary from a standard dependency point of view (see e.g. Clements and Hume 1995), it makes correct predictions about various local C-V interactions in a number of languages. Once some technical issues are worked out, we can incorporate this notion in UFT.



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## Mapping the functions of verb reduplication

Yueyuan, Li (Lancaster University, UK)

Verb reduplication refers to putting two identical verbs adjacent to each other, or placing part of a verb as an affix of the full verb. Verb reduplication can express various functions across languages (Key, 1965, Moravcsik, 1978, Bybee et al., 1994, Rubino, 2005 among others). Many of the functions are related to the concept of plurality, either of actions or participants. For example, the **iterative** function relates to plurality of actions, i.e., performing the same action repeatedly, as in (1).

- (1) Meyah  
 Rua ri-**agob-gob** ofa.  
 they 3PL-**strike-RED** him/her  
 ‘They repeatedly struck him.’  
 (Gravelle, 2002)

Bybee et al. (1994) used a 16 language sample to map the diachronic development of 8 aspectual functions of verb reduplication. The result is represented in Figure 1.

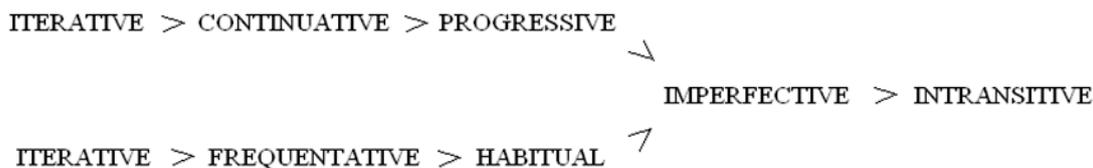


Figure 1 Diachronic pathways of 8 aspectual functions of verb reduplication in Bybee et al. (1994)

The purpose of the present study is a) to survey functions of verb reduplication based on a larger sample than previous studies, b) to find out the conceptual distance between functions and c) to determine diachronic pathways from one function to another.

A survey is carried out across 111 languages. 51 different functions are found. The conceptual distances between the functions are determined by constructional polysemy. If two functions share the same reduplicative form in the same language, the two functions are polysemous to each other. The more languages that attest this polysemy, the stronger the evidence is for the functions being conceptually close. Evidence is presented for the conceptual closeness of 11 main functions. Their conceptual relationship is presented in Figure 2. Functions that are conceptually close are connected by a line.

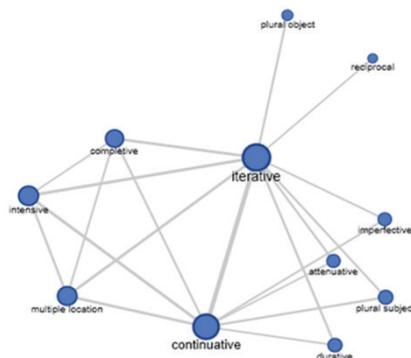


Figure 2 Conceptual closeness among 11 main functions of verb reduplication

Figure 2 serves as a basis for determining the diachronic pathways because a form would normally acquire a new function that is conceptually close to the previous functions.

The pathways of development are determined by three criteria. First, an earlier function is no less iconic than a later function. Second, a later function is at least as subjective as an earlier function. Third, a later function is attested no more frequently across languages than an earlier function. Wherever possible, bridging contexts (Heine, 2002) are found to support the development from one function to another.

**Iterative** is the earliest function of verb reduplication. The other functions derive from **iterative** in different directions. The findings are captured in the Figure 3.

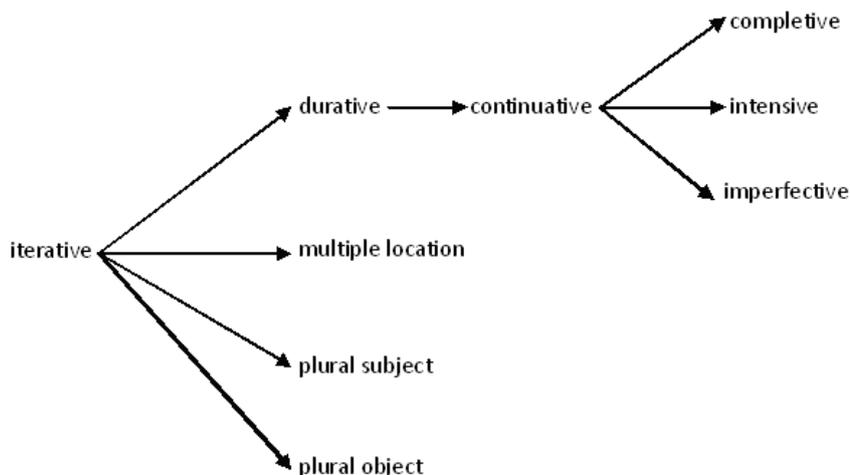


Figure 3 Diachronic pathways of main functions of verb reduplication

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## Patient and doctor positioning in narrative publications in specialist medical journals

Zabielska, Magdalena (Adam Mickiewicz University, Poznań, Poland)

Since narrative is “the principle way of knowing in medicine” (Hunter, 1989: 209), narratives have proven to be helpful both for medical professionals and patients. Consequently, narrative-based sections which focus on the patient’s and doctor’s perspectives have been increasingly published in specialist medical journals. Admittedly, not aspiring to be scientific publications, they point to other sources of knowledge or viewpoints previously excluded from the realm of medical practice. This poster presentation discusses the positioning of patients and doctors in such publications. In contrast to standard scientific papers written in the 3rd person, these are texts in which either patients’ (also families’) or doctors’ accounts are presented. To this aim, a selection of 30 such publications (interactive case reports from the *British Medical Journal*, regular case reports with the *Patient’s perspective* section, *On being a doctor* series from *Annals of Internal Medicine* and *Reflective Practice* from *Patient Education and Counselling*) will be analysed with respect to both patient and doctor reference. An attempt will be made to answer the question of how medical authors place communicative accents in the texts when they describe the patient’s disease as well as the processes of diagnosis and treatment. On the one hand, do they write about a suffering patient, about the diseased body or only about how the disease is treated? On the other, how do doctors position themselves when they write from the 1st person perspective? This way, the parameters adopted in the analysis will address the area of the functionally and cognitively-based grammar of discourse (Halliday, 1979; Duszak, 1998; Halliday, 1994; Smith, 2003) as well as genre analysis (Bazerman, 1988; Swales, 1990; Bhatia, 1993). It is expected that the analysed texts will present the patient as an active participant in the process of diagnosis and treatment as well as include subjective perceptions of both doctors and patients. The presentation will also show that by taking these elements into consideration, in other words, “listening with the third ear” (Davidoff, 1996: 270), the editors broaden their perspective and possibly affect the doctor-patient relation as well as explore new knowledge production practices and new doctor-patient partnerships.

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## Predictors of language development in immigrant preschool children acquiring German

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A sample of 134 German preschool children with immigrant background (82 boys, 52 girls) was tested twice with a modified and validated speech and language test Marburger Sprachscreening. Median age for the first test session was 50 months (range 48-53), the second test session was conducted six months later. After both sessions, all children were classified by an expert panel as (a) those needing or not needing additional educational support in learning German (ED), and (b) those needing or not needing medical help because of a very high probability of diseases/impairments negatively influencing language acquisition (CLIN). In both ED ( $\chi^2(1)=53.872, p<.001$ ) and CLIN ( $\chi^2(1)=20.699, p<.001$ ), test subjects achieved significantly better results in the second test session, although eight children got worse according to ED and seven according to CLIN.

Predictors for the changes in ED and CLIN classifications were analyzed in categorical regressions by means of dependent variables “worse-the same-better” and various independent variables taken from questionnaires filled out by parents and daycare center teachers. To identify most relevant variables, principal components analysis for categorical data (CATPCA) was conducted first.

For ED, the only predictor was “how often the child plays with German children” ( $\beta=.814, p=.014$ ). The model explained 57% of the variance ( $F(24, 15)=3.188, p=.012$ ). Following variables did not reach significance: “age during the first test session in months”, “length of daycare center attendance in months”, “father’s educational level”, “mother’s educational level”, “hearing disorders/problems”, “time span between two test sessions”, “the child speaks his/her mother tongue appropriately for his/her age”, “language spoken in the family most frequently”, “school grade for the child’s language skills (during the first test session) given by the daycare center teacher”, “sex of the child”, “language disorders in his/her family”.

In the second model, CLIN was examined with following significant predictors ( $F(31, 102)=2.628, p<.001$ , adjusted  $R^2=.275$ ): “father’s educational level” ( $\beta=.271, p<.001$ ), “the child likes to play with other children” ( $\beta=.193, p=.001$ ), “age when the mother began to learn German” ( $\beta=.263, p=.027$ ), “the child speaks his/her mother tongue appropriately for his/her age” ( $\beta=.336, p=.026$ ). Variables “age of the child during the first test session”, “length of daycare center attendance”, “German skills are appropriate for this age (during the first test session)”, “language the father speaks at home”, “language disorders in the family”, “language spoken in the family most frequently”, “age when the father began to learn German”, “whether the daycare center is communal, church- or bank-owned”, and “time span between two test sessions” were not significant.

## Lexical transitivity and its encoding in Kakataibo (Panoan, Peru)

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Approaches to the concept of ‘transitivity’ are varied, “compris[ing] semantic (including functional-typological definitions), formal, and pragmatic (transitivity in discourse) [ones]” (Kittilä 2011: 347). From a formal point of view, “a predicate requiring only one [...] noun argument is termed intransitive and a predicate requiring two or more, transitive” (Jacobsen 1985: 89), yielding a binary treatment of transitivity, usually assumed as a property of the lexemes. Semantic approaches, in contrast, define transitivity on the basis of properties such as the agency and affectedness of arguments and these and other semantic properties are used to define a transitive prototype (Hopper and Thompson 1980; Givón 1995) by which some events are considered closer to this prototype than others, turning transitivity into a gradient category, which goes beyond the lexeme and is understood as a property of the clause. Pragmatic approaches to transitivity in turn stress the discourse functions of arguments (Kittilä 2011: 349-350), as in the approach

of Hopper and Thompson (1980: 294), who argue for a relationship between high transitivity and foregrounding, and low transitivity and backgrounding. Among these approaches, the semantic one, based on the notion of a transitivity prototype, constitutes the most widely accepted approach in typology, as Kittilä (2011: 350) affirms when he remarks that “the continuum-like nature of transitivity has been recognized since Hopper and Thompson (1980).”

In this talk, I argue that in Kakataibo, as in other Panoan languages, transitivity is a fixed and inherent property of verb roots, and is totally immune to the clausal context in which they are used. In other words, being transitive or intransitive is a lexical property of verbs, which remains unchanged regardless of the actual number of arguments of the clause and/or their semantic and discursive properties. The transitivity of verbs can only be changed by derivational morphology, and ambitransitive verbs are extremely rare. This claim is based on the behavior of one of the most typologically interesting features of Pano transitivity systems: the encoding of the lexical transitivity of verbs at multiple sites within the clause by means of varied processes of transitivity agreement and transitivity harmony (see Valenzuela 2011 for some examples from Shipibo-Konibo). Transitivity agreement and transitivity harmony constructions in Kakataibo are unaffected by the contextual factors mentioned above, suggesting that not all the transitivity systems are equally sensitive to the clausal-level features usually associated with transitivity in the literature. In Kakataibo, changes in these features do not have consequences for the formal properties of transitivity-related constructions. This is typologically unusual since “[t]he frequent occurrence of these features in semantically based transitivity definitions is not surprising, since changes in these features have consequences for the formal coding of events” (Kittilä 2011: 349).

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## Of robbing, concealing, and violating: semantic specialisation and the case of Middle English ditransitives

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This paper investigates the range of verb classes associated with the double object construction (DOC) in Middle English (Mitchell 1985; Visser 1984). More specifically, it explains the reduction of this range that is observable during this period (and beyond, cf. Coleman & De Clerck 2011; Rohdenburg 1995), with certain verb classes (such as verbs of dispossession as in [1]) becoming markedly less frequent in the DOC.

- (1) (c1405 (c1390) Chaucer Pars.) *For dronkenesse bireveth hym the discrecioun of his wit* ‘for drunkenness takes away from him the discretion of his wit’.

This development is taken to “present a case of [constructional semantic] specialization”, in this case to basic ‘give’-senses (Coleman & De Clerck 2011: 183; cf. also Barðdal 2007; Geeraerts 1997; Goldberg 1995).

The development of the DOC is closely connected to more general processes occurring at the transition between Old and Middle English, such as the erosion of the case marking system and the convergence of different case frames available for ditransitive verbs in Old English resulting from this (e.g. [DAT<sub>Deprivee</sub> GEN<sub>Theme</sub>] as in [2]; Allen 1995: 28-29; Visser 1984).

- (2) (OE Ælfric Cath. Hom. I) *and him<sub>DAT</sub> **mancynnes**<sub>GEN</sub> benæmde* ‘and took mankind away from him’.

Thus, the Middle English DOC could first encode a wide range of meaning relations, i.e. not only the frame [DAT<sub>Rec</sub> ACC<sub>Theme</sub>], which expressed the successful transfer of a theme to a recipient (Allen 1995: 28-29), and which had been most common in Old English, but also others, including e.g. dispossession.

However, such non-prototypical uses, i.e. uses at the periphery of the construction's core meaning, were soon marginalised and eventually ousted from the pattern again (cf. Coleman & De Clerck 2011: 204; Rohdenburg 1995).

In this paper, it is argued that this re-narrowing was promoted by the rise of what is known as the 'dative alternation', i.e. the ability of ditransitive verbs to be paraphrased by a prepositional pattern with *to* (or *for*), as in (3):

(3) (a1470 Malory) *They gaff the godis [...] to their knyghtes* 'They gave the goods to their knights'.

As will be shown, the spread of the *to*-NP paraphrase as the prototypical analytic alternative to previously synthetic datives can be taken to constitute a key factor in the increasingly close (or rather, reinforced) association of datives with the semantic relations expressed by *to*, and particularly with basic 'give'-situations.

Evidence for this proposal is taken from a corpus analysis of the occurrences of the DOC as well as its prepositional paraphrase(s) in the *Penn-Helsinki Parsed Corpus of Middle English, 2<sup>nd</sup> edition* (PPCME2). The results not only confirm a strong correlation and suggest a causal relationship between the semantic specialisation of the DOC and the rise of the *to*-paraphrase, but also allow us to draw more general conclusions on argument structure and the syntax-semantics interface.

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## Individual differences and in situ identity marking: Colloquial Belgian Dutch in the reality TV show "Expeditie Robinson"

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In its focus on the way linguistic style is used to construct identity and to create social meaning, third wave sociolinguistics has moved away from social aggregation towards discourse analytic approaches to intra-speaker variation (e.g. Eckert 2011; Hernández-Campoy & Cutillas-Espinaso 2013). Recently, a similar trend has emerged in Cognitive Linguistics, where usage-based approaches to language have shifted their attention to idiolects and individual differences (e.g. Street & Dabrowska 2010; Barlow 2013).

This paper aims to add to this trend by conducting a bottom-up analysis of the speech of twelve participants to the Dutch reality TV show "Expeditie Robinson". Based on manual transcriptions of three seasons of the show (35 hours of recordings), we focus in on the participants' use of two features of Colloquial Belgian Dutch (an informal, substandard but supraregional variety of Dutch) (cp. Zenner et al. 2009), one located below the level of awareness (word-final t-deletion; e.g. *nie(t)* 'not') and one located above (the use of the personal pronoun *gij* instead of *jij* 'you'). Relying on quantitative analyses, usage profiles are built for each individual participant across a number of discourse situations. On the one hand, we look for register differences by contrasting informal dialogues on the island with the more formal video diaries and tribal councils (these are formal events where participants gather at regular intervals to vote one participant home). On the other hand, we are interested in differences in group make-up, and verify the absence or presence of Netherlandic Dutch participants, who typically do not use Colloquial Belgian Dutch.

The results reveal striking differences between the two linguistic markers. As concerns t-deletion – the feature below the level of awareness, the differences between the participants are minimal. We find evidence for moderate accommodation to Netherlandic Dutch participants and see a significant impact of the formality of the discourse situation. Comparable similarities between the participants are found for the impact of register on the use of *gij*, the feature above the level of awareness. However, the use of *gij* is characterized by very outspoken differences in the accommodation strategies of the participants towards their Netherlandic Dutch team members, ranging from no ad-

aptation (e.g. Meredith, using 84% *gij* in dialogues without Netherlandic Dutch participants and 85.7% in dialogues with Netherlandic Dutch participants) to nearly complete accommodation (e.g. Geert, showing a drop from 94.1% use of *gij* in homogeneous dialogues to only 22.2% *gij* in heterogeneous conversations). Interestingly, these different levels of accommodation can be linked to the *in situ* personae of the participants. More specifically, a qualitative analysis of corpus extracts reveals that the degree to which a participant is involved with strategic planning and voting schemes during the game is proportional to his or her level of group accommodation.

Overall, this paper demonstrates how a combination of bottom-up analyses of individual language use, quantitative statistical techniques and qualitative analysis of discourse extracts can reveal (probably deliberate) *in situ* identity creation by means of linguistic markers.

## Remarks on the geographical distribution of some features of Basque

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Research on the linguistic varieties of the Basque language is increasing day by day: surveys on modern varieties have been carried out from different points of view (Camino 2004), and over the last few years an increasing interest has arisen in investigating the diachronic evolution of the Basque varieties. That interest has led to some new descriptions and interpretations (Zuazo 2006, Ulibarri 2008, Camino 2008a, Atutxa 2011), as well as to theoretical and methodological reflexions (Camino 2004, 2008b, 2009).

After Mitxelena (1981), it is commonly accepted that the fragmentation of the “Old Unified Basque” (Lakarra 1997 and 2011, Trask 1997) did not happen beyond the Early Middle Ages. There is not any wide document written in Basque language until the 16<sup>th</sup> century, and that fact hampers the investigations on the medieval period. In spite of that limitation, there are ways to investigate the history of the varieties of Basque language, since written evidences after the mentioned date exist. For instance, it has been proposed that Vitoria-Gasteiz, the capital city of Araba, is the source of many of the structural features of the occidental variety of Basque language (Urgell 2006). Furthermore, Zuazo (2010) has established some geographic centres of the Basque Country as starting points of several linguistic innovations.

Our major aim is to clarify the geographical spreading of some features of the Basque language. For that purpose, we will work on some general problems related to comparative linguistics; exactly, on problems related to the genetic inheritance, to the areal diffusion, and to the *Raum/Zeit* model –some examples and methodological considerations could be found in Campbell (1985), Hernández Campoy (1999a), Aikhenvald & Dixon (2001), Petit (2007).

First of all, we will present some diachronic data to corroborate the hypothesized relevance of Vitoria-Gasteiz in the configuration of the occidental dialect of Basque. For that enterprise, we will analyze the historical distribution of some verb-morphology features (the progressive assimilation *eban* > *eben* and the substitution of \**ezan* by *egin*). Secondly, we will show that the most evident solution must not necessarily be the successful one: still on the occidental fieldwork, we will analyze the distribution of a morphological variant (*-rantxa* vs *-rantz(a)/-rutz*). Thirdly, we will present a good example of a phenomenon that we should bear in mind: the emergence of parallel innovations. We will illustrate the risk caused by those innovations by the means of a common epenthetic consonant in some varieties of Basque (*-ubV*). Finally, returning to the areal diffusion, we will show that the well known wave-theory is not enough to describe the complex distribution of some phenomena: we will proclaim the hierarchic model (Trudgill 1974, Chambers & Trudgill 1980, Wolfram & Schilling-Estes 1998, Hernández Campoy 1999b) as a successful way to explain neutralization happened in occidental and central varieties of Basque language (Atxutxa & Zuloaga 2013).

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## Polish consonant clusters in native speech production

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Phonotactics investigates permissible sound combinations in a language. Polish allows for as many as 4 consonants word-initially, 6 consonants word-medially, and 5 consonants word-finally. Moreover, sandhi phenomena allow up to 11 consonants. In casual speech these impressive sequences are often simplified (cf. Dukiewicz & Sawicka 1995, Dunaj 1985, Madejowa 1993, Madelska 2005). It is also noteworthy that a certain portion of Polish consonant clusters arise at morpheme boundaries.

*Morphonotactics*, proposed by Dressler and Dziubalska-Kołaczyk (2006) to refer to the interface between phonotactics and morphotactics, allows to specify consonant clusters which emerge as a result of the intervention of morphology. A boundary should be drawn between phonotactic clusters, which are phonologically motivated and occur within a single morpheme, e.g. /pr-/ in *praca* ‘work’ and morphonotactic clusters, which arise due to concatenative and non-concatenative morphology. The former refers to contexts in which a morpheme is added to a root, triggering a (longer) cluster, e.g. *robić* ‘to do (imperfective)’ → /zr-/ *z+robić* ‘to do (perfective)’. The non-concatenative morphology encompasses those sequences of consonants which emerge as a result of, e.g. deletion of a root vowel, as in *len* (linen, NOM.SG.) → /ln/ *lnu* (GEN.SG) or in zero-Genitive-Plural formation, in which case a medial cluster changes into a final one, and as such is more difficult to pronounce, as in *przestępstwo* ‘offence (NOM.SG.) → *przestępstw* (GEN.PL.).

Morphonotactic clusters tend to be more marked either in terms of size or in terms of their phonological structure. In this approach, markedness is defined by means of the *Net Auditory Distance* principle (NAD) which is based on three criteria of consonant description; manner and place of articulation (MOA and POA) as well as sonorant / obstruent distinction (S/O) (Dziubalska-Kołaczyk 2009). The model formulates universal preferences for optimal clustering, depending on the length of a cluster and its word position.

The aim of this paper is to investigate the production of Polish clusters in spontaneous speech of native speakers. The data comes from *Słownik wariantywności fonetycznej współczesnej polszczyzny* [The dictionary of phonetic variation in contemporary Polish] (Madelska 2005). The production of clusters is analysed from the point of view of two criteria: markedness and lexical / morphonotactic status of the cluster. It is predicted that unmarked clusters (preferred in terms of NAD) will be less affected by cluster simplification processes. On the other hand, morphonotactic clusters, despite their marked character, may be preserved in production more successfully, as they signal important morphological information.

Apart from cluster reduction the following processes affecting clusters were identified: modification (assimilation and substitution), cluster extension, cluster shift (a cluster changes its original position) as well as fusion (a cluster merges with another cluster or a singleton consonant). Thus our analysis will be extended to *emergent* clusters which arise as a result of vowel deletion, e.g. *przykład* /pʃikwat/ ‘example’ rendered as /pʃkwat/, *tylko* /tilko/ ‘only’ rendered as /tko/.

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## **WORKSHOPS**



## **WORKSHOP: ADVANCES IN THE INVESTIGATION OF L3 PHONOLOGICAL ACQUISITION**

Convenors: Magdalena Wrembel (Adam Mickiewicz University, Poznań) and Jennifer Cabrelli Amaro (University of Illinois at Chicago, United States)

### **Introduction**

As evidenced within the growing body of research in the field of third language acquisition, L3/*L<sub>n</sub>* language learners are distinct from adult L2 acquirers since the former possess a larger repertoire of linguistic and metalinguistic knowledge (among other factors). However, the study of L3 phonetics and phonology is still in its infancy. Until recently, a very limited number of studies had touched upon L3 phonetics/phonology. More than two decades ago, Ringbom (1987) observed, “the effect of grammar and phonology [of a non-native language in a European context] is accorded much less space and importance. Phonology *L<sub>n</sub>*-influence seems to be rare, since it is hardly mentioned in any studies” (1987: 114). At that time, the number of L3 phonology studies could be counted on two hands and research was very sporadic. A decade later Hammarberg (1997) also acknowledged the continued dearth of research in this area, expressing surprise given the interest taken in phonology in earlier contrastive linguistics. In the 1970s, pioneers of interlanguage research looked at transfer as a driving force in L2 phonology acquisition, whereas it was considered relatively unimportant for L2 morphology and syntax acquisition. According to Missaglia (2010), this lack of research might be linked to the fact that L2 adult learners outperform young learners in the early stages of lexical and grammar acquisition, but children outperform adults in phonetic and phonological acquisition. She claims that it thus makes sense that researchers have focused on the domains that adults master earlier.

Regardless of the reasons for which L3 phonology has not been a primary focus of acquisition research to date, its growth just over the last few years has been significant: In February 2010, *The International Journal of Multilingualism* published a special issue dedicated to L3 phonetics and phonology research that was the first of its kind. We can also observe a greater presence of L3 phonological research in international meetings and workshops. However, given the limited body of work in L3 phonology, what we know thus far fails to create a clear picture of the multifarious processes involved. As a result, the goal and purpose of this workshop are to continue to explore the myriad directions that the area can take from here and what such directions can yield not only for the study of L3 phonological acquisition, but for the field of language acquisition in general. We also aim to discuss the methodological and theoretical hurdles to overcome as the field continues to grow.

### **Research Questions**

- (1) Are bilinguals (early and late) better equipped linguistically and/or cognitively than monolinguals for the task of continued phonological acquisition? Gut (2010) states that L3 language learners possess a larger repertoire than L2 speakers of phonetic-phonological articulatory and perceptual knowledge, of phonological awareness and of phonological learning awareness as well as an increased cognitive flexibility, which might support their acquisition of the phonologies of further foreign languages (Gut, 2010: 21). However, the roles of typological distance, acquisition context, literacy in the L1/L2, bilingual proficiency, language dominance, and language status have barely been explored specifically for phonology.
- (2) How can the investigation of L3 acquisition inform our understanding of what constitutes the initial state and beyond for language acquisition? The generative study of L3 initial state transfer provides a unique window of inquiry for the testing of Universal Grammar (UG) accessibility in adulthood. In the case of evidence of L2 features acquired in the course of L2 acquisition that are present in the L3 initial state, access to UG would be the only explanation as to how such features were acquired during the L2 process. Several L3 phonology studies have produced results that support these findings and conclusions, such as those of Blank & Zimmer (2009), Tremblay (2007), Gut (2010) and Pyun (2005).
- (3) What is the developmental path of acquisition of an L3 sound system, and how does this path differ from L2 development? To date, there exists only one published longitudinal study of L3 phonological acquisition (Hammarberg & Hammarberg, 1993; Willams & Hammarberg, 1998), which observes an L1 English/L2 German/L3 Swedish speaker, and to our knowledge there has not been any investigation which directly compares L2 and L3 learners to answer this question.
- (4) When exposed to a third language, which existing language system does a learner transfer to the third language? Is it always a) the native language, b) the second language, c) the language that is most structurally similar to the third language, or d) a combination of both systems? Recent L3 phonology studies have also attempted to answer this question (e.g., Llama, Cardoso, & Collins, 2010; Wrembel 2010, 2012). However, results are conflicting, and additional research is necessary to better understand selective transfer.

- (5) How does the addition of a third sound system affect existing sound systems? Are early-acquired systems less vulnerable to L3 influence than late-acquired systems, and if so, why? Although the majority of the research focuses on progressive transfer from the L1 and/or L2 to the L3, there is also the possibility for L3 regressive transfer, that is, CLI in which the L3 affects the L2 and/or L1. While Gut (2010) found no L3 influence on the L2, Cabrelli & Rothman (2010) present case study data that suggests differential influence on an L1 vs. L2. This is a rich area to explore, as it informs longstanding debates regarding the mental constitution of native vs. non-native language systems.

## Conclusion

In spite of recent trends in L3 phonology over the last several years, the field is still in its infancy. As the discipline grows, the number of research questions increase, the language pairings considered broaden, the methodologies employed advance, and, as a result, new insights about the linguistic and cognitive underpinnings of language become evident as a result of these unique data. L3/Ln phonological acquisition is a promising area of inquiry precisely because of all its potential, and the workshop we propose will provide a forum to work towards answering the questions outlined above.

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## Effects of L3 regressive transfer on L1 vs. L2 phonological systems

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The present study investigates the extent to which early-acquired versus late-acquired (i.e., adult) phonological systems resist influence from a third language (L3). We test the hypothesis that adult-acquired phonological systems, even when evidencing native-like production and perception, are different from early-acquired systems with regards to the stability of the phonological system.

We examine L3 acquisition of Brazilian Portuguese (BP) and its effects on Spanish phonological systems that are acquired early (sequential L1 Spanish/adult L2 English bilinguals, n=11; heritage speaker English/Spanish bilinguals, n=16) versus late (L1 English/adult L2 Spanish, n=26). A cross-sectional study of Spanish and BP perception and production by intermediate and advanced L3 BP learners investigated BP > Spanish influence throughout BP development. To test the hypothesis, we investigated potential effects of L3 BP word-final vowel reduction on Spanish word-final vowels. BP unstressed syllables are less prominent than stressed syllables, evidenced by higher, shorter vowels than their stressed counterparts that tend to be lower in intensity (Massini-Cagliari, 1992). However, in the particular varieties of Spanish tested here, word-final vowels do not undergo reduction that is similar to the reduction evidenced in BP (e.g., Quilis & Esgueva, 1983)

	<b>BP</b>	<b>Spanish</b>	
/a/ <i>casa</i>	[ 'ka.zɐ ]	[ 'ka.sa ]	'house'
/e/ <i>frase</i>	[ 'fra.zɪ ]	[ 'fra.se ]	'phrase'
/o/ <i>parto</i>	[ 'par.tɔ ]	[ 'par.tɔ ]	'birth'

(1) BP and Spanish word final vowels

While there were no differences in control data from L1 BP speakers (n=15) and L1 Spanish speakers (n=10) in terms of intensity and duration, the data confirm that BP word-final vowels have a lower F1 (i.e., they are higher) and a lower F2 (i.e., they are more front) than Spanish word-final vowels. Thus, once L3 learners converge on the L3 BP target, we predicted that influence on the Spanish system could surface in the form of word-final Spanish vowels with a lowered F1 and/or increased F2.

We report findings from one production and one perception task that were completed by experimental participants in E-Prime 2.0. Participants completed the tasks in each of the two languages on different days. Spanish and BP production data from a delayed repetition task were measured for F1, F2, F2-F1, duration, and intensity and submitted to statistical analysis using a Mixed Linear Model (MLM). Perception was examined via a timed forced-choice naturalness preference task, in which participants were given up to 3000ms to select between a token with a word-final reduced vowel (BP-like) and one with a fully-realized vowel (Spanish-like). Accuracy (%) and reaction time (in ms) were then analyzed using an MLM. Although the L3 BP production and perception data indicate convergence on the L3 target by each of the experimental groups in that the participants' data does not differ significantly from the BP control data, no statistically significant differences in the Spanish data were found among experimental groups or between the Spanish controls and experimental groups. The results suggest stability of the Spanish phonological system independent of both age of acquisition and BP proficiency. Therefore, this data set does not support our hypothesis for differential stability in early-acquired and late-acquired Spanish phonological systems.

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## Phonetic transfer onto L3 English in subtractive bilinguals

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Studies so far have shown additive effects for bilinguals acquiring a third language, both on a general cognitive and an overall language proficiency level (Cenoz 2003) and in specific aspects of third language acquisition, including the acquisition of phonetic and phonological features (Marx & Mehlhorn 2009). In the area of phonology and phonetics, non-native L2 status has been shown to be the strongest point for transfer, regardless of typology (Llama, Cardoso & Collins 2009).

In 2003/2004, the German Institute for International Educational Research (DIPF) conducted a one-year national survey on 15 year-old children's performance in German and English (DESI 2006). DESI investigated listening comprehension, literacy, (socio-) pragmatics, grammar competence, oral production and written text production from a pedagogical and psychological point of view, but did not look at specific linguistic features. Results indicated advantages for simultaneous subtractive bilingual migrants for English as a foreign language compared their monolingual peers after socioeconomic and educational background factors were normalized. Interestingly, however, there were no advantages for successive subtractive bilingual migrants acquiring English as their third language compared to the monolingual control group.

The trend study presented here aims to investigate the production of vowels in 15 year-old children and 20-35 year-old adults in their L1, their L2 and their L3 in order to find out which language induces the most transfer. To this end, semi-structured, structured and free oral data were collected from subtractive successive bilingual participants of diverse L1 backgrounds (Turkish, Russian, Persian) with German as an L2 acquiring English as an L3, as well as from a monolingual German control group acquiring English as an L2. Participants were required to read a passage in their L1, L2 and L3, tell a story based on a picture sequence in all three languages and give a short sample of free speech. To avoid priming effects, different languages were tested on different days with adult participants and tasks were interspersed with language-unrelated exercises with children. The data was analyzed using Praat version

5.3.62 (Boersma&Weenink 2014), focusing on vowel formants (F1 and F2) and duration. In total, results from 8 informants (4 adults and 4 children) have been evaluated so far.

First results indicate that successive subtractive bilinguals with German as their first non-native language have advantages in their phonetic production compared to their monolingual peers and that transfer effects that can be observed are informed by speakers' L1 as well as their L2. The extent of L1 influence is dependent on typological proximity of the feature in question in the language pairs involved.

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## Multilingual acquisition of vowels in L1 Polish, L2 Danish and L3 English

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Third Language Acquisition (TLA) is a new and vibrant field which aims at analysing the acquisition of a second foreign language (De Angelis 2005, 2007). When it comes to research on third language (L3) phonetics, the number of existing studies is quite limited. The phonetic features under investigation include vowel formants (Llisterri and Poch 1987), vowel reduction (Gut 2010), diphthongs (Collazos and Pascual y Cabo 2011), velarisation of /l/ (Llisterri and Martínez-Daudén 1991), acoustic energy and intensity of fricatives (Llisterri and Poch 1987), VOT of plosives (Llama et al. 2010, Tremblay 2007, Wunder 2010, Wrembel 2011, Sypiańska 2013).

The aim of the present study was to analyse multilingual acquisition of vowels. In order to do that, all languages from the multilingual speakers' repertoire were taken into consideration. There were 30 study participants divided into two groups. The first group included 18 trilingual speakers of L1 Polish and L2 Danish and L3 English whereas the second group included 12 bilingual speakers of L1 Polish and L2 Danish. The first two formants F1 and F2 were measured for the following vowels: Polish /ɛ/, Danish /e, ε, æ/ and English /e/. These particular vowels were selected on the basis of an auditory analysis of the participants' L1 Polish realisation of the vowel /ɛ/ which exhibited noticeable non-native influence. Then, Danish and English vowels which were close on the vowel space were included in the study. The acoustic analysis was performed using PRAAT and was carried out in three steps. Firstly, the F1 and F2 measurements for all the above languages were compared to monolingual baseline data obtained from monolingual native speakers of the respective languages. Secondly, the acoustic measurements were compared cross-linguistically (i.e. L1 vs. L2 vs. L3). Thirdly, the values for the bilingual and trilingual groups were compared to each other.

The first step of the analysis shows that there is a tendency for the vowels of the multilingual users to be different from those of the monolingual ones. The second step demonstrates that there is a general tendency for the multilinguals' vowel space to become less peripheral, yet most of the phonological distinctions remain in place. Moreover, the vowels in all the three languages under study exhibit a chain-like behaviour which results in the reshaping of the vowel space. The results from the third stage of the analysis point to a statistically significant influence of the participants' L3 English vowel formants on both the F1 and F2 of their L1 Polish and L2 Danish vowels.

Concluding, the three languages in the multilingual speakers' linguistic repertoire vary from monolingual baseline data. The vocalic qualities in different languages also influence one another and there are significant differences between the bilingual and trilingual groups which means that with the addition of another foreign language previous languages are affected. Bearing all this in mind, the existence of a global language entity in multilingual speakers is postulated. The entity is composed of multilingual's component languages which exhibit qualitative phonetic differences from the same languages in monolingual speakers. With the addition of another component language in a multilingual's language repertoire, the entire global language entity also changes.

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## The effect of L2 experience in L3 perception

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Previous research has shown different types of linguistic influence in L3 learning. For example, Hammarberg (2001) and Bardel and Falk (2007) demonstrated that L2 has a stronger influence than L1. This is considered to be because L3 learners tend to associate L2 and L3 cognitively. The Cumulative-Enhancement Model (Flynn et al., 2004), on the other hand, argues that both L1 and L2 act as a source of positive influence in L3 learning. The current study investigates the linguistic influence in phonological perception of L3 contrasts. This study specifically examines how native speakers of Korean who have learned English as an L2 perceive Japanese as an L3.

Two experiments were conducted with native speakers of Korean with various Japanese contrasts. Two groups of Korean native speakers who were learning introductory Japanese participated. All participants had studied English as an L2 prior to beginning their study of Japanese as an L3. One group participated in a forced-choice identification experiment. The other group participated in an AXB discrimination experiment. Both groups also participated in a forced-choice English minimal pair identification experiment. Additionally, a group of monolingual English listeners participated in a similar experiment testing their perception of Japanese contrasts, to determine for which contrasts knowledge of English might provide a benefit.

The correlation between the Korean participants' responses on each of the Japanese experiments and the English experiment was examined in order to determine whether the perceptual ability in the L2 (English) has an influence in the perception of L3 (Japanese) contrasts. The results of the analysis suggested that the better the Korean participants identified English minimal pairs, the better they performed on several, though not all, Japanese contrasts. For instance, there was a significant positive correlation between the performance in English and the identification of Japanese stop voicing in word-initial position. The voicing contrast in word-initial position in Japanese is known to be very difficult for Korean native speakers, but not for English native speakers. Therefore, this positive correlation is considered as an indication of a direct positive influence of learners' L2 on their perception of L3 categories. Such results imply that the language learners can refer to the phonological categories of all of their background languages when identifying L3 categories.

Positive influence of the increased knowledge in L2 was also observed for the AXB discrimination experiment. That is, the better the participants identified English minimal pairs the better they discriminated several Japanese contrasts. However, some of these contrasts are understood to be difficult for English native speakers based on the results obtained from native English listeners. Therefore, these correlations are considered to indicate an increase in the L3 learners' sensitivity to the speech sounds in general rather than an explicit use of L2 categories.

These results suggest that L2 learning and L3 learning are qualitatively different, both L1 and L2 are possible sources of cross-linguistic influence, and L3 learners may have stronger auditory awareness as a result of the experience in L2 learning.

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## Characterizing variability in Catalan/Spanish bilinguals' segmental perception of English as an additional language

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Studies conducted on the phonological acquisition of an additional language (TL) have extensively examined the contribution of factors such as age of onset of second language (L2) learning (AOL), TL input and learners' first language (L1) to native-like TL speech perception and production (Moyer, 2004; Piske, MacKay, & Flege, 2001). Moreover, several investigations make reference to instances of individual variability failing to conform to overall group performance, which might be an indication of either native-like or nonnative-like attainment in the TL (MacKay, Flege, Piske, & Schirru, 2001; Moyer, 1999). Consequently, in an attempt to better understand all the processes involved in the phonological acquisition of additional languages, recent research has addressed, among others, inter-speaker variability in TL segmental perception (Kim & Hazan, 2010; Mayr & Escudero, 2011), sound production (Munro, 2008), and accentedness (Munro, Derwing, & Holtby, 2012).

In this line, the present paper aims to characterize the individual variability observed in 90 adult Catalan/Spanish bilinguals' perception of nine vowel contrasts of English as an additional or third language. Participants were studying English at university, all with a mean AOL of 8 years and 14 years of formal instruction on average. They carried out a categorical discrimination task consisting of 140 triads (as in Flege & MacKay, 2004) and completed a language background questionnaire. Results pointed to learners' perceptual difficulties in successfully discriminating some vowel contrasts – particularly, high front vowels and low front-central vowel distinctions (mean A' scores ranging from 0.70 to 0.96) – which corroborated previous findings from Catalan/Spanish bilinguals (Cebrian, 2006; Rallo-Fabra & Romero, 2012). In addition, a high degree of individual variation within each contrast was observed. This variability could not be attributed to learners' AOL (before or after age 8), amount of TL exposure (less or more than 14 years) or L1 dominance (Catalan, Spanish, Catalan/Spanish), according to Mann-Whitney *U* tests and Kruskal-Wallis analyses ( $p > .05$ ). In order to further examine the finding of individual variability, a Principal Components Analysis (PCA) with varimax rotation was performed on the A' scores of the nine vowel contrasts. The PCA accounted for 66.6% of the variance and identified three components concerning bilinguals' more accurate discrimination profiles: (1) contrasts involving high front vowels, (2) contrasts containing mid-front vowels, and (3) contrasts with low front and central vowels. Despite this, large individual variability was still noted for component 1, which might be explained in terms of learners' degree of immersion-like exposure to English as an additional language and frequency of vowel occurrence (Fullana & MacKay, 2013), along with psychosocial factors (Piske, 2013).

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## When the native language comes in two forms: the effect of regional variation on the perception and production of native and non-native vowels

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**Aims.** A still fairly small but recently growing body of literature has shown that L3 phonological acquisition is a complex process, involving intricate patterns of cross-linguistic interaction between the native and non-native phonological systems (Wrembel, Gut & Mehlhorn, 2010). In its broadest sense, L3 phonological acquisition does not necessarily involve three distinct languages: when the native language comes in two forms, as a dialect and as the standard variety, then the phonological system of a non-native language may be the third system to be acquired. The aim of the present study is to investigate to what extent regional variation in speakers' L1 has an effect on the perception and production of Standard L1 and L2 sounds. Specifically, we examined the perception and production of Standard Dutch and Standard British English vowels by 24 speakers of two regional varieties of Flemish (East-Flemish and Brabantine) which differ in their vowel realizations: Brabantine but not East-Flemish speakers have been reported to realize the contrast between the members of the Dutch vowel pairs /i-I/ and /y-Ψ/ in durational rather than spectral terms (Verhoeven & Van Bael, 2002).

**Method.** Twenty-four speakers of East-Flemish and Brabantine Dutch performed two vowel identification tasks and two production tasks. In the identification tasks they heard Standard Dutch (/i, I, y, Ψ) or English (/i, I, Y, ϕ) vowels, embedded in the consonantal frame /hVd/. They were asked to map these onto orthographic representations of all twelve Dutch monophthongs. The production tasks were picture-naming tasks, in which participants produced the target words in isolation, as well as in carrier sentences. The results of the production tasks were acoustically analysed in Praat (Boersma & Weenink, 2013) and normalized and plotted through NORM (Kendall & Thomas, 2010).

**Results.** The results of the two perception tasks revealed significant differences between the two groups in their identification of Standard Dutch vowels and in their assimilation of British English vowels to Dutch ones. For instance, Brabantine listeners classified Dutch /i/ and English /i/ more often as Dutch /I/ than East-Flemish listeners. The two groups also differed in their production of Dutch vowels. For example, Brabantine speakers produced smaller spectral differences between /i/ and /I/ than East-Flemish speakers. However, no major differences between the groups could be observed in the productions of English vowels. In fact, the spectral values of the English vowels produced by the learners were very similar to those reported by Hawkins and Midgley (2005) for RP speakers.

**Conclusions.** The study confirms earlier studies which have shown that L1 regional variation may have an influence on the acquisition of non-native language varieties (Escudero, Simon & Mitterer, 2012; Marinescu, 2012; Chládková & Podlipský, 2011), and should hence not be ignored when studying multilingual phonological acquisition. At the same time, it also shows that advanced learners can learn to suppress transfer of L1 regional vowel properties when producing foreign vowels.

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## Production of voiceless stops by trilingual children and teens

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The acquisition of different voice onset time (VOT) patterns across languages has been widely investigated in the field of Second Language Acquisition (SLA). Many studies have tested the perception and/or production of word-initial voiceless stops in speakers of language pairs such as English vs. a Romance language, where English displays longer VOT values for /p/, /t/ and /k/ than French or Spanish, for example (Caramazza *et al.*, 1973; Flege & Eefting, 1987). For the most part, it has been reported that this duration difference presents a challenge for many bilinguals.

While some of them produce monolingual-like values in their two languages, it is not uncommon to find learners who create a hybrid VOT instead (Gurski, 2006).

This phenomenon has also started to receive attention in Third Language Acquisition (Wrembel, 2011; Wunder, 2011), where VOT values have been used to determine cross-linguistic influence in the L3 phonological system of adult learners. Much like L2 studies, the few L3 studies carried out to date on this topic have often reported a similar use of compromise values across the participants' languages (Wrembel, 2011). This investigation allows us to extend the research on the patterns of VOT production to trilingual children and teens. We tested 12 Spanish heritage speakers in Canada, divided into four groups according to: 1) their age (6-8 vs. 14-17), and 2) the language in which they are schooled (either English or French). They are all exposed to the other official language through extracurricular activities.

We set out to investigate whether and to what extent these early trilinguals can produce native-like speech in all of their languages. To this end, they were recorded while reading three word lists (English, Spanish and French) containing mainly disyllabic words with a voiceless stop in stressed onset position (e.g., *casa* ['ka.sa] 'house'). Subsequently, the stops were submitted to acoustic analysis with Praat. So far, our results show high variability in these children and teen's VOT production, and more so in the younger group, something that has already been attested in previous child studies (as pointed out in Khattab, 2000). This holds us back from making any strong claims as to how distinct their VOT systems really are. In our discussion, we resort to age, language dominance and cross-linguistic influence to shed light on our findings. Our results are compared to those of L3 adult learners, and interpreted in relation to some transfer models recently proposed for multilingualism, although they are not specific to the acquisition of phonetics / phonology.

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## Production and perception of non-native accent in French as a foreign language: Multilingual learners with Mandarin Chinese as a heritage language

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Although there has been much work on L2 phonology, little is known about foreign language learning (FLL) in learners who acquired more than one language during childhood. This holds especially for multilinguals who acquired a typologically distant language in addition to the dominant environment language. Gabriel et al. (2012) have provided evidence suggesting that learners with (Mandarin) Chinese as a heritage language (HL) learning French as a FL in German schools acquire French speech rhythm more successfully than monolingual German learners. The present study compares speech rhythm, voice onset time (VOT), and global foreign accent (GFA) in French as a FL. The aim is to determine whether multilingual learners are advantaged over monolinguals wrt these (supra)segmental aspects of pronunciation. Specifically, we ask whether the results of the rhythmic analyses can be replicated wrt VOT and to what extent speech rhythm and VOT contribute to the perception of GFA.

Regarding speech rhythm, German is a stress-timed language, exhibiting complex syllable structures and vowel reduction, while French, a syllable-timed language, favors simple CV syllables and lacks vowel reduction. Although being typologically distant from German and French in morpho-syntax, Chinese patterns with French wrt speech rhythm. It is thus plausible to assume that multilingual (German-Chinese) learners of French show positive transfer from their HL. As a durational property linked to specific segments, VOT has a direct impact on speech rhythm. All languages in our sample have a phonological two-way contrast wrt plosives, but differ regarding its phonetic realization (German: voiced unaspirated–voiceless aspirated; Chinese: [±] aspirated voiceless; French: unaspirated [±] voiced). Possibly, knowledge of Chinese has an advantage for the multilinguals, because the Chinese contrast (like

the French one) is more subtle than the German one, which could help them perceive and produce the target values. Regarding perception, previous studies found that GFA is correlated with speech rhythm (Gut 2012) as well as VOT (Flege 1984).

Our study includes three learner groups: 13 multilinguals (German/HL-Chinese, ages 14–18), 10 German and 10 Chinese monolinguals (ages: 15; 17–21), and control data from 10 monolingual speakers of French (ages 18–22). We analyzed recordings of read speech (14 sentences in French/German/Chinese, including only CV syllables). As expected, multilinguals have an advantage over German monolinguals and pattern with monolingual Chinese learners (who can rely on their L1 in the production of French speech rhythm). Preliminary analyses of VOT suggest that knowing Chinese is neither an advantage nor a disadvantage because our learners seem to have developed compromise values between German and Chinese. In addition to these objective measures, we designed an accent rating experiment, including three sentences from each speaker, in which monolingual adult French speakers were asked to determine the perceived accent on a Likert scale. We expect that the learners' production in French is deemed more or less foreign-accented, depending on the target-likeness of both speech rhythm and VOT.

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## Investigating the acquisition of phonology in a third language: An overview of the field

Wrembel, Magdalena (Adam Mickiewicz University, Poznań, Poland); Cabrelli Amaro, Jennifer (University of Illinois at Chicago, USA)

This contribution is intended as an introduction to the workshop on Advances in the Investigation of L3 Phonological Acquisition. Research on the phonological acquisition of a third language (L3) is still in its infancy, therefore, the present paper aims to shed more light on this fairly unexplored area by presenting an overview of studies in the field, discussing their major findings and limitations, as well as pointing to theoretical and methodological issues involved.

A comprehensive review of the literature will range from the earliest accounts of multilingual case studies (e.g. Chamot 1973, Rivers 1979, Hammarberg & Hammarberg 1993) to the most recent empirical investigations into the acquisition of L3 phonology, the majority of which was published in the last decade (see e.g. Wrembel et al. 2010, Cabrelli Amaro, 2012). Major approaches to and methods of investigating third language phonological acquisition will be discussed on the basis of the existing body of research focusing on the following aspects: the phenomenon of facilitation of additional language learning; factors involved in L3 phonological transfer such as e.g. L2 status or typological proximity; as well as the theoretical underpinnings of the process.

A number of research questions relevant to this developing field of study will be accounted for in the presentation:

- 1) Are bilinguals better equipped linguistically and/or cognitively than monolinguals for the task of continued phonological acquisition?
- 2) How can the investigation of L3 acquisition inform our understanding of what constitutes the initial state and beyond for language acquisition?
- 3) What is the developmental path of acquisition of an L3 sound system, and how does this path differ from L2 development?
- 4) Which existing language system does a learner transfer to the third language?
- 5) How does the addition of a third sound system affect the existing sound systems?

A discussion of the findings will be presented demonstrating complex patterns of transfer from native and non-native languages. However, the results seem still insufficient to provide a full account of L3 phonological modeling or of the factors conditioning the cross-linguistic influence in L3 speech. Finally, to provide some theoretical conceptualization of L3 phonological acquisition, the results will be interpreted within the framework of selected transfer models proposed for multilingualism, i.e., the Cumulative Enhancement Model (Flynn et al. 2004); the L2 Status Factor Model (Bardel & Falk 2007); and the Typological Primacy Model (Cabrelli Amaro & Rothman 2010, Rothman 2011).

A number of pedagogical implications for the process of learning third language speech will be presented, including awareness raising techniques, acknowledging influencing factors other than L1 transfer, and taking advantage of the potential for positive phonetic influence from other non-native languages.

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## WORKSHOP: CORPUS AND DISCOURSE APPROACHES TO EPISTEMIC STANCE AND EVIDENTIALITY: SUBJECTIVITY AND INTERSUBJECTIVITY AT THE CROSSROADS

**Conveners:** Dylan Glynn (University of Paris VIII); Karolina Krawczak (Adam Mickiewicz University, Poznań; Université de Neuchâtel); Françoise Doro-Mégy (University of Paris VIII)

### Description

This workshop focuses on epistemic and evidential expressions. The approach adopted here will be data-driven, with special use of corpora and/or discourse analysis. Epistemic and evidential utterances convey information about the speaker's opinions and attitudes in an interactive context. They can, therefore, be understood in terms of subjectivity, intersubjectivity, and objectivity. The direct subjective expression of a speaker's cognitive state (e.g., *I think, I believe, I know*, etc.) and the objective evidential expression of the perceived situation (e.g., *it seems, it looks*) are both fundamental to understanding language use and the intersubjectivity of communication.

These three dimensions, the personal (subjective), interpersonal (intersubjective), and the impersonal (objective), play an important role in the interaction between the source of knowledge/perception and the degree of certainty, which may well question the definition of the terms "assertion" and modalisation of utterances

As noted by Nuyts (2001: 35), there are two interrelated aspects of any utterance expressing the speaker's opinion or judgment, namely, its *epistemic* and *evidential qualification*. The former facet has to do with "the speaker's evaluation of the probability of the state of affairs", the latter with "his/her characterization of the status or quality of the sources (evidence) for that [epistemic] qualification" (ibid.). Naturally, the more distributed the evidential basis of an epistemic statement, the more intersubjective and, hence, objective it should become (cf. Nuyts 2001: 61).

How to assess and measure this fundamental characteristic of an epistemic expression? How to operationalize the (inter)subjective dimension of epistemicity and evidentiality?

These and similar questions are central to understanding and accounting for the construal and conception of scenes as well as the functions and intentions of utterances, placing this research at the crossroads of Cognitive and Functional Linguistics. The workshop seeks to advance an already established tradition through integrating the cognitive and functional frameworks.

The workshop will build on the work by Benveniste (1971), Langacker (1985, 1987), Traugott (1989), Nuyts (2001), Mushin (2001), Brisard (2002), Scheibman (2002), Kärkkäinen (2003), Verhagen (2005), Cornillie (2007), Engelbretson (2007), Simon-Vandenberghe & Aijmer (2007), Ekberg & Paradis (2009), Boye (2012), Hunston (2010), and others.

The contributions to this theme session deal with topics related to epistemicity and evidentiality in relation to questions of (inter)subjectivity and objectivity in an intra- and interlinguistic context. The research questions concern:

- Cognitive and Functional perspectives on epistemicity and evidentiality
- Corpus-based and discourse analyses of epistemicity and evidentiality
- Modality across language varieties
- Epistemic stance taking and evidentiality across genres (e.g., journalism, online blogs, discussion forums, court hearings) and languages (e.g., English, German, Danish, Spanish, French, Russian, Polish)
- Discourse analysis and epistemicity
- Subjectivity and intersubjectivity in epistemicity and evidentiality
- Adverbial and adjectival expressions of stance and evidentiality
- Interactive framing and construal of stance taking
- Constructions and grammatical patterns of epistemic and evidential expressions
- Complementation in epistemic expressions
- Grammaticalization in epistemic expressions

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## Subjectivity and its relationship with the epistemic and evidential use of the Spanish imperfecto in journalistic texts

Böhm, Verónica (University of Potsdam, Germany)

This study aims to contribute to the analysis of the epistemic and evidential use of the Spanish *imperfecto* with regard to the speaker's subjective and not grammatically motivated decision to use the Spanish *imperfecto* in journalistic texts, e.g. in (1) *Peres reconocía ayer que el presidente sirio, Hafez El Assad, será el gran ausente de la cumbre [...] ('Peres admitted.IMP yesterday that the Syrian president, Hafez El Assad, will not be present in the summit [...])*. In such utterances, (1) the Spanish *imperfecto reconocía* is used instead of the *pretérito perfecto simple reconoció* and does not express its 'typical' aspectual and temporal values, i.e. an action in process or simultaneity in the past as in (2) *Ana miraba televisión cuando llegó su mamá ('Ana was watching TV when her mother came')*. Rather, it makes reference to the speaker's epistemic stance towards his utterance, which is related to the evidential reportative value of the Spanish *imperfecto* and which implicitly marks the speaker's dissociation from the utterance and that he did not obtain the information directly. The speaker's decision to use the imperfective verb form *reconocía* instead of the perfective one *reconoció* in (1) – which would be 'normatively' correct because the utterance (1) refers to a completed situation – is due to the fact that the speaker had no direct knowledge or experience of the state of affairs. Since the speaker does not take full responsibility for the veracity of his statement, he opens up the possibility for the reader to understand it as speculation or doubt. In some cases, the speaker may use the Spanish *imperfecto* to implicitly say "I believe it is so... because they said so... or I have heard it from others" as in *Juan venía mañana* ("[They said, I believe] Juan would come tomorrow"). Hence, this paper also attempts to demonstrate that the Spanish *imperfecto* is used in some journalistic texts to express the speaker's stance towards his knowledge or beliefs of something as well as towards his "commitment to the truth of a proposition" (Bybee/Fleischman 1995: 6 and Nuyts 2001).

Several studies (cf. Fernández Ramírez 1986, Bertinetto 1986, Reyes 1990, Gutiérrez Aráus 1995, García Fernández 2004 and Dessì 2010) have already referred to the 'modalized and evidential uses' of the Spanish *imperfecto*, however with much attention to oral discourses, except Díaz Salgado (2000), Haßler (2012) and Böhm (2013), who investigated these uses in a number of journalistic texts. For that reason, a qualitative and quantitative analysis of the epistemic and evidential uses of the Spanish *imperfecto* in (written) journalistic texts will be made in this paper. The corpus data will be extracted from the *Corpus de la Real Academia Española (CREA)*, from the journalistic section. It will contain examples with verbs like *moría, reconocía, terminaba*, etc., which are semantically perfective in nature and thus in normative use would require a perfect form. The frequency of cases and the contexts in which the Spanish *imperfecto* refers to the speaker's epistemic stance will be shown in the quantitative data.

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## Epistemic adverbials in modern spoken Danish. A corpus-based analysis of linguistic and extra-linguistic factors

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This paper reports on results from a research project on epistemic adverbials in Danish using corpus-linguistic and variationist methods within the field of Language Variation and Change (cf. Tagliamonte 2012). The quantitative investigation of adverbials signalling 'certain' or 'uncertain knowledge' is used as a case for developing the methodology and theoretical basis required for analysing semantic variation. Varying meanings are usually ruled out from variationist studies by the principle of semantic equivalence ('alternate ways of saying "the same" thing'; Labov 1991 [1972]), but since people clearly vary not only their forms but also their meanings, the field (still) needs to address these questions in a principled and coherent manner (cf. Hasan 2009).

The data for the project form part of the LANCHART corpus on spoken Danish, a corpus of mainly sociolinguistic interviews formed to enable real time analyses of language change (Gregersen 2009). The sub-corpus used in this study amounts to 1,27 mio. words, uttered by 66 speakers from three generations. The two older generations have been recorded twice, once in the 1980s and again in the 2000s (cf. Table 1). Extra-linguistic information about age, socioeconomic class, sex and recording period is available about all informants in the corpus.

Occurrences of 27 different epistemic adverbials (from a non-exhaustive list including, e.g., *måske* 'maybe' and *helt sikkert* 'surely') were located by a Praat script and manually categorized as signalling either 'certain' or 'uncertain' knowledge, as a result of contextual analysis. They were further annotated for linguistic factors of the context in which they occur, e.g. grammatical subject and tense of the finite verb. The resulting data set comprises > 6,500 occurrences of an epistemic adverbial, enabling sound statistical analyses.

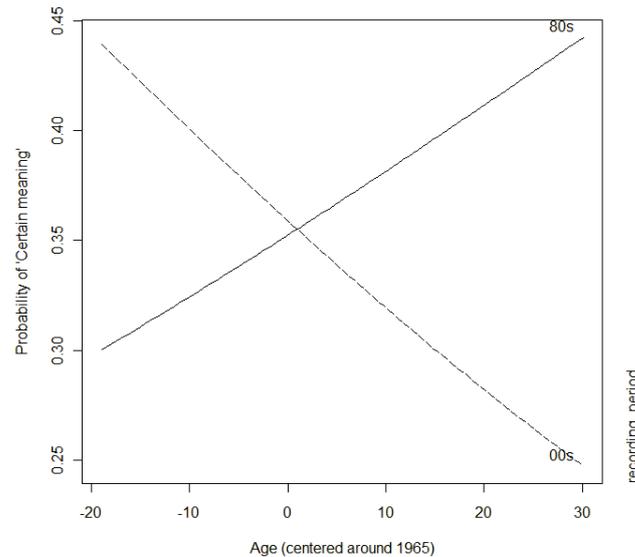
The best mixed-effects model (Baayen 2008) fitted to the data shows Tense and Subject as significant main effects with present tense and 1<sup>st</sup> person subjects forwarding the use of adverbials of 'certain' meaning in comparison to past tense and 2<sup>nd</sup> + 3<sup>rd</sup> person subjects (both  $p < 0.0001$ ), probably reflecting the fact that speakers know more about the present and themselves than about the past and others.

Of the extra-linguistic factors both age as a main effect and the interaction of age and time of recording come out as significant. The interaction is particularly interesting because of a shift in generational trends. Figure 1 plots the relative proportion of the two epistemic adverbial groups (the maximum use of adverbials meaning 'certain knowledge' just below 45%). Informants' birth year is plotted on the x-axis ranging from 1945 to 1995. Adolescents recorded in the 80s (solid line) had a lower than average relative use of epistemic adverbials meaning 'uncertain knowledge', while adolescents of the 2000s (dotted line) have a higher than average use of them. I will discuss possible explanations for this pattern, focusing on the highly institutionalized childhood and the increased access to (social) media, both possibly leading to an increased sensitivity to own and others' face needs.

	Generation 1 born 1942-63	Generation 2 born 1964-74	Generation 3 born 1993-94
Recording period: 1980s	age: 25-41	age: 14-22	–
Recording period: 2000s	age: 44-60	age: 34-41	age: 17-18

Table 1. Generations of speakers and recording periods in the study

Figure 1. Interaction of age and recording period (time of recording)



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## Modal adverbs vs modal adverbial phrases in English and Romance: Historical and functional differences

Cornillie, Bert (KU Leuven, Belgium)

In this paper, I discuss Wierzbicka's (2006: 250-256) claim that English epistemic and evidential adverbs with a *-ly* suffix do not have an interactional/intersubjective meaning, whereas the so-called "modal particles" or modal adverbial phrases such as *maybe*, *perhaps* or *of course*, which are the result of a dynamic grammaticalization process, do have such a meaning. The focus of this paper is on the division of labour between paradigmatic innovation from above (written language) and spontaneous innovation, through grammaticalization, from below (spoken language). The above – below dyad will help us account for two parallel semantic changes: (i) the shift from subjective to intersubjective readings and (ii) the opposite shift from intersubjective to subjective readings.

Although Wierzbicka (2006) convincingly shows that the adverbs ending in *-ly* originate in the tradition of the British Enlightenment of the second half of the 17th century, and more particularly in the epistemological pessimism of authors such as John Locke, she seems to adopt a rather static view of subjectivity and intersubjectivity. The proposed paper argues that the fact that in the 17th century the adverbs ending in *-ly* belonged to the high level textual register of philosophical prose and spread via other textual genres in the 18th century does not preclude them from being used intersubjectively in present-day English. In this paper, I show that although subjectivity is the most common meaning of –

ly adverbs, intersubjectivity understood as reference to common ground or shared knowledge can also be observed, especially in interactional contexts. The adverbs *obviously* and *surely* corroborate this evolution.

In the second part of the paper I deal with the paradigmatic nature of the adverbs in *-ly* and compare it with the paradigm of Romance modal adverbs in *-ment(e)*. Structural differences will be discussed briefly: It will be shown that phonologically speaking the adverbs in *-ment(e)* combine popular (innovation from below) and prestigious features (innovation from above). With regard to the modal meaning, examples from Spanish and French indicate that, as in English, there is a tension between the paradigm of the adverbs in *-ment(e)* and the newly recruited modal phrases. This tension can be interpreted as two types of semantic change. The original subjectivity of adverbs in *-ment(e)* is being lost in some cases to also express intersubjective meanings, whereas the intersubjectivity conveyed by modal adverbial phrases such as *peut-être* 'maybe', *a lo mejor* 'perhaps' and *al parecer* 'seemingly', undergoes a process of erosion towards new subjectivity meanings.

The conclusion is that, (i) due to their textual and paradigmatic origin, the *-ly* and *-ment(e)* adverbs witness functional persistence in present day use, that (ii) some of them have overlapping functions with the intersubjectively oriented adverbial phrases, and that (iii) this is the case in different language families, which may suggest a correlation with human sociality.

The analysis is based on both diachronic and synchronic corpora of English, Spanish and French.

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## Perception verbs "see" and "hear": A crosslinguistic approach to prominent perception verbs in English and Spanish

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This corpus based study aims to explore the meanings and uses, frequency and distribution, of the perception verbs "see" and "hear" and their Spanish counterparts "ver" and "escuchar" in both written and oral discourse.

Viberg (1983: 136) explains that "See" and "Hear" occupy a top position in the perception verb hierarchy, this being the reason why they enjoy a great prominence not only in terms of their frequency of usage but also in their ability to express polysemous meanings. The fact that certain verbs of perception could refer to other non-physical meanings has long been established in many etymological studies such as Bechtel (1879), Kurath (1921), and Buck (1949). In Ibarretxe-Antunano's work (2002), we are provided with a great deal of detailed information on the etymological origin of these verbs. However, the abovementioned authors fail to investigate the reasons why the meanings of these verbs evolved as they did. It is not until the end of the last century when Eve Sweetser (1990)—within the framework of Cognitive Linguistics—reanalyses some of the semantic extensions of perception verbs in English. The author proposes a semantic link-up to account for this pervasive tendency in the Indo-European languages to borrow concepts and vocabulary from the more accessible physical and social world to refer to the less accessible worlds of reasoning, emotion and conversational structure; what she calls the "MIND-AS-BODY" metaphor. Authors like Sweetser (1990) and Harm (2000) have thus pointed out that even if the root meaning of perception verbs is physical in nature, shades of non-physical, internal perception are often present as well. At the same time, scholars such as Lakoff and Johnson 1980 claim that a great deal of polysemy is due to metaphorical usage. And this is how the conceptual, cognitive uses of "see" and "ver" and "hear" and "escuchar" are usually going to end up to be framed by the metaphor MIND-AS-BODY (Lakoff & Johnson, 1980, 1993; Lakoff, 1987; Sweetser, 1990).

These preliminary considerations made, the present approach to the analysis of occurrence and distribution of these four perception verbs—"see" and "ver" and "hear" and "escuchar"—will be mainly based on mode of access to the information, direct vs. indirect perception (Plungian 2001). As for the evidential uses of the verbs, the domain of experience associated with the type of evidence, perceptual (*I see P*) or cognitive (*I know P*) (Marín-Arrese 2009), and the source of the information, which at the same time can be either internal or external to the speaker/writer (Squartini 2008), will be equally observed. The two-way distinction between subject-oriented and object-oriented perception verbs will be equally drawn (Viberg, 1983; Harm, 2000; Whitt, 2008).

With this intention, the data considered for the analysis has been taken from written and oral *corpora* in English and Spanish. As for the identification of the polysemous meanings of the different instances of "see" and "ver" and "hear" and "escuchar" located in the *corpora*, the dictionaries *Diccionario de uso del español* (María Moliner, 2007), *Diccionario de la real academia española* (Edición XXII, 2001), and *Diccionario del español actual* (Mánuel Seco, 1999) were used for Spanish, and the *Oxford English Dictionary Online* 2013 was accessed for English.

## **(Dis)assertion and evidentiality: An enunciativestudy of *think, believe, claim* and *report* in the passive voice**

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This paper examines the passive forms of reporting verbs in the English and American press. Verbs such as *think, believe, claim* and *report* are used in the passive to avoid quoting the information source, which has an impact on the assertive status of the utterance. Journalists often report state of affairs without making explicit the source of information and thus disclaim responsibility for the content (e.g. “*Khan is believed to have been the dominant figure in the group of four West Yorkshire men who launched suicide bomb attacks against the capital's transport system which killed 52 people and injured more than 700*”). The degree of determination of the information source in newspaper articles shows how journalists can take into account a propositional content without assuming responsibility for it. When the source of information is not identified, reporting verbs modalise the utterance. Assertion is modulated, which raises the question of the formal representation of (dis)assertion (Celle 2009, Marnette 2005, Laurendeau 2009).

The study questions the link between evidentiality and epistemic modality in the light of enunciative operations and focuses on the representation of disassertion as the suspension of assertion (Culioli 1990, Celle 2009). What are the parameters which indicate who takes responsibility for the reported propositional content? To what extent does non-commitment have an impact on the truth-value of the content? In order to apprehend the complexity of the phenomena, the analysis focuses on the use of reporting verbs in terms of mixed enunciation, based on the construction of a double subjective parameter, the enunciator and the assertive source (Celle 2008). Crucial to this analysis are the distinctive semantic properties of the reporting verbs *think, believe, claim* and *report*. The comparison of the predicates identifies the conditions under which these verbs are interchangeable. The analyse will show, in turn, how the quoted utterance is endorsed by the assertive source and how subjective parameters participate to evidential/epistemic interpretation of the utterance.

The sample under consideration consists of journalistic discourse where such markers are most likely to be found as the press is directly concerned with information source and the reliability of information. The sources of the texts are the BNC and COCA corpora. In total, 200 examples (50 of each predicate) is selecting data from newspapers only. The results demonstrate that the properties of the reporting verbs have a direct impact on the evidential interpretation of utterances. From this, we deduce that the metalinguistic representation of disassertion is based on the construction of a secondary subjective parameter, indexed on the original enunciator. It follows that the concept of (non-)commitment is not considered as a pragmatic external element of language, but rather as a metalinguistic operation which is the essential component of any utterance.

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## Inter-subjective dynamics and counter-presuppositional inference: the case of Neapolitan *chillo*

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Generally, a distinction is made between epistemic inference, based on the commitment of the speaker on the factuality of the situation, and evidentiality, which refers to the source of the information. Clearly, inferences based on evidentiality are stronger because of the inner strength of the external source providing the information. This distinction can be represented as the two opposite poles of an inferential gradient, which constitute a “tension field between the speaker’s most subjective reasoning, where conjectures originate, and a more objective kind of reasoning based on external evidence” (Squartini 2008: 927). Thus, in (1)

- (1) [The bell rings]      *Dev’essere / Sarà sicuramente il postino*  
    ‘It is must be / (be:FUT) certainly the mailman’.

the degree of commitment of the inter-subjective inference established between speaker and listener is completely dependent on the credibility of the speaker and no difference can really be made between the coding strategies adopted in Italian, the future or the modal. On the other hand, in (2) the two poles of the inferential gradient are overtly opposed because the modal is the only coding strategy available in the presence of truly sensory evidence:

- (2) [Pointing to a spider]      *Attento, dev’essere / ??sarà ancora vivo, perché ho visto che si muove*  
    ‘Be careful! It must / (be:FUT) still alive, for I saw it moving’

However, sensory evidence cannot be completely excluded in (1) as shown by the possible addition: *Sarà sicuramente il postino perché ho visto una borsa gialla* ‘It is certainly the mailman because I’ve seen a yellow bag’. In this connection, also Aikhenvald (2003) observes a similar overlapping between the two different kinds of inference for truly evidential markers in Tariana.

In Neapolitan the grammaticalization of the distal demonstrative as a sentence-initial topic-marker for new or re-activated information can be observed as in the following example in which the sentence containing *chillo* ‘that’ is embedded in a causal clause whose meaning is asserted (Ledgeway 2010):

- (3) *Aggiate pacienza ca chillo<sub>i</sub> [’on Gennaro]<sub>i</sub> m’ha crisciuta*  
    ‘You have to be patient, because (it was) don Gennaro (who) grew me up’.

Notice that this construction can also be used in the same context of (1): [The bell rings] *Chillo<sub>i</sub> adda essere / sarrà [’o pustino]<sub>i</sub>* ‘It is must be / (be:FUT) the mailman’. However, within the given communicative dynamics the topic marker displays a contrastive value which makes appeal to a previous inter-subjective exchange of information between speaker and listener. The speaker stresses the inferential value of his/her assertion which also serves to cancel the listener’s potential presupposition asserting the opposite. Moreover, the speaker means to suggest to be in possession of additive information supporting his/her assertion. Again, sensory evidence can also contribute to stress the inferential strength as in the following example, in which the neuter form *chello* is coreferent with a whole sentence:

- (4) [The rain is falling on the window pane]      *Aro’ vaje? chello chiove!*  
    ‘Where are you going? Look, it’s raining!’

In this way, the speaker takes stance against the intention manifested by the listener by pointing to sensory evidence providing a clear argument in support of his/her view via a covert presupposition which exploits the contrastive force of the topic marker. In other words, *chillo* qualifies as a discourse strategy serving the construal of stance taking, and represents at the same time a remarkable case of pragmaticalization (Diewald 2011) on the basis of a deictic marker.

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## Usage-based Operationalisation of Inter-subjectivity: A multifactorial approach to stance-taking

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Intersubjective stance taking is one of the most important functions of language, yet it is also one of the most complex, simultaneously bringing together the full gamut of discursive resources available in language (Aijmer 1980; Scheibman 2002; Boye 2012). The accurate description of this linguistic phenomenon, of the compositionality and choices made, and of the conceptual and functional motivations remains an essential goal for descriptive linguistics. In an effort to account for the complexity of the contextualized structure of stance taking, we employ the profile-based corpus methodology (Geeraerts et al. 1994; Gries 2003; Divjak 2006; Glynn 2009). This method is employed in order to capture subtle pragmatic meaning structures relative to contextual variation. Its underlying assumption is that contextualised patterns of language use serve as the indices of conceptual-functional structuring of grammar. Making generalisations across large numbers of individual, yet contextualised speech events, we obtain a picture of how speakers of British and American English co-structure and coordinate the multidimensional phenomenon of stance-taking.

This study examines a family of constructions based on the 1<sup>st</sup> person singular, present-tense uses of the mental state predicates *believe*, *think*, *guess*, and *suppose* in British and American English. In total, 15 constructional variants, instantiated by the four predicates, making a total of 30 construction-verb pairings are examined. These pairings include “AdvI BELIEVE” “AdvI don’t BELIEVE”, “Iadv BELIEVE”, “Iadv do BELIEVE” etc. The data are dialogic and informal, but not spoken. They are extracted from the LiveJournal Corpus (Speelman 2005, Glynn 2012) where the first 30 occurrences of each of the forms are extracted and submitted to close manual annotation of a range of semantico-pragmatic features. In total, approximately 2000 examples are analysed. This approach of profile-based usage-feature analysis (Geeraerts et al. 1994, 1999; Gries 2003, 2006; Divjak 2006, 2010; Glynn 2009, 2010) has been successfully applied to a range of lexical semantic and grammatical phenomena. The method uses advanced multivariate statistics to identify usage patterns across the annotated examples and model the predictive accuracy of the patterns identified. Extending this method to account for the subtle and varied nature of intersubjective stance-taking tests the limits of this approach.

In order to predict the stance type –epistemic construction pairing, the usage-feature analysis required is extremely detailed. The semantico-pragmatic factors include: (a) epistemic type (Fortescue 2001, Aimer 1997) (b) argumentativity, (c) verifiability, (d) subjective profiling (Langacker 1987), (e) negotiability (Langacker 2009), (f) speaker engagement, (g) speaker evaluation, (h) complement semantics, (i) complement reality (i.e., speaker external vs. internal), (j) adverbial semantics. The usage patterns are identified and modeled using multivariate statistics (correspondence analysis, loglinear analysis, and multinomial logistic regression). The results show that lexical-constructional pairings cluster with certain semantico-pragmatic factors and that these pairings can be predicted based on the presence or absence of combinations of those factors. This produces a quantified and context sensitive map of the usage of the constructions, where different stance strategies are described by clusters of pragmatic usage features.

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## Evaluation patterns in judicial discourse. A local grammar perspective

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Court judgments, especially those given by appellate courts offer a fertile ground for the study of stance construal. In these texts, appellate judges argue for or against decisions of lower courts, decisions of their colleagues sitting on the same bench or arguments of the appellants. Judges are expected to display commitment to judicial neutrality and fairness while ultimately committing to a stance that favors one party over the other. Therefore, stance, or more broadly, evaluation (cf. Hunston 2011), plays a crucial role and it should be regarded as inherent in the construction and interpretation of this generic construct.

For the purpose of this study, I adopt Hunston's (1994: 210) term 'evaluative language' as referring to language "which indexes the act of evaluation or the act of stance-taking. It expresses an attitude towards a person, situation or other entity and is both subjective and located within a societal value system". Surprisingly, the linguistic mechanisms used to convey assessments in judicial discourse, especially from a corpus-based perspective have received relatively scant attention in the relevant literature on law and language (see, however, Mazzi 2010, Heffer 2007).

Based on a one-million word corpus of US Supreme Court opinions, this paper attempts to address and apply the concept of local grammar (Gross 1993, Barnbrook and Sinclair 1995), namely, the description of particular areas of language (Bednarek 2007), i.e. the analysis of judicial discourse, or even more accurately, the genre of court judgments), rather than the language as a whole. Following Hunston and Sinclair (2000), it aims at testing the applicability of the concept of a local grammar to examine how evaluative meanings tends to be constructed and exploited by a range of legal interactants (SC judges, lower court judges, respondents' counsel, etc.). In particular, the paper will focus on the use of three patterns: N *that*' pattern, where a noun is followed by an appositive *that*-clause, *v-link* + *ADJ* + *that* pattern and *v-link* + *ADJ* + *to-infinitive* pattern. As for the first pattern, it is widely acknowledged (e.g. Halliday & Matthiessen 2004: 637) that the noun in this pattern indicates the epistemic status of the proposition expressed in the *that*-clause and that projected *that*-clauses of this kind are important to disciplinary epistemology (see also Goźdz-Roszkowski & Pontrandolfo (forth.) for an exploratory and preliminary study of evaluative patterns in American and Italian judicial discourse).

It is argued that these three patterns represent a efficient diagnostic tool and a useful starting point for retrieving instances of evaluation expression to provide a more systematic and coherent description of evaluation construal in the judicial disciplinary discourse. The ultimate goal is to test the hypothesis that evaluation is expressed through a set of identifiable restrictions operative not only in general non-specialist discourse (Hunston & Sinclair 2000; Biber 2006) but also in domain-specific institutional discourse. Finally, the paper will point to limitations of a corpus-based approach (analyzing pre-defined patterns) and will signal the way in which a corpus-driven and corpus-assisted (CADS) perspective (Partington et al 2013) could also be applied to add a more qualitative dimension to the analysis.

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## New perspectives on subjectification: A corpus-based study on epistemic stance verbs

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The notion of subjectification has played a major role in Langacker's (e.g. 1990, 1996) investigations of linguistic viewpoint phenomena as well as in the study of grammaticalization (cf. e.g. Hopper & Traugott 2003). In Traugott's (1997) definition, subjectification is the process "whereby meanings become increasingly based in the speaker's subjective belief state, or attitude toward what is said". For Langacker (1985, 1990), subjectification pertains to the degree to which a conceptualizer is construed as "offstage". For example, a sentence such as *He promised to be stout when grown up* (Daniel Defoe, 1722, OED) does not refer to a commissive speech act uttered by the person referred to, but rather expresses the speaker's belief how this person will look like in the future. In contrast to a sentence like *I believe he'll be stout when grown up*, however, the speaker is not overtly mentioned, i.e., in Langacker's terms, not "onstage".

This paper aims to complement previous theory-driven as well as corpus-illustrated studies with a corpus-based analysis of the diachronic development of the verbs *promise* and *threaten*. In addition, the development of perception verbs such as *see* and *witness* towards epistemic stance markers (*The past decade has seen a vast increase in corpus-based studies*) is taken into account. Based on data from the Parsed Corpus of Early English Correspondence (PCEEC), we investigate the development of these verbs with regard to variables such as subject animacy (*She promised me* vs. *The weather promised to be great*) and the nature of the complement (intentional actions, e.g. *She promised to come*, vs. non-intentional states and events, e.g. *They promised that the economy would bounce back*), but also with regard to the constructions in which they occur and their collocational preferences (active vs. passive voice, transitive vs. intransitive use).

Our analysis aims to address major questions concerning the phenomenon of subjectification in a decidedly empirical, data-driven way: Can epistemic meanings arise in one fell swoop by means of metaphoric transfer, or do they evolve gradually, as Traugott (1997) assumes? Do different instances of subjectification follow a similar pattern? Does the epistemic meaning of *promise* and *threaten* emerge in analogy to constructions with non-finite complements (Traugott 1997)? Why can quasi-synonymous verbs such as *pledge* and *menace* not be used in an epistemic sense? Reexamining these questions in a bottom-up, corpus-driven way promises new insights as to the nature of subjectification and the cognitive underpinnings of language change in general.

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## Estonian syntax and speaker stance: The (inter)subjective disclaimer (*veljalaga mai tea* '(or/and/but) I don't know')

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The pragmatic use of 'I don't know' has received considerable attention in World languages such as English and Spanish (Scheibman 2000, Rivas & Brown 2010, respectively). The phrase may be used as a discourse marker as well as an epistemic hedge. Some of its functions seem to occur cross-linguistically while many language (type) specific usages are yet to be scrutinized. The current paper looks at the use of *ma ei tea* 'I NEG know' in Estonian where its functions range from literally expressing 'no knowledge' as a full clause to an adverbial epistemic downgrader in an often assimilated format *maitea* (Keevallik 2010). As a discourse marker, it can be furthermore used for transitions to new topics as a type of disjunction.

The current paper looks at the temporal evolvment of speaker turns before and after *maitea* in relation to simultaneous recipient actions, thereby aiming to reveal its intersubjective nature and coherently explain its broad range of

functions. The focus is on retrospective practices where a speaker uses *maitea* after some potentially terminated stretch of talk by herself. The data come from everyday and institutional phone calls and comprise of 29 cases that are analyzed with the conversation analytic method.

On the one hand, there are instances of “post-completion stance markers” that follow the potential completion of a turn (Schegloff 1996:92). These are often phonologically reduced and regularly latched to the end of the intonation unit. Post-completion stance-markers function as subjective epistemic hedges of speaker knowledge or imposition (in case of e.g. requests) and do not project a continuation beyond themselves. Instead, turn transition is relevant.

On the other hand, *maitea* can be implemented after a pause and constitute a separate prosodic unit. In addition, it can be preceded by conjunctions such as *ve/ja/aga* ‘or, and, but’ and thereby technically accomplish a turn increment. While *ve* ‘or’ occurs even in the retrospective stance marker usage, in particular *aga* ‘but’ + *maitea* marks the imminence of further talk by the same speaker, and often also a shift in topic or stance. As a result of lack of immediate recipient response (evidenced by the pause) the speaker distances herself from the prior topic or stance with *maitea*, which strategically enables her to continue with something different. For example, to add independent evidence for a controversial argument. *Aga maitea* thereby emerges as a simultaneously retrospective and prospective disjunctive marker of stance that is also usable across turns.

There is thus a continuum of prosodically and syntactically more and less integrated instances of epistemic disclaimers, which corresponds to the subjectivity-intersubjectivity scale and reflects variable capacity to solicit alignment. The paper argues that the postpositioned usage of *maitea* displays how mutual epistemic stances are intersubjectively fine-tuned within or across speaker turns with the help of distinctive grammatical devices. It underlines the inherently interactional and temporal nature of grammar.

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## A subjective construal of the world: A corpus-based study of four Polish epistemic verbs

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The general cognitive linguists' assumption is that language reflects patterns of thoughts. Only thoughts which are expressed at the present moment can be understood as an assessment of the (ir)reality they describe. Otherwise, i.e. when expressed, for instance, in the past, as in *I believed that Peter was trapped in the room*, they cannot be considered as modal assessments, since here “the speaker conceptualises a scene as detached from himself, like a spectator watching a play” (Evans and Green 2006: 240).

Studying mental verbs in corpora and/or discourse ought to constitute a “window into [...] the nature, structure and organisation of thoughts and ideas” (Evans and Green 2006: 5). Krawczak and Kokorniak (2012) have shown that the mental verb *myśleć* ‘to think’ in Polish, regardless of the tense used, when realized in the first-person occurrences, demonstrates a clearly objective or performative construal (Nuyts 2001). This study takes a step further and compares the verb *myśleć* with its three synonymous epistemic verb forms in the first person singular, i.e. *sądzę, że...* ‘I think that’ and *uwżam, że...* ‘I think that’ and *wierzę, że...* ‘I believe/think that’ in Polish. With speakers becoming part of the objective conception, developed by Langacker (1990, 2006), the scene presented in their complementation is represented in a subjective way.

The aim of this study is to investigate how divergent or convergent is the subjective way of construing the world represented by the complementation of the four epistemic verbs. With the speaker's objective standpoint as of being here and now, the analysis focuses on whether an event is portrayed as referring to the past, the present or the future, and how the speaker assesses the scene, namely whether he or she is positive, negative or neutral in attitude of the proposition's construal represented by the complementation.

Applying at the same time Cognitive and Functional approaches, the analysis is both quantitative and corpus-based. The PELCRA search engine (Pęzik 2012) of the Polish National Corpus of the Polish Language (Przeiórkowski et al. 2012), as a balanced representative source of the Polish language is used in the study. The extracted data are manually annotated in search of both syntactic and semantic patterns in order to see their “behavioral profile” (Gries 2006). Statistical analysis, involving Correspondence Analysis and Classification Trees (e.g. Gries 2006,

Glynn 2009, Glynn and Fischer 2010), is used in order to see how formally and semantically different is the complementation of the four synonymous subjective epistemic verbs and whether there is any correlation between the temporal construal of the complementation and the speaker's attitude towards the event it represents.

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## At the crossroads of evidentiality and epistemicity: So-called evidential uses of English copular perception verbs

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English copular perception verbs (*look, sound, taste, smell and feel*) are said to convey an evidential meaning when they are combined with a predicative complement (e.g. *John looks tired tonight*) (Gisborne 1998, 2010; Miller 2008).

There is much debate over how to define evidentiality, which is not a grammatical category in English (Aikhenvald, 2004). Some authors subsume evidentiality under (epistemic) modality, and though the two categories 'evidentiality' and 'epistemicity' seem to overlap (Gisborne, 2010), they are clearly distinct from each other (Aikhenvald, 2004).

Given these observations, the current study sets out to accomplish three goals: first to show that the utterances under examination do not only express evidentiality, as defined by Aikhenvald (2004); second, to determine whether the link between copular and transitive uses of perception verbs is the result of a process of grammaticalisation; third, to compare copular perception verbs to epistemic modal auxiliaries, since they are said to be "subjective" (Gisborne 1998, 2010).

These aims are met using a corpus-based analysis, which allows me to develop a typology of predicative complements. The corpus-based analysis also brings the following findings to light. First, with copular perception verbs, each complementation type – as well as the sentence as a whole – must express a process of (scalar) evaluation by the speaker. If not, a perception verb cannot be used whereas BE can. Second, there exists a gradient from complements expressing a highly subjective appreciation to those expressing a less subjective one. The degree of subjectivity can be linked to the length of the inferential process. Indeed, such utterances convey the idea that an inferential process based on perceptual data is at work and the longer the process is, the less subjective the evaluation seems to be. Moreover, it appears that the types of complement (AdjPs, NPs, PPs, clauses) are iconic of the sensory-based inferential process: the shorter the process, the simpler the complement. Third, a perception verb semantically bears on the entire propositional content, just as an epistemic modal auxiliary does. Although it is the primary verb in terms of syntax, the perception verb is secondary in terms of semantics and predication (Dixon, 1991). This accounts for the fact that the experiencer is rarely mentioned in a *to*-phrase in utterances of that kind – by default, the experiencer is the speaker –, but when the experiencer is mentioned, the utterance denotes more subjectivity, or even controversy; which supports the idea that the sentence conveys an epistemic meaning. Finally, it appears that the (lack of) semantic link between referent of the subject and the sensory modality expressed by the verb helps defining the degree of epistemicity and subjectivity, as well as the converse degree of evidentiality.

It is thus argued that the verb has both an evidential meaning – as in all of its uses, since perception is the information source – and a modalising use or epistemic extension as it expresses a (speaker) judgement on sensory data

or appearances. Indeed, utterances containing copular perception verbs all convey a sensory-based experience, which is the basis for an inferential process that leads to the expression of the speaker's stance on the perceived situation. As such, these copulative sentences are at the crossroads of evidentiality and epistemicity, and are linked to various domains of human cognition.

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- BNC* Corpus.
- Brown* Corpus.
- COCA* Corpus.
- LOB* Corpus.

## Knowledge-predicate complementation and epistemicity

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Perception predicates are known to display a contrast in meaning between direct and indirect perception. As illustrated in (1), this contrast can be analysed as bound up with a contrast in meaning pertaining to perception-predicate

complements: direct-perception readings go with entity readings or state-of-affairs (SoA) readings of the complements; indirect-perception readings go with propositional readings (e.g. Dik & Hengeveld 1991; Boye 2010).

- (1) a. *I saw him.* (Direct perception of entity)  
 b. *I saw him play the piano.* (Direct perception of SoA)  
 c. *I saw that he played the piano.* (Indirect perception of proposition)

In contrast to perception predicates, knowledge predicates are generally analysed as semantically uniform, and as taking only propositional complements (e.g. Cristofaro 2003: 114; Noonan 2007: 129). The present paper argues that this analysis is wrong, and that knowledge-predicate complementation should be analysed in parallel with perception-predicate complementation. It is suggested that on crosslinguistic grounds a semantic distinction should be made between three types of knowledge, as illustrated in (2).

- (2) a. *I know him.* (Knowledge of entity)  
 b. *I know how to play the piano.* (Knowledge of SoA)  
 c. *I know that he played the piano* (Knowledge of proposition)

In support of expanding the notion of knowledge to include not only cases like (2c), but also cases like (2a) and (2b), it is argued that:

- the three types of knowledge are related in a predictable and systematic way, as revealed by a semantic map of knowledge predicates (which includes ‘remember’ and ‘forget’ in addition to ‘know’).

In support of nevertheless maintaining a distinction between three types of knowledge, it is argued that:

- the three types of knowledge may crosslinguistically be expressed by distinct knowledge predicates. For instance, Danish uses distinct predicates for knowledge of SoA or proposition (*vide*) and knowledge of entity (*kende*). Urarina uses distinct predicates for knowledge of SoA (*i jaa*) and knowledge of proposition (*kwit#kua*) (Olawsky 2006).
- complements of knowledge-predicates tend crosslinguistically to differ in ways that can be predicted from the distinction between three types of knowledge: i) only propositional complements may (as truth-valued complements) allow of epistemic modification; ii) propositional complements tend to be morphologically more complex than SoA complements (knowledge-predicate complements thus conform to a crosslinguistic tendency originally observed to hold for perception-predicate complements; Boye 2010); iii) propositional knowledge-predicate complements tend to be less deranked than SoA complements (cf. Cristofaro 2003: 122 on the link between the deranking-balancing distinction and the SoA-proposition contrast).

Subsequently, it is argued (*pace* Stanley 2011) that only knowledge of propositions can be said to be *epistemic* knowledge in the strict sense that it concerns a relationship between our representation of the world and the world itself. The paper is based on a genetically stratified sample of 100 languages. Data were collected from descriptive grammars and other academic publications.

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## Epistemic stance in journalistic discourse: A cross-linguistic study on the expression of evidentiality and epistemic modality as legitimising strategies in English and Spanish

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This paper presents a cross-linguistic study on the use of epistemic stance resources in journalistic discourse. The approach is based on studies on the conceptual domains of evidentiality and modality as subcategories of a general domain of epistemicity (Boye 2012), and on stancetaking and positioning in discourse (Du Bois 2007; Englebretson 2007). Stancetaking is a form of social action, involving the expression of speaker/writer's personal attitudes, beliefs, or evaluations concerning events and their commitment with respect to the communicated proposition. The analysis is based on a model of stancetaking in discourse which posits two macro categories of stance, the effective and the epistemic, which are systematically related to the indexing of inter/subjectivity (Marín Arrese 2009: 2013). The model draws on Langacker's (2009) distinction between the effective and the epistemic level in grammar, and between 'root' and epistemic modals in terms of the conceptual factor "striving for control" (Langacker 2013). It also relates stancetaking to the dimension of subjectivity/intersubjectivity as the degree of salience of the conceptualizer role indexed by these resources (Langacker 1991), and the degree to which they evoke personal responsibility of the stancetaker for the communicated information or intersubjectively shared responsibility (Nuyts 2012).

Expressions of epistemic stance involve various forms of expression of epistemic support and evidentiary justification for the communicated proposition (Boye 2012). They comprise epistemic modality and evidentiality, as well as other expressions of cognitive attitude and factivity. Epistemic modals involve the conceptualizer's striving for control of relations at the level of reality and of control of conceptions of reality (Langacker 2009, 2013). Modals invoke different degrees of epistemic support regarding the realization of the event designated in a proposition. Evidentials primarily indicate the source of evidence (Aikhenvald 2004), and the epistemic justification on the basis of which the speaker/writer feels entitled to express a proposition (Boye 2012). The various parameters of evidentiality may reflect different values of presumed reliability of the evidence, and of hearers/readers' potential acceptance of the validity of the information (Marín-Arrese 2011, 2013).

The paper explores the following research issues: (a) the similarities or differences in the form and distribution of the expressions of epistemic stance in two parallel corpora of journalistic discourse in English and Spanish; (b) the similarities or differences in the indexing of subjectivity/intersubjectivity and the potential of these stance resources for realizing the strategic function of legitimisation and mystification of responsibility in discourse (Hart 2011; Marín-Arrese 2011). The paper presents results of a contrastive corpus study (English vs. Spanish) based on texts from two genres of journalistic discourse, opinion columns and leading articles, from four quality papers differing in ideological orientation: *The Guardian* and *The Times* (UK), *ABC* and *El País* (Spain). Preliminary results point to certain differences in the choice and distribution of stance expressions, which may involve specific cultural features of argumentative discourse in these languages.

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## Evidential stances in the description of the singing voice by classical singing teachers: An interactional and prosodic approach. Evidence from French

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The present study aims at showing how a sensorial object, namely the singing voice is discursively built by experts through a variety of evidential stances ranging from definitions drawing on solipsistic experience and linguistic usage (*c'est comme ça que je le perçois* 'his is how I perceive it', *moi, j'utilise ce terme* 'I'm using this term') to descriptions which involve the interlocutor as an active participant in the process of naming (*voix blanche, si vous voulez* 'white voice, as you might call it'), to more objective definitions appealing to generic or unidentified sources (*on dirait* 'one might say', *il paraît que* 'it seems') as well as third person references to the singing community (*comme disent les chanteurs* 'as singers say', *comme dirait X*). Experts are aware of the subjective use of vocal terminology and at the same time, of the need for a terminologic consensus about the components of vocal quality across various singing communities. Their discourse thus reveals the constant tension between two poles: the pole of subjective perception and sensorial knowledge which is unique et unverifiable and the pole of scientific description which is analytic and tentatively consensual across different subjects.

Using methodology developed within the field of interactional sociolinguistics, conversation analysis (Auer 1992; Couper-Kuhlen 2004; Selting 1994), oral studies of French (Benveniste 1966; Morel & Danon-Boileau 1998) and pragmatic studies of evidential expressions (Guentchéva et al. 1994; Mushin 2001; Nuyts 2001), we are going to present a series of 30 examples selected from an 11 hour corpus of interviews with singing teachers. The examples are transcribed using the CA transcription conventions and analyzed using a script for pitch analysis, Melism (Caelen-Haumont & Auran 2004) that allows to modelize prosodic saliences. We are showing how through a network of interconnected devices (discursive, pragmatic, interactional, prosodic), the speakers contextualize their subjective involvement, their appeal to interactional consensus as well as their references to the expert community in the use of their terms. The process of naming is thus inextricably linked to a rapid succession of evidential stances proving that the discursive object is not a stable referent but a shifting one.

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## Epistemic parentheticals in Germanic languages and in French

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The aim of the contribution is to check the existence of parallel grammaticalisation paths for evidential and epistemic parentheticals in Germanic languages and in French. Further, I want to discuss the possible functional reasons for this parallelism and what this functional motivation could mean for the conceptual status of evidentiality and epistemic modality.

The starting point of the analysis is the comparison of three corpus-based studies by Weinert (2012) on the parenthetical or quasi-parenthetical uses of *I think* in English and *Ich denke / Ich glaube* (I think, I believe) in German, Bolly (2010) on the grammaticalisation of French *tu vois* (you see), and Nuyts & Janssens (2013) resp. Janssens & Nuyts (2013) on Dutch *ik denk, ich geloof* (I think, I believe). Those insights are also confronted with corpora from French and German (contrasting *ich glaube* and *glaube ich*) as well as Swedish data (about the similar marker *tror jag*, I believe).

To begin with, I examine the path from external to internal positional marking (Doherty 1985). I claim that there is a cline of grammaticalisation progressively turning first- and to a lesser extent second-person cognitive predicates

into epistemic parentheticals. Following Nuyts & Janssens, I show that traditional accounts are not sufficient to explain the formal evolution of those parentheticals, most notably word order.

Then, I suggest an alternative solution based on a parallelism between epistemic modal markers and quotatives in Germanic languages. The mental state predicate is progressively turned into a functional epistemic head and the personal marker gets cliticized. I show how this could explain the word-order phenomena observed in corpora, which are similar between quotative markers and epistemic heads (Engl. *I think / he said*, Germ. *glaub[e] ich / sagte er*, Sw. *tror jag / säger han*). This cline of grammaticalisation does not hold for French, neither for another kind of illocutive markers of Germanic languages derived from mental state predicates (e.g. Germ. *ich glaube*). Thus, I suggest there is a second path of grammaticalisation similar to the first classical scenario, so-called main clause reduction with complementizer deletion. This corresponds to the synchronic scenario proposed for German by Truckenbrodt (2006), according to which the illocutive force of the mental state predicate is absorbed by the former complement clause for reasons linked with the lexical meaning of those verbs. The corpus-based study shows that both kinds of markers are used in consistently different contexts in Germanic languages and thus should also be distinguished at the functional level. In French, only the second path is followed. I propose typological, syntactic reasons for the not-licensing of path 1 in that language.

I finally discuss the porosity between evidential and modal meaning in the grammaticalisation of mental state predicates. More especially, I show that the hypothesis of Path 1 is an interesting argument for those accounts that identify epistemic modality and evidentiality as two distinct, yet related subparts of the same epistemic complex (Boye 2010, but also Pottier 2001:200 ff.).

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## Intersubjectivity and inferential evidentiality: the case of Italian *sembrare*

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This contribution addresses the question how (inter)subjectivity patterns with the uses of the Italian appearance verb *sembrare* ('to seem'), with particular attention to inferential evidentiality, i.e. the indication of reasoning as an information source. Besides its resemblance and evaluative meanings, *sembrare* can be used as an evidential strategy to convey epistemically weak or strong inference, mostly, even if not exclusively, of the "experiential type" (Anderson 1986). Our analysis aims at determining the presence/absence of intersubjectivity in *sembrare*'s syntactic constructions as well as the relationship between this feature and the function of those constructions.

Among the wide variety of domain-bounded definitions of intersubjectivity provided in the last decade (Traugott 2010, Athanasiadou et al. 2006, Verhagen 2005, Bednarek 2006), our approach follows Nuyts' framework (2012), where the category is defined as "a matter of indicating whether the modal judgement is common between the assessor and the others" (2012: 58). This view, which differs from the previous formulation of (inter)subjectivity as a quality of evidence (Nuyts 2001, Cornillie 2007), disentangles the (inter)subjective dimension both from the reliability of the sources of information and from the speaker's commitment towards the likelihood of a state of affairs, thus providing a unified approach useful for the analysis of various values of *sembrare*.

Our study is based on the synchronic analysis of 2235 tokens of the verb in a mixed corpus of product and event reviews, editorials and forum posts (5.121.367 words). The choice of these text types is motivated by the fact that they provide a comprehensive overview of the different uses of *sembrare*.

The qualitative analysis of the tokens of *sembrare* shows a clear tendency for intersubjectivity and inferentiality to be associated. This appears most clearly when one considers the relationship between inferential meanings and the overt pronominal expression of a first person singular conceptualizer (*mi* ‘to me’). *Mi* is a strong indicator of subjectivity, which blocks any intersubjective reading. Inferential constructions (1884 out of 2235 tokens) are usually attested without *mi* and are intersubjective, while in the constructions in which the conceptualizer is explicit, the inferential values of *sembrare* tend to be overridden by other meanings: mitigation (Caffi 2007), especially in parenthetical *mi sembra*; evaluation (e.g. *Misembra una buona idea* ‘It seems a good idea to me’); personal sensations (*Misembra di essere un bambino* ‘I feel like a baby’); remembering as an information source (*Misembrache le chiavisanosultavolo* ‘It seems to me that the keys are on the table’).

In a discourse perspective, a possible explanation of these findings could be that the signaling of (experiential) reasoning as an information source be communicatively relevant above all in the context of argumentation (van Eemeren et al. 1996), where intersubjectivity – as opposed to subjectivity – is a precondition for persuasion and for the negotiation of shared standpoints. Research on the properties and functions of modals and inferentials in argumentation (cf. e.g. Rocci 2012) is needed to lend additional support to this hypothesis.

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## ‘Anaphoric’ vs. ‘deictic’ inferential evidentials

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Among the standard meanings of the evidential domain, there are several meanings (or clusters of meanings), distinguished by Aikhenvald (2004), Levin-Steinmann (2004), Wiemer and Plungjan (eds.) (2008) etc.: for instance, inferential (‘the information is inferred by the speaker from some other pieces of information’); reportative (‘the information is received from another person’); quotative (‘the information is a direct citation of other person’s statement’); auditive (‘the information is received from some sound evidence’) – and, sometimes, other meanings, not to forget about the direct evidentiality when the speaker observes the situation directly.

In my talk, I will introduce an opposition which is relevant for description of inferential uses. The information which serves as a basis for the inference can either be denoted in the pre-text (in this case, I speak of ‘anaphoric inferential’) or simply be present in the deictic speech act context (this we call ‘deictic inferential’) – the terms are chosen to be parallel to anaphoric vs. deictic uses of pronouns like *this*.

For instance, the Russian inferential units *poxože* ‘likely’ and *kažetsja* ‘seemingly’ differ, among other things, in that only *poxože*, but hardly *kažetsja*, can serve as an anaphoric inferential marker. For instance, if I enter the room and see empty bottles, I can simply say ‘It seems that someone had a party here’ using either *poxože* or *kažetsja*:

- (1) a. *Poxože, tut by-l prazdnik-Ø.*  
likely here be-PST-SG.F feast-SG.NOM  
‘It seems that there was a feast here.’
- b. *Kažetsja, tut by-l prazdnik-Ø.*  
seemingly here be-PST-SG.F feast-SG.NOM  
‘It seems that there was a feast here.’

This is a context of deictic inferential: the situation which serves as a basis for the inference is not expressed but is present in the context.

On the other hand, sentences meaning something like ‘There are so many bottles! It seems that someone had a party here’ are of the anaphoric type (the basis of the inference – ‘There are so many bottles’ – has been formulated in the pre-text – ‘It seems that someone had a party here.’). In this case, though *kažetsja* can be used, these examples are highly infrequent in the Corpus (the Russian National Corpus, [www.ruscorpora.ru](http://www.ruscorpora.ru), is employed) and sound rather awkward. In contrast, *poxože* is very frequent in this context. Thus, *poxože* can be used either anaphorically or deictically, while for *kažetsja*, the anaphoric use is rare.

- (2) *Kak mnogo butylok-Ø!*  
 how many bottle-PL.GEN  
*Poxože, /* *??Kažetsja,* *tut* *by-l* *prazdnik-Ø.*  
 likely / seemingly here be-PST-SG.F feast-SG.NOM  
 ‘There are so many bottles! It seems that there was a feast here.’

In contrast, there are units that tend to be used anaphorically, while the deictic one is rare. One of these uses in Russian is *vidno* ‘apparently’. It is mainly used in contexts like (2) – only one use like (1) is found in 100 first examples in the Corpus.

The meaning of the distinction introduced for other languages will be shown in the talk which will be based on corpus data of Arabic, Bulgarian, English and French.

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## Evidentiality, subjectivity and grammaticalization: one case study on perception verbs in European Portuguese

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This paper proposes to make a thorough description of one case study, systematizing data and presenting an explanatory framework for its functioning in European Portuguese. As object of study, a type of idioms (like *cheira a esturro* ‘I smell a rat’, ‘it smells fishy’), which may use three verbs of perception (*cheirar* ‘smell’, *saber* ‘taste’ and *soar* ‘sound’), was selected. The forms under study mark the distance between the enunciator and what he says, through the assignment of information to an inferential reasoning (cf. Guentchéva, 1995).

The proposed case study aims at showing that verbs of perception are, in European Portuguese, privileged markers of inferential mediative value (as it is defined by Guentchéva, ed., 1996). It is also noted that the relation between perception and cognition, while fitting into a general tendency of semantic change (cf. Sweetser, 1990; Traugott, 1989), is reducible to an invariance in the functioning of the linguistic forms, which allows plasticity that results from the interaction with other values underlying utterances (cf. Culioli, 1986). Thus, the constructions in question serve to provide plausible explanations, assumed as such by the enunciator, who keeps a distance in relation to their content and avoids validating them as strict assertions, modalized as certain.

In order to understand the functioning of these constructions, this study proceeds to a corpus research and analysis that seeks to account for the involved types of structures and inferential, metaphorical and subjectivity values. Finally, it explores how their occurrence in these idioms can reinforce the hypothesis that these verbs present evidence of a process of grammaticalization in progress.

The data come from a collection of newspaper texts, compiled under Linguateca project ([www.linguateca.pt](http://www.linguateca.pt)), integrated into The Clef Initiative. Thus, as the study focuses on idiomatic expressions in attested occurrences, the corpus consists of opinion texts, commentaries and letters from readers, with the ensuing consequences. On the one hand, their absence from informative texts shows the weak assertive value of these expressions, which reinforces the initial premise that the analysis of the marking of inferred facts cannot generally ignore the epistemic attitude of the enunciator towards the propositional content of the utterance. On the other hand, the less formal speech style promotes the emergence of more unusual and freer structures that allow realizing semantic change directions and simultaneously measuring the plasticity of forms.

In addition to the linguistic analysis, the use of quantitative methods allowed us to assess the frequency of use of each of the verbs in question. The fact that some are more common than others appears to be related to the degree of subjectivity (cf. Nuyts, 2001) inherent to different perception verbs (cf. Ibarretxe-Antuñano, 1999; Sweetser, 1990; Viberg, 1982; Whitt, 2011).

Therefore, in this study a transcategorial analysis is privileged aiming to clarify how different linguistic categories interact in the construction of utterances and enunciative values.

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## A corpus-based analysis of quotatives in English and Russian

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In this paper I propose to investigate the usage of quotatives (cf. Buchstaller and van Alphen 2012) and quoting or reporting strategies (cf. Aikhenvald 2004) by younger speakers in both Russian and English, using data from a recent corpus (LiveJournal), as well as some data from older corpora for comparison (RNC, COCA, BNC). In particular, I plan to focus on the usage of *go* in English (especially the simple present, e.g. *And then he goes*, “*Are you nuts?*”) and the reduced forms *grju/grit-gyt/grjat* (< *govori*’) “say” in Russian (e.g. *A ja grju, ne mogu, ne emši, grju* “And I say, I can’t, not having eaten, I say” [Viktor Astaf’ev, *Car’-ryba*, RNC]). Quotative *go* and *grju/grit-gyt/grjat* share certain features that make a contrastive study interesting: they are typical of the informal spoken register (unlike *say* or the full forms of *govorit*’, which can occur in formal registers as well), and they are both finite verbal forms (in contrast to the markers *like* and *all* in English or *mol* and *deskat*’ in Russian [cf. Plungjan 2008]). They do, however, differ in certain important ways, e.g.: *govorit*’ is a verb of speaking (a common source for quotatives or evidentials), whereas *go* is a verb of motion; *go* is more marked stylistically, often perceived to be typical of teen talk (although at least past tense *went* is attested in a similar but not identical usage in Dickens; see the online *OED* [Crystal 2012]), whereas *grju/grit-gyt/grjat* is more neutral; *grju/grit-gyt/grjat* can occur without an overt subject (to be expected, given Russian’s pro-drop capacities), an option not open to *go*; and finally, *grju/grit-gyt/grjat* often functions as a parenthetical and can easily be interposed in the quoted material, whereas *go* shows a strong tendency to precede the quoted segment. Despite these differences, the use of these forms as quoting strategies is comparable in the two languages.

This study differs from earlier studies in the direct comparison between the English and Russian quotatives using corpus-driven methods. Building on earlier studies (e.g. Grenoble 1998, Buchstaller 2002, Vandelenotte 2012), I will map out the uses of these quotatives and identify their similarities and differences. The principal data are extracted from the LiveJournal corpus (Speelman 2005, Glynn 2012), which is ideally suited to the study at hand, since it includes a British, American, and Russian component. The corpus consists of online personal diaries written mostly by young students, and is thus a thematically homogeneous corpus which allows for comparison among stylistically similar texts. There are approximately 200 occurrences of the Russian quotative and 100 of the English in both the British and American sections.

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## The epistemic origin of complementizer like

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The conjunction *like* in sentences such as *It looks like it's going to rain*, plays a fundamental role in the expression of evidentiality, in connection with the verb *look*. As this use of *like* has been considered incorrect and proscribed in style books for decades (see for instance Meyers, 1995), it has not received much attention in grammars of English. Quirk et al. (1985: 1033), however, have noted that this conjunction is often used in connection with verbs like *look*, *sound* and *seem*. In addition, Bender and Flickinger (1999) and Lopez-Couso and Mendez-Naya (2012a, 2012b) have demonstrated that *like* acts as a complementizer in this syntactic context.

In this paper, I propose an explanation for the high compatibility between *like* and evidential verbs. Based on the *Corpus of Historical American English* (Davies, 2010-), I suggest that this complementizer may have derived from the grammaticalization of the epistemic adjective *like* meaning *likely*. Given the semantic opacity of this rather rare adjective, cases of extraposition in which *that* is omitted (*it + evidential copular verb + like<sub>ADJ</sub> + Ø P*) were reanalysed as containing an overt complementizer, *like*. This bridging context thus made it possible for sentences such as (1) to be reinterpreted as sentence (2):

- (1) It looks like<sub>ADJ</sub> [Ø it's going to rain]. (≈ That it's going to rain looks likely.)  
 (2) It looks [like<sub>COMP</sub> it's going to rain]. (≈ It looks as if it's going to rain.)

In the *Corpus of Historical American English*, there are indeed many occurrences exhibiting this bridging context, in which it is often impossible to ascertain the grammatical status of *like*.

This hypothesis on the origin of *like* would help to understand why it displays such a strong bias towards the expression of epistemicity in structures involving evidential copular verbs. In order to test this hypothesis, I have compared the proportion of *like* after evidential copular verbs, as opposed to other contexts, in the 19<sup>th</sup> century and in the late 20<sup>th</sup> century. The results tend to confirm that *like* was primarily used after these verbs, before being extended to other syntactic functions (i.e. to introduce a manner adjunct, e.g. *He strides in like he owns the place*. or a disjunct, e.g. *I could see him scringe, like he thought the bullet was in him*.)

This hypothesis also helps to explain the success of *like* over *as if* in these structures in everyday English. In keeping with the iconicity of language, *as if* is less apt to express evidentiality than *like*, because its two morphemes explicitly encode that 'a parallel is drawn with something that is disconnected from reality', with *as* signaling Similarity and *if* encoding an Irrealis value (Kortmann, 1997: 159). Conversely, the epistemic origin of grammaticalized *like* makes it a more appropriate way to express evidentiality. *Like* therefore fills a gap in the language by offering an alternative to *as if*, which tends to be perceived as too counterfactual to combine with evidential verbs.

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## Constructing social relations in an online community: Social rank and intersubjective effects on stance

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The purpose of this study is to investigate the role of (inter)subjectivity in epistemic and evidential expressions, more specifically, in the epistemic mental predicate *think* and the evidential perception verb *seem*. We claim that the lexico-grammatical choices that encode epistemic stance are determined, in part, by intersubjective sensitivity of the social roles of the speaker and the addressee. In other words, subjectivity is partially determined by intersubjectivity.

The degree of subjectivity in an expression of stance is dependent on a range of factors. One factor is the presence or absence of an evidential qualification. Perhaps the most salient example is *I think* (Persson 1993, Aijmer 1997, Kärkkäinen 2003). Consider the following examples:

- (1) I think that's a bit of an exaggeration.
- (2) I think only one person on here has got tickets to the AA final.

Nuyts (2012) would argue that in expressions like (1), the primary reading is subjective rather than some estimation of commitment, which is present in (2). In addition, what makes (2) less subjective than (1), is the presence of an evidential qualification, which indicates that the speaker has some grounds for assessment. In such evidential verbs as *seem*, subjectivity is even more reduced, as these expressions are primarily associated with the type of evidence speakers have for what they are saying. This study accepts such notions, but seeks to show that speakers' awareness of the effects social hierarchy has upon the expression of stance plays a crucial role. Evidence for this will be found in such factors as the constructional choice of the verb, degree of commitment of the complement clause, and most importantly, in the differences between social ranks. In concrete terms, the hypothesis predicts that higher social rank motivates greater attention to evidence as a marker of reliability, while lower rank prompts increased subjectivity.

The corpus for the present study is compiled from an online bulletin board. In order to permit the investigation of the relationship between (inter)subjectivity and social power, members of the community are divided into three hierarchical ranks based on their activity and status on the board. Consequently, 754 examples of *think* and *seem* are extracted from the board. The examples are then annotated for a range of semantic, pragmatic and social factors. With the adoption of profile-based usage-feature analysis (Geeraerts *et al.* 1994, Gries 2003), it is possible to capture the interdependency of these factors and determine the degree of subjectivity across three different ranks. The study also employs mixed-effects ordinal logistic regression analysis to model the interaction of these factors.

The initial results of the study demonstrate that social rank is closely correlated with degree of subjectivity, and that the sender-addressee relationship is an important factor in determining the subjective dimension of epistemic and evidential verbs. In other words, the degree of subjectivity of a given proposition is encoded differently, depending on the relative social rank of the interlocutors. This effect of social rank on subjectivity strongly suggests that it is an intersubjective effect, and that although such factors as epistemicity and evidentiality play a part in the degree of subjectivity, this is relative to the intersubjective sensitivity of the speaker-addressee dyad.

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## Hedges and tweets: Certainty and uncertainty in epistemic markers in microblog feeds

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Researchers traditionally employ oral and written data for their studies, yet within the past twenty years, new fields of data have become available via the Internet. As language is in a constant state of flux, tools now enable researchers to take advantage of large data that show real-time usages and changes in language; these changes have also resulted in the creation of new language analytical tools. Many internet microblogs require interlocutions made in abbreviated forms, these though can result in fuzzy issues that consequently lead to constructs being misinterpreted, and when considering the geo-spatial and socio-cultural tones of postings there is a potential for confusion. This study's aims are two-fold. The first underscores the need to understand how a microblog's limited word amounts affect the dialogic interaction of stance, and the second provides a look at how visual analytics can provide new insight into the dynamics of stance in discourse.

This synchronic dialogic study of epistemic stance markers utilizes microblog data connected to the pre- and post-release of the long-awaited movie, *The Hobbit: The Desolation of Smaug*. We address the question of how hedges, e.g. markers of uncertainty, are composed in our microblog data, and how visual analytic tools help to further our understanding of this phenomenon. Our analysis is couched in DuBois' (2007) stance framework of evaluation - position - alignment; furthermore we describe hedges as "an unwillingness to make an explicit and complete commitment" (Hyland, 1998, p.3), i.e. "I hope that", "I had hoped that", "I think it might", "I wasn't sure if", etc. By analysing the interlocutor's expectations of the movie, we found that hedges were used to mark uncertainty, and subsequent posts aligned or deviated from these expectations, even in these shortened, and sometimes unusual, forms of dialog.

Methods used combine data analyses of epistemic hedge markers and visual analytics to study how microbloggers use this interactive yet very abbreviated mode of communication to convey hedges. We employ traditional concordance tools resulting in textual data as well as visual images to examine the collected data. These same data are subsequently analyzed within a separate, prototype visualization tool. Overall, this contribution constitutes the first attempt to automatically examine stance-related phenomena, by employing a refined corpus of microblog posts gathered from a truly large-scale dynamic data set and analyze the results with a multi-faceted visual analytical tool that gives a new awareness to how the phenomena of stance is expressed and negotiated in microblogs.

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## Hearsay particles in Polish: between textual distribution and semantics

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The paper addresses the variation observed in semantic-pragmatic features of propositional modifiers indicating hearsay in Polish (*rzekomo*, *jakoby*, *podobno*, *ponoć*). These hearsay markers have been claimed to carry epistemic overtones by which the actual speaker transmits his/her doubts into the content of the message referred to. Wiemer (2006) arranges them according to degrees of epistemic strength on the following scale:

<i>podobno/ponoć</i>	<i>jakoby</i>	<i>rzekomo</i>
'I think that P might be not true.'	'I think that P can be not true.'	'I think that P is not true.'

However, the paraphrase of *rzekomo* seems to be too strong: there are many corpus examples for *rzekomo* not indicating the speakers belief that the referred information is false (cf. Stępień 2010:53f., Socka 2011). On the other hand, conspicuous differences persist between the discussed particles in terms of the following textual properties:

- frequency in different text types,
- preferred syntactic structures for each of the hearsay particles,
- preferred positions of these particles with a sentential and a narrow scope, respectively
- frequency and manner of mentioning the original speaker in the context
- preferred topics and functions of the hearsay particles in newspapers, literary fiction and parliamentary debate.

Accounting for these properties can make particular meaning components more accessible and consequently help in describing the meaning of each lexeme adequately. The aim of this paper is thus twofold. Part 1 aims to demonstrate properties mentioned above by corpus research based on the National Corpus of Polish (NKJP). Part 2 aims to propose, based on these findings, a modified meaning description for each of the hearsay particles.

I will argue that the meaning difference between *jakoby* and *rzekomo* consists not primarily in the degree of expressed doubt, but rather in a further component which is a part of the meaning of *rzekomo*, while *jakoby* is unmarked with respect to this. The component can be paraphrased by ‘I cannot know that P’ and conceptualized as a sort of origo-exclusiveness or distance (cf. Diewald/Smirnova 2010) between an origo (the judging instance, most often the actual speaker) and the described state of affairs. Due to this meaning component *rzekomo* is typically used when

- the context information identifies the proposition in the scope of *rzekomo* as undoubtedly false.
- the speaker reports criminal cases which are still *sub judice* and refrains from making judgments.
- the truth cannot be ascertained because of a space or time distance.

*Rzekomo* owns the distance meaning as a default, independent of the context, but an appropriate context can cancel it. Thus, it is a generalized conversational implicature in the sense of Levinson (2000). At the same time both *jakoby* and *rzekomo* carry an epistemic potential and share the hearsay meaning component with *podobno* and *ponoć*.

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## Causal descriptions versus judgements: Markers of evidentiality and attitude in German online reviews

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In related earlier research, Stede and Peldszus (2012) introduced a corpus of German hotel reviews that have been assembled from an internet site. Their focus of interest was on causal/argumentative connectives, which would mark

- either a **description** of a causal event complex (“objective”)
 

[*Das Restaurant war schon geschlossen,*] *darum* [*blieben wir hungrig.*]  
 (‘The restaurant was already closed, so we stayed hungry.’)
- or a **justification** of a hypothesis/belief (“subjective”)
 

[*Ich werde das Hotel nicht mehr buchen,*] *denn* [*es ist viel zu teuer.*]  
 (‘I won’t book that hotel again, because it is way too expensive.’)

The authors first semi-automatically identified all such connectives, and then manually annotated the spans linked by each connective, as indicated by [] in the examples. Furthermore, all spans were then manually labelled with an *illocutionary role*. The inventory of these roles is a small modification of the inventory of Schmitt (2000), who conducted - to our knowledge - the first larger corpus study on identifying and labelling illocutions in (German) monologue text. Specifically, we used these labels: Report / Report-Author / Identify (author conveys personal feelings) / Evaluative (directed toward an external object) / Estimate / Commitment / Directive / Hypothetic-Situation

The annotation guidelines for the illocutionary roles provided only functional descriptions; they did not provide lists of linguistic elements that would typically signal the respective illocution at the text surface. Therefore, it is in retrospect possible to systematically investigate the correlation between such signals and the annotated illocutionary roles. That is the step we are undertaking now on the Stede/Peldszus data: In the same set of connectives and their arguments, we are marking all linguistic markers of *appraisal* (roughly following the subclassification of Martin/Rose 2003 into *affect, judgement, and appreciation*) and of evidentiality (understood as the strength of a belief

etc.) Once this annotation is complete, we will calculate the mapping between these markers, the illocutionary roles, and the connectives.

In the earlier work, preferences had already been found for certain connectives to co-occur with certain illocution pairs. This is partly in line with a lot of earlier research (e.g., Pasch 1982) that distinguishes “objective” causal connectives in German (predominantly *weil*) from “subjective” or “argumentative” ones (predominantly *denn*). One interesting feature of the corpus, though, is the - in comparison to newspaper text - high frequency of the connective *da*, being used both in objective and subjective contexts, which is not in agreement with traditional linguistic views.

In the same way, we now expect to find tendencies for linguistic markers to signal specific individual illocutions. In particular, we are interested in the correlations between illocution types and the various “illocutionary force indicating devices” (IFIDs, see e.g. Liedtke 2001), which include mood and modality, modal verbs, and the variety of particles that are especially important in German for conveying nuances of attitude.

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## A three-dimensional model of social cognition in language

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The main question of this paper is: “How to construe the relationship between speaker- and/or hearer-oriented meanings on the one hand, and those associated with other subjects of conceptualization on the other?”. A special case is the relationship between first and second person present tense instantiations of Complement Taking Predicates (CTPs, e.g. *I think, you know*) and other ones (*The manager had thought..., Almost everybody knew...*). Traditional answers differ in terminology, but they generally assign them to different conceptual types, the first “subjective” and the latter “objective” (Benveniste 1958), or “performative” and “constative” (Austin 1962), respectively. More recently, some scholars have proposed that CTPs *in general* should be considered subjective (Thompson 2001, Diessel & Tomasello 2002) or intersubjective (Verhagen 2005) expressions. Others maintain and extend the traditional distinction (e.g. Nuyts 2001), or argue for unification in the opposite direction, albeit in different ways (Boye & Harder 2007, Langacker 2009, Vandelanotte 2009, Newmeyer 2010). Vandelanotte, for example, argues (Ch.8) that first person expressions like *I think* may have pure representational uses, and in fact always exhibit *some* “descriptive” value in comparison to an epistemic modal adverb like *maybe*.

I will argue that the positions proposed all suffer from similar deficits: evidence supporting one position is only accommodated in the other position in an artificial way. The source of the problems is an implicit presupposition: that the ‘triadic’ nature of human communication (Tomasello 2008) suffices for the characterization of advanced social cognition. A triad implies a space of two dimensions: 1) the relation between the communication participants, 2) the relation between these and an object of joint attention. The role of other conceptualizers is hard to integrate in such a model, and creates unnatural dilemma’s (less subjective automatically has to mean more objective, and the other way around). The solution is to treat the relationships between conceptualizers in a discourse as a separate dimension, orthogonal to the triangle of elementary communication. The advance from communication involving only speech act participants to communication involving ‘others’ not only implies a shift from “simple syntax” to “serious syntax” (Tomasello 2008) but also entails a more drastic conceptual shift. The minimal configuration is then no longer a triad but a ‘tetrahedron’, i.e. a three-dimensional structure.

By means of an in-depth analysis of some instances of use in discourse, I will show how this proposal provides a general framework allowing for a natural account of the conventional semantics and specific applications of different types of epistemic, evidential and evaluative constructions within a language as well as between languages. The functional characterization of complementation (in languages that have it) turns out to be dependent on a general phenomenon observable in language use (e.g., epistemic judgments such as expressed by the single lexical item *maybe* may also be attributed to other conceptualizers than the speaker/, though such a usage is not generally considered ‘less subjective’), and across linguistic structures in various languages (cf. Evans 2010).

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## The epistemic, inferential and face-saving properties of the Russian parentheticals *možet (byt')* and *naverno(e)*

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This presentation discusses the various kinds of conventional and contextual meanings and their properties of the two Russian parentheticals *možet (byt')* 'perhaps' and *naverno(e)* 'probably'. My framework is cognitive-functional, and as a background study, I refer to the results of my typological study of epistemic modality and inferentiality, based on the sample of 130 languages. The data of this presentation consist of approximately 1000 utterances containing *možet (byt')* or *naverno(e)*, and they are collected from the corpus of Russian literature, the Fowler Database, located at the University of Helsinki Language Corpus Server. Russian has several parenthetical expressions, indicating epistemic or inferential meanings. In the Fowler Database, *možet (byt')* and *naverno(e)* are the most frequently occurring parentheticals of this kind. These expressions also stand out from the other epistemic and inferential parentheticals for their fine-grained range of meaning potential (cf. Langacker 2006), consisting of conventional and contextual meanings.

I will address the following questions:

- (1) What kinds of meanings of *možet (byt')* and *naverno(e)* can be distinguished?
- (2) How can these meanings be described?
- (3) How can the differences in the meaning potentials of *možet (byt')* and *naverno(e)* be explained?

On the basis of a detailed contextual analysis of the uses of these expressions, I will argue that the prototypical meaning of *možet (byt')* is purely epistemic 'possibility', whereas the prototypical meaning of *naverno(e)* combines the epistemic property 'probability' with the inferential property 'non-specific inference'. However, contexts surrounding the expressions can trigger specific inferential properties. For example, a frequently emerging property 'inference from memory' covers inferences made on the basis of previous experience, general knowledge, or intuition. Another frequent property 'inference from results' encompasses inferences based on observable or tangible results of some previous situation. Both the purely epistemic and various kinds of epistemic-inferential meanings represent the speaker's attitudes, and they can be interpreted as subjective (cf. Traugott 2010). In the interactional parts of the texts, the parentheticals often indicate the speaker's attention to the addressee's face, especially in requests, suggestions (*možet (byt')*), offers, and invitations (*naverno(e)*). These meanings are intersubjective (cf. Traugott 2010). In the description of different meanings, I will use the epistemic parameter 'degrees of certainty', the evidential parameter 'sources of information', and the notions of face-negotiating theory (Ting-Toomey 2005). More generally, the diverse face-saving uses of the two parentheticals are discussed considering some current issues in the study of the notions of face, facework, and politeness (e.g. Watts 2003, Haugh 2009).

The differences between the two parentheticals in the expression of inferentiality can be explained in terms of focusing. In the inferential usages of *možet (byt')*, inferential properties remain in the background, whereas *naverno(e)* foregrounds both 'probability' and some type of inferential property. The notion of focusing, as well as (in-

ter)subjectivity, represent construal phenomena (e.g. Verhagen 2007). The face-saving differences between the markers are explainable by means of the orientation towards the addressee's autonomy face (*možet (byt')*) versus inclusion face (*naverno(e)*).

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## Evidentiality, (inter)subjectivity, and genre variation in English and German: A diachronic corpus-based investigation

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Evidentiality – the linguistic encoding of a speaker or writer's evidence for a proposition – has gained prominence in linguistics since the early 1980s. As a social phenomenon, evidential markers play a key role in establishing a speaker's credibility both within the discourse context and the larger discourse community. Although most studies on evidentiality have focused on languages in which speaker evidence is encoded in verbal morphology (Aikhenvald 2004), investigations into evidential markers (such as perception verbs (*see, hear*), commissive verbs (*promise, threaten*), adverbs (*supposedly*)) in English and German are not lacking, and most of these studies focus on genre-specific contexts of modern-day usage (Chafe 1986; Katelhön 2001; Hyland 2005; Bednarek 2006).

Some attention has been paid to the development of evidential markers in the history of English and German (Gisborne & Holmes 2007; Diewald & Smirnova 2010; Whitt 2010), particularly within grammaticalization studies (Brinton 1996; Traugott 1997), as well as in diachronically-oriented studies on the connection between discourse context and marking of information source (Taavitsainen 2001; Grund 2012). Nevertheless, several issues remain unaddressed: varying uses of the same evidential marker in diverse discourse contexts (genres); changing uses of evidential markers within a single genre and among different genres in the histories of English and German; and possible connections between processes of grammaticalization, subjectification, and genre-specific uses of evidential markers.

This paper provides a first step in addressing these issues in the historical study of evidential markers and their evolution in English and German. Focusing on verbal realizations of evidentiality, I will examine the influence of the larger discourse context on the use of evidential markers from the Early Modern period onwards, and see whether particular types of evidentiality (perceptual, mediated, inferential) are more frequent in certain genres, and social contexts, than others (legal vs. literary, scientific vs. religious, etc.). Since evidentiality is a highly subjective phenomenon because it rests solely in the speaker's or writer's point-of-view, it is predicted that the genres that display more overt presence of speaker or writer (e.g. the use of first-person pronouns) will exhibit a higher degree of evidential phenomena than those genres touted as more objective and distant from any one individual's perspective. In a similar vein, genres involving some form of speaker-hearer or writer-reader interaction (such as dramas, sermons, and educational texts) will contain additional shades of intersubjective meaning (or "engagement" in Hyland's 2005 discussion; cf. Whitt 2010, 2011). And as generic styles change over time, so will the nature of evidential marking. Data will be drawn from a number of multi-genre diachronic corpora of English and German (Helsinki, ARCHER, GerManC).

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**WORKSHOP:****FROM METHODOLOGY BACK TO THEORY: HOW DO CURRENT EMPIRICAL METHODS FEED BACK INTO LINGUISTIC THEORY?**

Convenors: Fabiszak, Małgorzata (Adam Mickiewicz University, Poznań; University of Vienna); Hilpert, Martin (Neuchâtel University); Krawczak, Karolina (Adam Mickiewicz University, Poznań; Neuchâtel University)

**General description**

Recent work in cognitive-functional linguistics has increasingly turned towards a *usage-based* understanding of language, and it treats its object of study as *heterogeneous, usage-conditioned, semantically motivated, and context-dependent* (e.g., Geeraerts 2010). Given these assumptions, variation and change, along dimensions such as semantic structure, sense relations, grammatical patterns, or socio-cultural and contextual profiling, constitute an inherent characteristic of language. This development has brought with it the adoption of variationist corpus methods, which yield descriptively precise, predictive, and falsifiable findings. The proposed theme session addresses the question how these methodological innovations feed back into cognitive-functional theory. Are the empirical results being taken up to refine theoretical notions, or to re-think linguistic concepts?

The organizers of this theme session hold that the answer to this question is in the affirmative. The empirical tools currently employed in usage-based linguistics are extensive and have been successfully applied in synchronic and diachronic variational linguistics (e.g., Geeraerts *et al.* 1994; Heylen 2005; Gries 2006; Divjak & Gries 2006; Gries and Hilpert 2008, 2010; Hilpert 2008, 2011, 2013; Hilpert and Gries 2009; Glynn 2009, 2010; Divjak 2010; Szmrecsanyi 2013; Fabiszak *et al.* 2013). Methods such as Correspondence Analysis (Glynn In press), Cluster Analysis (Divjak & Fieller In press), Multidimensional Scaling (Cox & Cox 2001), Motion Charts (Hilpert 2011), Logistic Regression Analysis (Speelman In press) are well-suited to address many of the open questions in usage-based linguistics: What is the exact role of frequency and repetition? How is knowledge of abstract syntactic constructions organized? How do we model lexical variation in a usage-based, socio-cognitive framework? What is the relation between conceptual structure and socio-cultural profiling? Questions such as these are commonly touched on by empirical studies, but perhaps the link to theoretical issues could be stressed more prominently than it has been done to date.

The contributions in this theme session will address these and other pertinent questions, focusing on both lexical and grammatical aspects of usage-based variational linguistics. Each contribution will emphasize how its empirical results serve to inform a problem of theoretical relevance.

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## Constructional construal of predicative adjectives for SHAME in English: A multifactorial usage-based approach toward *of/about* complement alternation

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This study is a multifactorial corpus-based analysis of an adjective-based construction alternation. Predicative adjectives denoting SHAME take a range of complement clauses, two of which are particularly difficult to disambiguate: [COP + SHAME ADJ + *about* + Cause] and [COP + SHAME ADJ + *of* + Cause]. The goal is to identify the formal and semantic variables determining the choice of the constructions with a view to revealing their prepositional semantics.

In the literature juxtaposing the two prepositions, *of* is understood as having a schematized meaning that denotes an “intrinsic relationship (...) between its trajector and landmark” (Langacker 1999: 76; Taylor 2002: 325), whereby the complement is “integrated” into the event in a “focused” manner (Lindstromberg 2010: 206f.). The conceptualizer’s attention zooms in on the object of the relation in a selective and short-lived way (Dirven et al. 1982: 27; Lindstromberg 2010: 207). *About*, on the other hand, is characterized by “dispersion”, which, in its figurative uses, concerns “mental motion on topics” (Rudzka-Ostyn 2003: 180ff.). It marks indeterminacy (Dirven and Radden 2007: 329) and imprecision (O’Dowd 1998: 65) and is both conceptually and temporally extended in its profiling of the complement (Dirven 1982: 60, 62).

The present study will take these descriptive assumptions about the nature of the prepositions and test them by employing multivariate methodology, thus contributing quantitative evidence to their semantic description in the context of predicative adjectival constructions for SHAME. More specifically, it examines the problem from a constructional perspective (Goldberg 2006) and uses quantitative profile-based methodology (Geeraerts *et al.* 1994; Gries 2006; Divjak 2006; Glynn 2009). This profile-based method annotates a large sample for a range of structural and semantico-pragmatic usage-attributes. This detailed manual annotation is designed to quantitatively identify the attribute-values that determine the alternation. Multivariate statistical methods (exploratory: Multiple Correspondence and Cluster Analysis; confirmatory: Logistic Regression Analysis) are then employed to reveal the constructional usage patterns and ascertain the predictive power of the attribute analysis, and therefore the descriptive accuracy of the proposed attribute value matrix.

600 occurrences of each construction, instantiated with *ashamed*, *embarrassed* and *guilty*, were extracted from the LiveJournal corpus (Speelman 2005) as well as online blogs and manually annotated for a range of formal (complement length; complement form) and semantic usage features (complement semantics; temporal scope of the complement designating the cause of the shame emotion; complement profiling; complement specificity). Multivariate statistical analysis was then applied to identify usage patterns and determine their descriptive and predictive accuracy. To avoid the possible impact of the adjectival exponents of SHAME on the structuring of the data, the adjective was treated as a random factor in the Logistic Regression Analysis, which is an unorthodox and novel solution to the problem.

The results reveal, in a statistically significant and predictive model, that the *of* construction tends toward more concrete objects related to the here and now of the interactive situation, while the *about* construction licenses more abstract and elaborately profiled objects designating causes that originate in the past. It is thus demonstrated that the nature of the complement (concrete vs. abstract) plays an important role in the alternation, which is a factor that has not been posited yet. Overall, these findings add empirical evidence that supports the conceptual claims about how *of* imposes a restricted and focused construal on the object, while *about* construes its complement in a more extended manner.

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## The development of English noun-participle compounding: a corpus-based and theory-informed study

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This paper addresses the recent history of noun-participle compounding in English. Forms such as *theory-informed* or *corpus-based* combine a noun and a past participle. This compounding strategy is recognized in overview works on English word formation (Marchand 1969, Fabb 2001, Plag 2003, Bauer 2006); major descriptive grammars of English (Biber et al. 1999: 534, Huddleston and Pullum 2002: 1659, Quirk et al. 1985: 1577) present it as a highly productive word formation process that is said to be based on the passive voice: A phrase such as *a government-funded project* thus corresponds to a passive sentence such as *The project has been funded by the government*. The central questions of this paper are (1) how noun-participle compounding has developed over the past two centuries, (2) if these changes are related to changes that have been going on in the English passive, and (3) whether these developments instantiate grammaticalization.

There is some initial evidence to suggest that noun-participle compounding are, in synchronic usage, independent from the English passive. First, not all passive sentences have counterparts in idiomatic noun-participle compounds, consider for instance unattested formations such as *?car-transported* (*The cargo was transported by car*) or *?guest-preferred* (*The guided tours were preferred by the guests*). Second, forms such as *Atlanta-based* or *work-related* do instantiate noun-participle compounding, but these formations correspond to predicative constructions (*The company is based in Atlanta; The problem is related to work*) similar to the German *Zustandspassiv* (Eisenberg 2006), rather than to canonical passive sentences. What is unclear is if these more problematic examples represent a recent development or whether they are in fact central members of the constructional category.

The data for this study is taken from the COHA (Davies 2010). Noun-participle compounds were retrieved exhaustively along with their frequencies of use from the 1810s to the 2000s, yielding roughly 30,000 types and 100,000 tokens. It was determined for all participle types in noun-participle compounds how frequently they appear in the COHA with the English passive. The analysis compares the observed frequencies over time, contrasting noun-participle compounding with the passive. The data shows that noun-participle compounding has undergone a substantial increase in both token frequency and type frequency, as well as changes in the frequencies of its participle types. None of these developments are paralleled by changes in the passive.

The developments of noun-participle compounding could be interpreted as signs of increasing grammaticalization, especially host-class expansion (Himmelmann 2004), increasing text frequency (Bybee 2007), and semantic bleaching (Sweetser 1988). In contrast to this, it will be argued that the developments of noun-participle compounding are more fruitfully accounted for as a case of constructional change (Hilpert 2013).

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## Form, meaning, and the individual mind: What speakers' eyemovements can reveal about the nature of linguistic meaning

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In this paper we report findings from a study on variation in the linguistic construal of spatial scenes by speakers of German. Starting from the assumption that different spatial language constructions realize different attentional construal meanings (cf., e.g., Verhagen 2007), this study used a visual world eye-tracking paradigm (cf., e.g., Hartsuiker et al. 2011) to reveal possible relationships between speakers' choice of construction for scene description and their oculomotor behaviour when looking at these scenes.

It was predicted that uses of dimensional adjective-plus-noun constructions of the type *in der vorderen rechten Ecke* ('in the front right-hand corner') realize more strongly *object-focused* construals of their referent scenes and thus correlate with stronger deployment of attention towards object-specific information than uses of dimensional adverb constructions of the type *vorne rechts* ('front<sub>ADV</sub> right<sub>ADV</sub>'), which were assumed to construe their referent scenes in a more strongly *space-focused* manner (cf., e.g., Carroll 1993).

Interestingly, this prediction received support only from within-speaker comparisons, that is, from speakers who variably made use of either of these two construction types in the course of the experiment and who could thus be assumed to possess equally strongly entrenched knowledge of both constructions. In contrast, no differences in oculomotor behaviour were found when the comparisons were made between groups of speakers who consistently used either dimensional adverb or dimensional adjective-plus-noun constructions and who could thus be assumed to have strongly entrenched knowledge of only one of the two construction types.

We take the results to mean that particular construction types may not be considered to be conventionally, and thus more or less stably, associated with particular (construal) meanings in a particular speech community, but that the realization of these meanings is crucially dependent on the presence of competing constructions in *individual* speakers' cognitive contexts.

With regard to theory formation in usage-based cognitive linguistic frameworks, our findings may indicate, firstly, that the aspect of contrast and thus the principle of the differential nature of the linguistic sign (Saussure [1916] 1986) might constitute a central organizing principle of individual linguistic knowledge, and, secondly, that construction-associated meanings might be more strongly individual-specific and thus less strongly conventional than the findings from many (quantitatively focused) usage-based investigations might suggest.

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## The historical dynamics of metaphor

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Within cognitive linguistics it has often been pointed out that the Conceptual Metaphor Theory as originally proposed by Lakoff and Johnson (1980, 1999) lacks the historical dimension (cf. Bernárdez 2007, Grondelaers and Geeraerts 1995). Some attempts to investigate the diachronic variation in metaphorical linguistic expressions – or more specifically their mutation in new genres has been made by Semino (2011, Semino – Deignan – Littlemore 2013). Also Musolff (2004) looks at the historical evolution of the body-politic metaphor. Other attempts looked at the metaphorical conceptualization of emotions in earlier stages of English (Fabiszak 2001, Fabiszak and Hebda 2007, 2010, Gevaert 2005, Tissari 2001, 2006).

The present project aims at implementing the framework of evolutionary linguistics, successfully applied to phonological change (Ritt 2004), to **study how metaphors emerge in language use, how they spread through communication, and how and why they achieve (or fail to achieve) stability in historically developing speaker populations**. Croft (2006) claims that language evolution takes place in two stages: innovation and propagation. Innovation is defined as “‘functional’, in that it arises from the relationship between linguistic form and its meaning or function” (p. 124), while propagation is social. This paper specifically focuses on the second – propagation stage of metaphor evolution and analyses frequencies of metaphorically used expressions following Stefanowitsch’s (2006) metaphor pattern analysis. As within evolutionary linguistics the replicating competence constituents (here the conceptual metaphors) are characterised by longevity, fecundity and copying fidelity we will need to operationalize these notions in corpus linguistic terms. Fecundity is understood as the frequency of metaphorical linguistic expressions; longevity – evidence of use of metaphorical linguistic expressions while copying fidelity will be related to the number of linguistic expressions expressing the same conceptual mapping (but see the reservations of Zinken (2007) about subsuming various linguistic representations under the same mapping). In a pilot study employing the COHA data on MIGRATION IS MOVEMENT OF WATER metaphor, the competition between two metaphorical patterns: (1) movement of migrants is flow of water and (2) migrants are a reservoir (of cheap labour) has been investigated. At the linguistic level they were represented by such expressions as *flow/ wave/ stream/ flood/ tide/ in-flux/ swell/ floodgates/ of \*migrant\** and *absorb\* of \*migrant\**. Two hypotheses were posited for verification. Hypothesis 1: Pattern 1 will increase relative to Pattern 2 in time of war and economic crisis. Hypothesis 2: Pattern 1 will decrease relative to Pattern 2 in times of economic prosperity. The predicted correlation between relative frequencies of use and the selected historical events has been observed. We interpret it to mean that the variation in the use of the two metaphorical variants is evidence of the influence of selectional restrictions (here: socio-political and economic context) exerted on the fecundity of specific patterns of use, favouring the replication of the best-fit metaphor.

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## The cognitive plausibility of statistical classification models: an overview of experimental validation studies

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A much debated topic in both the generative and usage-based camps concerns the question of how frequency estimates arrived at on the basis of corpora relate to experimental findings (see, for example, the discussion in Featherston 2005, Kempen & Harbusch 2005, Arppe & Järvikivi 2007, Divjak 2008, Schmid 2010). Corpus-derived frequencies are not always good predictors for off-line acceptability ratings; this is considered as potentially problematic for usage-based accounts since it is generally assumed that the two are strongly correlated.

Our study links in with the above-mentioned, long overdue discussion of the type of frequency measures we need (to develop) to capture linguistic knowledge in cognitively realistic ways. Focus is on two synonymous Estonian locative constructions, the adessive case construction and the adposition *peal* 'on' construction. The paper compares the results of a distinctive collexeme analysis (DCA) (Gries and Stefanowitsch 2004), carried out on 9087 extractions from the fiction and newspaper sub-corpora of the 15 million word Balanced Corpus of Estonian with a forced-choice task and a Likert scale rating experiment. In our study, we test whether corpus-derived frequencies as estimated by the DCA are good predictors for the acceptability ratings and the actual choices made by native speakers.

In a pilot study we focused on a subset of 12 out of the 182 different collexemes found in the corpus data and asked 22 native speakers of Estonian to rate sentences on a 5-point scale. It was predicted that the 4 distinctive collexemes for the adessive case construction receive higher ratings when combined with the adessive case as opposed to the adposition *peal* 'on'. Similarly, it was predicted that the 4 distinctive collexemes for the adpositional construction receive higher ratings when combined with *peal* 'on' as opposed to the adessive case. Finally, the 4 lexemes not distinctive for either construction were predicted to receive equally high/low ratings with the two constructions. However, in all experimental conditions, it was the adessive case construction that received a significantly higher rating compared to the adpositional construction.

This result suggests potential problems with the accuracy of DCA for predicting acceptability ratings. It is therefore argued that a different type of frequency data is called for in order to capture linguistic knowledge in a more cognitively realistic way. Recent studies demonstrate the potential of frequency-derived conditional probabilities (Divjak & Arppe 2013). In order to validate the results of the pilot study and the preliminary conclusions drawn from it, a series of more carefully designed experiments is carried out.

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## Modeling frequency effects on the usage of sentence-internal capital letters in Early New High German

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The increasing use of sentence-internal capital letters during the Early New High German period has already been documented in a series of corpus-based studies. Bergmann/Nerius (1998), using one of the most extensive databases (a corpus of printed texts), can be considered as representative of the approach used in studies involving the analysis of factors responsible for the spread of capital letters. On the lexical level, Bergmann/Nerius analysed the variation between upper and lower case considering one hybrid factor, a combination of part of speech and semantically motivated subcategories (geographical names, nomina sacra etc.). Frequency effects have not been taken into account.

In our project, we first apply multiple factors to elucidate the usage of capital letters found in protocols of witch trials (1565-1665) (Macha et al. 2005). More precisely, in our analysis we systematically combine cognitive-semantic (animacy, individuality and referentiality) and syntactic factors (part of speech, syntactic functions, phrase structure). In contrast to previous studies, we furthermore concentrate on frequency effects. Since usage-based theories show that frequency is an important factor in language change (e.g. Bybee 2010), it also has an effect on the explanation of historical data, which is biased regarding the behavior of frequent items (see Barth/Kapatsinski 2013). Our talk will focus on frequency effects. A first evaluation shows a negative correlation between type frequency and usage of capital letters, which could be explained by a conserving effect impeding the spread of capital letters. But is frequency best understood as directly affecting the extent of capital letter usage, or could its effect better be seen as limiting the variation of high-frequency tokens, thereby having only an indirect effect on the spread of capital letters?

By fitting two mixed-effect models (Baayen 2008, Ch. 7) with the same independent and different dependent variables to the data, we want to investigate direct and indirect effects. Both models will use 1) the category proposed by Bergmann/Nerius, 2) a differentiation between animate and inanimate items, 3) the frequency of particular lexemes in the protocols – the text type dependent frequency, 4) the frequency of particular lexemes in the Bonn Corpus of Early New High German – the overall frequency, and 5) the point in time as predictors. As a dependent variable, we use the relative frequency of capital letters for a lexeme in the first model, thereby modeling direct effects and, the absolute value of the deviation of this relative frequency from the overall proportion as reported by Bergmann/Nerius in the second model, thereby modeling indirect effects.

The models and comparing them will tell us: 1) if and how frequency takes effect as a direct and/or as an indirect factor in the spreading of capital letters, 2) if and how high and low frequency items differ in their development, and 3) how frequency and the other factors interact. Overall, the results will offer us valuable clues on the role of frequency in language change.

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## The causative continuum revisited: A multifactorial analysis of causative constructions in European languages

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### Introduction

This study focuses on the factors that determine the use of lexical and analytic causatives, which are illustrated by (1a) and (1b), respectively:

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

It has been suggested that the division of labour between these two options can be explained by the iconicity principle (Haiman 1985): lexical causatives convey more ‘direct’ causation with a stronger conceptual integration of the cause and effect, whereas analytic causatives express indirect causation (e.g. Dixon 2000; Shibatani & Pardeshi 2002). However, according to other proposals (Haspelmath 2008), more frequently occurring, ‘natural’ events have more basic, unmarked forms, whereas rare events are encoded with the help of more complex forms. This leads to an alternative hypothesis that more frequent causation events should be encoded as lexical causatives, and less frequent ones should be expressed analytically. Nowadays, with the help of mixed-effect modelling and a large multilingual corpus, it is possible to disentangle these and other factors in predicting the speaker's choice between the constructions.

### Data and method

We use a self-compiled corpus of aligned subtitles of films of different original languages and genres. The choice of data is motivated by the maximal closeness of subtitles to spoken data in comparison with other available multilingual parallel texts (see also Brysbaert & New 2009). We will also demonstrate that translation effects and spatiotemporal restrictions in subtitling have less dramatic effect on the use of causative constructions than one might expect. The corpus includes both original and translated dialogues in 20 (Indo-)European languages. All cases of analytic causatives and a sample of lexical causatives are extracted semi-automatically from all originals and translations. The exemplars are coded for the type of causative construction and a number of semantic and usage variables, such as the semantic classes of the arguments, as well as the absolute and relative frequencies of the causative expressions in monolingual subtitles (Tiedemann 2012). Our statistical analysis is based on a mixed-effect logistic regression model (Baayen 2008) with the above-mentioned predictors as fixed effects and the type of causative as the response. The multilingual exemplars and languages are treated as random effects.

### Preliminary results

Our preliminary results suggest a complex interplay of the semantic, usage-related and language-specific factors. In accordance with the iconicity hypothesis, interpersonal causation, which is usually indirect (see Verhagen & Kemmer 1997), boosts the probability of analytic constructions. At the same time, frequency is the most significant predictor in the model. This shows that the previous theoretical accounts should be regarded as complementary rather than competing.

Our statistical method also allows us to pinpoint cross-linguistic differences in the division of labour between the constructional types. For example, French has the highest preference for the analytic construction (*faire* + Inf) among all selected languages. We try to provide an explanation of this and other findings by considering the syntactic and semantic peculiarities of the constructions in different languages.

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## Verb constraints on argument structure and generalized constructional patterns: Evidence from Spanish

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Particularly one aspect of the encoding of argument structure in Spanish (and other languages, e.g. Romance languages, Hindi and Turkish) makes it different from argument structure in Germanic languages: Spanish argument structure is verb constrained to a much higher degree (e.g. Author a, b, c, d, e; Goldberg 2006; Martínez Vázquez 2001; Mendivil 2003; Narasimhan 2003). In contrast to, for instance, English, Spanish verbs only occur in constructional environments in which their lexical semantics match the intended constructional meaning. No lexeme-

construction mismatch is allowed as exemplified in (1), in which a Spanish atelic manner of motion verb (*bailar*) is unsuccessfully used in a construction of directed telic motion:

- (1) \*Pedro *bailó* a la playa  
Pedro danced to the beach

This evidence highlights the different role the verbal lexeme may have in the grammar of argument structure in different language types. From a constructionist perspective, it raises an important theoretical question: what is the role of generalized constructional form-meaning patterns (schematic argument structure constructions) in clausal meaning construction if, as in Spanish, information about the intended skeletal meaning basically is provided and constrained by the verb?

I addressed this question in a large quantitative corpus study (annotated section of Modern Spanish in CE, approx. 20 mill. words) in which I examined occurrences of motion verbs in a transitive constructional environment, as exemplified in (2):

- (2) Pedro *cruzó* la calle  
Pedro crossed the road

The data were analyzed in terms of verb-construction association in standard collocation analysis (Stefanowitch & Gries 2003). The analysis showed, as expected (cf. the first paragraph), that transitive path verbs of directed motion – such as *cruzar* ‘to cross’, *atravesar* ‘to cross’, or *rodear* ‘to go around’ – represent the prototype (association measure  $p \approx 0$ ) of the matching transitive construction. Interestingly, it also showed that in some cases of strong association ( $p \approx 0$ , or  $p < 0.001$ ), the transitive construction is not predictable from the verb lexeme (e.g. *subir* ‘to move up’, *bajar* ‘to move down’, *saltar* ‘to jump’, *caminar* ‘to walk’). In these cases, the meaning of directed motion is provided by an intransitive motion verb in a mismatching transitive construction, as exemplified in (3):

- (3) Pedro *bajó* la escalera (corriendo)  
Pedro went (down) the stairs (running)

In the talk, I will, from a constructionist point of view, discuss how to interpret these findings as evidence of the role of generalized constructional patterns in the encoding of Spanish argument structure, as opposed to, e.g., English argument structure.

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## Constructional contamination effects. Evidence from mixed-effects logistic regression modeling of the Dutch partitive genitive

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Deflection has been rampaging in the history of Dutch, but in this long-term process, the genitive proves to be remarkably resilient. One of the tenacious relics is the partitive genitive of the type ‘iets moois’ (‘something beautiful’). The construction has drawn a lot of scholarly attention (Schultink 1962: 79-80; Kester 1996: 199-224; Broekhuis & Strang 1996; Hoeksema 1998; Booij 2010: 223-228; Broekhuis 2013: 420-426), but these accounts are mostly based on limited amounts of data, often gathered through introspection, yielding an oversimplifying description of the ins and outs of the construction. In our talk, we argue that the realisation of the genitival -s morpheme is subject to variation, and is influenced by both morphosyntactic factors and ‘lectal’ (i.e. regiolectal, register ...) factors. Taking a usage-based perspective, we argue that the variation cannot be circumvented in providing an adequate description (see also Bybee 2010; Geeraerts & Kristiansen, forthcoming). Our study is the first to bring to bear substantial

empirical data to the theoretical discussion on the construction at issue. We looked at corpus data (ConDiv, see Grondelaers et al. 2000), and used mixed-effects logistic regression to assess the multifactorial nature of the realisation of the partitive genitive. Our results show that the following variables have an impact on the realisation of the -s: the type of adjective, the regional variety, the register, the type of quantifier used, and the frequency of the phrase. We also looked at interaction effects and at the effect of the random factor in our model. Probing deeper into the relevant variables, we come up with statistical evidence for what can be called ‘constructional contamination’, in the form of (i) analogical influence of neighbouring constructions and (ii) influence of the regiolectal provenance of the lexical types involved. What we mean by (i) is that historically unrelated constructions that bear a superficial resemblance to the construction at issue (in our case an adverbial construction with similar surface realisation: ‘ietsbelangrijks uitleggen’ (‘explain something important’) vs. ‘ietshelder uitleggen’ (‘explain something clearly’)) can exert an influence on how the target construction is realised. What we mean by (ii) is that the regional provenance of constituting parts (i.e. lexemes) in a construction can exert an influence on the morphological realisation of the target construction, even if the construction is used by language users with a different regiolectal background. In our study southern speakers have a stronger tendency to drop the genitive -s, but less so when they are using ‘northern’ lexemes, and vice versa. This effect holds even if the regional provenance of the lexemes is subtle, and unlikely to be a shibboleth of a regionally recognisable type of speech. This all goes to show that, in line with exemplar-based theories of language, prior use of constructions leaves a (context-rich) trail in the mind of the language users.

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## WORKSHOP: INFORMATION STRUCTURE MEETS GENERATIVE SYNTAX

Convenors: Tajsner, Przemysław; Cegłowski, Piotr; Bogucka, Jadwiga; Wiśniewska, Agata (Adam Mickiewicz University, Poznań, Poland)

### Session description

For the last thirty years or so, the categories of Information Structure such as *focus* and *topic* have been incorporated into the mainstream of generative syntactic research. Starting with *focus* and *presupposition* (Chomsky 1972, Jackendoff 1972), dwelling on the insights of traditional Prague and London Schools' functional approaches, generative linguists have thought of the ways in which pragmatically-oriented categories of information structure could be coded in formal syntax.

The GB approaches to focus and topic have resulted in establishing a set of descriptive and explanatory statements on their nature and characteristics from a generative perspective. One line of research has aimed at defining the formal exponents of the displacement processes, such as Topicalization and Clitic Left Dislocation (Chomsky 1977b, Cinque 1983, 1990, Lasnik and Saito 1992). One of the questions was whether a topicalised phrase moves to a specialized position to the left of the subject, gets adjoined to a clausal projection, or is base-derived in its superficial position. Another was how to delimit formal, morphology-driven instances of Move  $\alpha$  from superficial PF-driven rearrangements (scrambling, extraposition). A key point was also to define how Topicalisation differs from Focus Movement in structure, prosody and function (Vallduví 1988).

The GB interest in focus started with Chomsky's (1976, 1981) observation that focus is constrained by WCO, like QR and wh-movement are. This led to the development of a view that focus structures involve the formation of operator-variable scope relations at LF. A line of further developments adopted a movement approach to focus based on feature checking (Horvath 1986, Brody 1990). An extension of such ideas has been the formulation of the Focus Criterion (Horvath 1995) by which there is a [+Focus] feature checkable by a focused phrase positioned in the Spec. of Focus Phrase at LF, at the latest. A remarkable counter-proposal is Rooth's (1992), whose framework of Alternative Semantics rejects an LF movement approach to focus both on conceptual and empirical grounds.

A somewhat independent line of research has centered around the problem of the unity of the phenomenon of focus. Kiss (1998) argued for the partition of focus into informational and identification foci. The former is an instance of in-situ focus involving plain new information interpretation. The latter is ex-situ (involving overt focus fronting) and entails exhaustive (or contrastive) interpretation. Kiss (1998) adapted the semantics of Rooth's (1992) framework to a movement approach (like Brody's 1990). A suggestion of a tripartite partition of focus is present in Rooth (1992), whose theory accounts for the cases in which focus is "shifted" to a new position, but leaves new information and contrastive foci aside (cf. Zubizarreta 1998).

A parallel set of proposals presuppose a form of "PF-coding" of focus, so that its placement and distribution are tackled from the perspective of syntax-phonology interface. Some fruitful lines of argumentation in this vein have been offered in terms of Nuclear Stress Rule (Halle and Vergnaud 1987, Cinque 1993, Zubizarreta 1998, Szendrői 2001, Zubizarreta and Vergnaud 2005, Reinhart 2006, Adger 2007). A common denominator of such approaches is, roughly, a view that there are two ways in which focus may be marked phonologically: (i) the unmarked case when focus overlaps with nuclear sentence stress and falls on the most deeply embedded constituent of sentence structure, and (ii) the marked case, when focus shifts to a different position and some special mechanism has to apply to overrule the effect of NSR. A way to account for the phenomenon of focus projection (available for information focus only) in terms of "PF-coding" has been offered by Reinhart (2006).

The development of the cartographic approach to focus and topic was heralded by the proposals of Pollock (1989) and Belletti (1990), who argued for splitting IP into smaller domains. This was followed by the proposals of Rizzi (1997) to split the CP into an array of dedicated functional heads: Force Top Foc Top Fin. The empirical basis for such a move has appeared to be compelling: numerous languages feature overt left-bound topic and focus positions. There is a question of the universality of the cartographic template, however. A number of proposals have been suggested to adjust the cartography of left-periphery cross-linguistically (e.g. Kiss 2003, Belletti 2004, Rizzi 2004, Green 2007). Moreover, a new take on sentence cartography has been offered by Boeckx (2008), who treats sentence hierarchies in terms of extended projections (Grimshaw 1990).

As noted by Chomsky (1995), the properties related to information structure had for long been "swept under the rug" by mainstream generative research. A central place for such considerations has rather naturally emerged within the minimalist framework. On the one hand, the coding of focus and topic in the grammar may be seen as a way of meeting the Interface Condition. On the other hand, the duality of semantics, emerging from splitting Merge into Ex-

ternal Merge (responsible for argument structure) and Internal Merge (responsible for “marked” interpretation) designates the latter as the domain for considerations of focus and topic (along with, e.g. Wh-movement). A conceptual variant of cartography within Minimalism is Chomsky’s (2001) proposal to multiply Specifiers of CP and relate topic and focus to two (un-interpretable) edge features of C.

That the question of the relation between narrow syntax and information structure remains a theme of a lively debate and ranks high on the generative (both minimalist and non-minimalist) agenda has best been proven by the quality and quantity of recent contributions in the field. Most of these are constructively critical with respect to many of the above presented mainstream views. One area subjected to particularly strong critique is the postulate of sentence cartography with dedicated heads for focus and topic. A significant collection of views alternative to sentence cartography has been offered in Craenenbroeck (ed.) 2010 (Bouchard 2010, Neelman et al 2010, Wagner 2010, Abels 2010). Other critical contributions on focus and topic include Newmeyer (2003), Lopez (2009), Horvath (2007, 2010), Fanselow and Lenertová (2011), Vermeulen (2010), to name just a few.

The aim of the workshop is thus to review the relationship between narrow syntax and information structure by discussing new data and proposals focusing on the following (and related) problems:

- What’s the empirical, cross-linguistic coverage for focus and topic?
- Are there features [+Foc] or [Top] in the derivation?
- Is focus fronting movement for focus, or for contrast ?
- Is there covert focus fronting?
- Is there just one focus position in sentence structure?
- What’s contrastive topic?
- Is there left periphery of nominal projections?
- Is there evidence for Information Structure - sensitive extraction from nominal projections?
- Is topic quantificational?
- How are topic and focus related to predication?
- Are topic and focus movements sensitive to islands?
- What’s the prosody of focus and topic?

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## Discourse functions in *wh*-questions or why syntax does not feed the information module

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Currently, the most influential approach to information structure (Cartography, Rizzi 1997) posits movements of the phrases bearing discourse functions to devoted positions, driven by discourse features such as topic, focus etc. However this view has been recently challenged by authors that try to expel pragmatic features from syntax (Horvath 2010) and show that the word order can be explained by the means of other constraints such as Relativized Minimality (Neeleman and Vermeulen 2012).

In this paper, I shall follow the latter view, with important changes, though. Horvath 2010 defends that discourse functions come in two types: those encoded as truth-conditional features in syntax (e.g. exhaustivity) and those arising at the interface (e.g. contrast). Here I claim that they can be treated in a more uniform way: They are all interpretively derived at the interface between semantics and information module on the basis of truth-conditional features encoded in syntax. There are four features, triggering movements to devoted positions. Thus, I keep some intuitions from Cartography, though limiting them to a minimal set of positions.

- 1) The phrases located in the left periphery of the clause never bear a single discourse function, but rather always carry a bundle of features such as [topic+aboutness] or [focus+contrast]. (topic = old information; focus = the informational part of the sentence). Since there are topics and foci appearing lower in the structure, at the vP edge (see among many others Jayaseelan 2001), the features [topic] and [focus] (let us call them so for the moment) must be checked there, and the features [aboutness] and [contrast] in the CP domain. This makes the prediction that there should not be languages that allow for sentences with both a contrastive and an information focus, which is borne out.
- 2) No position is devoted to a discourse function. Rather, a projection hosting topics etc. also hosts phrases bearing other (non-informational) functions. As shown by the position wrt to the underlined adverb in French, *whP in situ* (1) and focused XPs (2) stop at the vP-edge in some languages rather than actually being *in situ* (when preceding, *souvent* is a *local* focus particle). This projection cannot be devoted to focus. It has a functional head bearing a feature common to foci and *whPs*. I tentatively propose that the head against which foci and *whPs* check their features is an operator of [assertion].

(1) √Vous	écoutez	(?souvent)	<b>quoi</b>	√ <u>souvent?</u>
(2) √Vous	écoutez	(√souvent)	<b>du jazz</b> <sub>[foc]</sub>	√ <u>souvent.</u>
you	listen to	often	what/jazz	often

Following the same methodology, I show that [topic] is substituted for [presupposition], [aboutness] for [veridicity], and [contrast] for [alternation]. Note that contrastive topics, contrastive foci and *wh*-items exclude each other in *wh*-

questions, which suggests that they share a feature. As it is responsible for the question semantics, I propose [alternation], which accounts for *wh*-movement to the CP domain. We end up with **four features**, all semantic and truth-conditional, thus making uniform the cause of  $\bar{A}$ -movements.

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## Net-VP-ellipsis and across-the-board scrambling in Russian

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This paper investigates the interplay between coordinate ellipsis and word order in Russian. I show that there is a requirement on information structure parallelism that becomes manifest in word order restrictions. The particular ellipsis construction that I'm focussing on is *net*-VP-ellipsis (*net*-VPE). It is ellipsis that involves clausal coordination, where the VP in the second conjunct is substituted with a predicative negative word *net* 'not':

- (1) Vanja čital knigu, a Maša – net  
 Vanya read book, but Masha not  
 'Vanya read the book, and Masha didn't.'

Russian has moderately free word order. Scrambling, which is rather pervasive, is motivated by information structure (IS) demands, like topicalisation and focalisation (Dyakonova 2009). Topic normally appear clause-initially, while foci are clause-final. In addition to word order, focus is encoded by intonation | focal stress (pitch accent).

In general, a simple transitive sentence consisting of a subject, a verb and an object (e.g. *Vanja čital knigu*) allows all 18 logically possible permutations (six word orders by three pitch accent placements). However, in a *net*-VPE sentence the freedom in the first clause is suddenly reduced: only seven variations seem perfectly acceptable; five variations are out; the remaining six vary in their acceptability (and show greater variation between speakers).

I argue that the key to this problem lies in parallelism. The second conjunct in *net*-VPE has a rigid order (1): COORDINATOR SUBJECT PREDICATE, which in IS terms means that the subject is always the topic and the negative element is the focus. On the other hand, there is variation in the interpretation of the negative element: new information focus (2) vs. contrastive focus (3) (which suggests that contrastive foci in Russian don't obligatorily front, contra Neeleman et al. (2009)).

- (2) Knigu čital VANJA, a Maša – [net]<sub>F</sub>.  
 book read Vanya, but Masha not  
 'Vanya read the book, Masha didn't read it.'

- (3) Vanja ČITAL knigu, a Maša – [net]<sub>F</sub>.  
 Vanya read book, but Masha not  
 'Vanya read the book, and Masha didn't.'

The semantics of *net*-VPE is essentially that of contrast, viz. two individuals are contrasted w.r.t. having a certain property. Parallel information structure facilitates drawing that contrast, while radically different IS bleeds it. I show that topicalisation of the subject in the first conjunct is preferred, topicalisation of the verb is dispreferred. At the same time, there are factors, such as contrastive focus marking of the subject, that improve otherwise dispreferred orders. Moreover, certain configurations with the direct object fronted require a specific reading, whereby the object becomes a shared topic for the both conjoined clauses. I introduce the notion of across-the-board scrambling for this type of constructions.

These results do not necessarily indicate a particular syntactic representational level IS filter, but rather could be taken to illustrate syntax-pragmatics interface issues.

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## On unitary, clause-final focus and leftward movement for contrast and exhaustive identification. Counterevidence from Polish

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A cartographic view of sentence left-periphery has recently been subjected to a critique. Reviewing van Craenenbroeck (2009), Bailyn declares that the “overall picture that emerges for cartography is fairly bleak” (Bailyn 2011: 667). Two of the disputable points are: (i) the placement of focus in the left periphery, and (ii) the actual “trigger” for (alleged) focus fronting. For example, Neelman et al. (2009), argue for a uniform, sentence final position of focus, and instances of ex-situ focus are re-analyzed as movement for exhaustive identification or contrast (Horvath 2007, Neelman et al. 2009).

I present counterbalance to a few anti-cartographic points raised by Neelman et al. (2009) and Horvath (2007). First, I argue that the lack of co-occurrence of information and contrastive focus in Russian is not evidence for a single clause-final focus, but follows, more generally, from not meeting a condition on multiple focus (Rooth 1997, Krifka 1992, 2007, Hedberg 2012). The restriction is that each instance of focus in a clause needs a separate operator. If this obstacle is eliminated, two foci can co-occur in a clause, as shown by a Polish example (1) below:

- (1) A więc, nigdy nie słuchałeś pianisty w sali koncertowej?  
‘So, you never listened to a pianist in a concert hall?’
- (2) Pianistów JAZZOWYCH słuchałem ZAWSZE w salach koncertowych.  
pianist jazz (I) listened always in halls concert  
‘I listened to JAZZ pianists ALWAYS in concert halls.’

Next, I discuss the limitations of Neelman et al.’s argument for single clause-final focus based on the “reconstruction” of focused phrases under the scope of quantifiers, which is against general preference in Russian (and Polish) for quantifier scope mirroring surface order. Examples like (3) show that the tendency is reversed when the quantifier itself is contrastively focused, so the scope is  $\forall > \exists$ .

- (3) KAŻDY mieszkaniec naszego osiedla chciałbym, aby pomógł jednemu bezdomnemu (a nie tylko niektórym).  
Every resident<sub>NOM</sub> of our neighbourhood (I) would like that helped one homeless<sub>DAT</sub> (and not only some)  
‘I would like EVERY resident of our neighbourhood to help one homeless person (and not only some residents).’

Further, I show that split scrambling is allowed not only from the clause-final position and, finally, postulate an alternative to Horvath’s proposal of treating “focus fronting” as fronting for exhaustive identification and Neelman et al.’s approach taking it to be movement for contrast. I argue that the key aspect of derivations in such cases is the presence of an unspecified edge feature in the left periphery, present only if a new interpretive effect is to be achieved (e.g. Chomsky 1999, 2001). It is exclusively the role of the C-I interface to interpret the outcome of such a derivation as exhaustive or contrastive focus, or, e.g. contrastive topic. To substantiate the claim, I return to Horvath’s evidence from Hungarian and Neelman et al.’s data from Japanese and Russian and show how their anti-focus-fronting arguments may be discharged under the unspecified feature fronting alternative.

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## Elliptical *değil* 'not' in Turkish

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In this paper, I investigate the structure of *değil* 'not' in Turkish, and argue that it is never used as constituent negation (CN) syntactically. It cannot be combined with just any constituent in syntax. Its distribution is more restricted in the sense that it attaches to a position lower than TP in the hierarchical structure. The sentences in which *değil* seems to attach to smaller constituents such as AP, DP or PP are analyzed as elliptical coordination (Goksel&Kerslake 2005).

It has been suggested that among the two kinds of negative markers in Turkish, sentential negation (SN) is marked with the negative morpheme *-mA* on verbal items as in (1,a) while CN is marked with the negative particle *değil* as in (1,b) (Kornfilt 1997, McKenzie 2006).

- (1) a. Ali dün okul-a git-me-di-Ø-Ø.  
Ali yesterday school<sub>DAT</sub>. GO NEG. PST. Ø-COP.Ø-3SG. 'Ali didn't go to school yesterday'
- b. Ali okul-a değil iş-e git-ti-Ø-Ø.  
Ali school<sub>DAT</sub>. NOT work<sub>DAT</sub>. GOPST. Ø-COP. Ø-3SG. 'Ali went not to school but to work.'

Following Penka (2011), we argue that the terms SN and CN are problematic since they might refer to the syntactic position or wide vs. narrow scope of negation. The syntactic position of negation does not seem to be equal to the position in which the negation is interpreted in the semantic component (Kelepir 2011). Therefore, we deny CN in its syntactic sense, and propose that sentences like (1,b) are elliptical constructions serving an information structural purpose, namely, Contrast.

**Distribution.** The morphosyntactic distribution of *değil* suggests that it can never precede the copula as in (2,a) unless it is used as metatextual negation as in (2,a).<sup>2</sup> Also, there are certain TAM markers (i.e., the definite past -DI, the aorist -Ir/Ar, the modality markers -Abil and -mAll, and the optative -(y)A)<sup>3</sup> that are incompatible with *değil* as in (3) (Taylan 1986).<sup>4</sup>

- (2) a. \*Ali Dede yakışıklı-y-dı-Ø değil.  
Ali grandfather handsome<sub>COP</sub>. PST. Ø-3SG. NOT  
'It's not the case that the grandfather Ali was handsome.'
- b<sup>1</sup>. Ali Dede yakışıklı-y-dı-Ø değil çirkin-Ø-di-Ø de-di-m.  
Ali grandfather handsome<sub>COP</sub>. PST. Ø-3SG. NOT uglyØ-COP. PST. Ø-3SG. sayPST. 1SG.  
'I said the grandfather Ali was ugly, not handsome.'

- (3) \*Betül bisiklet-e bin -di/-er/-ebil/-meli/-e değil.  
Betül bike<sub>DAT</sub>. ridePST./AOR./ABIL./NES./OPT. NOT

*Değil* also functions in the following contexts; the so-called CN as in (4,a), tag questions as in (4,b), and the 'let alone' construction as in (4,c). It is clear that the contexts given in (4) all express Contrast.

- (4) a. Şeker değil çikolata sev-er-Ø -im.  
Candy NOT chocolate like<sub>AOR</sub>. Ø-COP. 1.SG.  
'I like not candy but chocolate.'
- b. Evde-Ø-sin, değil mi?  
Home<sub>LOC</sub>. Ø-COP.3.SG. NOT Q 'You are at home, aren't you?'

<sup>2</sup> See Kornfilt (1996) for further discussion on the copula in Turkish.

<sup>3</sup> The definite past and the aorist are compatible with *değil* in double negation contexts in which a verbal item inflected with *-mA* takes *değil* (Taylan 1986).

<sup>4</sup> We between *değil*'s peculiar morphosyntax and suspended affixation analysis presented in Kabak (2007).

- c. Değil partiye gitmek, dışarı çıkmak bile istemiyorum.  
 NOT party<sub>DAT.</sub> GOGER. outside GOGER. even want<sub>NEG.PRES-PROG.1SG.</sub>  
 ‘Let alone going to the party, I don’t even want to go outside.’

**Problem.** There is no detailed syntactic account of the CN *değil* in the literature. Based on the CN analyses on other languages (Klima 1964, Choi 2004) we argue against such an account for *değil* since the following properties of *değil*-marked sentences pose serious problems. If there is no contrastive pair, *değil* cannot attach to a syntactic constituent as in (5). Each member of the contrastive pair must “make the same kind of contribution to a common discourse topic” (Repp (2009:83)’s Principle of Balanced Contrast) as in (6). *Değil* does not necessarily attach to any syntactic constituent as in (7). *Değil* constructions also exhibit connectivity effects. The Case on a *değil*-marked item has to match with that of its contrastive-correlate as in (8). And finally, both strict and sloppy identity readings are possible in *değil* constructions as in (9).

- (5) a. \*Herkes değil gel-me-di-Ø-Ø.  
 Everyone NOT come<sub>NEG. PST. Ø-COP. Ø-3SG.</sub> ‘Not everybody came’.  
 b. \*Sen-in gül-me-ni değil isti-yor-Ø-um.  
 You GEN. laugh<sub>GER. 3SG. NOT want<sub>PRES.PROG. Ø-COP. 1SG.</sub></sub> ‘I want you not to laugh.’
- (6) \*Ali yarın değil Muş’a gid-ecek-Ø-Ø. (cf, Ali yarın değil Salı günü Muş’a gidecek.)  
 Ali tomorrow NOT Muş<sub>DAT.</sub> go<sub>FUT. Ø-COP. Ø-3SG.</sub>  
 ‘\*Ali is going to Muş not tomorrow.’ (cf, *Ali is going to Muş, not tomorrow but today*)
- (7) Kanuni Hürrem’-i değil İbrahim Paşa Mahidevran’-ı öldür-müş-Ø-Ø.  
 Kanuni Hürrem ACC. NOT İbrahim Pasha Mahidevran<sub>ACC.</sub> kill<sub>EVID. Ø-COP. Ø-3SG.</sub>  
 ‘(They say) İbrahim Pasha killed Mahidevran, but Kanuni not Hürrem.’
- (8) a. \*Aşçı kek-i değil salata yap-tı-Ø. (cf, Aşçı kek değil salata yaptı.)  
 The cook cake ACC. NOT salad make<sub>PST. Ø-3SG.</sub>  
 ‘The cook made not the cake but a salad.’ (cf, *The cook made not a cake but a salad.*)  
 b. \*Betül sınıf değil kafe-ye git-ti-Ø.  
 Betül class NOT cafe<sub>DAT.</sub> go<sub>PST. Ø-3SG.</sub> ‘Betül went to a café, not to a class.’
- (9) Ben değil Ali kendin-e kız-dı-Ø.  
 I NOT Ali self<sub>DAT.</sub> be-angry<sub>PST. Ø-3SG.</sub>

**Sloppy identity:** Ben kendime kızmadım. Ali kendine kızdı. (*I am not angry at myself, he is angry at himself*).

**Strict Identity:** Ben Ali’ye kızmadım. Ali kendine kızdı. (*I am not angry at Ali. He is angry at himself*)

**Proposal.** The traditional CN *değil* functions as contrastive and/or corrective negation, coordinating (at least) two conjuncts. *Değil* attaches to a lower position than TP since it never precedes the copula which occupies the T head in Turkish (Keleşir 2001). The contrastive items in each conjunct move to a left-peripheral position to mark Contrast. We will show that this movement is island-immune as in (10). After this movement, PF deletes the shared/redundant material in the conjunct marked with *değil*. Evidence in favor of this analysis comes from the fact that distinct adverbial items can modify each conjunct as in (11), and certain sentential coordinators such as *ama* ‘but’ and *fakat* ‘and yet’ can directly follow *değil* as in (12), suggesting that we are dealing with more than one verb in the so-called CN *değil* contexts.

- (10) Kitap değil ben-im defter al-dığ-ım çocuk fakir-Ø-di-Ø. (CNPC)  
 Book NOT IGEN notebook buy<sub>OBJ-RELAT. POSS-1SG.</sub> kid poor Ø-COP. PST. Ø-3SG  
 ‘The kid for whom I bought a notebook not a book was poor.’
- (11) (Anne, ban-a bu bebeğ-i al!) San-a bebeğ-i değil haftaya şu araba-yı al-acağ-Ø-ım.  
 (Mom, I<sub>DAT.</sub> this baby ACC. buy IMP.) You<sub>ACC.</sub> baby<sub>ACC.</sub> NOT next week that car<sub>ACC.</sub> buy<sub>FUT. Ø-COP. 1SG.</sub>

‘(Mom, buy this baby for me!) I will buy that car for you next week, but not this baby now.’

- (12) Bu sistem halk-ı değil (ama/fakat) halk-ın düşman-lar-ın-ı destekli-yor-ø-ø.  
 This system people<sub>ACC</sub>. NOT (but/and yet) people<sub>GEN</sub>. enemy<sub>PLU.POSS.ACC</sub>. support<sub>PROG</sub>. ø COP.ø-3SG.  
 ‘This system doesn’t support the people, but the people’s enemies.’

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## Information Structure – Sensitive (?) derivational extraction out of DPs in Polish

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The internal structure of nominals has been studied extensively (Szabolcsi 1983; Abney 1987; Grimshaw 1991; Longobardi 1994; Gavrusheva 2000; Bošković 2005a,b; Danon 2011; Pereltsvaig 2007; to name but a few). Among the most frequently debated questions is the phasal status of the DP and, what follows, the formulation of extraction mechanisms. Following the Phase Impenetrability Condition (Chomsky 1998/2000, 1999), extraction must proceed through phase edge. This should also be the case for *nominals*, assuming they are phases (cf. Matushansky 2005). The proliferation of DP-internal projections, couched in the idea of structural correlation between nominals and clauses introduces a complicating factor, i.e. the *multiphasal* structure of DPs, with non-trivial consequences for ‘deep’ probing:

- (1) X<sub>PROBE</sub> ... [VP V [VP V [DP ..... [FP1<sub>phase</sub> ..... [FP2<sub>phase</sub> .... [ Y<sub>GOAL</sub>]]]]]]]]

Whether X should be able to access Y remains a real puzzle. It may be that certain DP-related projections are added to the nominal constituent *after* it has left the VP, which requires a countercyclic version of Merge (cf. Sportiche 2003). An alternative would be to assume that certain DP-internal projections are transparent to probing as long as the features of their phasal triggers are not properly matched (‘feature percolation, cf. Bošković 2006). The proposal advocated in this paper is that movement from, say, FP2 (1) proceeds stepwise, targeting the phase edges up to the point in which it becomes transparent to external probing and is triggered by analogous features triggering the movement of the entire DP. On that scenario, it is to be expected that, under limited circumstances, extraction out of a DP would be possible once the DP has left its original position. To illustrate that this may indeed be the case, the paper examines cases of IS-driven extraction of classifying adjectives as shown in (2) below:

- (2) [płyn [hamulcowy<sub>APclass</sub>]] (brake fluid)  
 a. ?Tomek to nawet HAMULCOWY<sub>i</sub> by [płyn t<sub>i</sub>]<sub>j</sub> wypił t<sub>j</sub> (byle się upić)  
 Tom to.TOP even brake.FOC<sub>i</sub> by.COND fluid drink (only to get drunk)  
 b. ??/\* Tomek to nawet HAMULCOWY by wypił płyn  
 Tom would even drink brake fluid .....(only to get drunk)’

Interestingly, a non-alternating classificatory adjective<sup>5</sup> seems extractable only after the DP-container has moved forward. Thus, the adjective reaches the position in which it is visible to probing. On the proposal advanced here, the two movements work in tandem and have the same featural trigger (cf. Chomsky 2005). Once the DP is A’-moved to

5 Non-alternating post-nominal classificatory adjectives have been reported by Cetnarowska – Pysz - Trugman (2008) to form ‘tight units’ with the nominal predicate, i.e. [(43a)] [[N+Class]N + Num]. The fact that are within the nominal’s (strict) semantic grip (whole-to-whole relation) may be indicative of their early embedding.

the spec,vP position, the adjective (by now above a potential DP-internal phase-like category) is visible to outside probing (FOC<sup>0</sup>).

Apart from the description of some (Polish) language – specific facts, the line of argumentation presented here, if correct, might have interesting implications for the general view of extraction from nominal projections in that it provides further support for the relevance of an intermediate (extraction-related) site for DP arguments.

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## Exhaustive *to* and infinitives in Polish

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This paper presents a structural analysis of Polish sentences with the clause-initial *to* followed by an infinitive verb. A relevant example is presented in (1).

- (1) To CZYTAĆ Jan musi /będzie książki.  
*TO read Jan-NOM has to /will books-ACC*  
 ‘It is reading that Jan will/has to engage himself in.’

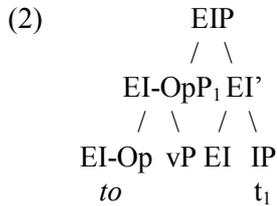
The analysis proposes a detailed account of the movement that takes place in (1) and yields an exhaustive interpretation. The Minimalist Program (Chomsky 2000, 2001, 2008) provides the theoretical basis enriched by Bošković’s (2007) explanation of motivation for movement.

In contrast to Tajsner (2008), it will be argued that the clause-initial *to* heads its own projection, namely an Exhaustive Identification Operator phrase (EI-OpP) originally proposed for Hungarian by Horvath (2010). In Horvath’s analysis the EI-OpP carries a valued formal feature called an exhaustive identification. The EI-OpP adjoins to a given projection which is pied-piped to the specifier of an Exhaustive Identification Phrase (EIP) in the left periphery.

Two modifications are introduced by us in Horvath’s analysis. The first change concerns the value of the [EI] feature on the EI-Op and an ensuing motivation for the movement to the Spec, EIP. The second change refers to the relation between the EI-Op and the focused phrase. It is assumed that the EI-Op is equipped with the unvalued [EI] feature and the head of EIP with the valued [EI] feature. The EPP feature, which is a motivation for the movement to the Spec, EIP in Horvath’s analysis, is replaced with the need of an unvalued probe to c-command a goal with a corresponding valued feature. The movement without the EPP feature is proposed by Bošković (2007).

According to Cable (2012), it is far from being justifiable to assume that a phrase bigger than an item with a relevant feature participates in a movement. It is argued here that the EI-Op is a head that takes a given phrase as its complement (see (2)). Together with the focused phrase, EI-Op forms one type of a phrase, namely EI-OpP, that moves to the Spec, EIP. If one assumes a head-complement relation instead of an adjunction relation as proposed by Horvath (2010), it is possible to explain why the movement affects both items, namely *to* and the focused phrase.

The analysis also tries to explain what exactly moves and why the presence of a modal/auxiliary verb is obligatory. As for the first question, on the basis of the tests originally applied to predicate clefting constructions by Bondaruk (2009), it is shown that in constructions like the one in (1) it is at least a vP that moves. The answer to the second query may lie in the status of the copy of the operator *to* which plausibly blocks affix hopping. As a result, only infinitives and not inflected verbs are observed in the left periphery. Modal/auxiliary verbs are needed to spell-out the agreement features.



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## Scrambling without information structure?

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Information structure (IS) is commonly assumed to cause word order effects like scrambling in German. IS factors were therefore introduced into syntactic derivations as IS heads (Foc<sup>0</sup>, Top<sup>0</sup>, Antifocus<sup>0</sup> etc.). However, specifiers have lost their privileged status as movement targets in current syntax, depriving these proposals of their theoretical appeal. Also, these proposals never made the right predictions anyway, as we show. We therefore reject cartographic scrambling analyses for German. Instead, our solution combines semantically driven movements with phonological spell-out operations.

Focused arguments in German allegedly cannot scramble to the left (e.g., Lenerz 1977 and many subsequent works). We show that receiving main stress (marked by CAPitals) prevents arguments from scrambling – not their discourse status *per se*. Arguments that are not *Given*, but unstressed, scramble across particles like *wohl*:

- |   |   |
|---|---|
| 1. Q: {What did you give to who?}             | <i>(focusses both objects)</i>              |
| A' #Ich habe dem Mann das GELD wohl gegeben.  | <i>(stressed object scrambles poorly)</i>   |
| A'': Ich habe dem Mann wohl das GELD gegeben. | <i>(unstressed object scrambles easily)</i> |

Similarly, topics have been argued to scramble obligatorily (cf. Meinunger 2000, Frey 2004):

- |  |   |
|--|---|
| 2. {Let me tell you something about Fritz.}            | <i>(Fritz contextually designated as topic)</i> |
| #Morgen wird wohl eine reiche Dame den Fritz heiraten. | <i>(topic is odd in-situ)</i>                   |

However, alternative options for stress placement allow topics to remain unscrambled:

- |   |                              |
|---|------------------------------|
| 3. {You know Fritz never had a girl friend? Well, let me tell you something NEW about Fritz:} |                              |
| Morgen wird wohl eine reiche Dame den Fritz HEiraten.   | <i>(topic is ok in-situ)</i> |

Therefore, prosodic (not discourse) properties control scrambling options – and IS heads make the wrong predictions wherever prosody and information structure do not go hand in hand. However, incorporating prosodic features into syntax causes architectural problems (*look-ahead*). We therefore propose the following:

I. For a semantic *effect on outcome* (*EoO*), arguments scramble freely (by *internal merge*, cf. Chomsky 1999):

4. (*EoO*: scope of *QP* over *Neg*) [QP [Neg [<sub>vP</sub> DP QP V] Aux]]]

II. Following Biberauer & Richards (2006), we assume that *vP* (rather than a *DP*) moves to *SpecTP* in German. PF spells out arguments in order to reflect the *EoOs*:

5. *Syntax*: Adv Aux [<sub>TP</sub> [<sub>vP</sub> DP QP V] [QP [Neg [<sub>vP</sub> DP QP V] Aux]]]]]  
*PF*: Adv Aux [<sub>TP</sub> [<sub>vP</sub> DP ~~QP~~ V] [QP [Neg [<sub>vP</sub> ~~DP~~ ~~QP~~ V] ~~Aux~~]]]]]  
*Example*: Dann würden [die]<sub>DP</sub> [alle Patienten]<sub>QP</sub> nicht<sub>Neg</sub> mehr heilen  
 ‘They would not heal any patients then.’ (∀¬)

Without *EoOs*, arguments inside *vP* can still spell out in *vP*'s leftmost copy for prosodic reasons – e.g., to place a contrastive rise contour (/SLASH) before the main stress:

6. weil [<sub>TP</sub> [<sub>vP</sub> ein einzelner Arzt /ALLEN Patienten ~~helfen~~] ja [NICHT<sub>Neg</sub> [<sub>vP</sub> ... helfen]] kann]  
 ‘because a single doctor will not be able to help all patients’ (¬∀: *QP cannot scope from inside vP!*)

Semantics therefore drives some scrambling cases (*EoO* movements) whereas PF controls other word order effects (spell-out operations). Scrambling can thus be explained by interface effects – in accordance with current aims in syntactic theorizing.

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## A unified analysis of Italian in-situ and left-peripheral contrastive focus

Samek-Lodovici, Vieri (University College London, UK)

I will claim, contra Rizzi (1997, 2004) and Belletti (2001, 2004), that Italian contrastive focus (CF) occurs in-situ. I will also provide evidence that left-peripheral instances occur when CF is extracted from discourse-given phrases targeted by right-dislocation (RD), as explained later below.

As I will show, the availability of in-situ CF is supported by sentences like (1) where the obligatory presence of neg-concord shows that the focused negative object is c-commanded at surface by the preceding negation and hence located lower than T (Zanuttini 1991, Cardinaletti 2001, Penka 2011). A left-peripheral analysis is excluded because it requires that the rest of the clause remnant-moves to a position before the object from which the surface c-command relation between negation and the negative object required by neg-concord cannot obtain.

(1) Gianni non ha visto NESSUNO<sub>CF</sub>.  
 John not has seen nobody

I will show that local movement to a TP-internal focus projection is also excluded. I’ll do so by examining new data like (2) and (3) below involving a negative subject that cannot undergo RD and must thus be located in-situ. When used as replies to statements like ‘nobody invited the Venetians’ both sentences involve a focused object. Crucially, the object may follow the subject in accord with in-situ focalization, see (2), but not move above it as would be required by movement to a TP-internal focus projection above VP, see (3). (Stress in capitals.)

(2) No. Non ha invitato nessuno i I MILANESI<sub>CF</sub>.  
*no. not has invited nobody the Milanese*  
 ‘No. Nobody invited the MILANESE.’

(3) \*No. Non ha invitato i MILANESI<sub>CF</sub> nessuno.

I will also argue, joining Samek-Lodovici (2006), that left-peripheral focus is a side-effect of RD, a well-known process that moves discourse-given phrases clause-finally (Cecchetto 1999, Cardinaletti 2002). Foci generated in a discourse-given phrase – as is possible under Schwarzschild (1999) – raise immediately above it before the latter undergoes RD. Since RD affects phrases of any category, left-peripheral foci should be found before phrases of different category, not just Samek-Lodovici’s TPs. I’ll present new data that confirm this prediction and the overall analysis. See for example (5)-(7) below, where the focused PP ‘da Roma’ respectively precedes the right-dislocated PP, VP, TP originally containing it in (4). Support for their right-dislocated status comes from the intonational break and pause preceding them and their inability to host negative phrases licensed by pre-focal negation.

(4) [Siamo [andati [via [da Firenze]]].  
*(We) are gone away from Florence.*  
 ‘We went away from Florence.’

(5) Siamo andati [da ROMA]<sub>CF</sub>, [PP via]<sub>RightDisl.</sub> (non da Firenze).

(6) Siamo [da ROMA]<sub>CF</sub>, [VP andati via]<sub>RightDisl.</sub> (non da Firenze).

(7) [Da ROMA]<sub>CF</sub>, [TP siamo andati via]<sub>RightDisl.</sub> (non da Firenze).

Finally, I will examine the theoretical consequences of the proposed analysis, including how the presence/absence of RD straightforwardly accounts for the subtle interpretative differences distinguishing left-peripheral from in-situ foci in Bianchi & Bocci (2012) and pre-focal from post-focal topics in Frascarelli & Hinterhölzl (2007).

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## English Verb-Phrase Preposing and Auxiliary Focus

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I argue that English Verb-Phrase Preposing (VPP), which results from *vP* movement to SpecTopicP, is information-structurally a *verum focus* (Höhle, 1992) construction. First, I show that both VPP (1a-b) and focus on the *in situ* auxiliary (1c-d) are infelicitous in the absence of an identical discourse antecedent for the main verb:

- (1) I told my boss I was going to quit today.  
 a. And quit I did.  
 b. # And resign I did. (Ward 1990, (30b))  
 c. And I DID quit.  
 d. # And I DID resign.

The pattern in (1), which I support with experimental evidence, indicates that VPP and auxiliary focus have the same basic discourse function, but that there are subtle differences between the two constructions. The experiment, which is currently in progress, compares native speakers' acceptability judgements for auditory examples of VPP with their judgments for sentences containing auxiliary focus in the same contexts. Preliminary results suggest that the two constructions are equally acceptable where there is an identical discourse antecedent.

Formally, I argue that both constructions trigger the construction of an alternative set (Rooth, 1992) based on the stranded or focus-accented auxiliary material. In the case of VPP, this alternative set is a result of the fronted *vP* (including a subject copy) in SpecTopP combined with focus marking (Jackendoff, 1972; Selkirk, 1984) on the stranded auxiliary. Because the fronted material in SpecTopP is given in or inferable from the preceding context, preposing provides an additional cue towards determining the information-structural relation between sentence containing VPP and the discourse context.

The second type of evidence comes from cases—thus far unnoticed in the literature—in which there is no identity between the fronted verb and the antecedent (2).

- (2) The Rev. Peter Colapietro woke on Wednesday sniffing, sneezing, wheezing and unable to sing.  
 But rise he did, since there are no sick days for a priest at Christmas. (Graff and Cieri 2003)

In (2), the *vP*-movement to SpecTopP triggers the creation of the same polarity-based alternative set, but here the alternatives must be accommodated as part of the discourse narrative. In this way, VPP differs from auxiliary focus, which preliminary experimental evidence indicates is infelicitous in (2). This difference indicates that the *vP*-fronting allows the alternative set to contrast with a non-overt antecedent.

Finally, VPP and auxiliary focus also pull apart in that a scalar interpretation is possible in cases of VPP, but not in cases of auxiliary focus. The most natural interpretation of (3a) is that the fans brought an extraordinarily large number of cans; (3b) means that the fans brought some cans, but not a surprisingly large number.

- (3) Kenny Rogers asked his fans to bring cans to his concerts to feed the hungry in the area.  
 a. And bring cans they did. (Ward 1990, (18))  
 b. And they DID bring cans.

The implication of these data are that focus assignment interacts with syntactic movement even in languages like English that do not have the prosodically driven movement of Spanish (Zubizarreta, 1998) or Hungarian (Szendrói, 2003).

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**WORKSHOP:****INTERLANGUAGE ANNOTATION: FROM SLA RESEARCH TO LEARNER CORPUS RESEARCH**

*Convenors: Lozano, Cristóbal; Díaz-Negrillo, Ana (University of Granada, Spain)*

Learner Corpus Research (LCR) is a relatively young and vibrant methodological approach to Second Language Acquisition (SLA) research, as seen in the increase of LCR research in the last decade or so. However, most SLA-oriented studies carried out in LCR have exploited the possibilities of such large naturalistic bodies of data only to a very limited extent. This is mostly because of the way in which SLA research questions and hypotheses have been approached in LCR.

Unlike experimental approaches to SLA, LCR research has taken a rather descriptive approach in the analysis of learner corpus data (Myles 2007: 380; see also Granger 2012: 21), probably as a reflection of the methodology used in corpus linguistics. In methodological terms, this means that SLA-oriented LCR has been *hypothesis-finding* (**descriptive/exploratory**), rather than *hypothesis-testing* (**interpretative/explanatory**). As a result, many LCR studies have had a pedagogical slant (e.g., Burnard & McEnery 2000; Granger et al. 2002; Aston et al. 2004; Sinclair 2004; Reppen 2006; Aijmer 2009): the results obtained in these studies are mainly diagnostic of language learners' linguistic problems (errors), and mostly valuable for teachers and material designers, while they have offered few explanations of how learners' interlanguage grammars work.

This may have been so because "corpus-based researchers do not know enough about the theoretical background of SLA research to communicate with them [=SLA researchers] effectively" (Tono 2003: 806). Indeed, it has been repeatedly stated in the literature that "[LCR's] links with Second Language Acquisition have been somewhat weak" (Granger 2009: 14). In practice this means that "[c]orpus-based L2 studies are (...) often **not sufficiently informed by SLA theory**" (Myles 2005: 381; cf. also Granger 2012: 8), which is reflected not only in the lack of theoretical motivation in the approach of SLA-oriented studies in LCR, but also in the design of rich coding/tagging tools which are necessary for fine-grained interlanguage data analysis.

Certainly, the above deficits are clearly seen in learner corpus annotation, which has been traditionally seen as a preliminary step to learner corpus data analysis. LCR annotation has been done so far according to tenets that prevail in corpus linguistics, but not necessarily in SLA research, that is, the main aim of LCR annotation has been to enrich learner corpora, so that they can cater for the needs of a large variety of users. As a result, LCR tagsets (both POS cf. Granger et al. 2009, and error annotation, cf. Díaz-Negrillo & Fernández-Domínguez 2006) tend to be rather general descriptions of a wide variety of linguistic categories, being therefore suitable for a variety of general research purposes, although not for specific ones. In particular, error-annotation has been described as the type of annotation in LCR that is specifically designed to cater for the anomalous nature of learner language in learner corpora (Granger 2002: 18). However, again, while error-annotation may be valuable in language teaching, as it diagnoses learners' difficulties, it provides a limited picture of learners' internal grammars, because it does not take into consideration what learners *can* do and it often overlooks what previous SLA research has found. In addition, this type of tagging is too coarse-grained for SLA research and does not recognise specific SLA theoretical and developmental issues. It is, therefore, mostly suitable for general descriptions of learners' language (hypothesis-finding), and not for explanatory (hypothesis-testing) SLA studies. Finally, such a wholesale tagging is not suitable for subtle consideration of specific developmental properties. As Tono (2003: 804) concluded some time ago, "we should learn a lesson from the past and make the tagging scheme purpose-oriented".

In this context, and quite importantly, "the SLA community is beginning to see the interest of using learner corpus data to test SLA hypotheses" (Granger 2008: 269). Also, there is also a growing "recognition among learner corpus researchers that their findings have to be integrated within SLA theories and hypotheses" (Mendikoetxea 2013: 21). Consequently, a natural development of this picture is that methodological practices in LCR are suitably adapted to make genuine SLA research possible in LCR. This is precisely where the general aims of this workshop stand, and which can be outlined as:

- (a) to contribute to the development of LCR methodologies, by catering for SLA research interests and needs, and
- (b) to strengthen the communication between learner corpus and SLA researchers.

These general objectives are specifically pursued in the workshop by exploring a type of annotation that has recently been referred to as "**InterLanguage Annotation (ILA)**" (Díaz-Negrillo & Lozano 2013). Grounded on common annotation practices in LCR as well as SLA hypothesis-driven rich tagging schemes (e.g. Lozano 2009; Gudmestad et

al. 2013; *inter alia*), ILA is a learner corpus annotation that is designed to test specific features of learners' interlanguage, and that, therefore, can serve to answer questions formulated in SLA research in more sophisticated ways than previous error tagging research. This is so in that ILA exhibits features that are fundamental in SLA research, and whose relevance has been discussed throughout this proposal: ILA is (i) **purpose-oriented**, (ii) **fine-grained**, (iii) **theory-motivated** and (iv) **describes learners' interlanguage** by covering both learners' errors and also their correct uses. The specific aims of the workshop are then:

- (a) to explore issues in the implementation of ILA annotation on learner corpus data,
- (b) to assess the potential of ILA annotation in the disclosure of learner language features, with a view to obtaining a better understanding of interlanguage grammars.

To achieve these specific aims, a number of talks have been selected from well-known experts around the world in the fields of SLA and LCR, as Florence Myles and Nicole Tracy-Ventura, as keynote speakers. Issues in the implementation of ILA (see objective (c) above) are discussed by Rosen et al., from the computational perspective, and by Lozano and by Díaz-Negrillo & Lozano from a corpus linguistics and SLA research perspective. On the other hand, an assessment of the potential of ILA in SLA research (see objective (d) above) is undertaken from a variety of SLA perspectives including phoneme acquisition and speech disfluencies (Ballier & Méli; Dumont), morphology acquisition (Myles & Tracy-Ventura; Díaz-Negrillo & Lozano), discourse acquisition (Callies; Lozano), lexicon-syntax acquisition (Mendikoetxea & Ferrandis), syntax acquisition (Tono) and pragmatics acquisition (Miura).

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## Syllable-based prosodic modelling of French English Interlanguage: an investigation of the ANGLISH corpus

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This talk will present an attempt at representing prosodic profiles of English native and non-native (French intermediate and advanced learners) out of a fine-grained multi-layered spoken corpus.

The syllable tier of the annotation of the ANGLISH corpus (Tortel 2009, 2013) has been corrected and used for automatic extractions of acoustic parameters using ProsodyPro (Xu 2013). The result is the alignment of acoustic pa-

rameters for each pronounced syllable of the read part of ENGLISH. This allows for the representation of the variability of the twenty native speakers recorded for the English native part of the corpus. The boxplot synthesizing native inter-speaker variation of mean fundamental frequency (computed for each syllable) is represented in figure 1 for the first utterance “I’ve always found it difficult to sleep on long train journeys in Britain.”

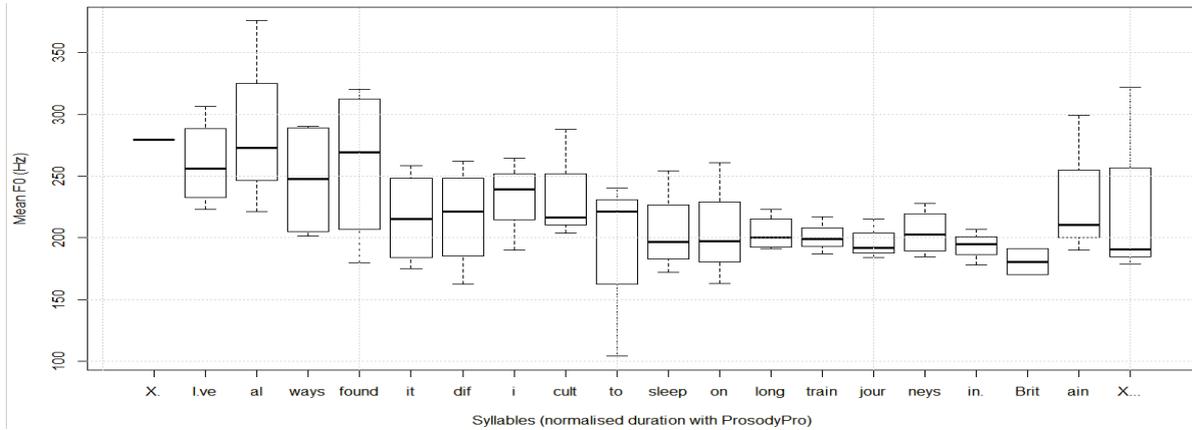


Figure 1 Syllable-aligned means of F0 using ProsodyPro

The three groups of the corpus (twenty natives, twenty intermediate and twenty advanced learners) can be similarly analysed. For example, non-finality of this initial prosodic utterance is clearly marked in native speech by a final rise on *Britain*, whereas French natives have resorted to a fall (coupled with French prosodic patterning on the final syllable, as noted in Martin 2009 and elsewhere). Cross-sectional comparisons are established on the basis of normalised duration, so that performances are equally considered on the basis of the prosodic target (here, pitch) for each syllable. In that sense, this is discourse alignment, not time-alignment, where prosodic realisations can be compared and native and prosodic modelling suggested. This simplifies speech time variability and enables the design of “confidence intervals” for native prosodic realisations and potential non-native mismatches.

The analysis will also assess the risks and limitations of this methodology due to resyllabification issues (Ballier & Martin 2013). This automatic extraction of data will be compared to Pit Mertens’s Prosogram analysis (Mertens 2004). The glissando threshold triggers a slope in the representation of the pitch.

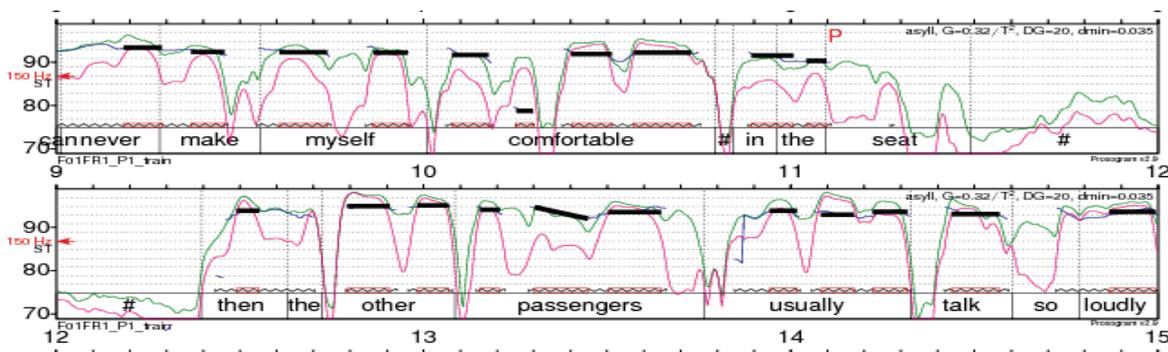


Figure 2 A sample of ENGLISH using Prosogram

This example is telling in that the syllable-division are only partially reflected: the four syllables of the word *comfortable* are outlined in the four segments of the word, the realization of *comfortable* as four phonetic syllables for this beginner is properly captured, but other divisions are lost in the automatic analysis. Highlighting of contours will not necessarily match the syllable divisions. This kind of automatic detection of syllabification will be compared to a (manual) perceptual analysis of the syllable divisions that shows a gradual realization of the native CVC syllabification for advanced speakers as opposed to the CV-patterning of the beginners. The reliability of this computer-aided analysis of syllabification (as well as the relevance of resyllabification sites to assess learner profiles) will be assessed.

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## Revisiting the topic-/subject-prominence continuum in SLA using a function-driven approach to annotating learner corpora

Callies, Marcus (Universität Bremen, Germany)

Numerous studies have demonstrated the relevance of L1 discourse structure for L2 acquisition by examining two typological parameters relating to discourse organization: topic- vs. subject-prominence (Li/Thompson 1976) and pragmatic vs. grammatical word order (Thompson 1978). Research shows two contradictory claims on the role of the topic-/subject-prominence continuum in SLA:

- irrespective of the learners' L1, SLA is characterized by an early universal topic-prominent stage, and topic-/subject-prominence is not transferable (e.g. Givón 1979, 1984)
- the learners' L1 does play a role in SLA in that learners transfer L1 function (information structure) to L2 form, and as their proficiency increases, speakers of topic-prominent L1s gradually increase the use of subject-prominent features in their L2 (e.g. Schachter/Rutherford 1979, Rutherford 1983, Han 2000, Jung 2004).

There has been increasing evidence for the second scenario as EFL learners with topic-prominent L1s show transfer effects as to 1) overproduction of L2 structures that have no equivalents in the respective L1s (*it*-extraposition, *there*-sentences and pseudo-passives; Schachter/Rutherford 1979, Han 2000), and 2) a tendency to use topic-fronting devices (e.g. *for* and *concerning*) and connectors (*besides*, *furthermore* and *moreover*) in theme position to introduce new information (Green et al. 2000). The findings on topic-marking devices are less clear and complicated by the fact that earlier studies have usually examined only a small selection of topic markers. In English, where topics are not syntactically marked, it is difficult to arrive at a definite set of such markers, although *As for...*, *With respect/regard to...*, *Regarding...*; *Speaking/Talking of...* are frequently used (Ward/Birner/Huddleston 2002: 1371).

This paper revisits the influence of L1 information structure on SLA by applying a function-driven approach to learner corpus annotation and analysis, examining topic-marking devices used in the written production of advanced EFL learners from L1 backgrounds that are typologically diverse and differ in their exploitation of word order for purposes of information structure. The paper adopts a Contrastive Interlanguage Analysis (CIA) approach using data from the *International Corpus of Learner English* (ICLE, Granger et al. 2009). The analysis considers a set of the most commonly used topic-markers, e.g. (*as*) *for*, *as to*, *as regards*, *with regard/respect to*, *regarding*, *as far as* NP BE *concerned*, *concerning*, *speaking/talking of...* but goes beyond form-driven approaches to corpus annotation and query that are common in Learner Corpus Research since these are bound to identify and represent only an incomplete picture of learner language. Form-driven approaches usually single out a limited set of typical candidates but neglect a wider range of linguistic means used to express a particular function. A function-driven, more fine-grained annotation of learner corpora will lead to a larger set of potential options including non-canonical, strategic means used (creatively) by the learners to express discourse functions (cf. Hirschmann et al. 2007; Lüdeling 2008). Such interlanguage-specific strategies are bound to occur but are usually overlooked in form-driven searches. This approach also enables corpus searches that retrieve a set of relevant forms in one query, while in form-oriented approaches, many more, partially very complex queries are needed and are subject to extensive manual post-processing due to a low(er) precision rate.

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## SLA meets learner corpus research: the morpheme order studies revisited with Interlanguage Annotation

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Since the 70s, the so-called Morpheme Order Studies (MOS) have been crucial in our understanding of learner language (interlanguage) in Second Language Acquisition (SLA) since "[t]he order that learners follow [in the acquisition of inflectional morphology] constitutes one of the most important 'facts' that any theory of L2 acquisition must account for" (Ellis & Barkhuizen 2005: 91-92), as attested by recent studies (Goldschneider & DeKeyser 2001; Kwon 2005; Luk & Shirai 2009) (cf. Table 1).

The methods used in traditional MOS studies have been mostly (quasi)experimental (but see Tono 2000), but Learner Corpus Research (LCR) offers a powerful methodology (naturalistic data and interrogation/tagging tools). This paper investigates/replicates the MOS phenomenon within LCR but provides new methodological/theoretical improvements by using theory-informed, fine-grained *Interlanguage Annotation* (ILA) (Díaz-Negrillo & Lozano 2013). First, while LCR has been mostly descriptive and hypothesis-finding (Myles 2005, 2007; Granger 2009), we adopt a **hypothesis-testing** approach, which results in a fine-grained ILA tagset. Second, while previous MOS have been coarse-grained, our analysis/annotation of the learner data is **fine-grained**, which permits to explore phenomena like the Dual Mechanism of irregular morphology processing. Third, previous LCR has focused mainly on learners' errors, but we address both problematic areas and **correct uses** for a better understanding of L2 processes. Our approach is thus formalized in terms of ILA, which is i) purposed-oriented, ii) theory-motivated/hypothesis-testing, iii) fine-grained, and (iv) that describes learners' (in)correct uses (cf. our ILA tagset in Figure 1 designed with UAM Corpus Tool (O'Donnell 2009)). Finally, while MOS have typically been conducted on populations with mixed proficiency levels (cf. Ellis & Barkhuizen 2005: 92), we analyse COREFL (CORpus of English as a Foreign Language) (Díaz-Negrillo & Lozano 2013), an on-going corpus of about 100,000 words from EFL Spanish secondary-school students, cross-sectionally classified according to CEFR proficiency levels (A1, A2, B1, B2, C1).

Overall, taken together, a preliminary sample analysis of COREFL (Figure 2) partially replicates previous MOS results (Table 1), but diverges in systematic ways since the ILA approach defended here reveals key findings that have gone unnoticed in previous research over the past 40 years. This can be illustrated with a sample analysis of irregular vs. regular past tense in A2 vs. B1 levels (Figure 3): (i) irregular past precedes irregular past, as reported in previous MOS, but only from B2 onwards; (ii) while underuse is very frequent, as previously reported, it decreases with irregular past but remains stable with regular past as proficiency increases; (iii) learners also show misuse and overuse deficits; (iv) misselection is more frequent than misrealisation across proficiencies, an overlooked fact in previous MOS; (v) overregularizations (overuse of regular morphology) increase with proficiency, as reported in Dual-Mechanism experimental studies (e.g., Murphy 2004), but overlooked in previous MOS studies.

To conclude, by triangulating previous SLA findings with the help of LCR and linguistically/theoretically-informed ILA, we can arrive at a better understanding of the interlanguage processes underlying the acquisition of L2 English morphology.

Table 1: MOS findings.

Sequential order	Morpheme
1	progressive <i>-ing</i>
2	contractible copula <i>-’s</i>
3	plural <i>-s</i>
4	articles <i>a(n)/the</i>
5	contractible auxiliary (be) <i>-’s</i>
6	irregular past
7	regular past <i>-ed</i>
8	3 <sup>rd</sup> person singular <i>-s</i>
9	possessive <i>-s</i>

OC: Past irreg (Peter stole yesterday)		S: Supplied form
<b>Target-like Use</b> (correct form supplied)		Peter stole yesterday [OC: past_irreg] [S: past_irreg]
<b>Non-target-like Use</b>	<b>Underuse</b> (no form supplied)	Peter steal_yesterday [OC: past_irreg] S: ∅
	<b>Misuse</b> (incorrect form supplied)	Peter stealing yesterday [OC: past_irreg] S: ing
	<b>Misselection</b> (form exists)	Peter stoled yesterday [OC: past_irreg] S: base + past_reg
	<b>Misrealisation</b> (form does not exist)	Peter stoled yesterday [OC: past_irreg] S: past_irr + past_reg
OC: 3 <sup>rd</sup> sing (Peter never stole [=steals])		SNOC
	<b>Overuse</b> (correct form supplied but in NOC)	Peter never stole [OC: 3rd sing] S: past_irreg

OC: Past reg (Peter walked yesterday)		S: Supplied form
<b>Target-like Use</b> (correct form supplied)		Peter walked yesterday [OC: past_reg] [S: past_reg]
<b>Non-target-like Use</b>	<b>Underuse</b> (no form supplied)	Peter walk_yesterday [OC: past_reg] S: ∅
	<b>Misuse</b> (incorrect form supplied)	Peter walk <del>s</del> yesterday [OC: past_reg] S: s
	<b>Misselection</b> (form exists)	
	<b>Misrealisation</b> (form does not exist)	
OC: 3 <sup>rd</sup> sing / past irregular		SNOC
	<b>Overuse</b> (correct form supplied but in NOC)	Peter never walked [OC: 3rd sing] [S: past_reg] Peter stoled yesterday [OC: past_irreg] [S: past_irreg + past_reg]

Figure 1: ILA tagset (irregular vs. regular past).

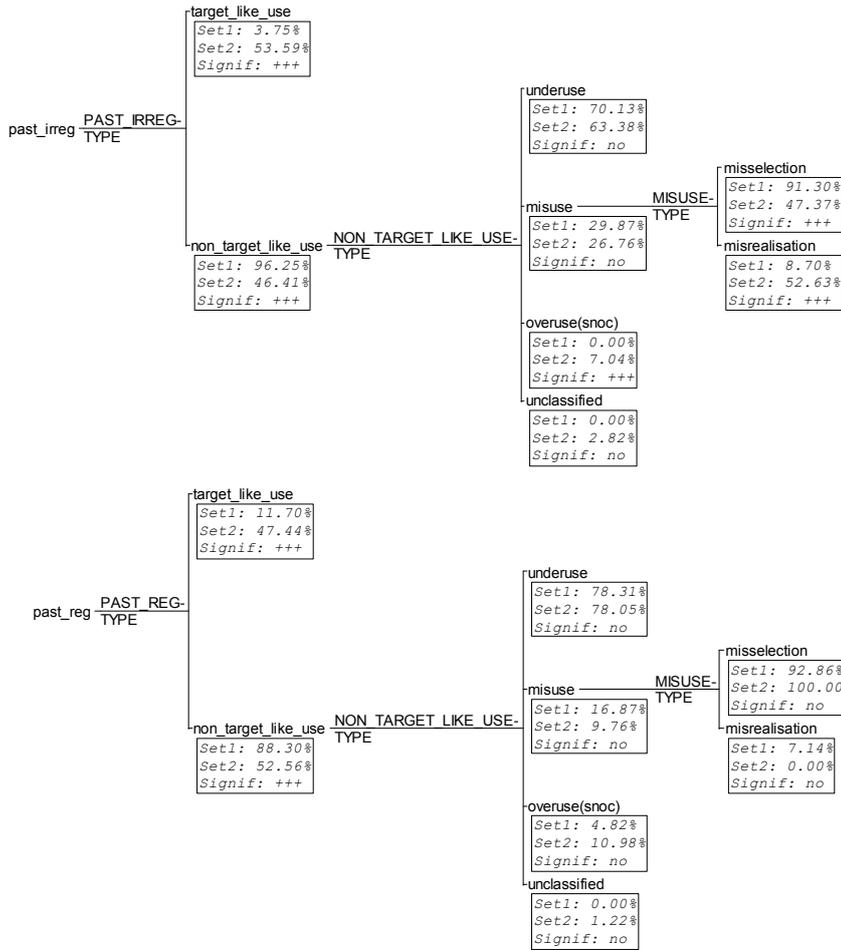


Figure 2: COREFL preliminary results.

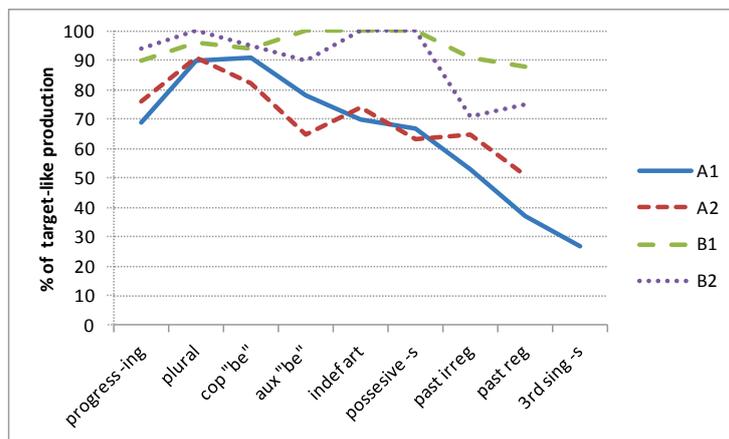


Figure 3: ILA results (regular vs. irregular past): A2 level [set 1] vs. B1 level [set 2].

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## Annotation of fluency and disfluency markers in nonnative spoken corpora

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First and second language research on fluency and disfluency has shed light on innovative concepts and their key role in the analysis and assessment of foreign language competence. Language researchers have extensively analyzed temporal variables (Chafe 1985, Lennon 1990), pausology (Dechert 1980), or performance and hesitation phenomena (Chafe 1980), which resulted in deeper insights into (dis)fluency. So far, however, most fluency-related studies have remained restricted to the analysis of one aspect at a time (Raupach (1980) focuses on temporal variables, Müller (2005) on discourse markers, etc.), to limited samples and participants (e.g. Larsen-Freeman 2006), and to relatively constrained speaking tasks (e.g. Kormos & Dénes 2004). Moreover, annotation systems – which are seldom designed for spoken data in the first place, and even less frequently for the analysis of (dis)fluency features – are rarely explicitly specified (see García-Amaya 2009 or Croucher 2004 for instance).

With the availability of large and representative spoken corpora such as the Louvain International Database of Spoken English Interlanguage (LINDSEI, Gilquin et al. 2010), however, access to numerous authentic, open-ended learner productions is now guaranteed, and SLA studies can benefit from large corpus resources (e.g. Gilquin 2008). Combined with a comprehensive annotation system, spoken learner corpus analysis has the potential to open new perspectives on learners' (dis)fluency investigation that previously remained out of reach: Götz' (2013) recent study has for instance shown that fluency profiles may be established on the basis of correlations of multiple fluency features.

Building on the idea of fluency profiles, this paper sets out to describe a multi-layered annotation system designed for the fine-grained analysis of manifold (dis)fluency features in the French component of the LINDSEI corpus and a comparable corpus of native speech, the Louvain Corpus of Native English Conversation (LOCNEC). The research questions investigate whether (dis)fluency profiles specific to French learners of English can be established and to what extent these are similar to those of native speakers. In addition, to assess the generalizability of the results, use will be made of other subcorpora of LINDSEI representing different mother tongue backgrounds. The first steps of the research consist in the selection of a panel of relevant fluency markers, and in the development of the annotation design. The study adopts an integrated approach, in the sense of Götz (2013): it encompasses not only the traditional temporal view on fluency, but also other features such as discourse markers, repairs and repetitions. The interface used to carry out the annotation is EXMARaLDA (Schmidt 2001, 2003), a versatile tool which allows the display of various tiers of annotation, text and sound alignment, in-context queries, etc. A three-step annotation design makes it possible to enhance the precision and accuracy of the annotation process, by first annotating the data semi-automatically, then merging the output with other types of annotation (like part-of-speech-tagging), and finally disambiguating the data manually.

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## Anaphora resolution in L2 Spanish: interlanguage annotation in the CEDEL2 corpus

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While second language (L2) researchers have traditionally relied on (quasi)experimental data, they have recently started to use learner corpus data (Myles 2005, 2007). Within the framework of interlanguage annotation (ILA) (Díaz-Negrillo & Lozano 2013) and learner corpus research (LCR), this presentation shows how corpus data can reveal unexpected L2 behaviour that has gone unnoticed in experimental studies on anaphora resolution.

The bulk of experimental research on L1 English–L2 Spanish reveals a robust pattern (Al-Kasey & Pérez-Leroux 1999, Licerias 1988, Lozano 2002): learners acquire early the fact that overt and null referential pronominal subjects can alternate syntactically, (1). But such (apparently free) alternation is constrained discursively in native Spanish: null pronouns encode topic continuity ( $\emptyset$  in 2), while overt pronouns encode topic-shift when a change of referent is required (*él* in 3). Importantly, recent experimental L2 studies indicate that learners show persistent deficits at the syntax-discourse interface (Margaza & Bel 2006, Pérez-Leroux & Glass 1999, Rothman 2009): they often produce (i) an overt pronoun in topic-continuity contexts, which causes redundancy (*él* in 2), and (ii) a null pronoun in topic-shift contexts, which causes ambiguity ( $\emptyset$  in 3). Parallel findings have been also observed in L2 Italian (Sorace & Filiaci 2006).

(1)  $\left\{ \begin{array}{l} \text{él} \\ \emptyset \end{array} \right\}$  es millonario.

‘*He/∅ is a millionaire.*’

(2) Pedro tiene mucho dinero y  $\left\{ \begin{array}{l} * \text{él} \\ \emptyset \end{array} \right\}$  dice que  $\left\{ \begin{array}{l} * \text{él} \\ \emptyset \end{array} \right\}$  es millonario.

‘*Pedro has a lot of money and \*he/∅ says that \*he/∅ is a millionaire.*’

(3) María y Pedro viven felices, pero  $\left\{ \begin{array}{l} \text{él} \\ * \emptyset \end{array} \right\}$  es pobre.

‘*María and Pedro live happily, but he/\*∅ is poor.*’

Building on previous experimental research, a fine-grained ILA scheme (Figure 1) was designed to take into account the multiple factors intervening in anaphora resolution in an L1 English – L2 Spanish learner corpus (*Corpus Escrito del Español L2*, CEDEL2: Lozano 2009a) at three proficiency levels, as well as an equivalent Spanish native sub-corpus. *UAM Corpus Tool* (O’Donnell 2009) was used to tag and analyse the CEDEL2 corpus, whose data reveal several important findings that have gone unnoticed in previous experimental research:

- i. Learners not only use an overt pronoun to mark topic-continuity, but they also produce full NPs (Figure 2).

- ii. Learners can mark topic-shift via an overt pronoun, as would be predicted for native Spanish, (*él* in 3), though they drastically prefer using a full NP (Fig. 3).
- iii. Additionally, learners also show a tendency to produce informationally richer phrases than pragmatically required (full NP > overt pronoun in topic-shift contexts; overt pronouns and full NP in topic-continuity contexts), which runs against economy principles (Fig. 4). These deficits have to do with the number of potential antecedents of the anaphor, coupled with the gender distinction of such antecedents.
- iv. Corpus data thus reveal that learners prefer being redundant and uneconomical to ambiguous, a finding not previously reported in experimental studies.

To conclude, naturalistic (corpus) data can (and should) be used as a follow-up to experimental data to explore new patterns of L2 production (cf. Gilquin 2007).

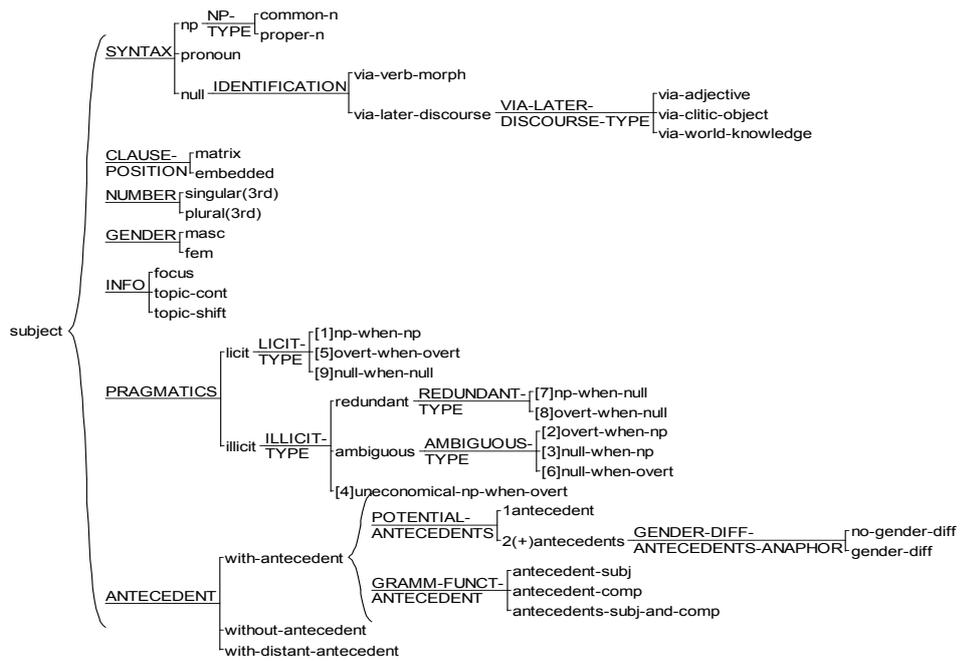


Figure 1: ILA tagset.

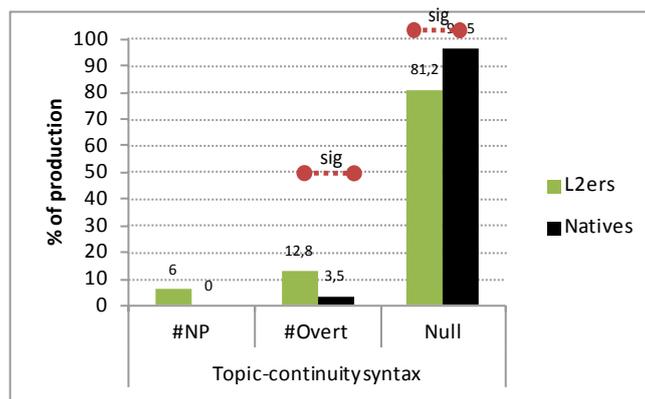


Figure 2: Syntax of topic-continuity.

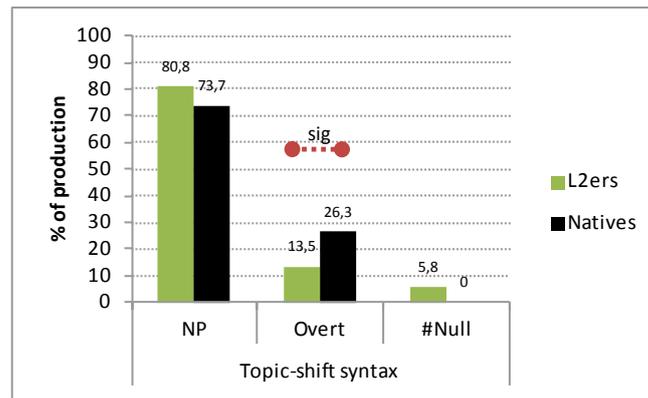


Figure 3: Syntax of topic-shift.

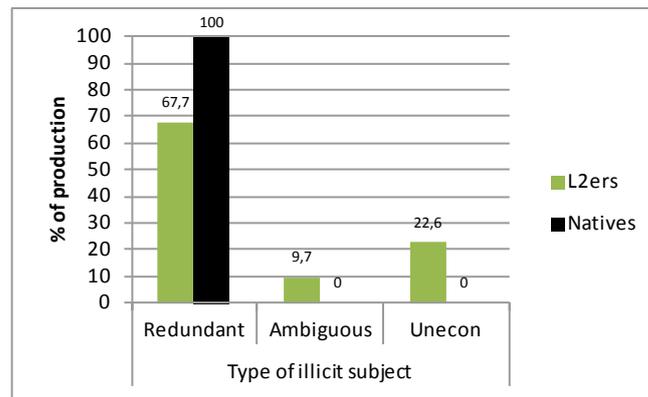


Figure 4: Pragmatics of anaphora resolution.

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## Investigating the interlanguage stages of vowel phonemic distinctions among French speakers of English

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This talk will exemplify detailed analyses of fined-grained phonemic annotations of a longitudinal spoken learner corpus. In this cross-sectional study, it is investigated whether patterns reflecting interlanguage stages exist in the vocalic realisations of twenty-two French undergraduate students at the University of Paris-Diderot recorded over three years. The existence of such patterns is hypothesized, and vocalic realisations are expected to depend on sub- or super-phonemic parameters such as place or manner of articulation of the consonantic environment, syllable structure or word frequency. These hypotheses are statistically tested.

A fine-grained phonemic annotation is obtained by feeding short sound and transcription files into SPPAS (Bigi 2012) which returns automatically aligned textgrids compatible with praat (Boersma & Weenink 2013). A script then reintegrates these into a single textgrid and collects phonetic and phonological data shown in Table 1. Roughly 2000 datapoints are thus collected for each of the 66 recordings.

B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
SPEAKER	SESSION	WORD	PHONE	LOCINFILE	F1	F2	F3	F4	DUR	PHONBEF	BEFVOICE	BEFMOA	BEFPOA	PHON	AFTVOICE	AFTMOA
DID0020	S001	ye	i:	18,202711	318,528	1040	2802,42	3621,79	0,18	v	VOICED	FRICATIVE	LABIODENTAL	b	VOICED	PLOSIVE
DID0020	S001	been	ɪ	18,572711	804,907	2779	3404,28	4567,89	0,19	b	VOICED	PLOSIVE	BILABIAL	n	VOICED	NASAL
DID0020	S001	everything	i:	23,185564	448,769	2002	2547,5	3921,08	0,03	r	VOICED	LIQUID	POSTALVEOLAR	T	VOICELESS	FRICATIVE
DID0020	S001	everything	ɪ	23,32556	569,69	2586	3033,22	4173,78	0,03	T	VOICELESS	FRICATIVE	INTERDENTAL	N	VOICED	NASAL
DID0020	S001	trip	ɪ	29,886694	431,246	1980	2594,81	3792,81	0,1	r	VOICED	LIQUID	POSTALVEOLAR	p	VOICELESS	PLOSIVE
DID0020	S001	big	ɪ	37,258073	431,241	2436	3078,44	4134,9	0,05	b	VOICED	PLOSIVE	BILABIAL	g	VOICED	PLOSIVE
DID0020	S001	pizza	i:	48,862681	358,961	2449	3175,57	4187,79	0,08	p	VOICELESS	PLOSIVE	BILABIAL	t	VOICELESS	PLOSIVE
DID0020	S001	pizzas	i:	51,104101	353,479	1922	2594,72	3457,77	0,1	p	VOICELESS	PLOSIVE	BILABIAL	t	VOICELESS	PLOSIVE
DID0020	S001	big	ɪ	56,020461	477,268	2600	2859,93	3185,26	0,08	b	VOICED	PLOSIVE	BILABIAL	g	VOICED	PLOSIVE
DID0020	S001	full	U	58,191009	775,181	1734	2997,84	4204,92	0,04	f	VOICELESS	FRICATIVE	LABIODENTAL	l	VOICED	LIQUID
DID0020	S001	good	U	63,4463	445,282	1524	2666,72	3808	0,08	g	VOICED	PLOSIVE	VELAR	d	VOICED	PLOSIVE
DID0020	S001	impress	ɪ	67,491044	474,852	1380	2703,66	3415	0,08	NA	NA	NA	m	VOICED	NASAL	
DID0020	S001	thinks	ɪ	89,942303	621,231	1882	3031,53	4046,24	0,03	T	VOICELESS	FRICATIVE	INTERDENTAL	N	VOICED	NASAL
DID0020	S001	big	ɪ	106,33352	438	2553	3086,51	4449,18	0,03	b	VOICED	PLOSIVE	BILABIAL	g	VOICED	PLOSIVE
DID0020	S001	big	ɪ	110,79352	466,709	2213	2928,64	4273,07	0,04	b	VOICED	PLOSIVE	BILABIAL	g	VOICED	PLOSIVE
DID0020	S001	thing	ɪ	124,21628	513,217	2295	3098,26	4354,41	0,04	T	VOICELESS	FRICATIVE	INTERDENTAL	N	VOICED	NASAL
DID0020	S001	city	ɪ	134,61339	428,013	1234	2979,39	3727,58	0,13	s	VOICELESS	FRICATIVE	ALVEOLAR	4	VOICED	PLOSIVE
DID0020	S001	city	i:	134,86339	544,38	2782	3512,94	4319,81	0,113	4	VOICED	PLOSIVE	NA	NA	NA	
DID0020	S001	think	ɪ	160,00702	594,213	2280	3030,5	3508,37	0,05	T	VOICELESS	FRICATIVE	INTERDENTAL	N	VOICED	NASAL
DID0020	S001	city	ɪ	162,4907	337,187	2715	3105,53	4460,3	0,1	s	VOICELESS	FRICATIVE	ALVEOLAR	4	VOICED	PLOSIVE
DID0020	S001	city	i:	162,6807	393,58	2717	3388	4626,17	0,102	4	VOICED	PLOSIVE	NA	NA	NA	
DID0020	S001	actually	i:	163,08236	447,21	2515	3101,31	4185,33	0,207	l	VOICED	LIQUID	ALVEOLAR	NA	NA	
DID0020	S001	city	ɪ	170,04638	1175,65	2676	3453,09	4429,07	0,04	s	VOICELESS	FRICATIVE	ALVEOLAR	4	VOICED	PLOSIVE
DID0020	S001	city	i:	170,21638	424,133	2881	3739,67	5039,07	0,05	4	VOICED	PLOSIVE	NA	i	NA	
DID0020	S001	couldn't	U	193,05007	1057,49	1947	2671,23	3827,47	0,12	k	VOICELESS	PLOSIVE	VELAR	d	VOICED	PLOSIVE
DID0020	S001	see	i:	193,65007	509,97	2241	2415,53	3139,27	0,12	s	VOICELESS	FRICATIVE	ALVEOLAR	D	VOICED	FRICATIVE

Table 1. Sample features extracted from the X corpus.

The study first focuses on the acquisition of /ɪ/ of /i:/ and /ʊ/ vs. /u:/ (respectively I, i:, U and u: in the shaded phone column). The prosodic context (focus, position in the prosodic hierarchy) has not been taken into account in this study but this dataset allows for regression modeling of the formant values of the two series of vowels under study. The acquisition stages of the two vowel sets can be compared longitudinally and the effects of the different parameters can be systematically tested, such as the effect of place of articulation of the preceding and following consonants.

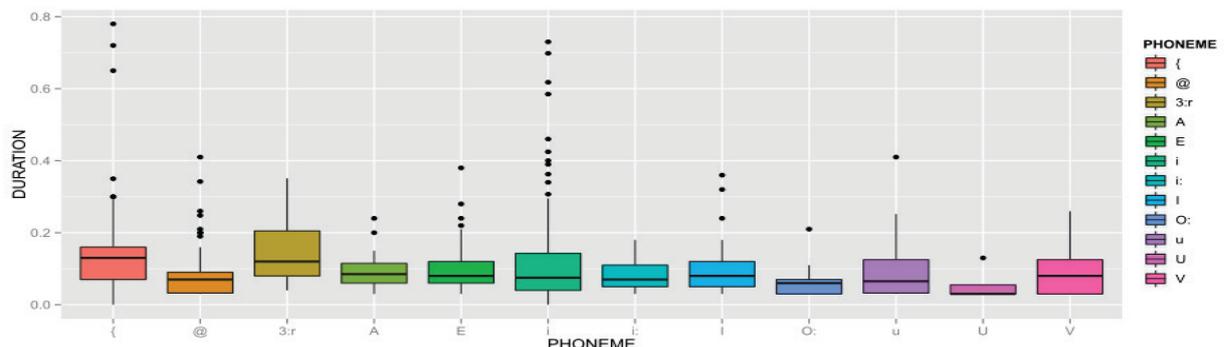


Figure 1. Sample durations (in seconds) of phonemes extracted from speaker 20 (3<sup>rd</sup> year recording).

Figure 1 sums up the boxplots of the duration of the tokens of each monophthong. Data were processed using R, representing phonemes with SAMPA transcriptions (Wells 1997). The happy tensing (i), long (i:) and short (I) realisations will be compared (and for F1/F2, distance from the native targets estimated in Bark distance as in Méli 2013). Frequency effects are tested, among them the hypothesis that some words like *people* for French learners seem to work like lexical ‘magnets’ structuring realisations. This comparative investigation of the distinction and acquisition of /u:/ and /ʊ/ (distance from the native targets estimated in Bark distance as in Méli 2013) contributes to the debate on the quantal zone of /i:/ (Stevens 1972, 1989) and on the ‘perceptual magnet effect’ (Kuhl 1991, Iverson & Kuhl 1995, Sussmann et al. 1995).

The gradual distinction of /ɔ:/ vs. /əʊ/ vs. /ɒ/ and the role of syllable structure in L1 is also investigated with the same technique. Up to a late stage (speakers are undergraduate students of English), confusions remain in closed syllables, which allows the testing of the hypothesis that French speakers gradually acquire the relevant targets of back vowels of English from the native complementary distribution (/ɔ/ in CVC syllables vs. /o/ in CV syllables). ‘Templatic effects’ or templatic transfers are systematically investigated with this annotation and phonetic interlanguage stages can be hypothesised by spotting the realisations of the vowels according to the syllable templates.

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## Annotating a learner corpus for subject realization: the complex nature of the Null Subject Parameter

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Though it is true that Learner Corpus Research has made a significant contribution to the field of SLA, its focus on description, rather than explanation, together with its focus on learner errors, has meant that its full potential for SLA research is mostly unrealized. In this paper, we show how the annotation of a learner corpus using a fine-grained, multi-dimensional tagset, not restricted to errors, can help us advance in our understanding of complex processes in L2 grammars. We look mostly at the production of subjects in the interlanguage of L1 Spanish-L2 English learners, to explore two different aspects of the Null Subject Parameter which have received considerable attention in the L2 literature.

In one study (Lozano & Mendikoetxea 2008, 2010), we focus on subject position, using a complex set of tags annotating constructions, verbs class and subjects according to syntactic (pre/postverbal), pragmatic (theme/focus) and phonological (heavy/light) factors (Figure 1). One of the purpose of this study is to throw light on the Interface Hypothesis (among many others, Sorace 2005, Sorace and Serratrice 2009, White 2009), according to which ad-

vanced learners show (residual) optionality at the syntax-discourse interface which persists after syntactic features have been fully acquired. Our study, however, points towards the existence of syntactic deficits in the grammar of our learners, particularly regarding the preverbal field.

In a different study (Ferrandis, in progress), we look carefully at the preverbal field for a better understanding of the resetting of the Null Subject Parameter in L1 Spanish-L2 English and L1 English-L2 Spanish grammars. The tagset for this study is devised around the types of elements which can function as preverbal subjects: full NPs, pronominal elements, expletives and null subjects, but construction type and verb type are also annotated as part of the syntactic context for subject realization. This corpus study confirms what experimental studies have shown (Al-Kasey & Pérez-Léroux 1998; Ruiz de Zarobe 1998): expletive elements are crucial in the resetting of the Null Subject Parameter.

Crucially, multi-layered tag schemes like the ones described can help us isolate different factors as well as established correlations between the variety of variables which can affect (pre and post)verbal subject realization, thus contributing to our understanding of the Null Subject Parameter in L2 grammars.

4	STRUCTURE	POSTVERBAL SUBJ.	PREVERBAL XP	GRAMM	FILE	CONCORDANCE
6	i-insertion	DP (def) F(1) 3 Heavy 24	Exp X	* (there)	spm0600	preverbal On the contrary, it appears
7	i-insertion	DP (def) F 1(4) Light 3	Exp X	* (there)	spm0801	'When the play arrives to a difficult point where it is almost impossible to find a
8	i-insertion	DP (def) F 3 Heavy 3	Exp X	* (there)	0006.cor	On the other hand, it has appeared
9	i-insertion	DP (def) F 3(2) Heavy 5	Exp X	* (there)	spm1002	In this framework, some decades ago, it appeared
10	Loc inversion	DP (def) F 3 Heavy 6	PP T	OK	spm1002	At the beginning of the play appears
11	Loc inversion	DP (def) F 3 Heavy 6	PP T	OK	spm1002	At the end of the play appears
12	Loc inversion	DP (def) F(3) 3 Heavy 6	PP T	OK	spm1002	In the main plot appear
13	Loc inversion	DP (def) F 1(4) Light 2	PP T	OK	0	So in its comedies appears
14	Loc inversion	DP (def) F 3 Heavy 3	PP T	OK	0006.cor	However, in this days have appeared
15	AdvP-insertion	DP (def) F 3 Heavy 7	Adv ?	OK	0020.cor	... because later could appear
16	XP-insertion	DP (def) F 3 Heavy 12	Adv ?	+	0	... and usually appears
17	XP-insertion	DP (def) F 3 Heavy 7	NP T	+	spm3000	Thanks to science and its consequences, technology and industrialization, appeared
18	i-insertion	DP (def) F 1 Light 5	Exp X	*	spm0601	... and appeared
19	i-insertion	NP (def) F 3 Heavy 5	Exp X	*	spm0601	The play was very well performed and also appeared
20	i-insertion	NP (def) F 3 Heavy 14	Exp X	* (there)	spm0403	Therefore, it arose
21	AdvP-insertion	DP (def) F 0-PN Light 3	Adv X	* (there)	2	So arisen
22	i-insertion	DP (def) F 3 Heavy 3	Exp X	* (there)	0010.cor	... family is the first place where it must begin
23	i-insertion	DP (def) F 3 Heavy 13	Exp X	* (there)	1	... in 1880, it began
24	XP-insertion	DP (def) F 0 Light 2	PP T	* (there)	8	... and from this moment begins
25	XP-insertion	DP (def) F 0 Light 2	PP T	* (there)	spm0411	... and from there began
26	AdvP-insertion	DP (def) F 3 Heavy 5	Adv X	OK	spm0000	... and thus began
27	i-insertion	DP (def) F 3 Heavy 8	Exp X	* (there)	spm0400	... it will come
28	XP-insertion	NP (def) F 3 Heavy 10	PP T	* (there)	6	In this way, come up
29	AdvP-insertion	DP (def) F 2 Heavy 5	Adv X	OK	0	... so come
30	AdvP-insertion	DP (def) F 3 Heavy 5	Adv X	OK	8	Then come
31	XP-insertion	DP (def) F 0 Light 2	PP T	OK	spm0805	With minerals we can build the houses where develop
32	XP-insertion	DP (def) F 3 Heavy 7	PP T	OK	spm0404	The last murder was in Valencia where died
33	i-insertion	DP (def) F 3 Heavy 4	PP T	OK	spm0401	... and here emerged
34	Loc inversion	DP (def) F 3 Heavy 3	PP T	OK	7	Against this society drama emerged
35	AdvP-insertion	DP (def) F 0 Light 2	PP T	OK	spm1001	... and here emerges
36	i-insertion	NP F 2 Heavy 4	Exp X	* (there)	spm0401	I would like to say that it always exists
37	i-insertion	DP (def) F 1 Light 3	Exp X	* (there)	spm0400	that maybe things will be better soon, can exist
38	i-insertion	DP (def) F 3 Heavy 10	Exp X	* (there)	spm0405	Second, it exists
39	i-insertion	NP F 2 Heavy 4	Exp X	* (there)	spm0401	We all know too, that on the other hand, it exists
40	i-insertion	NP F 3 Heavy 2	Exp X	* (there)	spm0401	It exists
41	i-insertion	DP (def) F 3 Heavy 18	Exp X	* (there)	spm0301	I think it exists yet
42	i-insertion	DP (def) F 3 Heavy 10	Exp X	* (there)	spm1000	I do believe that it will not exist
43	i-insertion	DP (def) F 1 Light 3	Exp X	* (there)	spm0403	... because it does not exist

Figure 1.

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## An annotation scheme for criterial features of pragmatic competence of Japanese learners of English

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This study presents an annotation scheme which aims to identify *criterial features* of pragmatic competence of learners of English at different proficiency levels. Several layers of language features and functions in spoken interaction are identified and annotated in the NICT Japanese Learner English (JLE) Corpus.

The following research questions are addressed in terms of different levels of proficiency: (i) What kind of language features are observed in language functions in a context of transactions, (ii) How do learners manipulate their communication strategies or *negotiation of meaning* in order to compensate for their lack of command of the language?

The study deals with the extracts of the NICT JLE Corpus containing the data of Japanese EFL learners taking an oral interview test called the Standard Speaking Test (SST). The sub-corpus of role-play task is annotated in order to see their pragmatic competences of learners in their interaction with interviewers. Especially, the tasks of “shopping” and “train”, where an interviewee is to deal with transactions to obtain goods in a shop or train station, are chosen. The learner data are explored in terms of the corresponding CEFR level; A1 learners (121 subjects), A2 learners (120 subjects), B1 learners (105 subjects) on the whole.

There are six layers of annotation: (i) *Situation*, (ii) *Directness in request strategies* (iii) *Communication strategies*, (iv) *Repairing*, (v) *Turn-taking*, (vi) *Appropriateness*. First, *situations* are identified in transactions, totalling 17 functions such as “expressing the intention to purchase an item”, “asking for an alternative item”, and “negotiating for discount”. *Request strategies* are annotated in terms of level of *directness*; direct, conventionally indirect and non-conventionally indirect. The use of modification such as lexical and syntactic downgraders is also identified (See Blum-Kulka, House and Kasper 1989). Then, in order to see how learners tend to compensate for their lack of command of language, especially by novice and lower intermediate learners, the learners’ *communication strategies* are identified; such as “asking for recommendation”, “explaining the background”, and “apologizing for not understanding”, totalling seven strategies. Then, *repairing* and *turn-taking* are observed. The learners’ activities such as “confirming the interviewer’s utterance”, “echoing the interviewer’s utterance”, and “rephrasing their own utterance” are examples of *repairing*. Also, “initiated utterance” by the interviewee or “response” to the interviewer are also identified as features of *turn-taking* (See Kasper and Ross 2007). Finally, *appropriateness* of the utterance is annotated. The preliminary study shows that “*I’m white color*” was produced by a lower learner when asking the colour in purchasing an item in a shop, with a topic-comment structure probably influenced by L1 structure. However, in the same *situation*, “*I would like to buy black one.*” was produced by an intermediate learner.

As expected results, there should be small difference in the frequency of *situations* across different proficiency levels due to the structure of the role-play interview, however, *criterial features* which can distinguish different levels of proficiency should be observed in each layer of annotation. Thus, lower learners tended to be more direct in their request as in the preliminary study.

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## Greek Learner Corpus: approaching agreement errors through stand-off annotation

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The aim of this paper is to focus on a fine-grained annotation scheme for Greek Learner Corpus (GLC) with respect to agreement in Greek DPs by means of stand-off annotation. GLC is the first learner corpus in Greek assembled from written productions of learners (age range: 7 to 12 years) in different language proficiency levels, which aims at providing a more user-oriented error annotation scheme. All the texts generated by the learners belong to the same genre, namely narration. At present, GLC comprises around 450 annotated texts (~33.000 words) and is annotated for errors. Finally, GLC includes a rich inventory of metadata, e.g. age, L1, age of onset, years of residence in Greece, years in the Greek education system and parents’ ability in Greek.

GLC’s annotation scheme attempts to approach the learners’ interlanguage in a theory neutral manner on the one hand and in a fine-grained linguistic description on the other (Díaz-Negrillo & Lozano, 2013). The motivation for this choice is to allow SLA researchers to test hypotheses from various theoretical angles and to explore linguistic features in depth. For instance, GLC’s scheme includes a category “Agreement” to encode agreement errors with

four subtypes which specify the erroneous morphosyntactic feature, i.e. number, gender, person and case. SLA studies have shown divergent results with respect to the learnability of gender agreement depending on whether the L1 has grammaticalized gender or not (Hawkins & Franceschina, 2004; Tsimpli, 2003; White et al., 2004). Moreover, there have been attested discrepancies in DP agreement errors regarding the presence of an adjective and the (in)definiteness of the determiner. Namely, it is disputable whether the presence of an adjective within a DP affects the L2 acquisition of agreement and whether definite DPs are more prone to agreement errors than indefinite ones (Tsimpli et al., 2007; White et al., 2004). To address these issues in GLC we are currently pursuing a more fine-grained annotation which includes a more detailed taxonomy with respect to the (in)definiteness feature of the DP as well as the presence of the adjective.

Moreover, in case of error ambiguity GLC is annotated for all possible options. For example, in (1) the mismatch between the determiner and the noun may be due to incorrect gender assignment of the noun or to incorrect agreement between the determiner and the noun in terms of either the gender or the number feature (see Figure 1).

- (1) \*mía                      δένδρα  
 a. FEM.SG.NOM    tree.NEUT.PL.NOM  
**Error tag: (a) \_GEN, (b) \_AGR\_GEN/\_NUM**

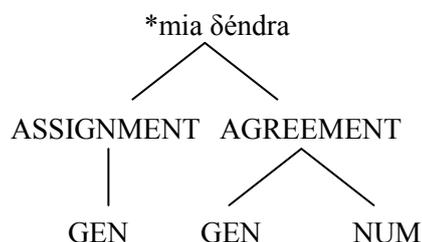


Figure 1. Error dependency for example (1).

With respect to the technical requirements of representing learners' errors, GLC adopts stand-off annotation. Stand-off annotation is the annotation in which the annotation content is separate from the original content. The separation of the original texts from the annotated ones is a crucial feature for learner corpus annotation, because it offers the possibility to very easily avoid syntactic conflicts in XML for encoding grammatical errors which spread through discontinuous and cross-reference spans. From an SLA perspective, stand-off annotation is advantageous, since it offers the possibility of including multiple and fine-grained annotations on the same data (see example (1)).

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## Using a cross-classifying taxonomy of non-standard forms to analyze non-native Czech

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Non-standard features of interlanguage can be analyzed from several aspects: morphology, syntax, semantics, etc. In a morphologically rich language such as Czech, interlanguage typically deviates in morphology and morphosyntax. Thus an appropriate classification of non-standard word forms can capture crucial properties of interlanguage in a systematic way and result in a principled error diagnostics and taxonomy of morphosyntactic phenomena specific to interlanguage.

Building on research focused mostly on learner's English (Díaz-Negrillo et al. 2010) and on a multidimensional taxonomy of word classes, used to harmonize annotations of multilingual corpora, we develop a multidimensional tagset to annotate and analyze the Czech interlanguage.

The tags of (ibid.) have morphological, distributional and lexical dimension. Our tags are similar but we use:

1. A *syntactic dimension* instead of *distributional dimension* to stress that the tag of a word within that dimension is not determined only by the word's surface position, but instead by its syntactic function. This is natural for a language like Czech, where word order is constrained much less by syntax than in languages such as English.
2. A more detailed tagset, capturing other categories beyond POS, such as number, gender, case, person etc., defined as appropriate for specific word classes along the individual dimensions.

A category may have different values in different dimensions: lexical, determined by properties of the lexeme, morphological, determined by derivational/inflectional morphemes, and syntactic, required by syntactic position. For example, in *Petr viděl tatínek* instead of *Petr viděl tatínka* 'Petr saw dad', *tatínek* 'dad' is morphologically nominative, but syntactically accusative (*viděl* 'saw' requires its object to be in accusative). In *Eva bude napsat dopis* 'Eva will write a letter', the 'lexical' aspect of the content verb *napsat* is perfective, while the auxiliary verb *bude* has a 'syntactic' requirement for an imperfective form *psát*. In *Whitney Houston zpívala krásný* 'Whitney Houston sang beautiful', the author used an adjectival form *krásný* 'beautiful' rather than the correct adverbial form *krásně* 'beautifully'. The word can be annotated as an adjective in the morphological dimension and as an adverb in the syntactic dimension.

The three dimensions do not have to match even in standard language (e.g. the relative pronoun *kteřý* 'that' is morphologically an adjective, but syntactically a noun), but some combinations, though logically conceivable, are not possible at all or at least not for a particular lemma. The set of mismatches in interlanguage differs systematically from standard language; such annotation can then be used as a powerful indicator of the type of interlanguage and the language learner's competence, and can help to build models of interlanguage by machine learning methods.

The above claims will be verified empirically by evaluating: (i) the feasibility of annotation of a non-trivial sample of Czech learner texts from the CzeSL corpus (<http://utkl.ff.cuni.cz/learncorp/>) and (ii) by analysing the results, using inter-annotator agreement, comparison with native language texts and correlation of the annotation with various specific groups of speakers.

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## Interlanguage annotations and association rule mining in the acquisition of relative clause constructions

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Relative clause (RC) constructions have attracted the attention of second language acquisition (SLA) researchers due to their complex structures (Gass&Selinker, 2001), and apparent difficulties for language learners. This study focuses on Interlanguage annotations (Díaz-Negrillo & Lozano 2013) concerning RC constructions and pronoun case markings. The following research questions were addressed: (1) Does the prior knowledge of pronoun case markings affect the proper selection of relative pronouns and their movement from the embedded clauses to the matrix sentences? (2) Does the use of RCs will lead to errors of other grammar items within the same RCs? The rationale for pursuing the second research question is that the use of complex grammatical structures such as RCs will constrain the processing capacity of L2 learners so that they are prone to make errors for those constructions which will otherwise be used correctly.

In order to fully understand the acquisition of RCs, purpose-oriented, fine-grained tagsets are definitely important. To this end, a special tagset of RCs was developed. The tagset is based upon (1) the role the head noun plays in the RC, known as the Noun Phrase Accessibility Hierarchy (SU/DO/IO/OBL/GEN/OCOMP), (2) the position of relative pronouns in the matrix sentences and embedded clauses, known as the SO Hierarchy Hypothesis (SS/SO/OS/OO). These tagset categories are useful to examine the previous hypotheses regarding relative ease of SS/SO/OS/OO in terms of perceptual difficulty (Kuno 1974), relativized subject accessibility (Keenan 1975), and parallel function (Sheldon 1977). Also these annotation results can be used to examine the effects of the noun phrase

accessibility hierarchy (NPAH) (Keenan & Comrie 1977) and the following studies summarized in Ellis (2008: 562ff). In addition, learner's L1 knowledge was also taken into account to interpret the results, regarding where the RC appears with respect to the head (i.e. whether L1 forms prenominal vs. postnominal RCs), a formal distinction between restrictive and non-restrictive RCs, and whether L1 allows resumptive pronouns. Annotations were made on the Japanese EFL Learner (JEFLL) Corpus (100,038 subjects, c. 700,000 running words).

To better understand the interim system of Interlanguage grammar, it is hypothesized that the knowledge of pronoun case markings has a strong relationship with the proper selection of relative pronouns and their movement from the embedded clauses to the matrix sentences. For this purpose, automatic POS-tagging was performed over the learner data to highlight pronouns and subsequent manual error annotations were done over the case markings of personal pronouns. Over the annotated data, association rule mining (Agrawal et al. 1993) was performed to extract useful association rules in terms of target-like performance between pronoun case markings and RC constructions. Combining the special tagset with association rule mining over a large dataset of L2 learner language, this study aims to reveal significant roles of L2 knowledge available prior to the given stage of Interlanguage.

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**WORKSHOP:****LANGUAGE CONTACT AND STRUCTURAL ISOMORPHISM IN THE HIMALAYAN REGION**

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It has been generally assumed that a linguistic area arises through intense contact-induced changes which involve structural inference (Thomason 2001). South Asia is by far one of the best known and most studied linguistic areas.

Since the pioneering paper by Emenau (1956) there have been many attempts (cf. Masica 1976; 2001; Ebert 2001 among many others) to select areal features which are shared among languages spoken in South Asia. However there has been little consent on the number of such features and the possible direction of their spread. The minimal set of such features would presumably contain: converbs, OV word order, explicator verbs, dative subject constructions, oblique stems, quotation particles, echo formations, and retroflex consonant sets (cf. Ebert 2001). The research on possible structural interferences has been focused mainly on their antiquity since it has always been assumed that they could only occur through the intense contact over a long period of time. The literature mentions e.g. Dravidian influence on early IA (postulated by Emenau (1956; 1974) and challenged e.g. by Hock (1975), Proto-Burushaski influence on IA (Klimov 1973 and later Tikkanen 1988), Tibetan influence on IA (especially Dardic and Pahari cf. Zakharyin 1982), Afroasiatic influence on Tibeto-Burman and adjacent Indo-Aryan (Tikkanen 1988) to name just a few of them. Methods applied in order to establish sets of interferences range from traditional historical comparative textual analysis, to elaborated calculations of structural variables being ascribed to various morphological types.

However, after a long lasting debate it seems that the possible solution to the problem of defining a linguistic area is an isogloss-based approach which takes into consideration a wider distribution of a feature and a smaller region displaying high density of shared structural traits. In such a 'restricted' approach, linguistic areas are perceived as outcomes of an intersection of isoglosses (Masica 2001; Matras 2009).

The present workshop will not aim at defining linguistic area(s) but rather at highlighting problems of language contact and contact-induced structural changes which have occurred and still occur in the Himalayan region. There have been already many single features mentioned in the literature (e.g. the borrowing of case markers in China (cf. Hook 1991)) and there have been attempts to demonstrate the stability of selected syntactic patterns across two major language families such as IA and TB (cf. Bickel 1999). What is more, there are areal features which have not found any reasonable explanation so far, e.g. the genitive subjects in Western Pahari (cf. Zoller 2008) or features found in IA and TB alike, such as vertical case, evidentiality marking on verbs, and morphological valence-changing morphology (Noonan 2003).

Therefore, it seems that more research is necessary in order to understand the peculiarities of this area which proves to be linguistically very diverse.

We invite contributions touching on different kinds of contact-induced isomorphism in the Himalayan zone, whether in the area of phonology, morphology or syntax. We are particularly interested in contributions that have the scope of an area or region encompassing several languages and that make an attempt at generalizations, where an important aspect would be to separate contact-induced convergence from inheritance or more universal phenomena. We would especially value contributions involving studies of lesser-described languages of this region, taking a variety of perspectives (such as synchronic, diachronic or typological) into account.

Possible topics for discussion may include (but should not be interpreted as limited to):

- the development of syntactic patterns under pressure from dominant regional or state-sponsored languages
- the reinterpretation of case marking and postpositional systems
- changes in TAM systems – the emergence of new tenses, new moods, etc.
- the emergence of discourse markers across languages
- distinctions made within pronominal systems, including the development of honorifics
- numeral systems

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## “East of the 84th meridian”? – Kiranti-Munda convergence reexamined

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Konow (1909) considered several features of the Himalayan (“Kiranti”) area of Tibeto-Burman (TB) to reflect Munda influence, including dual number, as well as multiple verb agreement; see e.g. [1]. He considered the Kiranti languages a link to eastern Kuki-Chin which likewise has verb agreement. Konow’s view was widely accepted. Recent publications by Ebert (e.g. 2009) and Neukom (1999, 2000) update the argument, postulating two convergence areas “East of the 84th meridian” (Ebert 2009). Group A includes TB, Munda, and Dravidian, ‘stretching from Nepal to Orissa’, with complex verb morphology said to reflect a Munda or unknown substratum, and with tense and person marking in subordination; Group B is the ‘predominantly TB northeast’. Neukom (1999) argues that Ebert’s Zone A and B are phonologically distinct from western languages.

- [1] ŋka            n-tak-ŋa  
 I.ABS        SG2(POSS)-friend-SG1  
 ‘I am your friend.’ (Belhare)

I present a critical examination of arguments, old and new. For instance, while dual number is limited to Tibeto-Burman and Munda in the modern period, pre-modern Sanskrit also has it. Moreover, it is found in TB languages outside the Kiranti area (Genetti 2007).

The issue of TB verb agreement is unsettled. Some assume Indo-Aryan origin (Maspero 1946, Egerod 1973). Current scholarship favors inheritance plus various morphological renewals (Henderson 1957, Watters 1993, DeLancey 2010, 2011). LaPolla (2001, 2003) rejects reconstruction of the feature.

The phenomenon of MULTIPLE agreement, with more than one constituent and even with possessors (as in [1]), is problematic. Konow already noted that this agreement is not limited to Ebert’s Group A, but also occurs in Kuki-Chin (Group B); see [2]. Some Indo-Aryan languages in the area have it (Rajbanshi [3], and Maithili), others do not (Assamiya, Bangla, Nepali); it is absent in North Dravidian. Further, Indo-Aryan agreement in the area is (partly) of clitic origin, and northern Munda subject agreement is clitic and probably a recent innovation. Prehistoric contact with Munda, thus, is not a likely explanation for TB multiple agreement (whether in “Group A” or in “Group B”).

- [2] ka-tanpui-ce  
 SG1.help.SG2  
 ‘I help you.’ (Mizo)

- [3] kal<sup>hi</sup> di-m-(k)u-n  
 tomorrow give.FUT.SG2.SG1  
 'I will give (it) to you tomorrow.' (Rajbanshi)

Many of Neukom's phonological features are shared by languages west of the 84th meridian (e.g., lack of retroflex nasals is found even in Hindi inherited vocabulary); but Oriya, located east of the meridian, does not share them (e.g., it has a retroflex dental nasal contrast). The only remaining feature is that both Munda and Tibeto-Burman have word-initial contrastive  $\eta$ -, but that feature is probably inherited in both groups.

Detailed investigation of these and other issues leads to the conclusion that while the evidence is suggestive, at this point there are too many uncertainties to consider the situation resolved. At the same time, the widespread pattern of multiple verb agreement in the area (whether affixal or partly clitic) is remarkable and difficult to attribute to mere chance. More detailed research is needed.

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## Impersonal transitive and causal expressions: Searching for the links among Kashmiri, Shina of Gilgit, Burushaski, and Balti

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In northern India and Pakistan the Indo-Aryan languages Kashmiri and Gilgiti Shina share an unusual construction featuring transitive or causal morphology with a non-referential subject that is used to express states and changes of state in overlapping domains of sensation and health:

- |  |  |
|--|--|
| (a) <i>vakht-ibrōṭhbuḍ-ir.ōvu-n-akhtsi</i><br>time-Abl before age-Caus.Pst-3sgErg-2sgNom you.Nom<br>'You have aged before your time!'          | [Kashmiri]   |
| (b) <i>umare-jo yarakī tu jar-ar-eēgi-n</i><br>age-Abl before you.Nom age-Caus-Pst3sgFem-PresPerf<br>'You've aged before your time.'           | [Hook 1986: (52b)]<br>[Shina of Gilgit]                      |
| (c) <i>krakhbūz-yithvyesir-ōv-n-as bi</i><br>scream hear-Ger fear-Caus.Pst-3sgErg-1sgNom I.Nom<br>'Hearing a scream I was struck with terror.' | [Hook & Zia 2005]<br>[Kashmiri]                              |
| (d) <i>maṭuṭaṅg-erbij-ar-eēgi</i><br>I.Nom dark-Loc fear-Caus-Pst3sgFem<br>'I felt afraid in the dark.'  | [data from ONKoul]<br>[Shina of Gilgit]<br>[Hook & Zia 2005] |

Kashmiri, GilgitiShina, and Burushaski use similar constructions for states of health:

- (e) *mye che-n drwakh ker-mits* [Kashmiri]  
 me.Dat is-3sgErgvomit(Fsg)do-PstPart.Fsg  
 ‘I’ve thrown up.’ [Hook 1986: (7b)]
- (f) *šakarbodikheékheé ma čangth-ar-eégi-n* [Shina of Gilgit]  
 sugar much eat.Gereat.GerI.Nom cloy do-Caus-PstFsg-Perf  
 ‘I have eaten so much sugar I can’t taste it anymore.’ [Hook & Zia 2005]
- (g) *(je)oqáa-é-ilá* [Burushaski]  
 I.Nomvomit1sg-do.Imprf-Cop3sg  
 ‘Ich muss mich übergeben.’ [Berger 1998, 3 (*Wörterbuch*): 97]

Kashmiri uses a parallel construction for the weather; GilgitiShina and Burushaski do not. But Balti (and other western forms of Tibetan?) does:

- (h) *pagahmādyiy-asrūddēr-yith* [Kashmiri]  
 tomorrowlestgive.Fut-3sDrainthrow-CP  
 ‘It might rain tomorrow.’ [Hook 1986: (24)]
- (i) *charpha mala taṅma-med ama rgun-la khā taṅed* [Balti]  
 rain never throw-Neg butwinter-Dat snow throws  
 ‘It never rains but in winter it snows.’ [Read 1934:81]

Using available descriptive resources our workshop presentation will examine the similarities and differences in the impersonal transitive and causal constructions in these four languages from three different families and propose likely scenarios of cross-linguistic influence.

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## From left-branching to right-branching: Syntactic changes in the Hindukush under pressure from languages of wider communication

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In Hindukush languages spoken in the north-western regions of the Indian Subcontinent (particularly Indo-Aryan, sometimes referred to as “Dardic”), a variety of means are available within a complex construction to mark one clause as dependent on another. A subordinate clause may precede the main clause, whereby a complementizer is placed at the end of the subordinate clause: *tu kī baáanu thaní, khojóolu*. ‘Where are you going? (he) asked’ (Indo-Aryan Palula), or *tu xató hatoyóo-t doós reé, buhtuii astám*, ‘I was afraid that you might give him the letter’ (Indo-Aryan Khowar). A preposed subordinate clause can also be formed with a verbal noun, with or without case marker/postposition: *nu ba asaám mhaar-anii the ukháatu de*. ‘He had come up to kill us’ (Palula). Pre-nominal participials is another strategy, semantically corresponding to relative clauses in languages such as English: *phai, teenii háatam čoonťéeli, rumiaál diti hini*. ‘The girl gave him a handkerchief which she herself had embroidered’ (Palula). Alternatively, the subordinate clause can be placed after the main clause, in this case often making use of a complementizer *ki* (or something similar) preceding the subordinate clause: *mhéeli i khojóolu, ki mii báabu koó*. ‘(He) asked: Who is my father?’ (Palula), or, *awá buhtai astám, ki hatoyóo-t doós reé*. ‘I was afraid that you might give him the letter’ (Khowar).

In a survey covering an area from southern India through parts of southern Pakistan, Hook (1987) observed a significant pattern, whereby the order subordinate – main clause was gradually replaced by the order main clause – subordinate as one moves from the Dravidian South to the Iranian Northwest. While the survey did not include the Hindukush, Bashir (2003: 823), points out that left-branching (i.e. the order subordinate – main clause), like in Dravidian and in the Indo-Aryan languages spoken in their vicinity, is also characteristic of the extreme North of the Subcontinent. Bashir (1996: 177) proposes that left-branching in this northern region has come about as the result of

ancient areal influences related to Central Asia, whereas right-branching (i.e. main clause—subordinate) and the use of *ki* is a feature more recently imported from influential languages spoken in South and West Asia. She further notes that the two constructions are used parallel in Khowar, and that the more recent construction may include the imported marker *ki* as well as the indigenous (a grammaticalization of ‘say’).

In the present study, we investigated interlinear texts in a few Hindukush Indo-Aryan languages (Palula, Kalasha, Pashai, Gilgiti Shina, Kalam Kohistani), empirically testing Bashir’s suggestion, and found that these, like Khowar, to a varying degree allow both constructions, with the left-branching alternative representing what seems like an older stratum of the languages, whereas the right-branching alternative most likely stems from massive Persian and, more recently, Urdu pressure as influential languages of literacy and wider communication. The distribution across different types of subordination within each language (Noonan 2007; Andrews 2007; Thompson et al. 2007), as well as quantitative differences between the languages in this regard, is presented and discussed.

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## Non-canonical object and subject in Garhwali: semantic roles or syntactic functions?

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Garhwali, like Hindi, has a set of postpositions used for case marking. This new Indo-Aryan marking system came to replace the flexional system of Sanskrit almost totally eroded by the end of the first millennium (Bubenik 2006). The new system which emerged between the 13th and 15th centuries, not fully developed before 18th century, is now mostly constrained by semantic roles, unlike Sanskrit where cases had mainly a syntactic function. This is particularly clear for accusative, a purely syntactic case in Old and middle Indo-Aryan, and a semantic or discursive case in modern Indo-Aryan, morphologically identical with the dative (an experiencer), which does not mark the typical patient or direct object, but marks atypical patients such as human objects or definite specific salient inanimate objects (Bossong (1985), Naess (2004), Kittala (2006, 2008)). But it is also true for the various markers used for non-canonical subjects, again corresponding to semantic roles rather than syntactic functions (Aikhenwald 2001, Kulikov & Serzants 2013), from the dative, to the instrumental, locative or genitive.

What is interesting in Garhwali compared with Standard Hindi is the great variety of markers (from Chatak’s table) which can be used for non canonical objects and subjects, and the correlate polysemy of almost all markers (INST used for two types of non canonical agents; DAT for marked objects and experiencers, ERG used for instruments, etc.: ex 1-4):

Agent (kartā)	<i>na/la</i> (unmarked in non ergative statements)
Patient (karma)	<i>ka, ku, kū, kaĩ, saṅi, haṅi, khunī, taĩ</i>
Instrument/cause (karaṅ)	<i>na, -n, se, sī, tī</i>
Dative (sampradān)	<i>kaĩ, taĩ, thaĩ, laĩ, lāĩ, ka, saṅi, haṅi, khũĩ, kū, caĩ</i>
Ablative (apādān)	<i>na, tī, te, biṅe, baṅi, be, se, sī</i>
Genitive (sambandh)	<i>ko, kā, kī, rū, rā, rī</i>
Locative (adhikaraṅ)	<i>par, mā, mu, mang, māje, tanaĩ, mathe, undū</i>

This proliferation of forms (up to a dozen for dative/accusative) is all the more intriguing since various cognates of such alternative forms occur in other Indo-Aryan languages as case markers for very different arguments and roles (dative/ergative, instrumental/accusative/ dative, instrumental/dative).

The paper will explore the etymology of such markers, focusing on non-canonical subject and object markers, and try to disentangle what pertains to contact from what represents the specific local semantization of initially unspecified markers.

For instance, the notoriously “indigenous” Garhwali and Kumaoni marker for ablative *bañ* occurs in its short form in Naggari, a language spoken in the Kullu region of Himachal Pradesh as a marker for dative/accusative (ex 5). It is difficult to assign this occurrence to contact, in the same way as the lack of ergative case marking in the 1st and 2nd person or the form of the present copula, clearly Panjabi like, may as well be part of the inherited mixture of languages spoken in the area before the differentiation Hindi/Panjabi, as be the product of contact with the neighbouring Panjabi. Besides, the phonetic erosion of a given form facilitated merge with morphologically similar forms from different etymological sources, for instance *tañ*, *te*, *ti*, derived by certain scholars from the adverbial *tavat* ‘so long, up to, till’, and by others from a participial form of the verb ‘be’ *huntaï*, and the variant *thañ*, *thē* from the verbal basis *sthā* (‘be, stay’). Similarly *se* and its cognates are sometimes derived for the noun *sang* ‘company’, the etymon of the dative *sañ* too, and sometimes from the adverbial *saman* ‘equal, parallel’. Such merges, favoured by the semantic quasi-emptiness of the etymon, explain that a same case marker can be used for marking cases which are now semantically opposed like dative/allative and ablative/ergative, rarely in the same language (ex 6-7) but systematically across languages of the area. The paradox is that they are now used to mark more semantic roles than syntactic functions.

- (1) *tu Anil Rawat tain/sañ/kū jandi cha*  
 2s Anil Rawat acc know prst  
 ‘(do) you know Anil Rawat?’
- (2a) *mī-na yi film sañi/tai dekhi/dekhe (yi film dekhi)*  
 1s-erg this film acc saw (this film saw)  
 ‘I saw this film’
- (2b) *mī-na nauno (naunā tañ/sañ) bainT na māri*  
 1s-erg child (child acc) cane instr stroke  
 ‘I bit the boy with a cane’
- (2c) *ve-na sattu sañ ve talau mā ḍāl dini*  
 3s-erg sattu acc that lake in throw gave  
 ‘he threw the sattu (cereal) in the lake’ (Grierson)
- (3) *mī tai kuch ṭaem chaenu mī tai bhūk cha*  
 1s.dat some time need 1s dat hunger is  
 ‘I need some time’ ‘I am hungry’
- (4a) *tvai se nī karṇyā jānd*  
 2s.instr neg do passive  
 ‘you cannot do (it)’
- (4b) *tvai se ni karṇyā*  
 2s inst neg do-future.passive.participle  
 ‘you will not be able (bring yourself) to do’
- (5a) *mū.be bahū bhūkh lāgī*  
 1s.dat much hunger touch.pft.3s  
 ‘I am very hungry’ (Naggari)
- (5b) *mere shorū be bahū bhūkh lāgi*  
 my boy dat much hunger touch.pft.3s  
 ‘my boy is very hungry’ (Naggari)
- (6a) *kutte nae dande nae māry* (Bangaru central, Singh 1970)  
 dog.ACC stick.INSTR strike.IMPER  
 ‘strike the dog with the stick’

- (6b) *balkā nae toriya hongē*  
 children.ERG break.MP PRESUMPTIVE  
 ‘the children have probably torn (it)’
- (6c) *ghor nae pāni pyā de*  
 horse.DAT water drink.CAUS give.IMPER  
 ‘give water to the horse’
- (7) *rupay tī us-tī le lo*  
 argent ACC 3s.ABL prendre prendre.IMPER  
 ‘prens l’argent de lui (prens lui l’argent)’ (Bangaru, Tiwari 1956: 177)

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## Language contact in the Western Terai belt of Nepal

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Following the pioneering work by Emeneau (1956) there have been many attempts by a number of scholars (for e.g., Masica 1976, Peterson 2010) to describe the areal features shared by languages belonging to the different language families in South Asia. However, to my knowledge, there is no such study that deals with the linguistic features which arise due to the (recent) language contact between or among languages of the same family. This study is based on the Kapilbastu, Rupandehi and Nawalparai districts of Nepal. It deals with Nepali and other Indo-Aryan languages, such as Bhojpuri/Tharu (Paschuan), and discusses how they came into contact and influenced each other in the western terai part of Nepal.

Linguistic evidence of the language contact:

### Genitive-Dative merging

Bhojpuri – where *-ke* covers functions covered in other languages by the dative and the genitive.

- (1) *ū bahan-ke dañ dih-le*  
 3ns sister-GEN offering give-PST.3ns  
 ‘They offered something to their sister.’ (Pandey 2003)

Nepali *-ko* as dative

This marking pattern is not found in the standard dialect of Nepali, which possesses both a dative and a genitive case. However, the Nepali language spoken in the Terai area has the same marking pattern found in Bhojpuri (2). Because this is the area where Bhojpuri was spoken as a primary language before the speakers of Nepali move to that area.

- (2) *gai-ko ghās diy-e*  
 cow-GEN grass give-PST.3ns  
 ‘They gave grass to the cow.’

In standard Nepali, the DAT(ive) case would be used here, as in (3):

- (3) *gai-lai ghās diy-e*  
 cow-DAT grass give-PST.3ns  
 ‘They gave grass to the cow.’

#### Gender agreement

In Hindi, Standard Nepali and most other Indo-aryan languages, there is gender agreement between nouns and adjectives. For example,

- (4) *bada beta* vs. *badi beti* ‘elder son vs. elder daughter’ (Hindi, Pandey 2003)

- (5) *thulo chora* vs. *thuli chori* ‘elder son vs. elder daughter’ (Nepali)

Unlike in Nepali and Hindi, in the Standard Bhojpuri there is no such agreement between nouns and adjectives, for example:

- (6) *bad beta* vs. *bad beti* ‘elder son vs. elder daughter’ (Pandey 2003)

However, we often do find the Hindi/Nepali type of agreement in Bhojpuri, as shown in (7). This is probably due to the influence of Nepali/Hindi. In this example, we can see gender agreement between the adjective and the noun.

- (7) *badka betwa* vs. *badki beti* ‘elder son vs. elder daughter’

#### Loss of ergativity

In Standard Nepali, the A argument must be marked by the ergative marker *-le* when the predicate appears in the past tense, as in (8).

- (8) *hari-le kalam bhāc-yo*  
 H.-ERG pen break-PST.3s  
 ‘Hari broke the pen.’

In the western Terai variety of Nepali, however, there is no such case-marking. This is probably due to influence from Bhojpuri, which does not have morphological ergativity. This is illustrated by the following examples:

- (9) *hari kalam bhāc-yo*  
 H. pen break-PST.3s  
 ‘Hari broke the pen.’

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## **Obligative patterns In Pahari – Individual developments and contact-induced changes**

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The aim of the present paper is to highlight the diachrony and typology of the obligative constructions in the Pahari languages spoken or attested in the area of Western Nepal and North-Western India (the states of Uttarakhand and Himachal Pradesh).

Pahari has developed a number of constructions denoting obligation. The standard Indo-Aryan pattern is reflected in the Dative subject construction (although there are some variations, e.g. in Marathi (cf. Masica 1990)) whereas the Pahari languages display a certain extension of marking of the main argument (both A and S).

In order to follow the spread of different types of subject marking in the obligative pattern I will demonstrate the results of the investigation of the inscriptional corpora of Nepali, Kumaoni and Chambyali. Early Nepali (cf. Wallace 1981; 1982) and Kumaoni show clearly unmarked and ergatively marked subject forms and Chambyali oblique and genitive forms. The results of the diachronic research will firstly be compared with the texts collected by Grierson (1916) and then with contemporary language usage. We shall be able to observe stadial introduction of the dative markers which can be conditioned by verb transitivity (e.g. Nepali) or, presumably, contact-induced shift to dative marker (e.g. Kumaoni (cf. Stroński 2010)). Both seem to be rather recent phenomena and the relevant data excerpted from the corpora will be adduced by the author.

On the other hand, the data from Western Pahari will indicate how the genitive marking has spread to the obligative pattern (cf. Hendriksen 1985; Zoller 2008). It has also been observed that some contemporary Western Pahari dialects (e.g. Kului) have preserved the ergative marking in the obligative pattern restructuring the obligative into the future (Ṭhākūr 1975). This well attested path of grammaticalization seems to be present in some Eastern Pahari dialects (e.g. Nepali) as well. In this respect the Pahari languages differ significantly from other Indo-Aryan tongues which have restructured the obligative pattern as the future tense but which at the same time have abandoned subject marking, such as Awadhi or Maithili. On the other hand, structural affinities between early Rajasthani and Pahari obligative patterns are striking and the paths of their development appear to coincide as well.

In addition to that, early Nepali developed another obligative pattern which made extensive use of the subjunctive (cf. Wallace 1982) with ergatively marked A and this particular development never took place in neighbouring Kumaoni.

Results of this preliminary research should highlight structural and contact-induced phenomena which led to the development and distribution of the three basic obligative patterns existing in the Pahari languages, namely ergative, dative and genitive.

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## Pronominal suffixation in the Kashmiri languages

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This paper investigates the influence of referential hierarchies on person marking and case marking in the Kashmiri languages. The term “referential hierarchies” is used in the broad sense of Bickel (2010), i.e., as an umbrella term under which several scales are understood, known separately as animacy hierarchy, indexicality hierarchy, person hierarchy, etc. It is argued that the Kashmiri languages show “hierarchical alignment”, an alignment pattern which is not dependent on lexical meaning or grammatical roles but determined by these referential hierarchies (cf. Siewierska 2004).

The Kashmiri languages present both head-marking and dependent-marking. The head-marking operates on two levels: there is a gender/number agreement system and a suffix system of dependent person markers. In perfective constructions, an ergative pattern is in evidence; however, other constructions seem to be hierarchically aligned, as illustrated in the following examples I from Modern Standard Kashmiri.

- (1) t̄ahi on-iv-on su yoor ('you brought him here')  
 you.ERG.PL bring.PST.M.SG-2PL-3SG he.NOM.SG here

- (2) tsi ch-u-kh me parināv-ān ('you teach me')  
 you.NOM.SG AUX.PRS-M-2SG I.OBJ.SG teach-PTCP.PRS
- (3) bi ch-u-s-ath tsi parināv-ān ('I teach you')  
 I.NOM.SG AUX.PRS-M-1SG-2SG you.NOM.SG teach-PTCP.PRS

In (1), a perfective construction, the case marking and the gender/number agreement follow an ergative pattern, but the person hierarchy additionally demands that the second person argument be marked on the verb. In (2)-(3), there is a difference in case marking of P, determined by the person hierarchy. If the ranking is direct, i.e. A is higher-ranked than P, then P is marked in the nominative (3), but if P is ranked higher than A, then P is in the objective case (2). Head-marking and dependent-marking are obviously determined by the referential hierarchies; however, in what ways is often less clear. Pronominal suffixation is obligatory for second person S, A, P and IO, but optional for first and third person (depending on the presence of an overt pronoun). The phenomenon is also dependent on a number of extra-linguistic factors, such as whether it concerns spoken or written language use, and its relation to pronominal drop.

The pronominal suffixes which Kashmiri uses, have been argued to be a feature of a north western "Sprachbund" (cf. Emeneau 1980 [1965]). They occur in Sindhi and Lahndi as well, though in other forms. Their origin is ascribed to Vedic pronominal clitics, although they seem to have disappeared in earlier stages of the language, and perhaps been reinforced in Indo-Aryan through contact with Indo-Iranian (cf. Emeneau 1980 [1965]). The precise diachronic evolution has not yet been described, though it is possible because sources of Old Kashmiri literature are available. We compare the use of pronominal suffixation in Standard Kashmiri with its use in Old Kashmiri, and its use in the Poguli dialect of Kashmiri which is rumoured to be more archaic than Standard Kashmiri.

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## Multiple negation in the Sino-Tibetan languages of Eastern Nepal and Sikkim

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This study aims to describe and explain patterns of multiple negation of the Sino-Tibetan languages of Eastern Nepal and Sikkim against the background of both the larger Sino-Tibetan family – with a reasonably representative data set on 153 languages – as well as coterritorial Nepali. The focus will be on standard negation, i.e. the negation of a declarative verbal main clause (Miestamo 2005).

Negation patterns in these languages are interesting in more than one way. First, whereas most Sino-Tibetan languages express standard negation with a single preverbal element (90 of the 153 languages), which is the universally preferred strategy (Dryer 2013), in Eastern Nepal and Sikkim we find a high concentration of multiple negation patterns (9 of the total of the 15 relevant Sino-Tibetan languages, viz. 8 Kiranti languages but also Lepcha). Second, multiple negation is usually double negation, as in (1), either obligatorily or optionally so, but triple marking is attested in two languages, viz. Limbu and Bantawa, and in the latter, a semantically single negation can be expressed by four and even five markers (in (2)), which, as far we know, makes the language unique.

- (1) Camling (Ebert 1997: 30)  
*pa-khai-n-unga*  
 NEG-go-NEG-1SG  
 'I didn't go.'
- (2) Bantawa (Doornenbal 2009: 271)  
*ī-ciŋ-nin*                      *set-nin-Ø-nin-ci-n*  
 NEG-hang-NEG              kill-NEG-PROG-NEG-DUP-NEG  
 'He is not killing himself.'

Third, with doubling negation, the parts need not embrace the verb, contrary to ta universal preference, but they can both follow.

## (3) Athpare (Ebert 1997b: 55)

*a-pid-u-n-ci-n-ga*

2-give-3U-NEG-3nsU-NEG-NML

'You will not give them.'

The explanation of the multiplicity of the negation patterns will have to appeal to a variety of factors. One is the more general phenomenon of affix doubling on both parts of a complex verb structure (as in Bantawa (2)) and the other is negative doubling as found in a 'Jespersen Cycle'. This is the process in which a doubling pattern is typically a stage between a preverbal single negation and a postverbal single negation, and in which the old preverbal negation is first optionally accompanied by a second marker, which could be a copy of the first one, and the new postverbal negation first still supports the old preverbal negation and then forbids it. Schematically:

$$\text{NEG1 V} \rightarrow \text{NEG1 V (NEG2)} \rightarrow \text{NEG1 V NEG2} \rightarrow (\text{NEG1}) \text{ V NEG2} \rightarrow \text{V NEG2}$$

Following the hint by Ebert (1997a: 30) on Camling, we argue that contact interference is a third factor, interfering with the first two. The contact language is Nepali, which expresses standard negation with a postverbal *na/nə* suffix. Similar suffixes are also found in 12 Sino-Tibetan languages, but 9 of these are found in Eastern Nepal and Sikkim, viz. 7 with double negation and 2 with postverbal single negation, and we take these 9 forms to be contact-induced.

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## Syntactic interaction between Indo-Aryan Nepali and Tibeto-Burman Newari

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Centuries lasting contacts between Nepali, the Indo-Aryan official language of Nepal, and the Tibeto-Burman Newari spoken in the Kathmandu Valley have conditioned changes in the two systems. The investigation of structural interference between Nepali and Newari, of its causes and effects and of directions of syntactic influence is the target of the paper. The analysis is based on data extracted from the original texts; the other scholars' views pertaining to the subject are also to be critically reviewed.

Among the bunch of sociolinguistic problems to be discussed most serious is the one of the number of waves of migrations into Himalaya (two or three) and the effects of the hypothetical 'third wave' on Pahari languages in general and on Nepali and Newari in particular.

The other problem is the Nepali ergativity which is often defined as 'aspectually split' in contrast with the 'consistent' one in Newari and other Tibeto-Burman languages. This syntactic non-congruity between the two languages seems to have served as basis for speculations that ergativity might have been borrowed from Nepali into Himalayish, and particularly into Newari. However, the proposed definition of the Nepali ergativity as 'aspectually split' is only partially correct as it also spreads on tenses and moods that lack the perfective aspect feature – compare, e.g.: *kukur haru: le ma:~s kha:nchan* 'Dogs [as species] (Erg.) are eating (Pres.) meat' or *u le ja:pan la:i ma:rne thio* 'He (Erg.) would have killed (Conditional) the Jap', etc.

It is true that in all the corresponding Indo-Aryan languages (including Nepali) ergativity has got firmly established historically due to internal reasons: it has been determined by transitive participles of the perfective aspect occupying the predicate position. But its subsequent development has often been determined by contact factors – illustrative is, for example, the loss of ergativity in Dakkhini which happened due to its contacts with non-ergative Dravidian. The similar contact factor seems to have been prominent in case of the Nepali-Newari interference: the reinforcement of the inherited Nepali ergativity has been determined by the influence of the consistently ergative Newari on Nepali, and not vice versa as is thought by some scholars.

It may also be shown that contrary to the opinion of certain linguists, the Tibeto-Burman Newari does possess the Dative subject constructions (with the role of Experiencer marked by dative) that are very much similar to those

of Indo-Aryan. The existence of them in Newari seems to demonstrate rather clearly the Indo-Aryan, and concretely Nepali, syntactic influence upon Newari.

Some other phenomena – such as, e.g., the almost full attrition of the category of gender in Nepali nominals or the development in Nepali of the syntactic category of evidentiality [expressed by the citatory particle (*a*)*re*] which partially reproduces the well developed system of evidentiality marking particles and suffixes in Newari – serve as proofs that the process of the syntactic interference between Nepali and Newari has been and still remains the two-sided one.

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**WORKSHOP:****LANGUAGE DIVERSITY AND HISTORY: NEW INTERDISCIPLINARY PERSPECTIVES**

*Convenors: Annemarie Verkerk, Simon Branford, Rebecca Grollemund (Reading Evolutionary Biology Group, University of Reading)*

There are 7000 to 8000 languages spoken in the world. This linguistic diversity is the result of a long evolutionary process as languages change and develop over time. Every language is an archive, a testimony of human evolutionary history. It reflects its speakers' history and its culture, and constitutes a body of historical evidence for linguists. In order to understand language diversity, different methods for classifying languages have been developed since the 19<sup>th</sup> century: lexicostatistics invented by Swadesh in 1955, the mass comparison developed by Greenberg in 1954 and the Comparative Method used by historical linguists.

During the last fifty years a number of new quantitative methods have been developed to compare and classify the world's languages. Recently, historical linguists have borrowed more sophisticated techniques from the field of evolutionary biology. Indeed, the numerous analogies between biological evolution and linguistic evolution established (Pagel, 2000, 2009; Atkinson and Gray, 2005) have shown that phylogenetic tools can also be applied to languages. Two major methods have been developed in phylogenetic reconstructions: distance-based methods (UP-GMA, Neighbour-Net and Neighbour-Joining) and character-based methods (Maximum parsimony, Maximum Likelihood, Bayesian approaches). These methods have allowed for the production of phylogenetic trees and thus to examine historical relationships amongst a large range of language families:

- Alor-Pantar: Robinson and Holton (2012);
- Arawakan: Walker and Ribeiro (2011);
- Aslian: Dunn et al. (2011);
- Austonesian: Blanchard et al. (2009), Bouchard-Côté et al. (2012), Gray et al. (2007), Greenhill et al. (2010), Greenhill and Gray (2005, 2009), Saunders (2005);
- Australian: McMahon and McMahon (2005);
- Aymaran: McMahon et al. (2005);
- Bantu: Currie et al. (2013), Grollemund (2012), Holden (2002), Holden et al. (2005), Holden and Gray (2006), Rexová et al. (2006);
- Chinese: Hamed and Wang (2006);
- Creoles: Daval-Markussen and Bakker (2011);
- Dravidian: Kolachina et al. (2011);
- Indo-European: Atkinson and Gray (2006), Blanchard et al. (2009), Boc et al. (2010), Dunn et al. (2005, 2007), Forster and Toth (2003), Gray and Atkinson (2003), Nakhleh et al. (2005a, 2005b), Nelson-Sathi et al. (2011), Petroni and Serva (2009), Rexová et al. (2003), Ringe et al. (2002), Ryder and Nicholls (2010);
- Japonic: Lee and Hasegawa (2011);
- Mixe-Zoque: Cysouw et al. (2006);
- Pama-Nyungan: Bowern and Atkinson (2012);
- Quechuan: McMahon et al. (2005);
- Papuan: Dunn et al. (2005, 2007);
- Semitic: Kitchen et al. (2009), Ryder and Nicholls (2011);
- Tupi: Walker et al. (2012);
- World: Brown et al. (2008).

However, there is the potential to go beyond the proposal of language phylogenies. Indeed, in recent years, research has focused on connections between the diversification of languages and other, related fields of inquiry:

- population expansions: Bouckaert et al. (2012), Currie et al. (2013), Gray et al. (2009), Gray and Jordan (2000), Lee and Hasegawa (2011, 2013), Serva (2012);
- the inference of homelands: Gray and Atkinson (2003), Kitchen et al. (2009), Wichmann et al. (2010);
- genetics: Balnovsky et al. (2011), de Filippo et al. (2011, 2012), Pakendorf et al. (2011), Tambets (2004), Verdu et al. (2013);
- archaeology: Bellwood (2007), Bostoen et al. (forthcoming);
- demography and social structure: Bowern et al. (2011), Walker and Hamilton (2010);

- climatology: Honkola et al. (2013).

This workshop brings together scholars who use hypothesis-driven, quantitative methods to illuminate long-standing questions in historical linguistics. It is a meeting of scholars who use new and novel methods to produce language phylogenies. Building on their phylogenetic estimations, the majority of the participants explicitly link their results to a range of meta-linguistic sources of historical information, including geographical, genetic, archaeological, social, and climatological studies.

The papers in the workshop are divided into two broad themes:

(a) **New approaches to phylogeny estimation** – papers that build on recent advances in phylogeny estimation to improve on the methods that are used to estimate phylogenies and use them for comparative analysis.

(b) **Interdisciplinary approaches going beyond phylogenies** – papers that link quantitative historical linguistics to the meta-linguistic context, including geography, genetics, archaeology, climatology, and well as social and cultural factors.

(a) **New approaches to phylogeny estimation and comparative phylogenetics.** In this theme are papers analysing lexical cognate data and phonological similarity data to propose new methodologies to infer phylogenies. Kelly and Nichols propose a phylogenetic model that takes into account lateral transfer of lexical material; Wichmann et al. present a comparison of character- and distance-based methods for inferring phylogenies; and Charnavel et al. propose a statistical framework in which evaluating comparative phylogenetics across different language families becomes possible. These participants bring cutting-edge answers to the question of how to best estimate phylogenies given the possibility of non-vertical transmission, different ways of measuring similarity, and peculiarities of different language families.

(b) **Interdisciplinary approaches going beyond phylogenies.** Several presenters use a range of meta-linguistic information to allow new insights in language history. This includes geographical information (incorporated by Atkinson et al.; Carling et al.; Grollemund et al.; Honkola; and Prokic and Cysouw), genetic records (Gray), archaeological dating (Grollemund et al.; Bostoen et al.), climatological findings (Honkola), and social and cultural factors (Honkola). The approach taken by the participants in this theme sets out new directions for historical linguistics: by including meta-linguistic information in phylogenetic inferences, a better understanding of language diachrony becomes possible.

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## Phylogeographic inference from linguistic data

*Atkinson, Quentin Douglas; Bower, Claire (School of Psychology, University of Auckland, New Zealand; Department of Linguistics, Yale University, USA)*

**Research questions:** What can modern and historically attested linguistic variation tell us about the timing and location of major human population expansions around the globe?

**Approach:** Recent work on language evolution has successfully applied phylogenetic methods from biology to comparative cultural and linguistic data to test hypotheses about cultural ancestry (Atkinson & Gray, 2006; Atkinson, Nicholls, Welch, & Gray, 2005; Bouckaert et al., 2012; Thomas E. Currie, Meade, Guillon, & Mace, 2013; Gray & Atkinson, 2003; Kitchen, Ehret, Assefa, & Mulligan, 2009), rates of change (Atkinson, Meade, Venditti, Greenhill, & Pagel, 2008; Greenhill, Atkinson, Meade, & Gray, 2010; Pagel, Atkinson, & Meade, 2007) and sequences of change (T. E. Currie, Greenhill, Gray, Hasegawa, & Mace, 2010; Jordan, Gray, Greenhill, & Mace, 2009). However, relatively little attention has focused on explicitly modeling large-scale spatial processes of language change. Here we report results from collaborative research that uses Bayesian inference tools from population genetics and phylogeography (Lemey, Rambaut, Welch, & Suchard, 2010) to analyze spatial information derived from comparative linguistic data in a number of linguistic groups.

**Method:** We build on our previous work modeling spatial processes of cultural (Ross, Greenhill, & Atkinson, 2013) and linguistic (Bouckaert et al., 2012) evolution by incorporating new types of data and by modeling spatial expansion across heterogeneous geography. These models are implemented in a Bayesian phylogeographic framework using the software package BEAST (Drummond, Suchard, Xie, & Rambaut, 2012). Our model-based, Bayesian approach offers a number of advantages over previous approaches. First, the optimality criteria and assumptions of the method are made explicit in the specification of the structure of the model and prior beliefs. Second, Bayesian

inference of phylogeny provides a principled framework with which we can efficiently explore the vast universe of possible language trees and quantify uncertainty in the inferred relationships and model parameters (Huelsenbeck, Ronquist, Nielsen, & Bollback, 2001). Third, we can compare the fit of a range of models of language lineage evolution and spatial diffusion. Finally, we can explicitly test between competing migration hypotheses by quantifying their relative support, given our data and model.

**Data:** In addition to new methodological developments, we apply our analysis to several large-scale linguistic data sets from language families across Oceania and the Americas.

**Results:** Our findings reveal clear spatial signal in the data. Our results can be used to shed light on the origins of these families and the cultural groups they represent. In addition, by explicitly modeling the process of population expansion, our parameter estimates provide insight into the nature and tempo of human population expansion dynamics in different parts of the globe. We discuss the implications of these parameter estimates.

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## Establishing the rate of language change in the Lower Congo Region: a phylogenetic approach to the diachronic Kikongo corpus

Bostoën, Koen (KongoKing Research Group, Ghent University, Belgium); de Schryver, Gilles-Maurice (Université libre de Bruxelles, Belgium); Branford, Simon (University of Reading, UK); Grollemund, Rebecca (University of Reading, UK)

The Lower Congo region occupies a pivotal position in Bantu history. It lies at the junction of two major Bantu sub-groups, the North West Bantu and West-Bantu, not only geographically, but also historically. Several studies have located a secondary nucleus of early Bantu expansion in this zone (Heine et al. 1977; Vansina 1984). Similarly, a recent reanalysis of lexicostatistical data suggests that the coastal Kongo area is indeed at the extremity of a long-term wave-of-advance which resulted in the settlement of the Inner Congo Basin by Bantu speakers (Wotzka and Bostoën 2009). However, it is very poorly understood as to how and when Bantu speech communities peopled the Lower Congo area itself.

In order to elucidate the language dynamics in this region, we present a new phylogenetic classification of the 'West-Coastal Bantu languages' (Vansina 1995), consisting of the languages belonging to Guthrie's zone H and groups B40-80 with a special focus on Kikongo languages (H10). We have integrated in our dataset new Kikongo

varieties collected during recent fieldwork (2012) and also historical Kikongo varieties, which were selected from historical sources dating back to the 17th century (e.g. *Vocabularium Latinum, Hispanicum, e Congense*, Van Gheel 1652).

In order to infer our tree, we have used advanced computational phylogenetic methods. We applied to our data a likelihood model of lexical evolution (that allows different rates of evolution for the words studied) and Bayesian inference of phylogeny (using Markov chain Monte Carlo -MCMC) with a relaxed clock dating methods, calibrated by the historical variants of Kikongo languages. This novel method allows us to provide a topology and date estimates for all nodes.

The preliminary results regarding the external classification of Kikongo show that the Lower Congo region is an area of later settlement for a subset of West-Coastal Bantu languages, rather than a West-Coastal homeland; whereas the preliminary results for the internal classification of Kikongo indicate a language frontier between the western Kikongo varieties, which are more closely related to the more northern West-Coastal Bantu languages, and the other Kikongo varieties which manifest closer lexical affinities with West-Coastal Bantu languages further East.

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## Calibrating typological and lexical diversity: Eurasia and Amazonia compared

Carling, Gerd (Lund University, Sweden)

It is a well-known fact that typological features and culture vocabulary are both subject to areal spreading. However, while shared culture vocabulary often is the result of fairly superficial and indirect contact, e.g., mediated by intervening cultures or languages, and coinciding with the spread of new cultural practices, typological areal features are the result of more intense long-term contacts, usually involving bilingualism. Given this difference, comparing the distribution of culture vocabulary with areal features can shed some light on various degrees of historical contact.

The proposed paper will address two linguistic areas, Europe (including Caucasia) and Amazonia, and will compare the geographical distribution of a set of typological data with a sample of culture vocabulary which can be assumed to have spread across language family boundaries. The results will be correlated against established genealogical groups to ensure that shared properties are the result of spread, not shared inheritance.

By comparing the distribution of thematic sets of culture words (e.g., agriculture, handicraft, religion) with established genealogical groupings (based on basic vocabulary), we propose a probabilistic model which can predict the probable direction of loan in the absence of historical data. This is then calibrated against known historical data from European languages. The resulting methodology is then used to suggest a tentative picture of cultural contacts in prehistoric Amazonia, based on cultural lexicon and typological properties in now living languages in Amazonia.

The typological properties addressed in the European scenario have been specially selected to chart a maximum of variation across the different language families involved. Typical examples include clitic placement, existence / non-existence of various kinds of morphology (certain cases, certain agreement patterns), word order at different levels and alignment. Of these, certain features have been singled out as maximally distinctive for linguistic areas, in part, features which are typical of e.g., the Balkan Sprachbund, and in part those features which can be shown mathematically to be the most distinctive for a given area, but which may be less salient (cf. Carling et al. 2013). Similarly, the typological features selected for Amazonia include those where the maximal diversity is expected, in particular agreement, alignment and word order, as well as some other marginal phenomena found in some languages. The data is partly the result of our fieldwork, and partly collected from published sources.

Patterns in the diversity of both typological features and cultural vocabulary are calculated using computational cladistics (Bayesian trees, biplots) and the geographical spread of those patterns is illustrated and calculated by Geographical Information Systems technology.

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## Layers of history and layers of evidence: genes, languages and the peopling of the Pacific

Gray, Russell (University of Auckland, New Zealand)

Human history is a complex tapestry of migrations, population interactions, drift and local adaptation. Unravelling the complexities of our history is thus a challenging task that requires the integration of evidence from linguistics, genetics, archaeology and anthropology to help disentangle the relative roles and timing of these processes. The standard model of Pacific settlement focuses on two major migration phases: the early Pleistocene settlement of Near Oceania (Australia, New Guinea and the islands east as far as the Solomon Islands) from 50-30,000 BP, which was followed much later by the arrival of Austronesian speaking colonists around 3400 BP. This second wave is generally associated with a Neolithic expansion out of Taiwan, and is archaeologically visible in the Pacific region with the appearance of the Lapita Cultural Complex (Kirch 2002). Lapita peoples were the first to colonize Remote Oceania and Lapita sites are found as far east as Tonga and Samoa. The final expansion pulse, into the rest of Polynesia, began some 2000 years later, and ended with the settlement of New Zealand only 730 years ago (Wilmshurst et al. 2011).

Despite quantitative analyses of lexical data strongly supporting this account (Gray et al 2009), recent research indicates that the peopling of the Pacific was much more complex than the standard two-phase model implies. Data from cranial morphometrics (Pietrusewsky 2006), linguistics (Blust 2008), commensal animals (Addison and Matisoo-Smith 2010), and the dating of mitochondrial haplotypes (Soares et al. 2011), all conflict with that account and suggest that multiple waves of population expansion might better explain the apparently contradictory lines of evidence.

Computational methods recently developed in evolutionary biology enable the diversification of lineages to be tracked in both space and time (see Bouckaert et al 2012), and thus potentially infer multiple waves of population expansion. In this talk I will use a new “island hopping” variant of these Bayesian phylogeographic methods to analyse a cognate coded basic vocabulary dataset of over 600 Austronesian languages (the data will be drawn from the Austronesian Basic Vocabulary database (<http://language.psy.auckland.ac.nz/austronesian/>)). The inferences from these analyses will be compared with those from archaeological and genetic data and I will outline how an ABC (Approximate Bayesian Computation) framework might be used to integrate the different layers of evidence and make inferences about different layers of history.

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## The Bantu Expansion: new routes, dates and evidence for punctuational change

Grollemund, Rebecca; Branford, Simon; Meade, Andrew; Venditti, Chris and Pagel, Mark (University of Reading, UK)

The Bantu language family has the largest geographical area of any in Africa, with approximately 240 million speakers divided among 400-600 languages spoken across 27 countries. It is now widely accepted that the Bantu ex-

pansion began 5000 years ago, somewhere around the Nigerian-Cameroonian borderland, eventually moving all the way to present day South Africa, but the precise routes and the timings of those routes are still debated.

To investigate these questions, we present a dated phylogenetic classification of the Bantu languages based on new lexical data for 400 languages, using novel Bayesian phylogenetic methods that allow for varying rates of lexical evolution throughout the tree as well as for rapid or punctuational bursts of lexical change to occur at or near times of language splitting events. We identify the signal of these punctuational episodes and show that they might account for as much as 20% of the total amount of lexical replacement in the tree.

Using the tree in conjunction with present day geographical information we are able to infer a novel dispersal route for the Bantu language family. We show that, from the proto-Bantu nucleus, there was a first migration wave from west to east, with a suggestion that some groups then went south through a savannah corridor that had opened up around 2500 BP in the rainforest, Northern Congo. The remainder of the Bantu range was subsequently filled by two distinct waves: one going west (Western Bantu) and the second going east (Eastern Bantu), before turning south and reaching present day South Africa.

## The role of extralinguistic variables in dialect formation

*Honkola, Terhi (University of Turku, Finland)*

Linguistic variation seen between languages stems from within-language variation analogously to genetic variation seen between species originates from within-species variation. Through the analogous nature of biological and language evolution suggested (see e.g. Croft 2000, Pagel 2009), and recent advances in the quantitative methodology, biological methods have increasingly gained ground in the study of language evolution during the last decade. However, studies on linguistic variation using evolutionary methods have until now concentrated mainly on the divergence and diversification of languages within language families and the source of variation that can lead to language divergence, i.e. dialectal variation, and variables associated with dialectal structure has thus far not been taken into account in studies using these methods.

Within-language variation is not randomly distributed but it is commonly geographically structured - similarly as is genetic variation in biological species: individuals far away from each other are usually also more distinct linguistically or genetically than individuals close to each other (Chambers & Trudgill 1998, Wright 1943). In biology, other factors producing genetic structure have been sought from environment (Wang & Summers 2010). Also in linguistics, the association of environment with language, and specifically to vocabulary, through social factors was noted by Sapir (1912) already a century ago, and later the relationship of environment and language has been discussed in ecolinguistics (Fill & Mühlhäusler 2001) and in studies about environmental variables driving linguistic diversity (Gavin 2013). In addition, as language is part of culture and dialectologists have occasionally noted that some cultural traits correlate with dialect isoglosses (Chambers & Trudgill 1998), it is essential to include also cultural variables to the study of extralinguistic variables explaining linguistic variation.

We studied the relative contributions of geographical distance (G), logarithm of geographical distance (logG), environmental (E) and cultural (C) variables in explaining linguistic variation using extensive Finnish dialect data, geographical distance data and ca. 100 years old data from several (in total 42) environmental and cultural variables collected from 471 municipalities across the area of Finland. Dialect data was turned into Séguy distance index (Chambers & Trudgill 1998) and environmental and cultural data (after clearing highly correlating variables away) was turned to Euclidian distance matrices for each pair of municipality. We then analyzed the correlation of the data matrices with Multiple Regression on Distance Matrices analysis and reduced the model to include the most essential variables.

Final model including 7 variables explained 53 % of the linguistic variation between municipalities. Each cultural, environmental and logarithm of geographical distance models explain a significant part of the linguistic variation individually (logG: 7.4 %, E: 5.6 %, C: 5.1 %), while large part of the variation is explained with double and triple models (EC=7.7 %, ElogG=9.0 %, ClogG=8.7 %, EClogG=9.5 %) pointing out the intertwined nature of environment, culture and geographical distance in explaining linguistic variation. Hereby, our study shows that extralinguistic variables contribute to linguistic divergence and suggest that quantitative population level methods could be a fruitful tool in uncovering fundamental questions in linguistics.

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## A statistical model for language diversification in the presence of lateral trait transfer

Kelly, Luke; Nicholls, Geoff (University of Oxford, England)

Bayesian Phylogenetic methods for inferring the ancestry of lexical traits have shown promise in validation studies testing the methods against known calibration data (Gray and Atkinson, 2003; Nicholls and Gray, 2008). However, the credible intervals quoted for divergence times are in conflict with values obtained by independent means for certain key branching events. We are undertaking a search for model misspecification which might explain these apparently contradictory findings. In this study we describe and test a phylogenetic model for the diversification of lexical traits which allows for the lateral transfer of traits between languages, corresponding to a model for unidentified borrowing.

Chang and Michael recently addressed this problem for pairs of languages. We are interested in testing for global borrowing between members of language families, such as Indo-European. We take the model of Nicholls and Gray (2008) as a starting point and extend it to allow for the lateral transfer of traits between the lineages of a phylogenetic tree. The model differs from previous models for borrowing due to Nakhleh et al. (2005) and Szöllösi et al. (2012) as it does not require special modifications to the tree in order to account for borrowing. Inference can be performed using Markov chain Monte Carlo methods. The model performs well even in the presence of relatively high levels of borrowing; and applying it to the datasets of Dyen et al. (1997) and Ringe et al. (2002), we obtain some interesting results.

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## Bayes meets Levenshtein: a comparative performance study of character- and distance-based methods in linguistic phylogenetics

Wichmann, Søren (Max Planck Institute for Evolutionary Anthropology, Leipzig, Germany); Greenhill, Simon (The University of Auckland, New Zealand); Gray, Russell (Australian National University)

Recent years have seen a proliferation of proposals for the classification of different language families using computational phylogenetic methods, where the most popular ones have been either character- or distance-based. Most often the character-based methods are applied to tables of cognate classes of lexical data established through judgments of cognacy provided by experts on the languages in question. Distance-based methods take as input a matrix of distances among languages which can be measured whatever way is deemed appropriate. A widely used distance measure is the so-called Levenshtein or 'edit' distance, which measures the number of transformations which it takes to change one word into another. Distances for word pairs are converted into an average for a whole list of words. The choice between character- or distance-based methods affects the choice of algorithms for turning the data into phylogenies. Character-based algorithms have the advantage that they can access the information contained in a table of characters, which is fuller than the information contained in aggregate distances. Moreover, their results are more tractable and they are closer in spirit to historical linguistic thinking inasmuch as some involve the reconstruction of ancestral states. Finally, simulations in the bioinformatics literature suggest that Bayesian character-based

methods are more robust in the face of variable rates of change than a distance-based method such as Neighbor-Joining.

Each family of approaches, then, has advantages that justify their application to linguistic data. Distance-based methods do not require cognate judgments and therefore do not rely on any kind of expertise. This means that there is no limit to the number of languages that can be investigated, and subjective judgment, which is an important, possibly confounding factor especially when dealing with very remotely related languages, is not involved. They do not even require a prior assumption of relatedness, which makes them well suited to explore long-distance relationships. Using character states, on the other hand, implies the availability of phylogenetic algorithms which are apparently superior. Thus, they would seem to be preferable in cases where one wants to apply computational phylogenetic methods to a set of languages known to be related – but this is not known for certain. It is, in fact, an open, empirical question whether character-based methods perform better than distance-based methods in historical linguistics.

In this paper we address this question by comparing phylogenies based on respectively (a) Levenshtein distances, Neighbor-Joining, 40-item word lists from the ASJP database and (b) cognate classes, Bayesian phylogenetic algorithms, and 200+ words. The trees are from the following language families: Bantu, Indo-European, Semitic, Austronesian, Uto-Aztecan, and Mayan. Preliminary results counting the number of nodes in (a) and (b) trees that are not in *Ethnologue* for Indo-European and Uto-Aztecan show no differences in the performance of (a) and (b) trees, but a more adequate tree comparison method using quartet distances is called for and will be applied to all the pairs of trees, as will qualitative inspection informed by the comparative linguistic literature.

## **WORKSHOP: LANGUAGE, IDEOLOGY AND THEIR REPRESENTATIONS: TEXTUAL AND PRAGMATIC FEATURES**

*Organizers: Manco, Alberto (Università degli studi di Napoli "L'Orientale", Italy); Russo, Valentina (Humboldt Universität zu Berlin, Germany; Università degli studi di Napoli "L'Orientale", Italy); Mancini, Azzurra (Università degli studi di Napoli "L'Orientale", Italy)*

This Workshop aims at grasping the relationship between language and ideology, focusing on the results of textual and pragmatic oriented studies. We will address the topic from diachronic, diamesic and diaphasic perspectives taking into account the interplay between awareness and unawareness in linguistic representations of ideology. The Workshop seeks to highlight common or parallel features among different languages and cultures in the way they express such a deep feeling as the ideological one.

Considering that there is no "neutral" language or language use (cf. Silverstein, 1979; 2004), we will focus on the ideological function of language that is central in contextualized language use (cf. Gumperz, 2002), in order to grasp the metapragmatic level in which linguistic-ideological features are so deeply rooted in (Silverstein, 1993). As a matter of fact, language appears to be one of the most important means of dominance and power (s., a.o., Habermas, 1977, 1983; Apel, 1992), playing a central role in the construction of what Bourdieu (1980) used to call *habitus* (s. also Bourdieu, 1982).

What is actually ideology? How far is this concept culture-dependent? And, finally, in what extent can the abovementioned relationship be ascribed to language itself or to the very willingness of speakers?

We will refer, among others, to the work of scholars such as Wodak (2013; Wodak *et al.* 1990, 1993; Weiss & Wodak, 2003) and van Dijk (1991, 1993, 1998): they point out the importance of interdisciplinary work and of the common goal of making linguistics results available for the society, in terms of practice and application, demystifying discourses by deciphering ideologies (Wodak, 2001). Indeed, in the last twenty years Critical Discourse Analysis (CDA), being "problem-" instead of "approach-oriented", has proved to be a suitable framework for the investigation of such a wide concept as ideology. In line with CDA, we stress the importance of textual and pragmatic analysis for the investigation of both maintenance and breakdown of linguistic-ideological complexes in socio-cultural systems. As Wodak puts it, "an important perspective in CDA is that a text is very rarely the work of a single person. In texts, discursive differences are negotiated. They are governed by differences in power that are themselves in part encoded in and determined by discourse and by genre. Therefore texts are often sites of struggle, in that they show traces of differing discourses and ideologies contending and struggling for dominance" (Wodak, 2001: 5).

We deserve attention to both overt and covert representations of ideology in text and discourse. By covering a variety of linguistic research areas – from historical linguistics to discourse analysis, from lexicology to language philosophy, philology and literary studies, spacing from ancient texts to e-media research – we will shift the focus from "stable" linguistic denotations to "unstable" socio-culturally and historically determined issues of language use. In particular, papers will address specific communicative and textual genres such as scientific and popularization literature, political discourse, advertisement and e-media discourse.

Research on language and ideology relationship has so far predominantly been conducted from different perspectives depending on the value assigned to the concept of "ideology". The term traces back to late 18<sup>th</sup> Century France and it has been used to point at different functions and meanings at different times (cf. Thompson, 1990). One of the first occurrences in Linguistics was strictly tied to the historical and dialectical vision of Marx and Engels followed by the so-called "immunization strategies" (s. Dittmar, 1982). Overt ideology can be seen in the explicit use of particular words or rhetorical structures (as e.g. in nationalisms, dictatorships and so on) while covert ideology is mainly something people are not aware of. This is clear if we think about "unaware" use of inherited routines and grammaticalized expressions or, from a broader point of view, about stigmatisation of e.g. dialects, minority languages, lower varieties, etc. In this sense, it is necessary to remark the role of the "spirit of the time", a *Zeitgeist* acting on language independently of people's willingness (Manco, 2013; Russo, 2013; Albano Leoni, *forth.*).

The final discussion will aim at verifying at what extent the linguistic findings brought together in the Workshop may reveal the deep layers of language-ideology relationship though emerging from different approaches, methods and investigated objects. The social and methodological significance of the collected results will be pointed out by the Convenors with the participation of Norbert Dittmar, underlying how "one of the effects of addressing language ideology is the fact that it dislodges a range of established concepts and categories and thus offers infinite opportunities for revisiting existing scholarship", as stated by Blommaert (2006: 510).

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## Language as a magnifying glass of history: the case of Italian brand names

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In the semantic analysis of Italian brand names we are able to find out different language strategies and word classes employed in order to underline those connotations and their implicit associations, which draw up some political and social contours of the history. Accordingly, we understand language as a magnifying glass, as the linguistic expression reflects trends or expresses the dictates of political choices. A good example in the history of the Italian language is provided by the language policy in the period of Fascism. The language policy in Italy was at the beginning of the 20th century strongly purism-oriented, was aimed at abolishing foreign words and was based on the roots of the Italian culture and classical tradition. There were many laws and decrees regulating the use of foreign languages in the first 40 years of the 20th century (Raffaelli 1983, Russo 2013). Furthermore, the semantic analysis of the choice of domains of connotations shows that those of **power** and **tradition** are particularly well represented by the material of the years 1925 to 1930. In fact, the reasons certain domains were preferred, even and especially that of power, is easily traced in the Italian national history. As a matter of fact, if past times, family past, national history and tradition are important ideological components and hint to the very true Italian tradition, like in brands as *Antico Mulino* ('Old Mill', pasta, 2008, Class 29), *Il caffè della nonna* ('Grandmother's coffee', 2004, Class 30), the rise of fascism has characterized not only the history but also the language of the Italian people and the language of advertising (see Klein 1986). The policy of the so called "ventennio" shows attention for the tradition, which is reflected in brands such as *Nettare italico* ("Italic Nectar", 1925, vermouth), *La Nazionale* ("The National", 1925, precision instruments, scales), *Romana* ("Roman" 1930, mineral water), *Marsala balilla* (1930 Marsala wine) and *Glicero Balilla* (1930, a medicinal tonic) and give the impression to programmatically describe the ideals of power, of the heroic image of the men in that period. The brand name *Centurino* (1925, aperitif and liqueur), for instance, recalls the Roman history which is connotative motif of power and tradition at the same time (Cotticelli Kurras 2007, 2011). The cult of power, well-documented in those names that refer to the proper names of the members of the Italian royal family, or to general power symbols and specific historical events, is attested in brands such as *Regina* ("Queen", bikes and sewing machines, 1908), *Regale* ("Royal", weapons, 1925) and *Principe* ("Prince", cookies,

1925) or *Rex* (Latin for “King”, motors, 1930) and finally *Ardens* (“burning”, insulation materials, 1930), reminiscent of the “Burning”, a body of fascist military forces of the “ardent” youth. The connotation domain of power changes its symbols in different historical periods, however, the associations linked to it not only suggest to the consumer a certain satisfaction of their hidden desire for power, but they also represent the power of the ruling regime through the well circulating brand names.

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## Pragmatic strategies in (con)texts. Signaling and mitigating code switching, interference and borrowing in ancient texts

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The aim of our paper is to explore pragmatic strategies that index different kinds of language mixing. Language mixing characterizes multilingual settings and can be used by speakers to ideologically distinguish the languages at their disposal, thus functioning as expression of the identity-“otherness” relation (Omoniyi & White 2006). Speakers often signal linguistically, through specialized expressions, the adoption of exogenous lexemes – presumably more difficult to interpret – and simultaneously the alleged inadequacy or audacity of their terminological choice. This choice acquires an ideological import for interlocutors and for the interpretation of the text itself since the linguistic construction of identity is a dynamic process in multilingual communication practices (Tabouret-Keller 1997, Auer 2007).

Basing our analysis on two comparable corpora of Latin and 18th-century Italian texts belonging to different literary genres, plays and scientific prose, we consider cases in which language mixing is signaled by markers derived from verbs of saying, which point to an oral activity *par excellence*, but have pragmaticalized also in written contexts at early stages.

Examples are the Latin expression *ut ita dicam* ‘so to speak’ and the Italian (*così detto* ‘so-called’. These expressions have a pragmatic function, hedging the speaker’s stance towards the lexeme employed and warning the interlocutor of a potential obstacle in her understanding process, thereby offering an interpretive tool to guide her in its identification and comprehension (Fedriani & Molinelli 2013, Ghezzi 2013).

In (1) the Latin author Svetonius adopts two Greek adjectives and signals his lexical choice by inserting *ut ita dicam* in between the two borrowings:

- (1) *nam si est artius, ut ita dicam, holocleros, quid est quod dubitemus, quin per eosdem articulos et gradus producendus sit, per quos frater eius productus sit?*

‘For if he be sound and so to say complete, what reason have we for doubting that he ought to be advanced through the same grades and steps through which his brother has been advanced?’ (Svet. Claud. 4, § 1)

In (2) the choice to use the Latin expression *prope victæ* ‘almost conquered’ is signaled by the Italian writer Vico through the marker *così dette*.

- (2) *[le città vinte] che furono le prime provincie, così dette quasi «prope victæ»* (Vico, *La scienza nuova*, II, 3, 5, 1, 595)

‘Such [conquered cities] were the first provinces, so called as if “prope victæ”’

The corpus-based investigation of the pragmaticalization process underwent by these markers reveals that they developed new pragmatic functions in dialogic contexts, where interlocutors negotiate their own identities and convey their attitudes toward the language chosen. These developments make it possible to reassess the pragmatic status of these markers as displaying metatextual and face-preserving functions.

Lastly, our corpora allow us to explore the dynamics between written and oral domains. We will argue that markers transfer into the written domain strategies which characterize orality. Their analysis can provide interesting examples of how devices that probably arose in dialogic situations have been recruited in writing to fulfill interactional purposes, such as guiding the comprehension process in multilingual contexts and refining the author's identity.

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## Latin language and political ideologies in synchronic and diachronic perspective

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The aim of this research is to outline the paths for the foundation of the *Latinitas* ideal, in late Republican age. Our paper will focus the themes of the grammatical debate (between analogists and anomalists) in a crucial period of Roman history by contrasting theoretical rules set out in literary works and the usual practice in public and private epigraphy. The connection between ideology and language models is manifested by the fact that important intellectual figures were actively engaged in political life, such as Cicero and Caesar, and, as shown by their writings, were equally committed to the definition of a model of standard Latin for written and oral communication. The necessity for the construction of this language model resulted from the expansion of the imperialist domination of Rome over Italy and all the Mediterranean area. The Roman ruling class was activated to offer an unitary language model for political communication, administrative and literary, even as L2 for foreigners, in the frame of a multicultural and multilingual state.

Within this framework, this paper will outline the specific ideologies of standard language used for political communication in the period preceding the Roman Empire, reflected by both normative precepts through surviving fragments and indirect quotations or literary works. In particular, the normative statements will be evaluated in a pragmatic key (with respect to texts and their diamesic channels: e.g. the execution of written/oral and reception between reading/hearing; variety of users and recipients: e.g. speeches addressed to the Senate, and those intended for a wider audience) and in a sociolinguistic approach (placement of the variants of language in relation to the variety of the repertoire of the speakers). The work also aims to highlight the different theoretical attitudes as well as the practical solutions adopted, such as, the apparent inconsistency between the rules set out in *De Analogia* of Caesar and their non-application in the *Commentari*. In addition, the paper will focus the different spelling rules, as reflexes of phonological and morphological variations especially of internal and final syllables in the perspective of their impact on the evolution of language. Among the most salient instances: the treatment of final *-s* and *-m* in their distinctive function between nominative/accusative and the solution proposed by Cicero to spell *tert.* replying to the question raised by Pompeo about the spelling of the numeral adverb *tertium* or *tertio*.

The corpus analyzed encompasses both literary genres in order to highlight different communicative contexts, diamesic levels and variety of recipients (e.g. judicial and political speeches, rhetorical philosophical treatises of Cicero's, works of propaganda as *Commentari* of Caesar) and the grammatical fragmentary works such as Caesar's *De Analogia*. Heterogeneity of materials is essential for focusing pragmatic functions and sociolinguistic stages of the theoretical or applied linguistic choices. A contrastive assessment of the literary data will also be carried out in relationship with contemporary epigraphic data, an important aspect of the public communication in ancient Rome.

The expected results are: a) Highlight the ideologies that have governed the choice of a model of Latin as a standard in political, administrative and literary communication in a multilingual and multicultural state; b) Outline the different views and practical uses of language in a crucial stage of both Roman history and formation of literary Latin.

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## Structures of coherence and intertextuality. A corpus-driven study of political discourse semantics and Greek neo-nationalist ideology

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This paper aims to present the preliminary findings from a corpus-driven study of textual semantics in Greek neo-nationalist discourse. The term “neo-nationalist”, adopted broadly from E. Hobsbaum's postulate (1990, see: 11] is used in this paper to designate the discourse and ideology put forward by Greece's extremist political party, Golden Dawn, the influence of which is sharply and steadily on the rise, especially since the start of Greek's recession [1].

Our effort, seen from a critical discourse analysis viewpoint, uses a ca. 60,000-word monolingual (Greek) synchronic corpus of so-called ideological stance-taking texts published on the party's website [2]. Using standard Corpus Linguistics techniques, including keyness analysis [9] of ideologically-loaded words and annotation in GATE [12], we exemplify and sketch the discourse - ideology link, i.e. aim to show how the far-right ideology at hand articulates itself at the level of discourse meaning [3].

More in particular, our analysis scenario examines the semantic coherence of discursal clauses on two levels:

- (a) intra-textual, by applying the model of Halliday & Hasan's conjunction mechanism [4] and tracing semantic continua on ideologically-loaded keywords of the texts analysed; and
- (b) intertextual, in the sense of the term coined by Kristeva [5] [cf. 10], by attempting to chart the semantic links of certain ideologically-loaded keywords of the texts analysed with their multi-dimensional spaces [6], i.e. their textual contexts.

The intertextual and intratextual layers of lexico-semantic conjunction and discursal reference are then combined and the findings therefrom are contrasted and statistically processed, with the expected outcome being to identify the systemic patterns of textual organisation, as a reflection of neo-nationalist ideology. This is done by using our textual (lexical/semantic) evidence to exemplify van Dijk's [3:244] theoretical premises (and hence, tentative conclusions) that the Greek neo-nationalist ideology and the manifestations of its current surge, as reflected in discourse, have a basis that is at the same time:

- (a) cognitive;
- (b) social;
- (c) sociocognitive;
- (d) a pattern defying the “true” or “false” explanatory dualism;
- (e) a system in which various degrees of complexity obtain;
- (f) a model with contextually variable manifestations; and finally,
- (g) a continuum that is both general and abstract.

As suggested already by our preliminary findings, the above-mentioned tenets seem to be evidenced in the textual analysis at hand, thus justifying lexico-grammatically [7], [8] the postulate that “ideologies that control opinions and judgements” [3:247] are both relatively context-free and a pattern of shared knowledge [3:247].

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## Language, ideology and their representations: Textual and pragmatic features. Hugo Schuchardt's lingua franca between philology and ideology

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Hugo Schuchardt's *Die Lingua franca* (1909), a work dealing with the simplified form of Italian language spoken on the northern-African coast, from Algeria to Libya, was, to some extent, initially neglected, but has then been paid extraordinary attention later on, from the Fifties, by both philologists – mostly Italian – and creolists – mainly American – as attested by Markey's (1979) and Gilbert's (1980) almost contemporary English translations. As a result it came to be considered more as an 'illustrious ancestor' of linguistic and philological issues and trends than studied in itself, for its place and function within the whole corpus of Schuchardt's writings.

By interpreting the lingua franca as a language of commerce, a *Handelnsprache*, Schuchardt condensed in this essay several of his ur-creolist considerations; he also showed a deep awareness of the contending ideological positions on the topic. The historical alternation of several glotonyms – *aljamía*, *sabir* etc., all of which standing for "lingua franca" in different time periods – gives an insight into a whole history of linguistic ideology in so far as the appreciation or denigration of a language stems from the appreciation or denigration of its speakers.

Nowadays *Die Lingua franca* has become, once again, a ground for an ideological reconfiguration which, surprisingly enough, utterly diverges from Schuchardt's original position. In the French context the lingua franca often becomes a peacekeeping tool of communication between the northern and southern shores of the Mediterranean Sea, the language of *non-lieu* through which every conflict can be easily dissolved (Dakhliia 2008). Yet we know all too well that, in point of fact, even 'invented languages' are far from immune to any interaction with history, i.e. with power and ideology (Bausani 1974 e Gobbo 2009).

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## Totalitarian ideology and language: How Stalin planned to turn Russian into universal language

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Since its inception in the late French Enlightenment, when coined by Destutt de Tracy, the concept of ideology has been employed with various meanings, serving a purpose or another. Among the original areas of pertinence of the new science, as developed by the ideologues, there was the research on language (Destutt de Tracy; Chasseboeuf de Volney). The substantial progress in the field notwithstanding, the sophisticated link between ideology and language is far of being clarified. It still lacks a coherent and consistent model of understanding. To fill in this gap, one should start with identifying the appropriate way of thinking (*modo di pensare*, to use a formula by Giambattista Vico). This implies the need to observe concrete cases, *sine qua non* pertinent theoretical foundation.

This paper aims to make a step in this direction. It considers a specific type of ideology, the political one. Moreover, it looks to the so-called totalitarian paradigm, where ideology manifests to the utmost bounds of its power. The inquiry concerns the Marxist/Communist/Bolshevik ideology, due to its *sui generis* relevance. Unlike the fascist and the Nazi ideologies, so deeply rooted in a national/nationalist worldview (yet each in a different way), the Marxist/Communist/Bolshevik one aimed transcending national boundaries and opening up avenues for a world-wide permanent revolution, hence its internationalist and universalist commitment. Such a positioning also calls for a universal language. While briefly recalling the meaning Marx and Engels employed the term ideology with, the analysis focuses on the Bolshevik case. The idea of a universal language fascinated many representatives of the Bolshevik ideology or, better, ideologues of Bolshevism. Among them, of particular interest are the views of Joseph Stalin himself. In the following, I'll look closely to a specific scenario, as contemplated by Stalin in a 1929 speech, about the eventual turn of a national language (Russian) into universal by means of ideology. While alternative scenarios will be considered (Bogdanov, for instance, thought English would become the universal language of the future), Stalin's views on the ideology-language relationship will be analysed against those by leading thinkers of the time (including Gorky, Trotsky, Marr, Bakhtin/Voloshinov, Vygotsky, and others). No theoretical finality informed Stalin's speech, it was all about a bare pragmatic strategy.

The tendency to overpass national language (as both natural and historical) is inherent to any ideology, political or not, totalitarian or not. It is also inherent in contemporary ideologies accompanying a series of apparently unsuspected paradigms, such as European integration or Globalisation. The final part of this intervention invites to reflections on the existence of a much deeper relationship between ideology and language, hence the need to go beyond particular cases, with a view to building up a theoretical model that may help understanding this relationship in its essentiality. Hence, the ultimate purpose of this paper: to propose a new way of thinking the relationship between political ideology and language, through an attempt at an integral (re-)foundation.

Placed at the crossroad of many disciplines – political science, history, philosophy, linguistics –, the ideology-language relationship presents complexities that go beyond the pertinence of these individual disciplines, hence the demand for a trans-disciplinary approach and an integral perspective.

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## WORKSHOP: NANOSYNTAX: HOW GOING FINE-GRAINED ENABLES A BETTER UNDERSTANDING OF LANGUAGE

Organizers: Aelbrecht, Lobke; De Clercq, Karen; Lander, Eric; Rocquet, Amélie (University of Ghent, Belgium)

### Workshop Proposal

The theory of Nanosyntax (Starke 2009, 2011a, b; Caha 2009) is built on a radical implementation of the cartographic tenet according to which every (morphosyntactic/semantic) feature is a head ('one feature, one head' Cinque & Rizzi 2008: 50). More concretely, it assumes that all individual features project their own structural layers and combine into binary-branching trees. As a consequence, Nanosyntax takes the atoms of syntax to be smaller than previously thought: in fact, the atoms are submorphemic. This is contrary to the mainstream view that morphemes are inserted into terminal nodes.

An example to illustrate this comes from French (Starke 2011a: 4-5, 2011b). The French verb forms (*il*) *entr-a* '(he) has entered' and (*il*) *entr-ait* '(he) entered' both express past tense, but *entr-a* (the *passé simple*) expresses perfective aspect, whereas *entr-ait* (the *imparfait*) does not. In Nanosyntax, this is interpreted as showing that features for both tense (T) and aspect (Asp) must be packaged into the portmanteau morpheme *-a* in *entra*. Furthermore, the features T and Asp must be merged in a particular order (dictated by the functional sequence). Evidence for this order comes for instance from the fact that languages which realize aspect and tense agglutinatively, e.g. Russian, always do so in a given order (Schmidtke 2006, Dahl & Velupillai 2011, Dryer 2011), with the Asp-morpheme closer to the stem than the T-morpheme. Such examples have led to the claim that T is higher than Asp in the hierarchy (for more discussion see also Tenny 1987, Cinque 1999, Harwood 2013). In nanosyntactic terms the morpheme *-a* in French *entra* thus spells out the phrasal constituent [TP [AspP]]. More precisely, Nanosyntax assumes that there exists in the lexicon a vocabulary item which pairs the phonological form /a/ with the syntactic structure [TP [AspP]]. When the structure [TP [AspP]] is built in syntax, it can be lexicalized by the morpheme *-a* since the syntactic and lexically stored structures match.

In Nanosyntax when two readings are lexicalized by the same morpheme, this means that the underlying structures associated with these readings are in a subset/superset relation with one another (Caha 2009, Pantcheva 2011, Starke 2009, 2011). More precisely, Nanosyntax allows for a lexically stored structure to match a syntactic structure if the latter is a subset of the former. For instance, in the domain of Case, the Hungarian morpheme *-val* syncretizes comitative and instrumental readings. The lexically stored structure of *-val* is shown in (1). Importantly, the structure in (1) contains the structure of the instrumental case, which is shown in (2). Thus the instrumental structure in (2) can be spelled out by the same morpheme that lexicalizes the comitative case.

- (1) [Comitative[Instrumental[Dative[Genitive[Accusative[Nominative]]]]]]  
(Caha 2009: 24)

- (2) [Instrumental[Dative[Genitive[Accusative[Nominative]]]]]

The nanosyntactic perspective has also led to a more precise understanding of phenomena such as case-marking (Caha 2009), the interaction of prepositions and verbal prefixes/particles in Slavic and Germanic (Pantcheva 2012), the syncretism patterns in English tense, aspect and voice markers (Starke 2011ab), deverbal nominalizations (Fábregas 2012), the internal structure of *wh*-expressions (Vangsnes 2011, Baunaz 2012, 2013) and *wh*-movement (Starke 2011b), the order and scope of derivational and inflectional verbal affixes in Bantu (Muriungi 2008), clausal complementation (Franco 2012), the relation between sentential and constituent negation (De Clercq 2013), differential object marking and nominal possession (Rocquet 2013), and the reinforced demonstrative in the Old Germanic languages (Lander, in prep.).

This workshop will bring together researchers who take the nanosyntactic approach to language. The aims of the workshop are to discuss both old and new data from a nanosyntactic perspective, to highlight the advantages of this approach and to discuss its consequences. Questions we would like to see addressed include (but are not limited to) the following:

1. The study of syncretisms has proven a useful tool for uncovering the fine-grained hierarchical structure of case morphemes (Caha 2009), path morphemes (Pantcheva 2011), class-markers in Bantu languages (Taraldsen 2010) and negation (De Clercq 2013), among others. Syncretisms also appear in other domains, such as phi-features

and complementizers. What kind of syncretisms are there? What do they reveal about the internal structure of vocabulary items? What are the implications for the functional sequences at stake?

2. Most research on syncretisms is restricted to syncretisms within one domain, as illustrated by the Hungarian case syncretism discussed above. However, syncretisms are not limited to members of a single grammatical category (Baerman et al. 2005: 103ff, Caha & Pantcheva 2012). For instance, in Russian, the masculine singular instrumental endings on adjectives have the same form as their plural dative counterparts (cf. *nóv-ym* 'new-MASC.INSTR.SG/MASC.DAT.PL'). This syncretism involves two dimensions, case and number, and thus two functional sequences. How do we model the ordering of these two functional sequences in order to capture the existence of this syncretism (Caha & Pantcheva 2012, Taraldsen 2012, van Craenenbroeck 2012)? In other words, what do cross-categorical syncretisms tell us about the underlying structure of morphemes? More generally, the question arises how multiple functional sequences are combined.
3. In nanosyntax the need to lexicalize syntactic structures can trigger what is known as spellout-driven movement. If no match between the structures in syntax and the lexicon can be found, then the syntactic structure can be altered by movement to enable spell out. Are spellout-driven movements different from non-spellout-driven (e.g. feature-driven) ones? If they are, the following questions arise. Where do spellout-driven movements stop and non-spellout-driven movements start? Whereas in Minimalism (Chomsky 2000, 2001) feature-driven movement is taken to arise from an Agree relation between the features of two heads, in Nanosyntax all features project their own layers. How, then, do we capture agreement or non-spellout-driven movements in Nanosyntax?
4. Given the idea that each feature corresponds to one projection, the question arises whether both lexical and functional vocabulary items should be entirely decomposed into multiple, individual features. That is, does the nanosyntactic perspective imply that there is no principled difference between lexical and functional categories? If so, this raises the issue of why lexical items are more malleable and coercable than functional categories (Borer 2005ab, van Craenenbroeck 2012). How can these differences be captured in Nanosyntax?

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## Declarative complementizers under the microscope

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Complementizers vary as to what information they lexicalize cross-linguistically (Roussou 2010, a.o). For example, French *que* 'that' does not have a single analogue in Modern Greek (MG) but a number of different instantiations: *oti* introduces 'non-factive' complements, *pu* factive complements, while *na* is not a subordinator, but a mood particle marking subjunctive clauses (Giannakidou 2009) – presumably no complementizer is pronounced in subjunctive clauses (see also Serbo-Croatian for a similar construction, Socanac 2011). So French *que* unites properties of multiple items in MG, raising the questions of how these heads get compiled and spelled-out as morphemes and how these morphemes are represented in the lexicon.

I argue that there are three complementizers in French, which are camouflaged by all being phonetically realized as /kə/. I claim that *que* 'that' is in fact not a morpheme on its own, but a lexical item structured in organized semantic-syntactic features. It can be the spellout of at least three different subtrees. Hence what we see as a uniform complementizer *que* corresponds in fact to different feature structures of various syntactic sizes. Complementizers are then complex. Based on a typological study, I argue that complementizers are light nouns, i.e., with nominal features above them, as in Franco 2012 (see also Manzini & Savoia 2003, Roussou 2010).

I propose that what governs the distribution of French *que* is *veridicality*: the three different *ques* are each contingent on the classes of verbs that select them, whose properties are tied to veridicality (Giannakidou 2009). I claim that (i) verbs of cognition (*remember*, *know*) are strong veridical, in that they require that the embedded proposition be absolutely true both from the point of view of the Speaker and of the Subject; (ii) factive emotive predicates (*regret*) are relative veridical (Giannakidou (1998) in that they require that the embedded proposition be true from the point of view of the Subject, but not (necessarily) from the point of view of the Speaker (cf. Schlenker 2005); (iii) predicates of assertion (*say*) and desiderative/affective predicates (*prefer*) are non-veridical in that they do not embed a proposition whose truth must be inferred either by the Subject or the Speaker.

I propose that the three types of veridical predicates select three types of nominal-like complementizers: strong veridical predicates select specific *ques*, relative veridical predicates select partitive *ques* and non-veridical predicates select non-specific non-partitive *ques*. This analysis is extended to MG *pu/oti/ø* and Serbo-Croatian *da/što/ø*. (note that Serbo-Croatian distinguishes between specific and partitive complementizers: *da* vs. *što*).

I also draw a parallelism between *wh*-elements and the nominal-like complementizers, and show that the latter have different properties sensitive to quantificational features. These properties interact with *wh*-/focus-extraction phenomena under Relativized Minimality (RM), provided that RM is understood as a constraint on (a hierarchically organized bundle of) features rather than on 'structural types' (Starke 2001). I account for the island effects (or lack thereof) attested with so-called factive complements and conclude that size matters: bigger complementizers block extraction and act as interveners in quantificational chains, smaller don't.

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## On the nano-syntax of possessive and reflexive pronouns

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The paper proposes a sub-morphemic, nano-syntactic analysis of possessive and reflexive pronouns in German(ic) (*sein-, zijn, sin/sitt/sina* and *sich, sig* etc). The proposal is that the relational nature of these elements (Principle A) is a direct consequence of the composite meaning of the two items that constitute the pronouns: the equative particle **so** + a (kind of the) **indefinite determiner** (with its inflection) for possessives, see also Corver 2004) and in the case of reflexives **so** + the **1<sup>st</sup> sg pronoun**.

The D<sup>0</sup>-head thus consists of (at least, see below) two layers:

Reflexive pronoun:

(1) [...DP<sub>i</sub>...[<sub>DP</sub>[D<sup>0</sup> s<sub>-ij</sub> [D<sup>0</sup> ich]]]<sub>j</sub>...] whereby *so*: j=i

For a possessive, we have the following structure:

(2) [<sub>DP</sub> Possessor<sub>j</sub> [D<sup>0</sup> Ø [...[<sub>KindP</sub> [KindP<sup>0</sup> s<sub>ij</sub>-[KindP<sup>0</sup> ein- [<sub>NP</sub> Noun]<sub>i</sub>]]]]] whereby *so*: i BE-AT j

For reflexives, it has been shown by Leiss (2004) that a de-composition into **so** + 1<sup>st</sup> personal pronoun is plausible, given the diachronic and comparative data from various Indo-European languages. The question then is how the combination of an equative particle with a personal pronoun may yield the reflexive meaning? Assume that the difference to the 'normal' equative construction where the two elements involved are situated in their own respective functional domain (two CPs, if we adopt the ellipsis analysis of equatives/comparatives, e.g. Lechner (2004), is that the two entities are coerced into one functional domain, i.e. one clause. As there are now no more different properties that could be equalled, the only remaining interpretation is that the referential indices are equalled, i.e. the reflexive meaning.

In possessives we find again an equative semantics. The difference to the reflexive is of course that we are dealing here with two nominals with their own distinctive descriptive content. Thus an interpretation in terms of identity of the referential indices is not available. Assume nevertheless that the same type of coercion took place, in this case in one nominal domain, i.e. one DP, as in (2). The most plausible interpretation is a BE-AT interpretation, i.e. that the location of the two entities is equalled. And this is exactly the possessive relation.

The next question then is in which way the person/number features are encoded in case of 1<sup>st</sup> and 2<sup>nd</sup> person, respectively in the plural, where we find e.g. in German *m-ein* or *m-ich* instead of *s-ein* or *s-ich*. I will suggest that there is a further layer, responsible for the expression of the person features. However, this layer is of a different nature as it does not provide relevant interpretational features w.r.t. the reflexive/possessive meaning. The suggestion is that this layer is adjoined to the *so*-head and does not head a separate position in the f-seq of the pronoun, but leading to a PF-deletion of the *s*-component. Evidence for this claim will come from historical data from German, where e.g. *s-ich* could also be used in the 1<sup>st</sup> plural and from many Slavic languages where the *s*-form is used irrespectively of the person feature of the antecedent – a fact which holds also for possessives.

Further note that the person-marked pronouns are ambiguous between a reflexive and a pronoun interpretation. In order to account for this fact, I will suggest that there are two different structures underlyingly. One with a *so*-head (reflexive, possessive) and one where the person feature directly replaces the *so*-head with the consequence that the antecedent must be sought outside of the relevant functional domain (Principle B).

In sum, a nano-syntactic analysis of pronouns gives us new insights about the principles underlying the effects of Binding theory and enables us to derive them without the axioms used traditionally.

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## Nevermind the gap

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In this paper, I propose a new phrasal spell-out principle – a version of Starke’s (2009) Superset Principle – which allows for gaps in the functional sequence to be ignored.

What is a gap? Suppose that there is a functional sequence ... [ C [ B [ A ... Measured against this full maximal sequence, the structure that uses a non-contiguous subset of the maximal specification, e.g., ... [ C [ A ... can be said to have a gap. In this context, the proposal (i.e., that such gaps can be ignored by insertion) means that the insertion mechanism is set up in such a way that a lexical entry [ C [ B [ A ] ] ] can spell out [ C [ A ] ]. I give the precise phrasing below:

- (1) The Superset Principle: The syntactic node SN may be spelled out by an entry L if SN matches a node contained in L.
- (2) Match: A SN matches a LN iff
  - a. they have the same label
  - b. all immediate daughters of SN match any daughter of the LN

I discuss two empirical cases where such gaps arise (Estonian partitive case and spatial cases), and show that the predictions made by the model are borne out.

Concerning the first case, I argue that the partitive case should be analyzed as a special way of materializing an agreeing possessor construction (similar to GEN1/GEN2 in some Caucasian languages). In particular, I analyze PART as a portmanteau that spell out two sets of features: case features (reflecting the possessor/nominal dependent role of the noun) and agreement features (PART only appears when the head noun is in NOM/ACC). In such a setting, a partitive dependent on a nominative noun will have a gap. The new insertion procedure correctly allows for such a gap to be ignored.

Concerning the second case, I focus on markers that are ambiguous between a spatial reading (e.g., allative) and non-spatial reading (e.g., dative). I argue that these uses are related by an abstract change-of-state semantics (that is what they share), but differ in terms of what that semantics applies to (being at an individual or a occupied by the individual). Once this intuition is implemented in structural terms, it turns out that in order to allow for the attested syncretism, we need to ignore gaps, something the current proposal allows.

Further, I show that the insertion procedure provides a useful tool for ‘multicategorical portmanteaus.’ This term covers lexical entries that spell out several separate macro-categories (say gender, number, case), where each category can be decomposed. Usually, in such contexts, gaps arise when macro-categories are stacked (i.e., in syntax, decomposed gender representations of variable size can be embedded under number representations of variable size, etc.). The proposed mechanism applies in these cases as well, and predicts a vertical-horizontal layering of \*A-B-A patterns.

## A bare root position in Dutch compounds: an empirical challenge for nanosyntax

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### 1. Summary

The non-head of a specific subtype of Dutch primary (i.e. non-synthetic, non-phrasal) compounding is demonstrably a bare root, i.e. an acategorial stem. It does not contain categorial heads or functional projections. Hence, roots do not need to be licensed by functional superstructure in order to be realizable (pace Ramchand 2008, Starke 2009).

### 2. Main data

The examples in (1) illustrate a subtype of compounding in Dutch (henceforth *root compounds* or *RCs*). The non-head of this type is not nominal(ized) (see below). It is directly adjacent to the head, without any intervening material, i.e. there is no so-called *linking element*.

- |     |  |  |  |   |
|-----|--|--|--|---|
| (1) | a. klee-kast<br>cloth-closet<br>‘wardrobe’ | b. slaap-pil<br>sleep-pil<br>‘sleeping pill’ | c. ja-woord<br>yes-word<br>‘marriage vows’ | d. achter-deur<br>back-door<br>‘backdoor’ |
|-----|--|--|--|---|

These compounds contrast with Dutch compounds which do contain a linking element and of which the non-head is clearly nominal(ized) (henceforth *nominal compounds* of NCs).

### 3. The non-head of RCs is not nominal

(i) **Interpretational differences between NCs and RCs** The non-head of a NC (recognizable by its linking element) only allows for nominal interpretations (2-3), whereas RCs are more liberal, see (2-3). This shows that the category of the non-head in the RC is not determined syntactically, i.e. it is a root. (The possible readings of the examples in (2) are given in (3).)

- |         |                                    |                 |                       |     |     |
|---------|------------------------------------|-----------------|-----------------------|-----|-----|
| (2) a.  | antwoord-en-centrum (NC)           | b.              | antwoord-centrum (RC) |     |     |
|         | answer-NOMINAL.INFL-center         |                 | answer-center         |     |     |
| (3) (i) | center where answers are stored    | nominal reading |                       | ✓NC | ✓RC |
| (ii)    | center where one answers the phone | verbal reading  |                       | *NC | ✓RC |

(ii) **Structural differences** The non-head of the NC may contain nominal inflection. In contrast, the non-head of RCs may lack otherwise obligatory nominal heads, indicating the non-head may be smaller than a N, i.e. it may be a root. (i) the plural marker of pluralia tantum, as in (5)a, is lacking on the non-head in RCs, as in (5)b. (ii) gender marking may be absent in West-Flemish examples (West-Flemish dialects have overt feminine marking on the noun, as in (6)a.)

- |        |           |    |        |    |              |       |           |    |                      |
|--------|-----------|----|--------|----|--------------|-------|-----------|----|----------------------|
| (5) a. | kleer-en  | b. | *kleer | c. | kleer-kast   | (6)a. | e vrouw-e | b. | vrouwmens            |
|        | cloth-PL  |    | cloth  |    | cloth-closet |       | a woman-F |    | woman-human          |
|        | ‘clothes’ |    |        |    | ‘wardrobe’   |       | ‘a woman’ |    | ‘woman (pejorative)’ |

During the talk I will also discuss distributional differences between NCs and RCs.

### 4. Evidence against intervening categorial heads

One could argue that the non-head of RCs merges with a null categorial head (i.e. a little head  $v^{\circ}/n^{\circ}/a^{\circ}$ ) (cf. Harley 2009 on compounding in English), realized by means of derivational affixes. If root compounds contained a null derivational affix, we'd predict that overt derivational affixes are licit in this context as well. Yet, overt affixes are illicit, see (7). RCs thus do not contain little heads.

- |        |                                 |    |                                |    |                                 |
|--------|---------------------------------|----|--------------------------------|----|---------------------------------|
| (7) a. | *steen-ig <sub>v</sub> -cultuur | b. | *menstru-eer-pijn              | c. | *spaar-zaam-attitude            |
|        | stone-AFF <sub>v</sub> -culture |    | menstru-AFF <sub>v</sub> -pain |    | save-AFF <sub>A</sub> -attitude |

During the talk I will address apparent counter-examples and I will show that compounds containing nominal derivational affixes systematically instantiate NCs.

### 5. Conclusion

I conclude that the non-heads of RCs merge directly with the head without an intervening functional or categorial head, i.e. they are bare roots. As such, they are an empirical problem for any model which assumes that roots are nothing but the spell-out of functional heads (Ramchand 2008, Starke 2009).

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## The syntactic size of Semelfactives and Degree Achievements

Taraldsen Medova, Lucie (University of Tromsø, Norway); Wiland, Bartosz (Adam Mickiewicz University, Poznań, Poland)

**Claims.** We make a case for nanosyntax showing that the structure of verb stems reveals the relative size of aspectual classes of predicates. On the basis of Czech and Polish, we argue that (i) there exists a syntactic containment relation between semelfactive (S) and Degree Achievement (DA) verbs such that semelfactives are structurally bigger

than DA's and (ii) that S verbs differ in the syntactic structure they are made of (i.e. some S verbs are structurally bigger than others).

**Slavic themes and NU.** The Czech suffix NU, and its Polish (and other Slavic) equivalents, creates either S (in (1)) or DA (in (2)). Thematic suffixes together with the root ( $\sqrt{\quad}$ ) they attach to encode the verbal argument structure, (cf. (3)). Given that the themes are generally vowels, the morphological shape of the theme NU is surprising (cf. (3c)). Also – as opposed to all other themes – NU gives rise to two different readings: the  $\sqrt{\quad}$ +NU combination is either a S (eg. *písk-NU-l* 'he whistled once shortly') or DA (e.g. *mrz-NU-l* 'he was freezing'). Crucially, these meanings are mutually exclusive, either one or the other. Yet the morphological behavior of S and DA is exactly the same: both DA and S show the same allomorphs in the same environments; both S and DA have -NOU- in the infinitive *kop-NOU-t* / *hloup-NOU-t* (see Caha and Scheer (2008)); -N- in present-stem based forms (as present tense in (4)); the so-called disappearing NU in L-participles in (5).

**Root+N+U.** While DA are limited to tens of items, S are rather productive (cf. (6)). The difference lies in the roots of each V type: DA roots are adjectival, roots of S are 'nominal' and/or 'verbal' (roots are discussed at length). Based on the morphological and syntactic behaviour of S- and DA-forming NU we argue that NU is not a theme at all: [ $\sqrt{\quad}$ +N] is analogous just to  $\sqrt{\quad}$  with verbs derived by other themes. Hence, NU=N+U with U being the 'proper' theme and N being an instance of Rothstein's (2004, *et seq.*) Natural Atomic Function.

**Stems of different size.** Splitting NU into N+U and the decomposition analysis of lexical categories of roots as in (7) allow us to link the lexical categories of roots that build S and DA with the syntactic properties they display when merged with the U-theme: DA stems are all unaccusative while S are either accusative or unergative, yet all being lexicalized by the stem of the same format:  $\sqrt{\quad}$ +N+U. In nanosyntax, where spell out targets constituents rather than terminal nodes (cf. Starke (2009), a.o.) this indicates that morphemes making up S and DA stems span across several layers of syntactic event ("VP") structure, with smaller DA stems spelling out only lower unaccusative projections, S stems spelling out bigger accusative positions and even bigger S stems spell out projections building unergatives (cf. (8)). This ultimately leads to a fairly straightforward picture where DA's are syntactically smaller than both accusative and unergative S.

### Examples:

- (1) Petr kop-NU-l psa.  
'Petr kicked the dog once.'
- (2) Petr hloup-NU-l.  
'Petr was getting more and more stupid'.
- (3) a. plat-I-t 'to pay'  
b. mrk-AJ-t 'to blink'  
c. kop-NOU-t 'to kick once'  
d. kamen-ĚJ-t 'become stone'  
e. kleč-Ě-t 'to kneel'  
f. kup-OVA-t 'to buy'
- (4) a. kop-N-eš 'you kick once' (S)  
b. hloup-N-eš 'you become stupid' (DA)
- (5) a. kop-(NU)-l -- kop-(?\*NU)-l-a -- kop-(?\*NU)-l-o -- kop-(?\*NU)-l-i  
Msc.SG Fem.SG Neut.SG (Msc).PL  
b. hloup-(NU)-i -- hloup-(?\*NU)-l-a -- hloup-(?\*NU)-l-o -- hloup-(?\*NU)-l-i
- (6) a. skyp-NOU-t 'have one Skype conversation' (S)  
b. forward-NOU-t 'to pass on an email' (S)
- (7) *Containment structure of lexical categories:*  
[ Verb [ Eventive Noun [ Non-eventive Noun [ Adjective ]]]]
- (8) [<sub>n+2</sub> unergative [<sub>n+1</sub> accusative [<sub>n</sub> unaccusative ]]]  
{ semelfactive { DA } }

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## Verbal prefixes in Russian: Conceptual structure versus syntax

*Tolskaya, Inna (University of Tromsø, Norway)*

I address the problem of widespread polysemy of Russian verbal prefixes, particularly when added to motion verbs. I argue that multiple instantiations of a single prefix share a core conceptual meaning, and receive the specific denotations as a function of its syntactic position, thereby shifting part of the computational burden from the lexicon to the syntax.

I adopt a ‘neo-constructivist’ viewpoint, in particular the ‘first phase syntax’ of Ramchand (2008), where the meaning rests partly on what is brought from the lexicon and partly on the syntactic structure. I also use Svenonius (2004) analysis of the lexical/superlexical distinction using the first phase syntax framework, where the lexical prefixes are located rather low in the structure, associated with the *res* (result) part of the syntax, while the superlexical prefixes are located above aspect.

When added to a directional motion verb, prefixes behave as lexical, attached VP internally, inside the result projection. Since a change of location is the logical result of a motion verb, the meaning refers to spatial domain (e.g. the prefix *pere-* refers to crossing a boundary in space). When the same prefix is added to a non-directional motion verb, it behaves as a superlexical prefix and its meaning is associated with the temporal domain (e.g. the prefix *pere-* refers to crossing a boundary in time).

Furthermore, the prefixes in the spatial and temporal domain demonstrate an intriguing parallelism: in the spatial domain, the prefixes may refer to beginning, duration or end of the path (i.e. source (e.g. *ot-*), route (e.g. *pro-*) and goal (e.g. *za-*)), while when applied to the temporal domain, the prefixes are associated with beginning (*za-*), duration (*pro-*) or completion (*ot-*) of the event in time. I will provide syntactic evidence for this tripartite division based on the types of preposition phrases that may modify verbs with each prefix.

Thus there is a single lexical entry for each prefix, which contains its core conceptual meaning and a set of syntactic features, which specify the kind of transition involved. Lexical prefixes, when applied to directional motion verbs, modify path, and describe displacement of the figure in respect to a ground in space. The same prefixes, in their superlexical function, when applied to non-directional motion verbs, modify time, and the event, denoted by the verb, acts as the ground. The denotation of a path or time reading for one and the same prefix results from the core conceptual meaning mapped onto the syntactic position.

E.g. the prefix *za-* denotes a plus to minus transition in terms of Zwarts 2005. When this lexical entry is combined with the structural position inside VP, the prefix refers to path and receives a goal denotation, i.e. a transition from not being at a certain location to being there. When the same prefix is attached high, as with non-directional motion verbs, the ground, in respect to which the transition is evaluated, is the event denoted by the verb. Hence the meaning of the prefix is a transition from not being involved in a certain activity, to being involved in it, thus resulting in an inception meaning with non-directional verbs.

Shifting the computational burden to the structure makes it possible to preserve one common lexical entry for each prefix. Though some idiosyncratic information must still be a part of the lexical entry, the approach suggested allows us to bring at least some order to the chaos of Russian prefixes.

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## The feature structure of anaphors and pronouns

*Vanden Wyngaerd, Guido (KU Leuven, Belgium)*

Many languages do not always have morphologically distinct forms for anaphors and pronouns. A typical situation is one where a dedicated reflexive form is missing, and pronouns take on the double function of expressing reflexive and nonreflexive meanings. In other words, anaphors and pronouns are syncretic. An example is the French first person pronoun *me* ‘me’:

- (1) a. *Je me lave.*  
 'I wash myself'  
 b. *Marie me lave.*  
 'Marie washes me'.

The same pattern is found with the second person pronoun *te* 'you'. In the third person, however, there is a dedicated reflexive pronoun *se*, and the pronoun *le* 'him' can only express nonreflexive meanings:

- (2) a. *Jean se lave.*  
 'Jean washes himself.'  
 b. *Jean le lave.*  
 'Jean washes him.'

This first (and second) person situation can be accounted for in the nanosyntactic framework by assuming that the lexical item for *me* contains the features that enter into the syntax of both reflexive and nonreflexive relationships, as indicated in (**Error! Bookmark not defined.**) (R represents a reflexive feature):

- (3)  $\langle me, [_{RP} R [_{1P1} ] ] \rangle$

In a nonreflexive sentence like (**Error! Bookmark not defined.b**), the syntax will not contain an R feature, but the *Superset Principle* will ensure that *me* is inserted even though it is not a perfect match (which it is in (**Error! Bookmark not defined.a**)). In the third person, two lexical items compete:

- (4) a.  $\langle se, [_{RP} R [_{3P3} ] ] \rangle$   
 b.  $\langle le, [_{3P3} ] \rangle$

The reflexive *se* will be inserted in reflexive environments, and the pronoun *le* in nonreflexive ones only, in either case because they are a perfect match. This accounts for the data pattern in (**Error! Bookmark not defined.**).

I will investigate other patterns of anaphor-pronoun syncretism than the one illustrated for French here, and examine what they tell us about the underlying feature structure. Brabant Dutch, for example has the French pattern except that the anaphor-pronoun syncretism extends to the third person as well.

- (5) *Jan wast 'em.*  
 'Jan washes himself/him.'

Many Slavic languages have a 123P syncretism in the anaphor, i.e. we can have either horizontal syncretism across the reflexive-nonreflexive divide (as in French), or a vertical syncretism across persons (as in Slavic). Syncretisms also extend to the possessive pronouns in many cases: in French, the consonants of the personal pronouns *me/te/se* are also found in the possessive pronouns in the same person (*mon* 'my', *ton* 'your', *son* 'his'). Surprisingly, the third person possessive pronoun consonants- is syncretic with the consonant of the reflexive of the personal pronouns, but whereas personal pronoun *se* is reflexive only, the possessive pronoun *son* 'his' can be either reflexive or nonreflexive.

- (6) *Jean<sub>i</sub> aime son<sub>ij</sub> chien.*  
 Jean loves his dog.

This contrasts with the situation in Swedish, where *sin* 'his' is a dedicated reflexive possessive, and *hennes* 'her' the exclusively nonreflexive possessive.

- (7) a. *Hon<sub>i</sub> älskar sin<sub>i/\*j</sub> man.*  
 b. *Hon<sub>i</sub> älskar hennes<sub>\*ij</sub> man.*  
 'She loves her husband.'

These syncretisms across the reflexive-nonreflexive divide, across persons, and across the personal-possessive pronoun divide, suggest the existence of an underlying feature system.

## Indexicals by nanosyntax: *wh* and D items apart

Vangsnes, Øystein A. (UiT The Arctic University of Norway)

Across languages indexicals may lexicalize more than just one semantic/conceptual function each, i.e. they may be *syncretic* in a certain sense of the word. The Norwegian *wh*-item *hvor*, for instance, can query for both PLACE and DEGREE where English must use *where* and *how*, respectively. In turn, English *how* spans MANNER in addition to DEGREE, whereas Norwegian must use the distinct item *hvordan* for MANNER. This is illustrated by the examples in (1)-(3).

- (1) a. Hvorbor du? (Norw.) PLACE  
 b. Where do you live (Eng.)  
 (2) a. Hvorgammeler du? (Norw.) DEGREE  
 b. How old are you? (Eng.)  
 (3) a. Hvordan åpna du flaska? (Norw.) MANNER  
 b. How did you open the bottle? (Eng.)

Similarly, there may be asymmetries within a language across different kinds of indexicals, notably across the *wh*/D dimension. Consider the examples in (5) to (9).

- (5) a. How old are you? DEGREE  
 b. I am this old?  
 (6) a. How did you open the bottle? MANNER  
 b. I opened it like this.  
 (7) a. What does he look like? PROPERTY  
 b. He looks like this.  
 (8) a. What car do you have? KIND  
 b. I have a car like this.  
 (9) a. What car is yours? TOKEN  
 b. This car is mine.

The *wh*/D asymmetry in English is summarized by the two first columns of table 1. The other columns show (with some simplifications) what exponents we find in Swedish and Norwegian for the corresponding D and *wh* functions. When we compare the three languages we see on the one hand that there are asymmetries across the D/*wh* dimension in all of the languages but at the same time that the asymmetries differ from one language to the other. This is particularly interesting when we compare the closely related varieties Swedish and Norwegian where morphologically identical exponents (*så* and *sån(n)*) have different lexicalization ranges.

	English		Swedish		Bokmål Norwegian	
	<i>wh</i>	D	<i>wh</i>	D	<i>wh</i>	D
DEGREE	<i>how</i>	<i>this / (ye)</i>	<i>hur</i>	<i>så (här)</i>	<i>hvor</i>	<i>så</i>
MANNER	<i>what ... like</i>	<i>like this</i>	<i>hur / (hurdan)</i>		<i>hvordan</i>	<i>sånn</i>
PROPERTY			<i>vad för / (hurdan)</i>	<i>sån (här)</i>	<i>hva slags</i>	
KIND	<i>what</i>	<i>this</i>	<i>vad för / vilken</i>	<i>den (där)</i>	<i>hvilken</i>	<i>den (der)</i>
TOKEN						

Table 1. *Asymmetries in the lexicalization ranges of certain wh- and D-words in English, Swedish and Norwegian*

In this paper I will discuss asymmetries of this kind both across and within (mainly Germanic) languages and I will show that although *wh* and D items in one and the same language need not have corresponding lexicalization ranges, whenever *syncretism* arises it follows certain patterns. More specifically, I will show that semantic functions such as DEGREE, MANNER, PROPERTY etc. seem to be ordered in a particular way, perhaps reflecting a universal, conceptual continuum, and that an exponent can only expand its lexicalization range to a function which is adjacent to the one that it already lexicalizes. In turn I will show that these adjacency patterns can be accounted for by some of the standard principles of Nanosyntax, notably the Superset Principle and the Elsewhere Principle, operating on particular Fseqs (functional sequences) reflecting the functions described.

## WORKSHOP: NON-AUTOMATIC ALTERNATIONS IN PHONOLOGY

Convenors: Köhnlein, Björn (Leiden University); Pöchtrager, Markus (Boğaziçi University)

Natural languages offer many examples of phenomena that eschew the extraction of a generalisation, but rather call for lexical storage, such as classic examples of suppletion (*go/went, I/me, good/better* etc.). On the other hand we find alternations that are completely general and invite a treatment in terms of principles/rules/constraints: Tapping in English, phrase-final devoicing of Turkish *r*, vowel reduction in Brazilian Portuguese etc. As soon as we come to less clear-cut cases, however, we enter a battle field — the question of what to do with phenomena such as English Velar Softening (*electric/electricity*), German Umlaut (*Wolf/Wölfe*) or the various Polish palatalisations (*noga/nodze*) has occupied generations of linguists and prompted the development of various solutions: The birth of morphonology (Trubetzkoy 1931); the subsumption of all such phenomena under phonology (Halle 1959, Chomsky & Halle 1968) with the option of having different strata (as in Lexical Phonology, Kiparsky 1982), indexed constraints (Alderete 1999, Ito & Mester 1999), or co-phonologies (Orgun 1996, Inkelas and Zoll 2005); making those phenomena a part of morphology (Ford & Singh 1983), or the lexicon (many versions of Government Phonology, e.g. Kaye 1995); combining insights from different models of storage and computation (e.g. the stratal approach in Bermúdez-Otero 2012), to only name a few. Furthermore, the boundaries between the various components (phonology, morphology, lexicon) are sometimes argued to be fuzzy (Dressler 1985).

The arguments in favour of one or the other solution revolve around questions like these:

- What is the function of the phenomenon in question? In particular, does it signal a morphological category? Do we lose a generalisation if we relegate the phenomenon in question to the lexicon?
- Can a phonological phenomenon refer to morphological properties and if yes, which ones?
- Does a phonological phenomenon have to be exceptionless/automatic? Does it have to be (fully) productive? Does it have to apply in loanwords? Does it have to be carried over to L2-acquisition?
- Does the phenomenon in question have to be natural? Does there have to be a connection between target and trigger?
- Are there different components/strata, and if so, what is their architecture? Are they strictly separated from each other or do they shade off into each other?

Obviously, all those questions refer back to a more fundamental issue:

- What is the role and purview of phonology, and (how) does it differ from other areas of our linguistic competence?

Today, despite decades of scholarly research, the issue is far from resolved. This workshop focuses on the discussion of the above-mentioned questions; its goal is to evaluate the state of affairs, and to identify possible directions for future research that may help to get closer to a consensus.

We welcome two types of contributions: on the one hand, presentations may discuss how specific non-automatic alternations in a certain language (such as, for example, German Umlaut) can (or cannot) be treated in different phonological theories, and whether this presents evidence in favour of a specific approach. On the other hand, we also invite contributions that evaluate different theories/models that have been proposed in the literature to deal with non-automatic alternations, preferably in the light of broader discussions on the structure of grammar (e.g. by comparing them to current theories of other components or of a general architecture of grammar).

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## On modular approaches to mental grammars: Evidence from Polish

Czaplicki, Bartłomiej (University of Warsaw, Poland)

Modular approaches propose that grammars consist of separate components (e.g. syntactic, semantic and phonological), each component uses its own vocabulary and the flow of information from one component to another is restricted by narrow channels of communication called “interfaces”. Thus, modularity places stringent restrictions on the possible interactions between the various components. To verify this position, I look at three morphophonological patterns in Polish.

I analyze the palatalization effects triggered by various *e*-initial suffixes and conclude that morphophonological patterns must have access to morphosyntactic information, as the effects cannot be predicted from the phonological context.

k ~ ʃ	krok [skɔk] ‘jump’	kroc-ek [krɔʃ-ɛk] dim.
k ~ ts	ręka [rɛŋk-a] ‘hand’ nom.sg.	ręc-e [rents-ɛ] dat./loc sg.
k ~ kʲ	krok [krɔk] ‘step’ nom.sg.	kroki-em [krɔkʲ-ɛm] instr.sg.

This position is substantiated by the effects of the *a*-initial (back vowel) suffix *-arz*, whose addition may also result in palatal mutations of the preceding consonant.

t ~ tɕ	kwiat [kfjat] ‘flower’	kwiaci-arz [kfjate-aʃ] ‘florist’
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Another problem for modular approaches relying on phonological conditioning is that suffixes *-ek* and *-arz* show contradictory effects on the preceding consonant. Before *-arz* coronals tend to surface as palatalized and velars as non-palatalized. Before *-ek* the pattern is exactly the opposite.

base-final cons.	<i>-arz</i>	<i>-ek</i>
[...t]	[...tɕ-aʃ]	[...t-ɛk]
[...k]	[...k-aʃ]	[...ʃ-ɛk]

Next, I look at the variants of the genitive singular desinence of masculine nouns *-a/-u* (e.g. *geniusz* ‘genius’ – *geniusz-a* gen.sg. vs. *geniusz* ‘work of a genius’ – *geniusz-u* gen.sg.) and conclude that their distribution is governed to a large extent by semantic factors (e.g. *-a* is used for people and *-u* for abstract concepts).

Finally, I examine the relation between iconicity and allomorph selection. In diminutive formation, three suffixes are used: *-ek* [-ɛk], *-ik* [-ik] and *-yk* [-ik]. Of the three, the suffix *-ik* triggers expressive palatalization, a sound-symbolic effect that is specific to consonants whose acoustic frequency is concentrated in higher regions (e.g. [ɛ z tɕ dʒ]). It is shown that in recent formations the suffix *-ik* is preferred over the more expected *-ek* and *-yk* after certain base-final consonants (e.g. *fundu*[ʃ] ‘fund’ – *fundu*[ɛ]-*ik*, cf. *kama*[ʃ] ‘shoe’ – *kama*[ʃ]-*ek* and *ko*[ʃ] ‘basket’ – *ko*[ʃ]-*yk*). This preference results from the direct influence of phonetic and psycholinguistic factors on morphophonological patterning.

It is argued that information from morphosyntax, semantics and phonetics is essential to the full understanding of morphophonological patterns and their productivity. Under this view, there must be a close relation between phonology, morphology, syntax, semantics and phonetics. Placing restrictions on the possible interactions between these domains may not be desirable on empirical grounds.

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## Automatic and Nonautomatic Alternations at the Explanatory Level

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Since the beginnings of modern phonology in the work of Kruszewski and Baudouin de Courtenay (Baudouin de Courtenay 1895), linguists have had the intuition that alternations divide into two types characterized by the opposition "automatic" versus "non-automatic" and differentiated by criteria such as naturalness, exceptionlessness, and productivity. In this talk, I propose that such descriptive level differences between the two types of alternations are accompanied by a fundamental difference in the explanatory principles on the basis of which speakers analyze them. In particular, I claim that the two types of alternation differ sharply regarding the principles according to which speakers set up basic/lexical/underlying representations for alternating morphemes and determine the mapping from underlying to surface representations.

Evidence that alternations fall into two classes regarding principles of UR choice comes from the differential applicability of principle (1), the Basic Alternant Hypothesis (see Albright 2012: 145 and references cited there) and the principles of "salience" (2), both of which presuppose (1).

- (1) The UR of a morpheme M must coincide with one of M's surface alternants.
- (2) a. URs are identified with the most frequent alternants in inflectional paradigms.
  - b. URs are identified with isolation forms, when those exist.

On the basis of completed or ongoing "analogical" changes in the inflectional morphophonology of several languages, I argue that speakers' analysis of nonautomatic alternations respects (1) and is typically governed by either (2a) or (2b). In contrast, the analysis of automatic alternations need not respect (1): when multiple automatic alternations happen to target the same morpheme or segment, morpheme or segment-sized stretches of UR may be distinct from all their surface realizations. This is because automatic alternations are responses to constraints that are stated in terms of units as small as individual feature values, so that URs, too are determined at the level of the feature. Further, there is a simple principle for determining URs for automatic alternations: underlying feature values are those all deviations from which can be explained in terms of the need to conform to the operative constraint.

Consider now the mapping between underlying and surface representations. For automatic alternations, there is no analytic decision to be made: given feature-sized URs determined as above, the mapping in question is simply the minimal repair that brings those URs into conformity with phonetic representations. For nonautomatic alternations, however, UR choice according to (1) and (2) typically sets up a situation in which there are multiple candidates for a rule. I argue that in that situation, the choice of the winning candidate depends on a frequency-based criterion akin to (2a).

Finally, I consider the conditions under which an alternation makes the transition from automatic to nonautomatic status. I suggest that acquisition of either counterfeeding opacity or counterbleeding opacity is sufficient to render an originally automatic alternation vulnerable to reanalysis under principles (1)-(2); as a result, I claim, many alternations are reanalyzed at a relatively early stage of their life cycle.

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## Palatalisation in Polish: between diacritics and phonological regularity

Michalski, Grzegorz (Adam Mickiewicz University, Poznań, Poland)

This paper compares and evaluates the treatment of palatalisation in Polish under the following three approaches: 1) Government Phonology (Gussmann 2007), 2) Lexical Phonology (Rubach 1984), and 3) (Derivational) Optimality Theory (Rubach 2007). The four areas of comparison are the following: A) so-called surface palatalisation, B) lexical palatalisation of coronals, C) lexical palatalisation of velars, and D) under-/overgeneration of palatalised consonants in the lexical domain. Issue A pertains to automatic palatalisation triggered by [i] and [j]. Issues B and C concern alternations at morphological boundaries. Issue D concerns the existence of root-internal consonants that fail to palatalise the way they would if found at a cohering morphological boundary. The assessment finds none of the listed approaches fully satisfactory in all the areas.

Issue A is exemplified in (1) below, where the presence of a following [i] or [j] triggers the surface palatalisation without exceptions, irrespectively of lexical boundaries.

- (1) *kot* [kɔt] ‘cat’  
*kot i pies* [kɔtʲipʲɛs] ‘a cat and a dog’  
*kot Jana* [kɔtʲjana] ‘John’s cat’

Issue B is exemplified in (2) below, where the presence of an underlying /i/ within a cohering structure (morpheme or cohering morphological boundary) results in the palatalisation of the target consonant (for the whole pattern see Gussmann 2007: 113ff).

- (2) *kot* [kɔt] ‘cat’ — *koc-i* [kɔtei] ‘feline, adj.’

Issue C is exemplified in (3a) and (3b) below, where the so-called first velar palatalisation (3a) and second velar palatalisation (3b) is found before an underlying /i/.

- (3a) *krok* [krɔk] ‘step, n.’ — *kroc-z-yć* [krɔʃʲite] ‘step, v.’  
 (3b) *Kozak* [kɔzak] ‘Cossack’ — *Kozac-y* [kɔzatsi] ‘(id. nom.pl.)’

The two patterns are of particular interest to the present study, as they appear to be triggered by the same phonological object, but yield distinct results (see Rubach 1984: 110ff).

Issue D is exemplified in (4), where a root-internal coronal fails to palatalise to its lexically-palatalised counterpart despite the presence of the palatalisation-triggering /i/.

- (4) *tik* [tʲik] ‘twitch’ (\*[tɛik])

Approach 1 views issue A as truly phonological, issues B and C as morpho-phonological. All the alternations pertaining to B and C are segment replacements triggered by diacritics (“palatalization replacement patterns”; pp. 125ff). The diacritics are lexically- or morphologically-given, and thus the alternations have no overt phonological trigger. Approach 2 views issues A, B, and C as truly phonological (rules 103 and 160), however the rule responsible for the so-called second velar palatalisation (rule 181, responsible for the pattern in (3b)) has a morphological label in its SD, thus disqualifying it as a truly phonological generalisation.

Approach 3 views issues A, B, and C as truly phonological, except for the second velar palatalisation, which is said to be historic, and which is not analysed. (All the triggers rely on features, and there is no phonological feature that could “choose” which velar palatalisation it triggers.)

As for issue D, all the approaches account for the consonants in question, but none can satisfactorily explain why these are only found in borrowings.

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## Representational ambiguity in the evolution of Polish palatalization

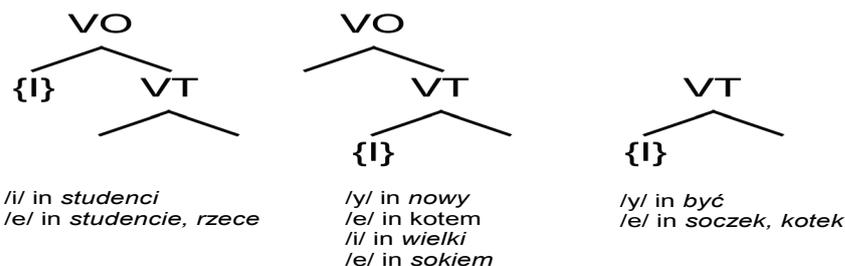
Schwartz, Geoff (Adam Mickiewicz University, Poznań, Poland)

The alternations grouped under the label ‘palatalization’ in Polish are associated with a variety of reflexes and morphological environments that appear to defy phonological generalization. Gussmann (2007) attributed many of these complexities to a claim that Polish has multiple front vowels that are phonetically equivalent but representationally distinct. For example, some morpheme-initial /e/s appear to induce consonant mutations while others do not. On this view, the Polish alternations are not phonological; the representationally distinct vowels reflect the outcomes of diachronic changes.

Though one may accept these claims, we still lack an explanation of the origins of the representational ambiguities that are so crucial to Gussmann's account. This paper examines the evolution of Polish velar and coronal palatalization processes within the Onset Prominence framework (OP; Schwartz 2013). In the OP environment, palatalization is a phonotactic phenomenon, sparked by the fusion of consonantal and vocalic structures, and motivated by the need to avoid perceptual ambiguities that may arise during this fusion process. The ambiguities stem from two phonetic universals that point to acoustic links among the alternating segments. First, the acoustic properties of velar consonants are associated with dramatic context-induced variation stemming from the fact that the tongue dorsum is also the primary articulator for vowels (Ladefoged & Maddieson 1996). In the face of this variation, velars' most stable acoustic cue is the ‘pinch’ (e.g. Baker et al. 2008), by which F2 is raised to converge with F3. A raised F2 is also associated with palatal articulations. Additionally, palatal contexts increase the robustness of frication noise, a universal that has been observed experimentally in Polish by Ćavar & Hamann (2003), as well as Świąciński (2012). Increased noise is also associated with coronal sibilants, which constitute the reflexes of the earliest changes.

These acoustic patterns interact with the variable status of the VO node (Schwartz 2013) in the vowel-initial morphemes that sparked the alternations. Simplified representations of the relevant vowels, reflecting both their diachronic development and synchronic distribution, are presented in (1). On the left is a structure parallel to Gussmann's (2007: 52) ‘I-headed’ vowels, inducing mutations in both coronals and velars. In the other structures coronals are unaffected, while the changes in velars reflect their inherent palato-dorsal quality as implied by the aforementioned phonetic considerations. OP representations allow for the reconciliation of representational and phonetically-based (e.g. Ćavar 2004) approaches to palatalization. In addition, the ambiguous status of the VO node, which is derived from universal phonetic principles, eliminates synchronic opacity and adds to the inventory of ambiguities that may drive the evolution of sound patterns (cf. Blevins 2004).

### (1) Simplified representations of front vowels in Polish



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## On the non-phonological status of Polish palatalizations

Zdziebko, Sławomir (Catholic University of Lublin, Poland)

Polish has several sets of regular, strongly productive and opaque palatalizations (see Gussmann 1980, 2007; Rubach 1984, 2003 among others). The aim of this presentation is: i) to argue against the phonological account of palatalizations and ii) to argue in favour of their morpho-phonological status.

I am going to show that the phonological accounts promote untrammelled abstractness by postulating a non-existent underlying sequences, e.g. of coronals+palatal glides (Gussmann's 1980 *J-Palatalization*) combined with unmotivated rules that derive surface representations (*J-deletion* rule). The analyses posited in representation-oriented frameworks like Government Phonology could postulate that different palatalizations of coronals, i.e. /t/→/tɕ/ as in *s-tra/t/-a - s-tra/tɕ/-e* 'loss – dat./loc. sg.' and /t/→/tʃ/ as in *s-tra/t/-a - tra/tʃ/-eni-e* 'loss – the act of losing', are triggered by different types of {I} prime: headed and headless. This kind of analysis, however, is unable to explain the existence of three different palatalizations of velars, e.g. /k/→/tʃ/, (ro/k/ – ro/tʃ/ek 'year-diminutive'), /k/→/ts/ (rze/k/a – rze/ts/e 'river-dat./loc. sg.') and /k/→/c/ (ro/k/ – ro/c/em 'year-inst. sg.') all occurring before /ɛ/. Moreover, there are instances of /ɛ/ which do not induce any kind of palatalization as in *temat-em* /tɛmatɛm/ 'subject, inst. sg.', *kępa* /kɛmpa/ 'clump' or *ręka* /rɛŋkɛ/ 'hand, acc. sg.'.

I am going to argue that palatalizations are the effect of the translation of morpho-syntactic information into phonological information. This explain the arbitrary nature of palatalizations, which cannot be accounted for if palatalizations belong to phonological computation. I will argue that palatalizations coincide with vocabulary insertion and constitute a re-writing of the morpho-syntactic features with phonological information (see Bobaljik 2000). For example, the /t/→/tɕ/ palatalizations found in the locative and vocative singular and nominative and vocative plural in masculine-personal nouns and adjectives, is in fact triggered by decomposed case features, which are re-written as palatalized counterparts of the stem final objects.

On the basis of the survey of affix-specific palatalizations found in Polish, I will show that palatalizations apply whenever their conditions are satisfied. The apparent counterexample to this claim is the presence of counter-feeding derivations in masculine personal adjectives, where stem-final /r/ is palatalized to /ʒ/ in nominative and vocative plural, e.g. *cho/r/y - cho/ʒ/y* 'ill - nom/voc. pl'. The adjectival stems ending in /ʒ/ are palatalized to /ʒ/, e.g. *świe/ʒ/y - świe/ʒ/i* 'fresh – nom.voc. pl'. I will show that the latter change is restricted by socio-linguistic and grammatical factors: females palatalize significantly more often than males, denominal adjectives (e.g. *Bo/ʒ-y* 'of God nom/voc. sg/pl.') are palatalized significantly less often than non-denominal adjectives. Finally, /ʒ/s derived from /r/s do not palatalize: forms such as *\*cho/ʒ/i* 'ill nom./voc. pl.' are strongly disapproved of by the speakers. I will show that the lack of palatalizations in the /r/-final stems is a consequence of the erasure of the decomposed case features: the palatalizations of /r/→/ʒ/ and /ʒ/→/ʒ/ are triggered by the overlapping sets of features. As a consequence the former change bleeds the latter.

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## WORKSHOP: PHONETIC REDUCTION AND REDUCTION PROCESSES

Convenors: Kul, Małgorzata (Adam Mickiewicz University, Poznań, Poland); Hannisdal, Bente (University of Bergen, Norway)

The workshop aims to address a range of different aspects of phonetic reduction as it manifests in both native and non-native speech.

Phonetic reduction refers to “the phenomenon that ... phonemes may be shorter or absent” (Hanique and Ernestus 2012: 1). It can denote “a large deviation from the citation form such that whole syllables are lost and/or a large proportion of the phones in the form are changed” (Johnson 2004: 1), or “different types of simplification which speakers regularly exhibit in pronunciation ... with respect to the canonical form” (Byrd 1994:41). It may be exemplified as follows: “*perhaps* in clearly articulated slow speech becomes *praps* in rapid speech” (Bussmann 1996: 396).

While research on phonological variation and change is abundant (Labov 1994, Wells 1982, Trudgill 2002), studies of phonetic reduction are comparatively rare. The correlations between language and various social factors have been extensively documented within the variationist paradigm, but the study of casual, reduced pronunciation remains underrepresented (cf. Shockey 2003). The workshop intends to fill some of this gap and contribute to an increased understanding of phonetic reduction, as it brings together a range of different approaches devoted to the phenomenon. It will explore articulatory, acoustic, perceptual, sociolinguistic, stylistic, and acquisitional aspects of reduction, and discuss various explanatory models.

Previous scholarship in the area of reduction studies is devoted to the factors responsible for reduction, revealing the following research trends: rate of speech, frequency (frequency of occurrence, lexical frequency, type frequency, word- and multiword frequency), speech styles, stress, rhythm, phonetic context, position in phrase/syllable/word, grammar (function vs. lexical words), semantics (semantic predictability, old vs. new information), morphology, syntax, typology, pragmatics, intra- and interspeaker variability, and language acquisition (non-native speech). The workshop represents these trends and reflects the newest developments in the field.

The following research areas will be the subjects of discussion:

1. Reduction of vowels (with focus on formant structure and duration), consonants and syllables.
2. Reduction in languages, including German, Polish, Hungarian, Spanish, Portuguese, Danish and Persian.
3. Reduction in accents and dialects, including General American, Received Pronunciation and Lancashire English.
4. Reduction across speech styles, including politician speeches, news, read speech and conversational speech.
5. Reduction by non-native speakers.
6. Interspeaker variability.
7. Reduction as a function of speech rate, lexical frequency, syntactic position and phonological environment.

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## Stress pattern and reduction correlations in Spanish

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Given the abundance of vowel reduction phenomena spreading across the different language families, phonetic reduction is usually analysed with respect to vocalic segments. It is, however, also the domain of consonants. Certain languages, such as Spanish, tend to preserve its vowels (both in quantitative and qualitative terms) regardless of the speech ratio and reduce the articulatory features of the consonants.

Most Spanish dialects are very much advanced in weakening phenomena, such as debuccalization and assimilation of preconsonantal codas, spirantization of intervocalic stops (with inter- and intradialectal variation between the resultant spirants and weak approximants) and word-final or intervocalic deletions, pointing very clearly to the universal lenition pattern (Lipski 1996, Colina 2002). These processes can be gradual and very often depend on social factors, producing variation in the speech patterns of different, or even the same speakers, which makes it difficult to analyse them on purely phonological grounds, or establish the phonemic status of such changes.

Closely related languages (e.g. Portuguese or Catalan) seem to present different patterns, with significant reductions in vowels (Mateus & Andrade 2002, Mascaró 1978). Why is it that Spanish seems to resist one type of reduction while engaging in another type with such mastery? This paper aims at addressing this issue, suggesting that a language's intonational and stress patterns are strictly connected with the freedom of reduction. A disruption of these patterns might inhibit comprehension and speech perceptibility, vowels being the principal stress and melody carriers (syllable timing) – a situation which does not occur in languages with rhythmic and phrasal stress patterns (such as French or stress-timed English). Limited or inexistent vowel reduction levels are less costly in the process of communication.

Nevertheless, the supposed inexistence of vowel reduction in Spanish may be countered by certain dialectal properties, such as Mexican or Andean vowel reduction (entonces 'then' surfacing as [entons's]).<sup>6</sup> Interestingly, these varieties have a tendency to preserve their consonants rather than weaken them, which may point to an interesting correlation between the two types of reduction processes. Furthermore, even languages traditionally perceived as non-reducing (e.g. Polish) have been reported to show schwa-like sounds in certain positions in rapid speech (e.g. Nowak 2006 provides a thorough analysis of Polish vowel duration reductions).

The author of the paper will present the results of a simulation-based speech perception analysis focused on the Spanish stress pattern and its implications for the (non-)reduction of vowels in the vast majority of its dialects.

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## Variation in word-final coronal stop deletion among Persian speakers

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The main goal of this study is to investigate the nature of word-final consonant deletion in Persian through an articulatory and acoustic study and explore whether there exists variation across subjects. Persian word-final coronal stops are optionally deleted when they are preceded by obstruents or the homorganic nasal /n/. For example, the final clusters in the words /ræft/ "went", /loχt/ "naked" and /qæsd/ "intention" are optionally simplified in fast/casual speech, resulting in: [ræf], [loχ], and [qæs]. What is not clear from this traditional description is whether the coronal stop is truly deleted, or if a coronal gesture is produced, but not heard, because it is obscured by the adjacent consonants. According to Articulatory Phonology (Browman & Goldstein 1986, 1988, 1989, 1990a, 1990b, 1992, 2001), the articulatory gestures of the deleted segments can still exist even if the segments are not heard. In this study, ultrasound imaging was used to determine whether coronal consonant deletion in Persian is categorical or gradient, and

<sup>6</sup> Mostly impressionistic descriptive works on the subject exist so far (e.g. Lope Blanch 1963) and the two phenomena need confirmation in the form of valid research and phonetic analyses. One such attempt has been made with respect to the Andean dialect of Cusco by Ann Marie Delforge (2009).

the acoustic consequences of cluster simplification were investigated through duration and spectral measures. This phonetic study enables an account for the optional nature of the cluster simplification process.

Ten Persian-speaking graduate students from the University of Ottawa and Carleton University, five male and five female, aged 25-38 participated in the articulatory and acoustic study. Audio and real time ultrasound video recordings were made while subjects had a guided conversation with a native speaker of Persian.

662 tokens of word-final coronal clusters were auditorily classified into unsimplified and simplified according to whether they contained an audible [t]. Singleton coda consonants and singleton /t/s were also captured as controls.

The end of the constriction plateau of  $C_1$  and beginning of constriction plateau of  $C_3$  were used to define a time interval in which to measure the coronal gesture as the vertical distance between the tongue blade and the palate. Smoothing Splines ANOVA was used in a novel way to compare tongue blade height over time across the three conditions.

The articulatory results of this study showed that the gestures of the deleted segments are often still present. More specifically, the findings showed that of the clusters that sounded simplified, some truly had no [t] gesture, some had gestural overlap, and some had reduced gestures. The participants of the study showed variation in terms of the simplification process. The results of this study are further used to examine different sound change models. It is argued that the simplified tokens with totally deleted [t] gesture could be the result of speakers changing their representations based on other people's gestural overlap. This would be instances of the Choice and Chance categories in Blevins' (2004) CCC sound change model. The acoustic results did not find any major cues which could distinguish simplified tokens from controls. It is argued that articulatory data should form an integral part of phonetic studies.

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## T-reduction in American English: an empirical study of tapping in broadcast speech

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Tapping, or flapping, of /t/ is a well-known phenomenon in American English that has been widely discussed in the linguistic literature, though typically not in the context of phonetic reduction. The focus has often been on determining the exact phonetic environments for the voiced tap (cf. e.g. Kahn 1980), and this remains one of the most challenging issues in American English phonology. Tapping is virtually categorical before an unstressed vowel in items such as *city* and *waiting*, but variable in words such as *negative* and *primitive* (cf. Riehl 2003), and normally absent in words such as *politics* and *heretic*. Tapping can also occur in the context following /r/, /n/ and /l/.

Many of the previous accounts of /t/-tapping in American English are either purely theoretical, or based on experimental data. This paper presents the results from a corpus-based study of tapping in American English, and brings in perspectives from a framework of phonetic reduction to shed new light on the phenomenon. The data consist of approximately 50 hours of newscast speech that has been analysed auditorily, with a focus on the realisational variability of /t/ displayed in certain phonetic environments.

The variants identified are voiced tap and aspirated plosive, and the environments studied are the following:

1. Word-internal /t/ between /n/ and an unstressed vowel (e.g. *twenty*).
2. Word-internal /t/ between /l/ and an unstressed vowel (e.g. *guilty*).
3. Word-internal intervocalic /t/ separated from stress by one or more syllables (e.g. *impotence*, *relative*, *associative*).

The main goal of the study is to estimate the relative frequency of each realisational variant in the given environments, and thus provide valuable insight into /t/-reduction in American English based on quantitative empirical data. A second aim is to suggest a plausible explanation for the variation or lack of reduction in certain items (with accentually parallel forms that regularly display tapping) which avoids the potential circularity of many of the traditional explanatory models.

The results of the phonological analysis will be correlated with factors such as lexical frequency, style (scripted vs. unscripted speech) and speaker gender. Reduction is expected to be more common in frequent and informal words, and increase on repeated mention. Male speakers are predicted to reduce more than females, in line with the sex/prestige pattern, as phonetic explicitness is often linked with “correctness”. The reduced variants will presumably be less frequent in scripted speech, where the level of speech-consciousness is higher. An explanatory model will be proposed which refers to syllable weight as the main factor in accounting for the systematic lack of tapping in certain lexical items.

The study will be supplemented with data from an online questionnaire, where native speakers are presented with a selection of words with potential /t/-tapping and asked about their pronunciation preferences.

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## Phonetic reduction and communicative contrast: The case of the Danish adverb *faktisk* ('actually')

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In recent years, the increased availability of spoken language corpora has given rise to a large body of studies on phonetic reduction in spoken language. Studies in this emerging tradition have typically been designed to investigate how phonetic reduction is manifested on phrasal, lexical or segmental levels, and have successfully identified a number of factors that can be said to predict or correlate with phonetic reduction, including contextual predictability (e.g. Gregory et al. 1999), frequency (e.g. Pharaoh 2009), information structure (e.g. Aylett & Turk 2004) and grammatical function ('content words' vs 'function words', e.g. Bell et al. 2009).

This paper adopts a communicative perspective on the phenomenon of phonetic reduction, through a case study of the Danish adverb *faktisk* ('actually'). Heegård (2013) observes that the degree of phonetic reduction in the pronunciation of *faktisk* has a statistically significant correlation with the syntactic position of the adverbial. In topologically peripheral positions *faktisk* is always pronounced in an expanded, 'distinct', manner: [ˈfɑ̃ɡd̥ɪs̥ɡ̊]. However, in sentence medial positions the pronunciation of *faktisk* shows considerable variation, from fully expanded [ˈfɑ̃ɡd̥ɪs̥ɡ̊] through intermediate [ˈfɑ̃d̥ɪs̥] to heavily reduced [fɑ̃s̥]. The present study aims to investigate whether this variation can be explained by taking the various dialogic functions of 'faktisk' and the communicative contrasts they realize into account.

Drawing on Skafte Jensen (2006) we present a model of *faktisk*'s dialogic discourse functions and investigate the extent to which the identified functions correlate with the varied pronunciation of *faktisk* as documented in two corpora of spoken Danish (Grønnum 2009 and Gregersen 2009). As such, our approach to phonetic reduction is more in line with the communicative perspectives as presented by Local et al. (1986), Ogden (2006) and Plug (2005, 1011) than with the above-mentioned approaches to phonetic reduction.

Our preliminary findings suggest that different dialogic functions do indeed correlate with the degree of phonetic reduction in the pronunciation of *faktisk*, but only when seen in isolation from other factors. When multiple factors are included in the analysis, differences in dialogic function cannot be shown to have a statistically significant effect. This suggests that an adequate model of the reduction processes in the pronunciation of *faktisk* will have to take multiple factors into account, including utterance/sentence position, dialogic function and genre.

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## Reduction in negative contracted forms and conjunctions in Lancashire (Bolton) English

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The present contribution intends to show how corpus data can refine phonological analyses by looking at variations that are all too simplistically referred to as "fast speech phenomena". To this end, the talk will analyse patterns of negative contracted forms, especially forms like *didn't*, *couldn't*, *shouldn't* or *haven't* as well as reduced forms of conjunctions such as *because* in Lancashire (Bolton) English, as observed in the Lancashire component of the PAC spoken corpus (Carr, Durand & Pukli 2004, Durand & Pukli 2004).

Relatively long and frequently occurring conjunctions like *because* tend to show a large number of reduced variants which lend themselves to investigation with respect to geographical or interspeaker variation. Both aspects can be profitably studied in the PAC corpus. The LPD (Wells 2008) lists variants, both for RP and GA as well as for non-standard pronunciations, that vary in the identity of the stressed vowel – /ɒ ɔː ʌ ɑː/ (even /ə/!) –, the voicing of the final sibilant – /s/ vs. /z/ –, and the amount of reduction in the unstressed vowel – /ə i/. Recorded corpus data from Bolton, Lancashire, can reveal further reduced variants, such as one with complete deletion of the first unstressed vowel: [b̥kəz]; and one, even more surprisingly, with complete deletion of the first syllable and cliticization on the preceding word [-kəz]/[-ks]: "...development **because**..." [ŋks], "...do **it because**..." [iks]. Also, a systematic study, not attempted here, of the distribution of the use of weak (reduced) and strong forms of such grammatical words may reveal more about the pragmatics of this group of words.

The specific negative contracted forms in Lancashire elicited above are relevant for a study of reductions in contracted forms for at least two reasons. One is that the Lancashire English recorded in PAC uses contracted forms of main verb *have* as in "I haven't patience", which increases the occurrence of possible assimilation (and deletion) sites. In the example, the /t/ in the negative is deleted as is evident from the assimilation to [mp]. The other reason is that, as Beal (2010) revising Trudgill (1990) discusses, doubly contracted forms *isn't* [ɪnt], *couldn't* [kɒnt], *shouldn't* [ʃɒnt], *hasn't/hadn't* [ant] regularly occur in this area – and indeed there is some recorded evidence for this in the PAC data. These forms are doubly reduced because there is wide-spread, that is standard, reduction in *not* > *n't* and the geographically specific absence of final consonants of *is/has* and *should/had/could* before the negative marker. This absence is possibly best explained by a reanalysis of the contracted paradigms rather than assuming an arbitrary deletion rule because there is otherwise no context-sensitive deletion of /z d/ before nasals. It is then all the more relevant to investigate how these geographically specific contracted forms pattern together with the more frequently found standard forms ['ɪznt], ['kɒdnt], etc. in the corpus.

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## Vowel reduction in Polish

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The term vowel reduction is ambiguous, but many researchers, e.g. Barnes (2006), make a clear distinction between phonological and phonetic vowel reduction. The former neutralises contrasts in unstressed syllables regardless of speaking style and rate, whereas the latter is a phonetically conditioned phenomenon that results in more central articulation of low vowels (see also Crosswhite 2000). In acoustic terms, the process of centralization manifests itself in significantly changed values of F1 and F2, which move towards those of the neutral vowel.

The schwa sound does not constitute a phoneme of Polish, but, as in any language, schwa-like realisations of vowels can result from articulatory undershoot in fast or casual speech. Previous studies, e.g. Łobacz (1974) and Nowak (2006), have established that Polish vowels undergo relatively deep phonetic reduction but, in spite of that, neither author considers the possibility of phonological contrast being neutralised in connected speech. However, such a hypothesis was formulated by Jaworski (2008) who provided acoustic data suggesting that, in fast speech, the first two formants of /e/ and /i/ did not differ in terms of statistics. Importantly, the finding is confirmed by anecdotal evidence as many Poles have difficulty distinguishing minimal pairs such as *przyszłości* – *przeszłości* ‘future’ (gen. sing.) and ‘past’ (gen. sing.), respectively.

In this study, we make an attempt at determining whether phonetic vowel reduction may lead to obliteration of lexical distinctions in the Polish language. Our investigation is limited to /e/ and /i/ as their acoustic characteristics and their position within the vowel space suggest that, in connected speech, they may become indistinguishable.

To achieve the objectives, we designed an experiment that consisted of two parts, namely a production study and an auditory test. In the former, we asked five native speakers of Polish to read a randomised list of words including minimal pairs such as *przywleźli* ‘they brought’ and *przewieźli* ‘they carried across’, in which the sounds in question occurred in unaccented syllables, and then we measured the values of the first two formants. Next, we performed a statistical analysis to establish the extent to which the two sets of data differ. In the latter part of the experiment, ten native speakers of Polish were asked to listen to the recordings and determine which item in each pair was pronounced. Predictably, this procedure was meant to establish whether Poles have difficulty in distinguishing the tokens.

The preliminary results strongly suggest that, in casual speech, the phonetic contrast between /e/ and /i/ is indeed neutralised as three of the informants produced vowels whose acoustic parameters did not differ significantly ( $p > 0.5$ ), while the vowels pronounced by the other two participants just reached the level of statistical significance. As for the auditory test, the participants’ judgments also indicate that phonetic reduction results in obliteration of phonological contrast between the two sounds as errors were committed with greater than chance frequency.

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## Reduction processes in Lancashire: frequency of occurrence and comparison to RP

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Lancashire dialect, often described or even stereotyped in terms of reduction (Jones 2002), still remains a highly understudied variety of English. Lodge (1984), the only cross-dialect comparison of reduction, does not include Lancashire. Shorrocks (1999) has done interesting work on the phonology and grammar of the Bolton area dialect, but there are problems of area definition, since the 1974 reform of the county boundaries that belongs to Greater Manchester not Lancashire.

The study investigates phonetic reduction in Lancashire, using 8 hrs of recordings of speech, produced by 10 speakers of the Lancashire dialect from the Phonologie de l’Anglais Contemporain corpus (Durand and Pukli 2004).

The first objective is to provide a list of reduction processes affecting consonants. They are classified in the manner of Lodge (1984), Cruttenden (1998) and Shockey (2003) and annotated manually in Praat. On the basis of the compiled list, frequency of occurrence is counted. For the most frequently occurring processes, phonetic context will be considered. The other objective of the study is to test the hypothesis that certain typologically common grammatical phenomena are reported to be non-existent in highly codified standard varieties such as standard English (RP), but are attested in non-standard dialects (Kortmann & Wagner 2005). By comparing the reduction processes in Lancashire to RP, the study verifies if this also applies to phonology. Comparison is done following Wells (1982), Schneider et al. (2004) and Hannisdal (2006).

In light of preliminary results, /t, d/ deletion has the highest frequency of occurrence. In addition, a great deal of interspeaker variability is observed. Meanwhile, the hypothesis of Kortmann & Wagner (2005) concerning the typological regularity of non-standard dialects against highly codified varieties is positively verified (work in progress as a part of a research project number 2012/05/D/HS2/03565, National Science Centre).

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## Reducing *have to* to *hafta*: Stored pronunciation variant or on-line reduction?

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This study investigates the import of frequency, speech rate, and phonological context on the phonetic realization of the semi-modal *have to* in American English. As *have to* is a highly frequent sequence, it is prone to phonetic reduction (cf. Bybee 2006). A contracted form *hafta* has been posited in analogy to other instances of *to*-contraction such as *wanna*, *oughta*, etc. (Pullum 1997). However, it is not obvious how the contraction *hafta* is marked off phonetically from the full form, and whether speakers indeed have a mental representation of *hafta* as a variant of *have to*, and if so, to what degree the contraction is conventionalized. We address this question by analyzing identifying reduced realizations of *have to* and analyzing how they are conditioned by speech rate and phonological environment; this is then compared to known cases of *to*-contraction at different levels of conventionality, i.e. *wanna*, *tryna* and *needa*.

Drawing on data from the Santa Barbara Corpus of Spoken American English (DuBois et al. 2005), we analyze two variations in the realization of *have to*. Firstly, the reduction of the final vowel /o/ to schwa, which can occur in any instance of *to* (e.g. *the best way to* [tə] *get there*; *today* [tə'deɪ]); and secondly the flapping or omission of the voiceless stop /t/, which does not usually occur at the beginning of a word (*\*the best way to* [rə] *get there*; *\*today* [rə'deɪ]). A reduction of /t/ in *have to* therefore indicates that the sequence is accessed non-compositionally, i.e. as a chunk in which *to* is not a separate item. This serves as a working definition of contraction.

Three measures of speech rate are employed: the rate (syllables per second) in the entire speech unit (the phrase or sentence), the duration of the target item (*have to*), and the difference between speech rates at the target item and in the surrounding context. As for the linguistic environment, we consider the following sound and the preceding item.

Our results suggest that a contracted variant of *have to* does exist (typically [ˈhævrə]), but it is relatively rare given the high overall frequency of *have to*. Rapid speech promotes /t/-reduction on all three measures; the variation of /u/ and schwa in the final vowel, on the other hand, is not determined by speech rate, but by the following sound. Thus, phonetic reduction of *have to* is quite systematic, and it is surmised that this leads to the creation of a stored pronunciation variant (i.e. *hafta*), which is the variant that initially emerges in rapid speech.

This indicates that *hafta* patterns with the non-conventionalized *to*-contractions (such as *tryna*, *needa*) in terms of relative frequency as well as the import of speech rate, despite the higher absolute frequency of *have to*.

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## Temporal organization and reduction in Standard Austrian German. A sound change in progress

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### Introduction

A recent study on the temporal organization of Standard Austrian German and the Viennese dialect revealed that, with respect to absolute durations of vowel+consonant sequences in stressed disyllabic words, young speakers of SAG produce statistically significant shorter stressed vowels and consonants than both SAG speakers of the old generation and Viennese dialect speakers. Relative durations ( $V/(V+C)$ ) are not affected, they render no age-specific differences between the two age groups. As concerns  $(V+C)/\text{word duration}$ , young SAG speakers differentiate the type V:F and VF (where  $F = /p, t, k/$ ) while the other groups do not differentiate these two types of vowel+consonant sequences (Moosmüller & Brandstätter, forthcoming). These results raised the question whether absolute durations are generally shorter for young SAG speakers, i.e., whether young SAG speakers speak faster than SAG speakers of the older generation.

### Method

26 speakers of Standard Austrian German (18-24 years, 7 female, 6 male, and 45-59 years, 6 female, 7 male) were asked to read a list of 80 sentences twice. Stressed disyllabic words of the following structure were subjected to acoustic analysis: #'PVPV#, where P is either a fortis or a lenis plosive and V is either a long or a short vowel. The following measurements have been performed: duration of the word, closure duration and VOT of the initial plosive, duration of the following stressed vowel, closure duration and VOT of the intervocalic plosive, duration of the final unstressed vowel. Passive voicing of initial and intervocalic lenis plosives will be considered. In addition, F1, F2, F3 of the vowels have been extracted.

### Preliminary results

Comparison of the two age-groups rendered interesting statistically significant results for absolute durations.

1. Absolute word duration is significantly shorter for the younger SAG speakers.
2. Stressed long vowels are significantly shorter for the younger SAG speakers.
3. Stressed short vowels show no statistically significant differences between the two age groups.
4. Absolute duration of word-final vowels of the words with long stressed vowels expose no statistically significant differences.
5. Absolute duration of word-final vowels of words with short stressed vowels is shorter for the younger SAG speakers.

The initial plosives were grouped according to lenis/fortis and according to place of articulation. The following preliminary results were obtained:

1. Initial /b/: closure duration is significantly shorter for the younger SAG speakers. VOT turned out to be longer.
2. Initial /t/: closure duration is significantly shorter for the younger SAG speakers. No differences for VOT.
3. Initial /k/: closure duration and VOT are significantly shorter for the younger SAG speakers.

### Discussion

The results presented so far suggest that young speakers of SAG speak faster, a fact many non-linguists complain of. However, the characteristic Middle Bavarian temporal organization is preserved. Further interesting results are expected concerning the vowel quality of the final vowels. In Standard Austrian German, unstressed vowels preserve their full vowel quality. It is interesting, whether we can observe a reduction towards schwa in the younger generation.

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## Vowel reduction in German Learner English

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Vowel reduction is a characteristic feature of stress-timed languages like English and German (Kohler 1995, Giegerich 1992). In unstressed syllables, vowels are reduced – they are articulated with a more central position of the tongue, a narrower jaw-opening and a loss of lip rounding (Delattre 1982). Acoustically, this is reflected in their duration and formant structure. This paper presents the results of an acoustic investigation of vowel reduction in German Learner English (GLE). The aim of the study is to identify patterns of interlanguage development; it thus investigates learners with different levels of language proficiency.

While English and German are both considered stress-timed, they differ with regard to the quality of unstressed vowels. The degree of vowel reduction is smaller in German, where the distribution of schwa vowels is restricted: in polysyllabic lexemes, this is due to morpho(phono)logical constraints; in function words, vowel centralization is stylistically marked (Kaltenbacher 1998). The duration of unstressed vowels is reduced in both languages. A lack of vowel reduction has been described as a characteristic feature of GLE (e.g. Parkes 2001) and, more generally, as a universal feature of learner speech (Barry 2007). Instrumental investigations of this feature of GLE have focused on the temporal properties of unstressed vowels, using rhythm metrics to quantify vowel reduction. A lack of temporal reduction was found by Gut (2009). Ordin et al. (2011) were able to attribute inter-speaker variation to language proficiency, with the productions of advanced learners being more stress-timed. The reduction of vowel quality in GLE has so far not been investigated.

This study deals with two acoustic properties of unstressed vowels: duration and formant structure. The results of a pilot study showed that advanced learners differ from native speakers in terms of vowel quality rather than duration. While there were no significant differences in vowel duration, learners produced slightly higher  $F_1$  and markedly lower  $F_2$ , the difference in  $F_2$  being statistically significant for each learner. The quality of unstressed vowels showed a clear influence of orthography. This factor – which might be characteristic of reading tasks – is avoided by using a delayed imitation task (Flege et al. 1995) for data elicitation.

The current investigation into the developmental pattern of vowel reduction in GLE is carried out in the framework of Major's (2001) Ontogeny and Phylogeny Model of Second Language Acquisition. It focuses on the interplay of three interlanguage components: L1, L2 and universal structures. According to Major's model, the influence of universal structures first increases and then decreases in the chronological course of second language development. The universal tendency to overarticulate unstressed vowels is thus expected to vary with the level of language proficiency.

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## Phonetic reduction in native and non-native English

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Traditionally, second language pronunciation teaching has taken single vowels and consonants in isolated words as a starting point. Most attention has been devoted to words' canonical forms. As a rule, connected speech phenomena

have been given only low priority. In phonetic research, investigation of such phenomena is a relatively recent development. The goal of the present study is to investigate phonetic reduction in non-native vs native speech.

It is postulated that degree and direction of phonetic reduction in second language speech is determined by different factors. Firstly, non-native speakers can be expected to adopt reduction patterns from their native language or otherwise to produce reductions that differ from what is found in native speech. Further, certain reductions will be due to anatomical, physiological and physical factors. It can thus be hypothesized that such reductions will occur in native and non-native speech alike. Finally, also speaker idiosyncrasies will affect pronunciation. In the present case of second language speech production this includes both individual characteristics in speakers' native language production and simple pronunciation errors in the target language.

The material used consists of BBC news transcripts read by ten Norwegian and ten native speakers of British English. To investigate native Norwegian speech production, spontaneous recordings from the same ten Norwegian subjects are used. Evaluation of this speech material involves close inspection of waveform and spectrogram combined with auditory analysis. Additionally, acoustic measurements are carried out to obtain information about voicing and intensity as well as durational and spectral parameters. This method enables us to specify relevant subsegmental acoustic details. Reduction is studied in segments occurring in similar contexts in both native and non-native production, and also when only occurring in either native or non-native speech. The main focus of this investigation is on stops.

Preliminary analysis suggests that the experimental hypotheses will be borne out by the results. Our study will present empirical evidence contributing to the development of models of second language speech learning. Existing models take phonemic contrasts and phonological systems as their points of departure (e.g., Best's 1995 and 2007 Perceptual Assimilation Model; Flege's 1995 Speech Learning Model; Kuhl and Iverson's 1995 Perceptual Magnet model). Typically, they do not take into account connected speech phenomena. The present contribution will argue that focusing on subphonemic reduction phenomena is potentially important for the description and possible explanation of non-native speech production. Apart from widening the scope of theoretical models, our study may have implications for language teaching and applications in speech technology.

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## WORKSHOP: CONCEPTUAL AND NON-VERBAL STRATEGIES OF PERSUASION

Convenors: Romano, Manuela (Autonomous University of Madrid, Spain); Josep Cuenca, Maria (University of Valencia, Spain)

This panel proposes to explore a line of research that approaches the study of **conceptual and non-verbal strategies of persuasion** within socio-cognitive and functional models of language. Firstly, the panel aims to promote the integration of the contextual component, including the specificities attached to discourse genres, in the explanation of discursive dynamics; that is, how persuasion is best understood as a dynamic, interactive process in real socio-cultural contexts. Secondly, it intends to show the specific linguistic and pragmatic choices that speakers/writers make to construe persuasion, namely, the use of conceptual and linguistic—both verbal and non-verbal—strategies such as metaphor or simile, specific lexical and grammatical elements, such as encapsulators or person markers, as well as specific multimodal –visual and sound –resources and gestures, among others.

Persuasion and strategy are the two key concepts in the panel:

Starting from a general definition of *strategy* as “plan of action designed to achieve a major or overall aim” (*Oxford English Dictionary*), the expression *discourse strategy* has been widely used within discourse studies: discourse analysis (Gumperz 1982; Calsamiglia & Tusón 1999; Menéndez 2009), text linguistics (Beaugrand & Dressler 1981; Bernárdez 1995), argumentation theory or new rhetoric (Perelman & Olbrechts-Tyteca 1989), critical discourse analysis (Fairclough 1989; Van Dijk 1993, 2003; Wodak & Meyer 2003), and interactional sociolinguistics (Schiffrin 1994), among others. In this panel, the word is used in its widest sense as all the resources (both verbal and non-verbal) that the speaker consciously uses in order to build and interpret the discourses within the appropriate context, and in order to interact efficiently within communication.

*Persuasion* has always been deeply rooted in the history of rhetoric and of linguistics. The idea that speakers/writers select linguistic elements from a range of semantic options and combine them with other elements into chosen syntactic patterns within different communicative situations in order to influence hearers/readers can be found throughout the history of linguistics (Cockroft & Cockroft 2005; forthcoming).

This approach to language is now at the heart of Cognitive Linguistics. Coming from Morpho-Dynamic models of language and Sociology, and related to Slobin’s (1996) ‘thinking for speaking’ and to Bourdieu’s (1994) ‘habitus’, Bernárdez (2008; forthcoming) updates the approach by introducing the notions of *synergetic cognition* or *active-cognitive* approach to language, which considers that language is a product of a socially-conditioned, activity-driven cognition, an essentially cultural and social object which is then incorporated in individuals. Persuasion fits perfectly into this ‘activity-driven’ view of language, as it concerns the specific use or choices of linguistic, pragmatic and paralinguistic strategies speakers/writers make for specific purposes in specific socio-historical contexts of use.

Aristotle’s *pathos* (appealing to the audience’s feelings to persuade), *ethos* (the set of values held either by an individual or a community and reflected in their language, social attitudes and behaviour) and *logos* (the final choice and development of persuasive arguments) (Cockroft & Cockroft 2005) seem to be back into the picture within the most recent cognitive and functional research. Persuasion links directly with recent cognitive work on various topics such as: (i) Metaphor and similes in discourse (Cameron & Deignan 2006; Roncero et al. 2006; Semino 2008; Bernárdez 2009; Kövecses 2010); (ii) ‘Viewpoint’ in language (Vandelanotte 2009; Dancygier & Sweetser 2012, Dancygier et al. 2102); (iii) Mental spaces and conceptual integration theory in spoken and written discourse (Coulson & Oakley 2006; Semino 2010; Schneider & Hartner 2012) (iv) Multimodal persuasion in different genres such as advertising, digital storytelling, etc. (Forceville & Uriós-Aparisi 2009; Alonso, Molina & Porto 2013; Hidalgo, Kraljevic & Nuñez-Perucha 2013).

- The workshop propounds an approach to sometimes implicit or understudied strategies in persuasive discourse, encompassing:
- A comprehensive understanding of ‘persuasion’: creating emotion and empathy; persuading people to buy a product or to assume an idea or opinion, vote for a political option, join a movement; read a text; etc. In short, persuasion into outstanding social activities in a specific context and for a specific purpose.
- The study of persuasive discourse in a wide variety of discourses and situations—spoken, written and multimodal—including parliamentary debates, interviews, opinion articles, blogs, tweets and digital stories.

- The analysis of various conceptual and paralinguistic strategies of persuasion, such as similes (Cuenca & Romano) and metaphor (Soares da Silva, Corrêa Ferreira), person representation and marking (De Cock), encapsulation and other lexical devices (Ribera, Potapenko), adversativity and negative polarity constructions (Maldonado), and, finally, gestures (Guilbeault) and music (Porto) as devices related to subjectivity and argumentation.
- The exploration of the relationship between the strategies and the contextual features defining a wide variety of genres and situations.

Thus the **research questions** that the panel wants to contribute to answer are the following:

- (i) How is the speaker's intentionality projected onto his or her conscious use of strategies for persuasive purposes –search for attention or empathy, attempt to emotionally touch the listener, to persuade or influence his or her ideas or behaviour?
- (ii) Which verbal and non-verbal devices are mainly used to enhance the argumentative force of a message?
- (iii) What is the impact of the specific socio-cultural context, text types and genres in the use and frequency of some strategies of persuasion?

The panel is conceived as a **one-day session** including:

- A brief introduction to the topic
- 9 presentations on different strategies of persuasion:
- A final discussion on the topics covered by the papers, methodological issues and questions for future research.

All the presentations are corpus-based. The languages considered are English, Spanish, Catalan, Portuguese, Russian and Ukrainian.

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## Metaphor and social-status in talking about urban violence in Belo Horizonte, Brazil

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This study deals with metaphor as a strategy of persuasion in the discourse produced by focus groups' participants as they engage in talk about urban violence in Belo Horizonte, Brazil. Social status seems to be determinant in shaping systematic metaphor use in face-to-face interaction among Brazilian participants.

Specifically, our research investigates how metaphors persuade by appealing to the different audiences' emotions. We are interested in questions such as: (i) how social status motivates some vehicle terms, (ii) how they emerge in face-to-face interaction and affect metaphor performance, (iii) to what extent social status also plays a role in shaping empathy among participants.

This qualitative study follows the methodological procedures set out in Cameron et al (2009) and Cameron & Maslen (2010). Eleven voluntary participants, students at undergraduate level at Federal University in Belo Horizonte, took part in the study about urban violence in the city in May 2012 and the impact such phenomenon has caused in their lives. Data were collected from a structured focus group discussion. The transcribed data (13,880 words) were subjected to metaphor-led discourse analysis. Identification of metaphor vehicles followed an adapted version of the MIP (Metaphor Identification Procedure) adopted by the Pragglejaz Group (Pragglejaz 2007). The analysis identifies some recurrent metaphor vehicles, which describe the informants' beliefs and ideas about the role that social status has played in shaping their attitudes towards urban violence and its agents.

Among other things, participants spoke of the fear of being robbed as playing roles using the systematic metaphor FEAR OF VIOLENCE IS PLAYING ROLES. The expression 'the make up the person wears' is motivated by the systematic metaphor (FEAR OF) VIOLENCE IS PLAYING ROLES. There is some evidence for this systematic metaphor in the data, which works on both sides of the social status scale of Brazilian society since wealthy people in Brazil nowadays try not to show up their wealth in order to avoid calling the attention of the robbers. On the other hand, robbers dress well aiming at approaching their victims without raising any suspicion. The talk of the victims reflects the relationship between physical appearance and social status and its role in Brazilian society.

In conclusion, the systematic use of metaphor in the focus group discussions reveals how metaphor plays an important role in talking about their traumatic experience and their values. It also shows how this is assimilated in the victim's discourses. Social status appears between the lines as an important factor mentioned by victims when they talk about their experience with urban violence in Brazil since they refer to the appearance of the perpetrators. However, social status might appear in different contexts of use.

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## "Why money-printing is like global warming": Similes as headlines in opinion genres

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Similes are frequent and highly significant in informative and opinion discourse (e.g., news, interviews, blogs and tweets). If a text contains a simile, it is often the case that it is selected as its headline. This prominent text location is related to the main discursive features and cognitive functions of similes (Israel et al. 2004, Bernárdez 2009, Dan-cygier & Sweetser 2014, Cuenca submitted), and more specifically to their use as persuasive, attention calling devices that invite to continue reading the text.

Headlines are designed to optimize the relevance of the information contained in the text. They provide readers with the adequate ratio between contextual effect and processing effort, and direct them to construct the optimal context for interpretation. To this end, headlines are short and compressed, usually include deviant graphology, strong sound effects and word play, and are highly prone to figurative creation. In fact, the relationship between headlines and metaphors has been extensively studied (Knop 1985, Dor 2003, Semino 2008, Kövecses 2010), but the case of similes has not received a similar attention.

Because of their structural features—the fact that they are usually followed by an explanation or elaboration that helps to interpret a non-conventional analogy—, similes allow daring and novel mappings, as the headline “Why Money-Printing is Like Global Warming” clearly shows. The *wh*-pronoun announces an elaboration of the analogy to be found in the following text. The simile acts as a powerful rhetorical tool that persuades people into reading whatever comes after the headline. Therefore, headlines and similes seem to feed back to each other.

Our analysis assumes a cognitive-functional approach (Israel et al. 2004, Glucksberg & Haught 2006, Utsumi 2007, Bernárdez 2009, Moder 2012, Dancygier and Sweetser 2014) that puts forward the key-role of similes as a relevant conceptual mechanism both in language and text construction. Specifically, they are descriptive and evaluative mechanisms to catch the addressee’s attention and put in a nutshell someone’s opinion.

On the lines of the analyses of metaphors and headlines, and considering that similes are related to but different from metaphors both cognitively and discursively, this presentation proposes a description of the use of similes in headlines.

The data for the study, collected through the WebCorp search tools, consist of 150 texts including “*A is like B*” headlines in English, Catalan and Spanish. The texts belong to different opinion genres, namely headlines in news, interviews, commentary sections, as well as from comments to news, blogs and tweets.

By analyzing similes in real contexts, this study sheds light on key-questions such as: (i) which are the specific rhetorical and cognitive functions of similes as conceptual mechanisms in persuasive texts, (ii) why do similes seem to be preferred to metaphors in the specific context of opinion discourse headlines, (iii) what are their similarities and differences in the use of similes in headlines in the three languages considered.

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## Which persuasion in which discourse? An analysis of how politicians adapt their persuasive strategies according to the discourse type

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In this paper, I will look into how politicians adapt their strategies of persuasion according to the context in which they communicate. Indeed, cognitive corpus linguistics research has shown that considerable genre-differences can be found in the ways in which certain linguistic phenomena function (Gries 2013). It has also highlighted that, given the situatedness of cognition (Mandelblit & Zachar 1998: 253), we should adopt an “activity-driven” approach to language in its social context (Bernárdez 2008). More concretely, through a case study of Alejo Vidal-Quadras Roca (right-wing Spanish vice-president of the European Parliament), I will show how politicians adapt their use of person deixis, and generic pronouns (e.g. *uno* ‘one’) and other impersonalizing devices in order to persuade their public through identification and empathy, depending on the political discourse type they engage in and the public they interact with.

The corpus consists of Vidal-Quadras' production in discourse types with different degrees and ways of interaction, namely parliamentary debate, TV- and radio-interviews, his own blog and Twitter-account. I focus on the period of September to December 2013, when Vidal-Quadras publicly attacks his own party (leading to his not being the leader of the 2014 European elections list) and considers creating a new party. He thus has to manage a shift in political identity and public (members of the own party, supporters of the idea of a new party, Spanish voters in general, ...). My research questions concern (i) which variety of deictic and impersonalizing devices Vidal-Quadras uses in order to persuade through identification and empathy and (ii) how these uses vary per discourse type depending on the interactivity and public.

The usage-based analysis will be both quantitative (looking into the frequencies of the phenomena) and qualitative (looking into their different uses). In the most interactive spoken genre (interview), the use of person deixis is not only more frequent, as could be expected, but also serves a specific goal, namely clearly positioning Vidal-Quadras, as in (1). In the tweets and blogs, by contrast, person deixis is limited to quotes and hedging.

(1) *Los dirigentes del PP se comportan como socialdemócratas, y yo no estoy afiliado desde hace 30 años a un partido socialdemócrata.* (interview with PeriodistaDigital, 17/10/2013)

'The leaders of the PP behave like social democrats, and I am not affiliated since 30 years to a social democrat party.'

Furthermore, persuasion is realized by means of first person plurals when addressing other party dissidents in discourses and meetings, with whom there is already a shared identity. However, when addressing a broader public in the media, Vidal-Quadras rather uses impersonalizing constructions, e.g. generic and passive *se*-constructions, to persuade, thereby creating empathy and identification with the public in a less direct way than with a 1<sup>st</sup> person plural group identity.

All in all, the analysis shows that the discourse type and public must be taken into account in a usage-based description of persuasion in political discourses.

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## Sounds and emotions for persuasion in multimodal narratives

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Persuasion is present in all forms of communication in one way or another. Narratives are more indirectly persuasive than other genres like political speech or commercials, but still there is always a definite purpose in storytelling. Apart from obvious educational or moral purposes in some of them, narrators strive to convince their audience that the story is worth listening and remembering and make use of different strategies to get them engaged with the story, identified with the characters and transported into the narrative worlds, often with the aim of changing their beliefs and attitudes and make them perceive the world in a different way.

In the digital era, narratives have far evolved into new modes and genres and so have persuasion strategies. Thus, multimodal, digital stories make use not only of words, but also of images, sounds and music in order to persuade their audience (Perloff 2003). Particularly, this paper addresses the role of sounds and music as the *pathos* in digital stories, that is, the narrators' appeal to their audience's emotions.

Contrary to rational persuasion, which requires a cognitive effort on the side of the audience, emotional persuasion works on the subconscious. Music and sounds in a digital story is usually out of the focus of attention and so elicits an emotional, unconscious response in the audience.

The analysis of a number of digital stories on personal experiences, based on previous work on this narrative subgenre (Alonso *et al.* 2013, Porto & Alonso, forthcoming), will evidence that the background music in digital stories acts as a powerful persuasive technique that makes the audience get involved in the events narrated and so persuade them into a change of attitude towards a definite aspect of the world.

In order to show how music becomes a persuasive strategy in digital stories, first, different kinds of background sounds will be identified in a sample of thirty stories (popular songs, folk music, melodies, humming, percussion, symbolic sounds, etc.) and the way they contribute to meaning construction will be analysed, in terms of evaluation, narrative transportation, cultural identification and emotional involvement (Gabrielsson & Lindstrom 2001, Green & Dill 2012, Robinson 2005, Yan & Yang 2013). Secondly, attention phenomena (Talmy 2007), i.e. the persuasive ef-

facts of directing the hearer's attention to music, will be considered, e.g. when there is a change of the music, when it becomes louder, or when it abruptly stops at a specific point in the story. Finally, cultural aspects and intertextuality will also be taken into account as the emotions aroused by a specific kind of music are not purely subjective reactions, but often the response to certain conventional associations as culture influences which situations lead to particular emotions (Johnson-Laird & Oatley 2000).

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## Cognitive rhetoric of effect: Strategies of creating responsibility impression in Russian and Ukrainian presidents' inaugurals

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The presentation relates rhetoric of effect to ethos, i.e. the formation of a favorable self-image. Its creation is governed by strategies which as plans of practices adopted to achieve particular goals (Wodak 2011: 40) determine an author's activity throughout four rhetorical text-building stages serving as steps of analysis: invention (looking for arguments), disposition (argument arrangement), elocution (verbal ornamentation) and performance combining the ancient canons of memory and delivery. The cognitive rhetorical application of the four steps consists in finding how the planned effects are evoked by the arrangement and nomination of conceptual structures: image schemas, defined as recurring dynamic patterns of our perceptual interactions and motor programs (Johnson 1987: xiv), and force-dynamic patterns, treated as a fundamental semantic category in the realm of physical force (Talmy 2000: 409).

The suggested procedure is applied to revealing the cognitive rhetorical strategies of forming a responsibility effect in President Putin's inaugurals of 2000 ("I am aware that I have undertaken a huge responsibility") and 2012 ("As I take office as President of the Russian Federation, I am aware of my great responsibility before our country") as well as in the 2010 inaugural of Ukrainian President Yanukovich ("What do I feel taking presidential oath? Responsibility and humility").

The first – inventive – stage aims at image-schematic and force-dynamic reconstruction of dictionary definitions of the words naming particular effects to identify the conceptual relations to be traced in the text. The analysis reveals that in image-schematic terms the noun *responsibility* and its derivatives position an acting individual as a target of COMPULSION, representing the experience of being moved by external forces (Johnson 1987: 45), while from the force-dynamic perspective, this very target restricted by external forces is characterized by an internal tendency to moderate activity.

The second – dispositional – stage reveals the textual sequencing of the units referring to the conceptual structures which underlie particular effects.

The third – elocutionary – stage explains the selection of the words evoking image-schematic and force-dynamic relations underlying the intended textual impressions. President Putin's inaugurals differ in the nomination of responsibility-COMPULSION sources restricting his activity. In the 2000 inaugural they included Russian history, the president and various social groups surrounding him. In the 2012 address the responsibility sources encompassed the homeland, its values and the audience's inner tendency to activity.

The lexical units in Ukrainian President's inaugural reflect a non-canonical view of responsibility: he is an energetic leader whose activity is not restricted by external forces. This impression is triggered by the lexical units repre-

senting him as an Agonist, i.e. a focal force, with a tendency to activity and as a source of a number of force image schemas: ATTRACTION and BLOCKAGE in the context of preventing the country's downfall; COMPULSION for the governing bodies; RESTRAINT REMOVAL for the country's further economic development.

The fourth – performative – stage explains the differences in representing the responsibility effect by the history of the respective countries and the status of their presidents.

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## Encapsulation as a strategy of persuasion in Catalan parliamentary debate

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Parliamentary debate is a specific genre of parliamentary discourse within the sphere of political communication. Generally speaking, parliamentary debates are characterized by combining both confrontation and cooperativeness in order to contribute to problem-solving tasks related to political deliberation and decision making processes (van Dijk 2000, Ilie 2006, Cuenca in progress). Therefore, persuasion and persuasive strategies are crucial in parliamentary debate.

This paper aims at analyzing the role of encapsulation by means of shell nouns (nominal encapsulators) as a complex conceptual strategy of persuasion in Catalan parliamentary debate. Shell nouns are defined by their ability to encapsulate complex predicative chunks of textual information (the shell content), recategorizing them syntactically and/or conceptually as nouns (cf. Schmid 2000, Borreguero 2006). Thus, being well aware of their potential for subjectivity and evaluation, the members of parliament make use of shell nouns (or encapsulators), specified or complemented by determiners or adjectives, to enhance the argumentative goals of the debates. By analyzing a corpus of debates run in the Catalan Parliament between July 2010 and January 2014, this research tries to shed some light on two questions:

- (i) how and to what extent the diverse recategorizing operations performed by shell nouns contribute to transform conceptually the encapsulated content, and
- (ii) what subjective and intersubjective effects are conferred by the whole phrase into which the shell noun occurs.

In order to answer these questions, firstly the shell nouns in the debates and the encapsulated contents have been identified and classified considering the six-fold semantic categorization proposed by Schmid (2000), namely, factual, linguistic, mental, modal, eventive and circumstantial. Secondly, the semantic changes observed between the two elements of the phoric relation have been highlighted as potential carriers of semantic reclassification in behalf of persuasion. Thirdly, the shell nouns, and their accompanying determiners and adjectives, have been analyzed taking into account their potential for subjectivity with respect to the positive or negative connotations of their semantic content and thus regarding their contribution either to confront the opponents or to gain supporters or allies among the participants of the debates and presumably among the voters (cf. Izquierdo Alegría & González Ruiz 2013).

The analysis shows that encapsulation proves to be a very effective conceptual strategy to evaluate the topics discussed in the Catalan parliamentary debates. In the case of nominalizations, the shell noun is morphologically related to the predicate of the encapsulated content; however, it is not a mere conceptual repetition: the anaphoric noun tends to present as objective (a fact or an event) entities that have been expressed previously as the addressor's utterances (linguistic shell nouns) or ideas and desires (mental shell nouns). Thus, the speakers subtly objectivize what is actually subjective information in order to dissuade the addressees. On the other hand, some shell nouns purport subjective features such as epistemic and deontic modality, positive and negative attitudes, and various psychological states used as defense or attack means of argumentation in the political arena.

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## The persuasive (and manipulative) power of metaphor in 'austerity' discourse: Embodied and moral metaphors of austerity in the Portuguese press

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This presentation analyses the persuasive power of metaphor in the Portuguese press discourse that implemented harsh austerity policies by the Portuguese government aiming to solve the serious economic present crisis in Portugal. The analysis relies on a corpus of news and opinion articles published in two time periods: (i) June-July 2011, after the entry of the Troika and together with the announcement of the first austerity measures by the new government, and (ii) May 2013, when protests against the austerity policies, the government and the Troika intensified. The present study adopts an active-cognitive view of language following the promising convergence between Cognitive Linguistics and Critical Discourse Analysis (Charteris-Black 2005; Dirven et al. 2007; Hart 2010, in press). The analysis firstly identifies and interprets the conceptual metaphors of austerity, and secondly highlights the persuasive and manipulative functions of the metaphors.

In order to identify the metaphors, we adopted the "metaphorical pattern analysis" as proposed by Stefanowitsch (2006). This method takes the target domains of the metaphors as the starting-point of the analysis. 8 key words from the target domains of economy, finance and politics were searched for in the corpus, namely *austeridade* 'austerity', *corte* 'cut', *dívida* 'debt', *Estado* 'State', *orçamento* 'budget', *pobreza* 'poverty', *poupança* 'saving' and *Troika* 'Troika'. Considering these targets, we gathered 1,151 metaphorical expressions which can be related to three generic conceptual metaphors, namely metaphors based on THE GREAT CHAIN OF BEING (Lakoff & Turner 1989), metaphors based on *image schemas* (Johnson 1987; Hampe 2005), and event metaphors. For example, metaphors of austerity are typically related to human behavior (responsibility/irresponsibility, discipline, sacrifice, obesity, cruelty, despotism, honor, good students), family budget and debts, PATH and FORCE image schemas, and war, games, household management, therapy, and mission. Interestingly, there is a strong increase of the negative sense of these metaphors in the press between 2011 and 2013.

The corpus analysis reveals the persuasive force of specific metaphors used in the implementation and justification of harsh austerity policies, namely the metaphors of obesity/diet, indebted family, good student, and sacrifice. These socially-embodied metaphors are used deliberately for manipulative purposes. In persuasion, the interlocutors are free to believe, whereas in manipulation they are victims (Van Dijk 2006). These metaphors aim to convince the Portuguese society with emotional and moral arguments not to 'live above its means', and to accept the drastic cuts addressing the social expenses of the State, wages reductions, fiscal sacrifices and poverty. Based in metaphorical moral models (Lakoff 1996, 2004), these metaphors are used with covert ideological and mythical intentions that are not so easily detected by the Portuguese people. Crucially, they serve the ideological agenda of austerity, foster the beliefs that budgets deficits are always a problem, economy is like household management, and austerity policies help the economies to revert to their long-term growth. In the actual context of widespread perception that austerity and sacrifices were not worthy, these metaphors are also used to reveal their mischievous and immoral features.

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## WORKSHOP: THE DIACHRONIC STABILITY OF COMPLEX VERBAL MORPHOLOGY

Organized by: *van Gijn, Rik (University of Zürich, Switzerland); Zúñiga, Fernando (University of Bern, Switzerland)*

The distribution of morphologically complex verb forms over the globe is clearly skewed (Bickel & Nichols 2011): complex inflectional verb forms are predominantly found in the Americas, Papua New Guinea, and north-eastern Asia. Africa and Australia present a more scattered picture, and Eurasian languages (with some notable exceptions) predominantly have lower inflectional complexity on the verb.

This geographical skewing raises the question whether verbal morphological complexity (in terms of many potential categories per verb) is diffused through contact. If this is indeed the case, this is rather unexpected from the perspective of most modern theories of contact-induced language change, which predict that very basic and purely structural architectural features (such as morphological structure) are relatively resistant to contact-induced change, unless they can be shown to be rooted in semantics or pragmatics (see e.g. Heine & Kuteva 2005, Matras & Sakel 2007). Moreover, language contact is often assumed to lead to simpler, rather than more complex, structures.

Another possible explanation for the skewed patterns is that, rather than contact-induced similarities, they represent very old structures, which are in fact inherited from an ancestor language far beyond the reach of the comparative method, in line with claims made by Dunn et al. (2005). Interestingly, this answer would give new life to the claims by early pre-typological grammarians that genetic affiliation can be shown by the comparison of morphological structure.

This workshop is dedicated to contributing to the advancement of our knowledge about the diachronic development of morphological complexity. Broadly speaking, the contributions focus on three major, related, themes:

### 1. The development of morphological complexity in contact situations

Contact-induced structural change can take on different forms and guises. Structural convergence is perhaps most typically found in linguistic areas, where different linguistic groups have coexisted for many years, with prolonged contact between them. It takes place in a scenario of language maintenance, for which it is generally assumed that widespread multilingualism over long periods of time is a prerequisite. In situations of language shift the structural profile of a language can also be drastically altered as a result of substrate influence, where structures of the original language leave their imprint on the new variety of the acquired language.

**Mithun** explores pathways of unconscious morphological change in several contact areas in North America, focusing on the different factors that contribute to the replication of more abstract morphological characteristics of language, parallel to what has been reported for other areas of grammar. **Van Gijn** evaluates proposals that have been made to regard morphological complexity of verbs as a contact feature of the Mamoré-Guaporé linguistic area in eastern Bolivia and Rondônia, proposing a model for morphological comparison. **Zúñiga** investigates the extent to which contact-based scenarios help explain the patterns of verbal morphology in northern Quechuan languages, which are often claimed to be reduced compared to more southern varieties.

### 2. The development of morphological complexity within families

Another way of exploring the stability of the morphological profile of verbs is to focus on patterns found within linguistic families. On the assumption of high stability of verb morphology one would expect to find relatively homogeneous patterns within families. Three contributions focus on (proposed) families.

**DeLancey** discusses the contact-induced loss of a complex system of argument indexation on the verb in some Tibeto-Burman languages, and a subsequent rebuilding of a new system, suggesting a more genealogically-based and resilient propensity for having complex verbal indexation systems. **Gildea and Meira** discuss several developments in the verbal morphology of Cariban languages, arguing for a general inclination towards increased morphological complexity, without an obvious role for either contact or conservatism in these developments. In their contribution, **Bakker and Ariza** examine what a comparison of patterns of verbal morphology brings to bear on a long-standing issue of a proposed genealogical grouping between Algonquian and Ritwan languages, and further tentative connections to Kutenai and the Salishan family. **Pache** discusses verbal inflection in the Chibchan family, arguing for the fact that the complexity in the Chibchan verb is in part due to innovations, and in part to inherited patterns.

### 3. The development of morphological complexity within individual languages

The third group of papers focuses on the verbal morphology of individual languages, generally against the background of a language family or area. These studies offer more detailed perspectives on the ways in which patterns of verbal morphology may change over time.

**Bernander** argues that the development of a new set of verbal future markers, which lead to a paradigmatically more complex verb morphology in Bena (Bantu, southern Tanzania), is a language-internal innovation rather than the result of either contact or inheritance. **Plungian** discusses the diachronic development of verbal inflection in Armenian, which shows an increase of periphrastic forms at the cost of synthetic ones. He argues that a single semantic feature, which he terms “temporal mobility” underlies the diachronic development and the current distribution of periphrastic and synthetic forms. **Asatiani** discusses the diachronic development of verbal morphological structure of Georgian against the context of the Kartvelian language family, arguing for its remarkable stability over time, not only in terms of the morphological processes involved, but also in terms of its categories and dependencies.

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## Synchrony and diachrony in Algic, Kutenai and Salish

*Bakker, Peter; Ariza, Andrea (Aarhus University, Denmark)*

Two distantly related languages in California, Wiyot and Yurok (together called the Ritwan languages), have been considered proven to be related to the Algonquian language family by Ives Goddard in 1975, sixty years after Edward Sapir first proposed this connection (Haas 1958). Algonquian and Ritwan languages together constitute the Algic group or stock.

The evidence for a genetic relationship between Ritwan and Algonquian is limited to a few dozen lexical cognates, several similarities in the verbal system, the form of the person markers, the presence of a morpheme marking non-possession and some aspects of the kinship system.

There are in fact more typological and lexical differences between the Ritwan languages and Algonquian than there are similarities. Some of the differences between the Ritwan and Algonquian languages are probably due to influence from the neighboring languages in California.

In recent years, some linguists have discussed deeper connections, genetic or otherwise, connecting the Algic languages with languages of other families, most notably the isolate Kutenai (Haas 1965, Dryer 2007) and Salish (Denny 1991, Bakker 2006, 2008, 2012, 2013; but see also Van Eijk 2007). A genetic grouping comprising these languages, and some others, was proposed by Sapir in 1929, but he never backed up his claim with evidence.

In this paper we will compare the verbal structures of Algonquian, Wiyot, Yurok, Kutenai and Salish, and discuss the similarities and differences between these five languages or groups from a typological perspective. If verbal morphology is relatively conservative or more stable than other typological features, one should expect a closer resemblance within this group of languages, than between these and other North American groups. This appears to be the case. This closer resemblance could be taken as an argument for a genetic connection, as there is no documented evidence for the diffusion of polysynthetic structures. The morpheme order of these languages also differs significantly from those of other North American languages.

We also take other, stable typological features into consideration for these languages and a sample of neighboring languages, features that are independent from verbal morphology. Using phylogenetic techniques for stable features, it appears that Salishan and Algonquian are in fact closer to one another than either is to the Ritwan languages, suggesting the possibility that the similarities between Salish and Algonquian are genetic rather than areal, and at a time depth beyond proto-Algic.

Concluding we may say that similarities between stable features, among them order of morphemes in the verb, strongly suggest a genetic connection between Salish and Algonquian that is not recoverable by the comparative method.

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## The evolution of future markers in Bena (Bantu G63)

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The Bantu languages are known for their agglutinative character, with a rich set of Tense and Aspect (TA) markers, including several denoting future time reference (Nurse & Philippson 2003). Bena, a Bantu language (G63) spoken in southern Tanzania, is no exception. It distinguishes three kinds of futures (SM stands for Subject Marker and B for the verbal base):

TENSE	FORM	EXAMPLE	TRANSLATION
F(uture)1	(h)adza SM-i-B-a	(h)adza ndi-géénd-a	"I'll go (sometime today)"
F(uture)2	SM-dza-B-a	Ndi-dza-géénd-a	"I'll go (in a day or two)"
F(uture)3	SM-lá-B-a	Ndi-lá-geend-a	"I'll go (in a few months or years)"

(Morrison 2011)

The aim of this study is to account for how this complex future tense system has evolved, i.e. what are the sources of the different markers and the pathways of grammaticalization involved? And, additionally, why have they patterned in this way? The study is based on comparison with older sources of Bena (e.g. Priebusch 1935) and with neighboring and related Bantu languages (cf. Nurse 2008), as well as with cross-linguistically grounded statements on language evolution (Bybee et al 1994; Heine & Kuteva 2002).

To begin with F3, *-la-*, it is attested as a future affix for Proto-Bantu (Nurse & Philippson 2006) and occurs in many closely related languages. The older sources suggest that only *-la-* existed as a single, broad future marker in diachronic Bena. In Pangwa (G64), its closest relative, *-la-* is the only future tense marker (Stirnemann 1983). These observations indicate that F3 is the original future marker in Bena while F1 and F2 are more recent creations. I propose that both F1 and F2 have developed from the same source, *-adza* 'come', a lexical verb still present in synchronic Bena. The lexeme 'come' is a common source for future tense marker, especially in Bantu, but also cross-linguistically (Botne 2006; Nurse 2008; Bybee et al 1994; Heine & Kuteva 2002). According to Heine (1993) it is not unusual that the same source evolves into different grammatical markers in a single language. However, the differences in degree of fusion and position between F1 and F2, where F2 is of less phonological substance and more incorporated in the verbal matrix, indicate that F2 is an older marker than F1 (cf. Bybee et al 1994).

Given the characterization above, we see that the complex future structure in Bena is not inherited or diffused through contact. What seems inherited, when comparing cross-Bantu, is rather the tendency of rapid and frequent (re)creations and additions of tense forms. According to Nurse (2008: 25) and Bybee et al (1994), this is connected to the agglutinative structure of Bantu languages: Newly desemantized function words fuse faster than they do in more analytical languages.

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## The fall and rise of morphological complexity in Tibeto-Burman

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Certain subbranches of Tibeto-Burman stand out as islands of complexity in a Eurasian sea of simplicity (Bickel and Nichols 2011). Others show a radically simpler verbal system more consistent with their South and Southeast Asian neighbors. The complex systems include elaborate systems of transitivity management, characterized by hierarchical argument indexation and inverse marking (DeLancey 1981, Ebert 1991, Sun and Shi 2002, Sun and Tian to appear, Jacques 2010, LaPolla 2010, Boro 2012, van Driem 2013, inter alia). A hierarchical biactantial indexation system, including inverse marking, can be reconstructed for Proto-Tibeto-Burman (DeLancey 1989, 2010, Ebert 1990, 1991, van Driem 1993, Jacques 2012, inter alia). The Proto-Tibeto-Burman paradigm indexed three persons and three numbers, inclusive vs. exclusive, and inverse vs. direct, with special marking for local (2→1 and 1→2) categories. The loss of this morphology in the Sinitic, Boro-Garo, Tibetic, and Lolo-Burmese branches of the family was a result of creolization under intense language contact (DeLancey 2013). The archaic system was preserved in communities which retreated into the mountains to avoid assimilation into the large-scale states and empires in which the creoloid branches developed.

Parallel to this loss of complexity under contact in several branches, the Kuki-Chin languages have partially or completely lost the original system while simultaneously innovating new complexity to the same purpose. Proto-Kuki-Chin had a slightly simplified version of the inherited system coexisting with an innovative subject agreement system. Since PKC many languages have abandoned what remained of the original system while expanding the innovative indexation paradigm to index 1<sup>st</sup> and 2<sup>nd</sup> person objects as well as all subjects. Individual languages have innovated distinct constructions to carry out this function, and have innovated distinct valence-altering morphology, including morphological causatives, middles, and applicatives. This is clearly not a result of contact; these languages are manifestly much more morphologically complex than any of the surrounding and nearby groups (Burmese, Naga) or hypothetical substratum (which would presumably be Austroasiatic). Rather, they appear to have individually innovated new paradigmatic structure to replace the lost archaic features, suggesting that these share some inclination toward management of transitivity and argument tracking through complex verbal morphology.

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## Increasing morphological complexity without contact: Verbs in the Cariban family

Gildea, Spike; Meira, Sérgio (University of Oregon, USA)

When discussing changes in morphological complexity, one must first define what is intended by the notion “complexity”. One possibility is number of morphological slots in a verbal template — fewer indicates less complexity and more indicates greater complexity. By this definition, there are multiple examples in the Cariban family of both decreasing and increasing complexity in the verb stem *vis-à-vis* a reconstructible ancestor. Phonological erosion and lexicalization lead to loss of slots in individual languages; grammaticalization adds both derivational and inflectional slots. Also, innovative inflectional systems may have fewer or more morpheme slots than the older ones they replace. These innovations are all widespread and arguably not due to contact, showing that changes in complexity do not show consistent directionality.

Derived verb stems are fairly stable across the family. Verb roots (or denominal verbs) may be elaborated by adding a DETRANSITIVE (reflexive/middle/passive) prefix and/or TRANSITIVIZING, CAUSATIVE, and ASPECT suffixes, all reconstructible (Meira, Gildea & Hoff 2010, Gildea & Meira 2010). Some languages have lost valence increasing suffixes, but some have innovated another slot for derivational aspect suffixes (which reconstruct as complement-taking verbs, cf. Gildea 1992).

### Conservative (reconstructed)

DETRANS-	VROOT	-TRANS	-CAUSATIVE	-ASPECT <sub>1</sub>
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### Innovation = loss of morphological slots (e.g., Panare; Payne & Payne 2013)

DETRANS-	VROOT	-TRANS	-ASPECT <sub>1</sub>
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### Innovation = increase of morphological slots (e.g., Makushi; Abbott 1990; Gildea 1992)

DETRANS-	VROOT	-TRANS	-CAUSATIVE	-ASPECT <sub>1</sub>	-ASPECT <sub>2</sub>
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The Proto-Cariban inflected verb took one or two person prefixes, conditioned by verb class (intransitive/S<sub>P</sub>, middle/S<sub>A</sub>, transitive) and a personal hierarchy (SAP > 3) (Gildea 2012). A number suffix indexed collective SAP core arguments, and TAM suffixes resist reconstruction beyond an initial position before the number suffix (Gildea 1998). The person prefixes often collapse into a single slot (Gildea 1998) and mood suffixes erode in some languages, but in others, TAM suffixes have incorporated mood and aspectual particles into the suffix complex to create systems with 3-8 past tense morphemes, each specified for aspect and/or mood; in others, the noun ‘people’ became a new third person collective suffix.

### Conservative (reconstructed)

A-/S <sub>A</sub> -	P-/S <sub>P</sub> -	VSTEM	-TMA <sub>1</sub>	-NUMBER <sub>1</sub>	-MOOD
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### Innovative = merge of person-marking prefixes, loss of number, mood suffixes (e.g., Panare)

PERSON <sub>HIERARCHY</sub> -	VSTEM	-TMA <sub>1</sub>
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### Innovative = increase of morphological slots (Carib of Suriname; Hoff 1968)

EVIDENTIAL-	A-/S <sub>A</sub> -	P-/S <sub>P</sub> -	VSTEM	-TMA <sub>1</sub>	-NUMBER <sub>1</sub>	-TMA <sub>2</sub>
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### Innovative = increase of morphological slots (Katxúyana)

PERSON <sub>HIERARCHY</sub> -	VSTEM	-TMA <sub>1</sub>	-NUMBER <sub>1</sub>	-TMA <sub>2</sub>	=NUMBER 2
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Innovative inflectional systems are reanalyses of possessed nominalizations (Gildea 1998, ch 9). These inflectional systems may be smaller, as in Kuikúro, which contains only an absolutive person prefix, a tense-aspect suffix, and a number enclitic, or they may be larger, as in Makushi, where they add an ergative person enclitic followed by an er-

gative case-marker and ergative number marker. The inflectional complex with the greatest number of forms is found in such systems.

**Innovative = fewer morphological slots** (e.g. Kuikúro; Franchetto 2010)

PERSON <sub>ABS</sub> -	VSTEM	-TMA	=NUMBER <sub>ABS</sub>
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**Innovative = more morphological slots** (e.g. Makushi)

PERSON <sub>ABS</sub> -	VSTEM	-TMA	=NUMBER <sub>ABS</sub>	=PERSON <sub>ERG</sub>	=CASE <sub>ERG</sub>	NUMBER <sub>ERG</sub>
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## Morphological complexity and language contact

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It is well known that morphological complexity is not distributed evenly across the world. Polysynthesis, for example, is especially prevalent in parts of the Americas, Papua New Guinea, northeast Asia, and northern Australia. On the surface, this appears counterintuitive. Scales of borrowability typically rank vocabulary as the most easily transferred, then phonology, then finally syntax. Morphological structure is often not even mentioned. It is easy to imagine why morphology might be stable: it is usually more automated than syntax or lexical choice, less accessible to conscious manipulation. But morphology too can develop out of contact. What may be transferred are more analytic structures, which only later develop into complex morphology.

Complexity can develop via a number of pathways, most rooted in frequency. Bilinguals often replicate the frequency of a particular semantic distinction in one language when speaking another. They might, for example, transfer a propensity to specify detailed distinctions involving space, time, shape, position, manner of motion, information source, etc. Over long periods of intensive contact, frequently-recurring patterns of expression can develop into morphological structure.

One route is compounding, a common process cross-linguistically involving full roots, stems or words, accessible to consciousness. A component which occurs especially frequently in compounds may subsequently erode into an affix. Such developments can be seen in several strong linguistic areas in North America. On the Northwest Coast, three families, Wakashan, Salishan, and Chimakuan, were once thought to be genetically related, primarily because of similarities in their abstract morphological structure. The structures, consisting of initial roots potentially followed by large inventories of suffixes often with quite concrete meanings, can be seen to be descended from Verb-Noun compounds (noun incorporation) and Noun-Noun compounds. The majority of the numerous languages indigenous to California and neighboring regions were once grouped into two massive superstocks, again in good part on the basis of certain morphological patterns, particularly means/manner prefixes ('foot'/'stepping', 'palm'/'pushing' and locative/directional suffixes ('on a surface', 'northward')). These patterns, too, can be seen to be descended from earlier compounds, but of a different type.

Another route is via complement or serial verb constructions. A well-known pattern reconstructed for Proto-Siouan, of the Plains, is a sequence of verbs in which the second member distinguishes the posture or position of a participant: sitting, standing, lying, etc. The construction became so frequent that already in the parent language, the positionals had developed into continuative aspect markers. Some Siouan languages were spoken in the Southeast,



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## Evolution of verbal inflexional system in Armenian: On “temporal mobility” feature

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Armenian is one of relatively rare languages with a reasonably long period of attested diachronic development (going back to V c. AD). Many peculiarities of this evolution are worth studying in greater detail.

When comparing the “starting point” (which is Old Armenian [OA]) with several “endpoints” of this evolution (one of them is Modern East Armenian [MEA], the main focus of the present study), the most evident (and immediately observable) distinction is the proportion of synthetic and analytical forms. This proportion has drastically changed: most synthetic verbal forms of OA became gradually supplanted (in the Middle Armenian [MA] period, i.e. between XII and XVII cc.) by various periphrastic constructions in MEA.

An interesting question (though not readily answerable) is the following: can the analytical verbal forms in MEA be described as a homogeneous semantic class? In other words, can the evolution from (predominantly synthetic) OA verb to (predominantly analytical) MEA verb be described as a semantic-driven process – and not just as a chaotic and purely structural change?

In OA, only perfect had a periphrastic paradigm; future, present, imperfect and aorist (as well as non-indicative forms) were all synthetic, in keeping with the classic Indo-European type. As for MEA, the inventory of its analytical forms is as follows: imperfective (present and past), perfect (present and past, remained intact from the OA period), resultative (present and past), and prospective (present and past); all these forms are indicative. Synthetic forms of MEA are as follows: aorist (indicative), imperative, subjunctive (present and past) and conditional (present and past).

Obviously, the bulk of periphrastic MEA forms belongs to the indicative domain, but synthetic aorist – in fact, diachronically one of the most stable part of Armenian verbal paradigm – is an indicative form as well. Of course, there is a certain connection between indicative and analyticity (recall that MEA subjunctive is originally OA imperfective), but the position of aorist remains unexplained.

Our hypothesis is that a semantic feature underlying all the analytical verbal forms in MEA is related to the possibility of expressing a full-fledged present / past distinction. Therefore we propose to call it “temporal mobility”: all the analytical verbal forms can inflect for tense, being either present or past. On the other hand, synthetic verbal forms in MEA either – as the aorist – have a fixed time reference (and hence they are not temporally “mobile”) – or lie outside the temporal domain belonging to the unreal mood. It should be emphasized that the formal distinction of “present” and “past” within subjunctive / conditional paradigm is a mere label: semantically, these oppositions convey something like irreal degree and bear practically no relation to the domain of (indicative) tense.

Historically, the center of this innovation is related to the forms of (progressive) present: they were among the first periphrastic constructions attested in MA. Given that, “temporal mobility” can be said to have another facet: the possibility to denote “actual” (i.e., ongoing situations with a distinct present-time reference). Only those verbal subparadigms in MEA are periphrastic, which include “actual” forms.

## (Poly-)synthetic verb morphology in the Guaporé-Mamoré: a contact feature?

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In their discussion of the linguistic area Guaporé-Mamoré (eastern Bolivia and Rondônia in Brazil) Crevels & Van der Voort (2008) propose ‘polysynthetic morphology’ as one of the structural features shared by most languages in the area as a result of grammatical convergence through contact. However, their binary approach (present versus not present) to this feature is likely to obscure a much more complex reality, where structures that fall into one and the

same category on a binary basis may in fact be widely different. Moreover, it is not immediately clear how an abstract formal pattern like high verbal synthesis would spread. In line with theories of language contact, contact-induced language change is rooted in semantics and pragmatics (see e.g. Heine & Kuteva 2005, Matras & Sakel 2007) and so one would expect this to result in similar structures not only in terms of structure, but in terms of semantics as well.

In this contribution I revisit the data of the Guaporé-Mamoré languages to evaluate the likelihood of a contact-induced convergence account of complex verbal morphology. This question is approached by collecting formal and semantic properties of the verbal templates of the languages in question in a relational database, breaking down the templatic information into a multivariate structure that allows for a comparison between the languages. The information about the variables and their values is connected to language-specific template positions or slots. In this way we can systematically compare not only basic information such as morpheme types and the semantics of verbal morphology, but also relational information between morphemes, both syntagmatic and paradigmatic. Semantic information, furthermore, is coded at different levels of granularity to accommodate the matching of functionally related but somewhat divergent meanings of morphemes or morpheme groups, thus allowing for more flexibility in detecting semantic similarity.

On the basis of these multivariate cross-linguistic comparisons we can calculate distance measures that tell us how much the verbal morphological structures of the Guaporé-Mamoré languages resemble each other both in terms of their formal and their semantic aspects, and especially in terms of combinations of these. The study will not only give us a more informed picture of the morphological diversity of the area in question and therefore a more solid basis to evaluate the contact scenario proposed by Crevels & Van der Voort, it will also provide a model for comparing morphological structures across languages in general, a notoriously difficult task.

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## The case for contact-induced grammatical restructuring in Quechuan

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The linguistic literature on contact phenomena involving Quechuan has appropriately concentrated on issues related to Aymaran and occasionally explored the varieties of Spanish that have been in close and prolonged contact with varieties of Quechua. Nevertheless, there is comparatively little from a contact-centered perspective on the much-cited characterization of Northern Quechua (QII-B) as being simpler or simplified when compared to its southern relatives (QII-C). In particular, it is well-known that some southern phonemic contrasts do not exist in the north, and that some verbal argument-marking affixes and important person distinctions (e.g. inclusive vs. exclusive first person) are absent from Ecuadorian Quechua despite the substantial lexical unity found in the language family.

Based upon work by Arends (1993, 1996) on grammatical restructuring, a study by Muysken framed the relevant issues in terms of creolization vs. radical koineization (Muysken 2009) and noted that the necessary comparative work with potential substrate languages is yet to be undertaken. More recently, Muysken (2012) explicitly mentioned the possibility of Jivaroan and Barbacoan substrate effects on Northern Quechua, although without providing a detailed account. In a context where Quechua was not only as a trading language but also as a dominant neighboring language, according to Muysken, contact might have resulted in both shift (loanwords in zoonymy and phytonymy, morphological simplification, and some individual grammatical features) and maintenance phenomena (cultural loanwords from Quechua).

The present paper first discusses the extent to which the morphosyntax (especially verb morphology) of northern varieties can meaningfully be said to be simplified (rather than merely simpler than, or even different from) versions of their southern relatives. Second, a number of relevant structural features of Jivaroan and Barbacoan languages are contrasted with their Quechuan counterparts, both northern and southern, in order to assess how strong the case for contact-induced change really is. The data come from the extant descriptions of and secondary literature on Quechuan, Jivaroan, and Barbacoan languages. The paper argues that the evidence supporting an analysis in terms of grammatical restructuring caused by contact is, albeit somewhat inconclusive due to the absence of written attestation, indeed more than merely suggestive.

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## **WORKSHOP: THE PERCEPTION OF NON-NATIVE VARIETIES: METHODS AND FINDINGS IN PERCEPTUAL DIALECTOLOGY**

*Convenors: Kristiansen, Gitte (Universidad Complutense de Madrid, Spain); Gerritsen, Marinel (Radboud University Nijmegen, Netherlands); Geeraerts, Dirk (K.U. Leuven, Belgium)*

### **Description**

We know from previous research that L1 recognition is surprisingly fast (Purnell et al. 1999), surprisingly accurate (Van Bezooijen and Gooskens 1999) and that it is an early acquisition, which evolves gradually and experientially (Kristiansen 2010). Listeners thus gradually construct mental representations to identify native varieties and foreign languages. At the same time, linguistic varieties trigger attitudinal reactions. Accents are socially diagnostic and serve as effective cognitive shortcuts to identification (where is this speaker from?) and evaluation (what is this speaker like?). In more technical terms, accents are socially diagnostic because linguistic stereotypes, i.e. sets of abstract linguistic schemata composed of a cluster of salient features, gradually emerge to capture the essence of what a group speaks like. In this sense of the words, social and linguistic stereotypes, rather than distorted images, constitute useful cognitive reference points that emerge to allow us to navigate fast and efficiently in a complex social world.

Ever since Lambert et al. (1960) published their pioneering article on speech evaluation methods, numerous studies have investigated the (conscious or unconscious) attitudes triggered by L1 varieties (e.g. Chambers and Trudgill 1998, Preston 2011, Grondelaers and van Hout 2010, Kristiansen 2010). Numerous studies thus exist on L1 perception, but L2 identification and characterization is still severely understudied. Given the role of English as a Lingua Franca in an increasingly globalised world, focus in this theme session is on the (attitudinal and identificational) perception of non-native accents of English. At the same time, given the empirical nature of the theoretical questions that we address, the scope is by no means limited to situations in which (a variety of) English constitutes the L2 language. This theme session welcomes proposals that address issues related to the study of the perception of non-native varieties such as the following:

### Research questions

- (i) Which are the most novel and efficient ways of controlling speaker-related characteristics?  
How do we best keep voice quality, speech rate and clarity and other factors under control?  
How do we measure and keep speaker's L1 variety constant while measuring L2 performances?
- (ii) Which are the current intricacies of speech-related factors and what are the methodological challenges?  
How do we best measure levels of L1 and L2 accentedness and against which standards? How can the (regional) distances of L1 and L2 accentedness be objectively measured?  
How do we keep speaker-related factors apart from speech-related factors?  
In attitudinal research, to what extent are the attitudes measured related to the speaker, to the social group related to the speaker, or to the L1 accent or the L2 accent of the speaker? How can regional aspects of L1 and L2 accents be kept under control from the point of view of attitudinal research?
- (iii) How can we best tease apart the numerous mixed effects of the multiple variables involved in the scenario of L2 and L1 accentedness?  
From the point of view of advanced corpus-based techniques, to what extent can multifactorial analyses help control the numerous variables involved?  
Ingenious methods have been developed in the past to deal with the identification and attitudes of native perceptions. Which new methods are being developed to deal specifically with non-native dimensions?

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## The role a multiple-method approach and language awareness may play in studying language attitudes

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There are three main approaches to researching language attitudes: analysis of the social treatment, direct measures (questionnaires, interviews) and indirect measures (the verbal and matched guise technique) (Garrett 2010). The results of studies that employ one of these tools are often seen as related to the social group the participants represent. However, being collected from individuals, the results, especially in direct and indirect measures, may well be seen as indicative of the individual's attitudes only. It might therefore be a good solution to apply a multiple-method approach to studying attitudes (Liebscher and Dailey-O'Cain 2009), which will shift the weight from individuals to the group. The answer may also lie in measuring the participants' (language) awareness.

This paper examines whether the application of a multiple-method approach indeed allows the results of a study into language attitudes to be referable to the group more than the individual. It also investigates the role (language) awareness, as a determinant of (language) attitudes, may play in this process. Apart from these two main research questions a number of supplementary questions as well as hypotheses were posed. Examples include: the participants would be consistent enough to give comprehensive results, there would be little, if any, variation between males and females, and such like.

In the study, both the language awareness and language attitudes of Polish students of Dutch were measured in each of the three tools used: an extensive questionnaire and two different extended verbal guise tasks. The questionnaire comprised open and closed questions and a variety of semantic differentials. Both verbal guise tasks consisted of two parts: recognition tasks and a semantic differential. In the first verbal guise task the participants rated speakers reading the same text, in the other actors starring in Dutch and Flemish versions of the same two films. These tools were used in three sessions. To analyze the obtained data, various statistical tests were run, such as *T*-tests, *Chi*-square tests and correlation tests. The results were then compared in different ways - by gender, by level of proficiency, within each session and between two or all three sessions.

It is argued that the more methods are used and the more comparisons are made, the more indicative the results are of the group rather than the individual(s). Another outcome of the study is that measuring the participants' (language) awareness may complement and verify the results of research into (language) attitudes.

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## Does phonological salience originate in the brain?

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"Salience defines the degree of relative prominence of a unit of information, at a specific point in time, in comparison to the other units of information." (Chiarcos/Berry/Grabski 2011, 2). The term is used both by neuroscientists and

linguists (Rác 2013). In linguistics, the definition of salience varies between the different strains of research. Dialectologists, for instance, use the term to motivate why, in cases of dialect contact, dialectal features change at different rates. As previously shown, not all phonological features of a dialect diffuse to other dialects as quickly as others (Trudgill 1986). One hypothesis holds that salient features change at a higher rate than non-salient features (Schirmunski 1928/1929, Schmidt/Herrgen 2011). Until now, however, there is no agreed-upon method with regards to a measurement of salience, for this reason it is difficult to test the mentioned hypothesis. Often definitions of salience are somewhat circular: The more salient a feature, the more unstable it is and vice versa (Kerswill/Williams 2002). Different methods of measuring salience yield results that are often incongruent. This, however, does not mean that the methods lack consistency. Rather, they measure different aspects of salience (Elementaler/Gessinger/Wirrer 2010). Some methods concentrate on salient phenomena that speakers are aware of, e.g. asking speakers about specific features of another dialect, others include salient phenomena that speakers are not aware of, too, e.g. having subjects imitate another dialect. Although salience is essentially a cognitive concept, to our knowledge, no neurological methods have been used so far to explore this phenomenon. In the present study, we use Electroencephalography (EEG) to monitor the effects of auditory stimuli. EEG is a suitable method for measuring language processing (Bornkessel-Schlesewsky/Schlesewsky 2013). In our experiment, Swiss German listeners hear stimuli of another Swiss German dialect. The dialects are mutually intelligible but show well-known phonological differences. An example is the word-initial affricate /kx/ in Zurich German, as in [kxino] 'cinema', which corresponds to a plosive /k<sup>h</sup>/ in the dialect of Grisons, [k<sup>h</sup>ino]. Using EEG, we examine whether the processing of phonological features of a Zurich German speaker while listening to this specific feature in the dialect of Grisons differs from the processing of features which do not vary between these two dialects. On the one hand, this study follows former work on phonological salience: Subjects are asked to comment on typical features of the other dialect in a second experiment. This approach is regularly used to test salient features (Lenz 2010). On the other hand, EEG is an innovative way of measuring salience empirically. Doing so, we combine the neurological and linguistic approach to salience and thereby contribute a new aspect to this concept.

In our paper, we present first results and discuss questions such as: What benefits does an EEG study with regards to examining linguistic salience? How are our results connected to results achieved by other methods? Do we find an implicational scale of salience which can be useful when explaining phenomena of dialect contact?

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## The evaluation of Dutch-accented and German-accented English of lecturers in higher education

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Most studies on the effect of non-native (NNS) accents of English focus on evaluations by native speakers (NSs). Such studies have generally shown that NSs evaluate speakers with a non-native accent negatively. One aspect of a foreign accent determining listeners' evaluation is degree of accentedness of the speaker. Studies examining the relationship between degree of accentedness and speaker evaluations have demonstrated that native listeners generally

evaluate speakers with stronger accents more negatively on attitudinal variables than speakers with weaker accents. However, few studies have looked at how NNS accents are evaluated by other non-native speakers and even fewer have taken into account the effect of degrees of accentedness. One such study only investigated intelligibility, finding that speakers with a strong accent were considered less intelligible than speakers with a slight accent (Stibbard & Lee, 2006).

In view of the widespread use of English in higher education in non-English-speaking countries (Brenn-White & Edwin van Rest, 2012), the purpose of this study was to investigate the evaluation of (Dutch or German) moderately and slightly accented English by (Dutch and German) non-native speakers of English in an educational context. Evaluation focussed on comprehensibility and attitudes towards the speaker.

A total of twenty male speakers of Dutch, German, and English were asked to record two fragments taken from a marketing lecture. Expert judges evaluated the speech samples on accent strength, intonation, voice quality, dynamism, speech rate, natural sound, self-confidence, and pleasant voice (e.g. Bayard et al., 2001; Jesney, 2004). For both Dutch and German, four speakers were selected with two levels of accentedness (moderate and slight), whereas two native speakers of English were selected to record the native English variety.

In an online experiment, around 500 Dutch and German participants evaluated the samples on intelligibility of the speaker, comprehensibility of the fragment and attitudinal variables: status, social attractiveness, dynamism (based on Bayard et al., 2001; Nejari et al., 2012; Tsalikis et al., 1991; Zahn & Hopper, 1985), and teaching quality.

Findings show that speakers with a slight or a native accent were evaluated more positively on attitudinal ratings than speakers with a moderate accent. Dutch or German respondents did not evaluate their domestic accent differently than the foreign-accented samples. The speakers with the native and the slight accent were rated as equally intelligible, but speakers with moderate accents were evaluated as less intelligible. Degree of accentedness did not have an effect on perceived comprehensibility.

It can be concluded that degree of accentedness is an important aspect of foreign speech in determining attitudes towards the speaker and speaker comprehensibility, not just for native listeners, as was found in earlier studies, but also for non-native listeners. On a practical level, findings show that for lecturers in higher education for whom English is a lingua franca, it is important not to have a strong foreign accent as this may result in them being evaluated less positively and being less well understood by their students.

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## U.S. college students' perceptions and understanding of nonnative English speakers' speech: The case of article errors and plural-izing non-count nouns

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It has been widely reported that varieties of English in the outer- and expanding circle countries, as defined by B. Kachru (1990), commonly include omission of articles and pluralizing non-count nouns (Kirkpatrick, 2007). Mastering native-like attainment of the English article usage has been considered one of the most difficult goals, especially for native speakers of Slavic, oriental, and African languages which do not have articles in their linguistic inventories (Celce-Murcia & Larsen-Freeman, 1999). Since these types of errors are considered local errors, rather than global errors (See Burt & Kiparsky, 1974 for distinctions), theoretically we can assume that their impact on the listeners' comprehension would be minimal. However, these types of errors are perceived to mark a speaker as nonnative and could negatively affect the listeners' attitudes toward the speakers. However, to what extent would they affect the listeners' attitudes toward the speaker? An empirical study was conducted to investigate the effect of these grammatical errors on the listeners' perceptions and understanding of nonnative English speakers' speech by

comparing the listeners' responses in two different conditions: first, when the nonnative speech is grammatically accurate but marked for a noticeable foreign accent; second, when the nonnative speech displays both a noticeable foreign accent and common nonnative speakers' grammatical errors in article usage and pluralizing non-count nouns such as 'advice' and 'information.' In order to examine the relationship between these variables and the listeners' comprehension and perception, this study utilized two-way ANCOVA and descriptive statistics to analyze data collected from an experimental study involving speech samples of three non-native speakers of English—a Korean, a Chinese, and a Russian—and 104 U.S. college students as listeners. Baseline data/pretest from a native speaker sample served as the covariate for the ANCOVA procedure, which was used to determine group differences in the dependent variables—understanding and perception—on the posttests. For all three language groups combined, there were no statistically significant differences in the adjusted means between the groups that had grammatical errors and those that did not have grammatical errors in comprehension and any of the perception items. Additionally, there were no statistically significant interactions between language groups and error groups in comprehension and perception items. This study has also confirmed the well-established notion that listeners tend to respond to the pronunciation. However, the strength of a speaker's accent affected only certain aspects of how the listeners perceived them, but not enough to make a difference in comprehension. The findings of this study can help English language learners increase confidence in international communication by understanding that these minor grammatical errors are not likely to affect how they are understood and perceived. For language teachers, the findings of this study can help prioritize their instructional goals by identifying items that are not likely to affect communication.

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## English L1 and L2 varieties perceptions from a Spanish perspective

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Within the field of sociolinguistics, dialect variation and speech perception of English varieties have largely been studied in the **intra-native context** (Giles and Powesland, 1975; Labov, 1972; Preston, 1996).

There has also been research on **English varieties perception by non native speakers** in countries such as France (Flaitz, 1993), or Denmark (Ladegaard and Sachdev, 2006), in which a certain preference towards monolingual standards has been detected (especially towards British RP).

Nevertheless, the perception, stereotypes, and possible prejudice that Spanish students/speakers of English might have towards English native and non native varieties have not yet received sufficient attention.

### In this paper we formulate the following research questions:

- What is the level of acceptance or prejudice of Spanish EFL students towards a selection of 4 L1 and 4 L2 varieties of English?
- Does the **gender of speakers** affect language attitudes?
- Do real **phonetic distances** amongst English varieties correspond to the different **distances perceived by listeners**?

### Method

In the present we implement **8** accent samples of non native Englishes and native Englishes: Spanish, French, German, and Russian accented samples as L2 varieties; and British RP, Scottish, General American, and Southern American accented samples as L1 varieties. Each accent sample will have a female voice and a male voice version, which will make a total of **16 recordings**. A group of **100** - B2 English level or higher- Spanish students (50 male, and 50 female) will be exposed to these recordings and required to fill in a questionnaire which will reflect their impressions of the given varieties. The questionnaire shall contain not only differential scale questions (reflecting quantitative results), but also questions which will contribute to a deeper understanding of the results (qualitative analysis).

As stated above, the recordings will correspond to female and male speakers on a 50%-50% distribution in all varieties. Respondents shall also be equally distributed in terms of gender. This way it will be possible to measure the effects of gender agreement or disagreement between speakers and respondents in the final results, by means of an analysis of variance.

By means of Levenshtein distance algorithm analysis (Nerbonne et al., 1999), the real phonetic distances analysis amongst the different English varieties shall be mathematically measured. Then, by comparing the Levenshtein results with the quantitative attitudinal results obtained, we shall obtain an insight into the relationship between *real* phonetic distance and *perceived* distance.

### Expected results

Spanish speakers of English will show prejudice against non native varieties. More specifically they will probably show stronger prejudice towards Spanish accented samples. We expect that Spanish respondents will show the highest level of acceptance towards standard English varieties (RP, General American).

This could be due to the fact that the models they are more accustomed to are the monolingual prestigious standards. They want to sound native-like themselves and therefore avoid sounding “foreign”, and specially avoid sounding Spanish, as a sign of high command of the English language.

Following the *liking principles* from the *compliance theory* (Groves et al., 1992) we expect that the level of acceptance will be higher when respondents listen to a person of the same sex than when they listen to a person of the opposite sex.

Finally we believe that real phonetic distances from the standard varieties have an effect on perceived distances. In other words: the further the accent is from Standard British or American English, the more stigmatized it will be.

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## Measuring the effect of non-native varieties of English compared to native varieties of English: The challenge of designing stimuli

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In order to explore the reactions to a non-native English pronunciation (Dutch English) compared to two native pronunciations of English (British and American English) a sociolinguistic experiment is being conducted. This experiment distinguishes itself from previous studies (e.g. Nejjari et al. 2012) in that it is focused on the reactions to these varieties by both native (British, American) and non-native speakers (German, French, Polish, Arabic) of English in three different communicative contexts (education, job interview, health information) in terms of language attitudes, degree of intelligibility, comprehensibility and interpretability (Kachru and Smith 2008).

The stimuli selection proved challenging because speakers’ voice characteristics, such as loudness, tone, rhythm and speech tempo should be as similar as possible in order to avoid interference with the main independent variable *variety of English*. The research question we wanted to answer was therefore: Can stimuli be designed that differ only in terms of *variety of English*?

With the aim of researching whether it was possible to eliminate other factors than *variety of English*, we developed a technique based on the Matched Guise technique introduced by Lambert et al. (1960). Four speakers were selected who were known to be able to produce three varieties of English: Dutch English, British English and American English. An experiment was conducted to test if the Dutch English, British English and American English fragments of these four speakers actually represented native Dutch English, British English and American English pronunciations. Native speakers of Dutch English (N=40), British English (N=40) and American English (N=40) evaluated the matched-guise speakers’ fragments (Dutch English, British English, American English) on two aspects. First, whether the fragment could be considered a native pronunciation of one of these three varieties, and second if the fragment could be considered a representation of a standard variety of that particular variety of English. Each matched-guise variety was evaluated in comparison to four actual native speakers of the selected variety as well as four distracter speakers, who were native speakers of one of the other varieties. Results showed that one of the four matched-guise speakers had to be removed from the experiment, but that all three varieties for three matched-guise speakers represent a standard variety of British English, American English or Dutch English. Our study shows that it is possible to develop stimuli that differ only with regard to *variety of English*. The results of this pre-test has led to a

balanced design of the experiments that measure the reactions to Dutch English compared to British and American English in a number of non-native – native and lingua franca situations.

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## Perceptions of Norwegian-accented English among teachers

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All participants in English language teaching (ELT) – students, teachers and teacher educators – agree that a certain level of English language proficiency is required in order to teach English. However, although pronunciation often determines the first impression of language proficiency, there are few established criteria of what constitutes “good” pronunciation. With ELT practitioners and educators as both participants and intended user groups of the results, this study asks the following research question:

*What is the effect of Norwegian-accented pronunciation of English on the evaluation of language- and teacher proficiency?*

The paper draws specific attention to a number of methodological issues encountered when designing a methodology for investigating perceptions of non-native accent. A study design is proposed combining several methods in order to enhance the validity of the results and add desired complexity to an under-researched area.

Briefly, the study design can be presented through four phases:

**Phase 1.** Interview with gatekeepers in teacher education; which qualities are related to a proficient teacher of English?, and what characterizes “good” English?

**Phase 2.** Stimulus recordings of teachers of English with varying degrees of L1 influence. Recordings are characterized and categorized by linguist and non-linguist listeners, from which a selection is made of moderate and slight L1-accented English.

**Phase 3.** Participants (students and teacher students of English) evaluate the stimulus from Phase 2 related to qualities elicited from Phase 1, using a verbal-guise test (Garrett, 2010).

**Phase 4.** A selection of participants is interviewed about Norwegian-accented English, prompted by the stimulus recordings and the results from Phase 3.

Although native-like pronunciation is likely to be associated with general language proficiency (as suggested by for instance Boyd, 2004), the proposed combination of methods might uncover a more complex attitudinal picture of L2 perceptions, where L1-accented English is related to other qualities relevant to teachers, such as for instance pleasantness, reliability, accessibility and authenticity.

Two major issues emerge from designing this methodology:

- 1) Balancing the stimulus: perceived authenticity of the recordings on the one hand, and speaker-related factors other than accent kept to a minimum on the other hand. This paper argues against using software-processed stimulus to isolate linguistic variables, as is increasingly done in investigations of L1 perceptions (e.g., Levon & Fox, 2014). Rather, levels of L1 and L2 accentedness mirror listeners’ own perceptions of linguistic variation, inspired by folk linguistics (cf. Niedzielski & Preston, 2003).
- 2) Integrating SLA and sociolinguistic approaches: because more often than not non-native pronunciation will be related to a language-learning situation or an emerging multilingual community. In the case of English, perceptions of non-native English accents will have major implications for teaching practices, as ELT is the largest educational (and economic) enterprise in the world.

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## Auditory affective priming: Exploring new methods to measure language attitudes

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In the context of the theme session ‘The Perception of Non-Native Varieties: Methods and Findings in Perceptual Dialectology’, this paper sets out to explore a novel technique to measure implicit attitudes towards language varieties. Despite the abundance of new methods to investigate implicit attitudes that have been introduced in social psychology over the past two decades (e.g. neuroimaging, the Implicit Association Test (IAT), affective priming (AP), etc.), the application of these techniques in linguistic research has been limited. Speelman et al. (2013) have taken the lead here and developed auditory affective priming (AAP) for linguistic applications. The AAP technique is based on the extensively studied AP paradigm used in social psychology. A classic AP experiment measures the reaction time a respondent needs to categorise a target picture as negative or positive after being presented with a prime picture. If the prime has the same polarity as the target picture, it has been found that the reaction time is shorter than when prime and target are contrastively polarised (see table 1 below for a schematic overview). Analysing reaction times, then, allows to determine whether a stimulus is experienced positively or negatively. Speelman and colleagues bring innovation to this method by replacing the visual primes from the original technique by auditory ones which allows linguists to study language attitudes (see also Degner 2011 and Degner et al. 2012 for experiments using auditory primes in a non-linguistic context).

<i>Prime valence</i>	<i>Target valence</i>	<i>Response latency</i>
+	-	short
+	+	long
-	-	long
-	+	short

Table 1 – Schematic representation of the affective priming effect

However, the linguistic AAP technique has only been tested once on a relatively small sample and further research is needed to assess its possibilities and compare it to existing methods in language attitudes research. Questions that need to be addressed concern the characteristics of the auditory primes (can we go beyond the phonetic level as explored by Speelman et al. 2013? is the technique suited for L2 accented speech? etc.) and the possibilities to enter sociolinguistic variables in the design of the experiments (will an abundance of variables overload the design of this sensitive method?). In addition, a number of practical concerns need to be considered (e.g. the problem of the technique’s transportability).

Given the relative novelty of AAP in linguistic research, the paper will present a systematic survey of the possibilities and difficulties of implementing the technique in linguistic attitude research, with specific attention for research into (second) language varieties and comparison with existing methodologies.

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## Native speaker attitudes towards frequent pronunciation errors

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The fact that foreign-accented speech may meet with unfavourable reactions from both native (e.g. Gill, 1994; Lippi-Green, 1997; Matsuda, 1991; Mulac, Hanley and Prigge, 1974; Ryan, Carranza and Moffie, 1977) and non-native speakers (e.g. Chiba, Matsuura and Yamamoto, 1995; Dalton-Puffer, Kaltenboeck and Smit, 1997; Forde, 1995) ap-

pears to be well documented in the literature and widely acknowledged by researchers and laypeople alike. Given the powerful influence of the L1 sound system on L2 pronunciation and the near impossibility of attaining a native-like accent by adult learners, setting priorities for pronunciation teaching seems crucial to make the task of improving one's pronunciation manageable. In order to identify some of the said priorities, the authors of the present study propose an approach that combines attitudinal measures with the methodology of corpus linguistics.

In a study by Zajac and Pezik (2012), a learner corpus (PLEC Pelcra Learner English Corpus, Pezik, 2012) containing recordings of spoken interactions of Polish learners of English was used to compile a list of English words that are most frequently mispronounced by native speakers of Polish. Participants' pronunciation was assessed by a native Polish rater who used a definition of a pronunciation error specifically formulated for the purposes of the study. The definition drew on Szpyra-Kozłowska's (2013) description of "phonetically deviant words", which are characterised by substituting English sounds with phonologically and phonetically distant segments and/or include incorrect stress placement, e.g. *Disney* pronounced as [ˈdɪsnej] or *foreign* realized as [fɔ'rejn]. The definition of a mispronunciation used in the study by Zajac and Pezik diverged from Szpyra-Kozłowska's description in that a given pronunciation error was included in the analysis if it was judged not to have been caused by regular features of Polish accent.

The aim of the current research project is to determine whether the mispronunciations uncovered in Zajac and Pezik's (2012) work are considered erroneous by native speakers of English and investigate their relative gravity. Approximately a hundred native speakers of English are asked to complete an Internet survey in which they provide some personal information (such as their gender, occupation, place of residence, age, etc.) and rate the 20 most frequently mispronounced words in the spoken component of the PLEC corpus. The native raters listen to conversation fragments extracted from the corpus and are required to focus only on one particular word in each fragment (the pronunciation error under investigation). The analysed mispronunciations are taken from different speakers and played randomly in order to avoid speaker-specific bias. The following research questions are formulated: 1. Are the mispronunciations identified in the previous study considered erroneous by native speakers of English? 2. Do native speakers find any of the mispronunciations annoying and which of the investigated pronunciation errors bring about the greatest amount of irritation? 3. Does the assessment of a pronunciation error depend on some characteristics of the native raters (such as occupation, gender, place of residence, etc.)? We expect that the results of the study will let us identify some pronunciation teaching priorities for Polish learners of English and, potentially, other ESL/EFL users. We expect that the experimental procedure used in the study will contribute to the development of tools for studying attitudinal perceptions of non-native speech.

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**WORKSHOP:****TO BE OR NOT TO BE? THE VERBUM SUBSTANTIVUM AND ITS FUNCTIONS FROM SYNCHRONIC, DIACHRONIC, AND TYPOLOGICAL PERSPECTIVE**

Organized by: Michail L. Kotin (University of Zielona Góra & Adam Mickiewicz University of Poznań, Poland)

An outstanding role of the 'be'-verbs in various languages of the world can be observed at almost every level of the language systems:

- a) Morphologically, it mostly shows a wide-spread suppletivism and occurs, as a rule, as a highly irregular verb concerning its conjugation paradigm;
- b) Semantically, it combines the meaning of existence (or, in other languages, additionally the meaning of possession, transformation, development, etc.) with properties of a "semi-empty" or "empty" entity;
- c) Syntactically, it can encode the function of a full predicate as well as ones of a copula or an auxiliary;
- d) In many languages it can or even must be omitted in numerous types of sentences, where it has to occur as a copula;
- e) In some (i.e. almost all I.-E.) languages the 'be'-verbs have a close affinity to 'being'-nouns and other nominal forms, whereas in other languages (so in Arabic) these connections are not so strict and plausible.

The main purpose of the intended workshop is to confront various approaches to the verbs of the 'be'-group and of the 'be'-constructions from the synchronic, diachronic, diatopic, and typological perspective. The following issues will be the subjects of the planned discussion:

- 1) the genetic origins of the 'be'-roots in various languages: their etymology and the problems of their reconstruction; the origins of the 'be'-suppletivism, especially the question, whether 'be' was originally an existential verb or rather a genuine copula;
- 2) the historical development of the semantics and the functions of the 'be'-verbs with a special regard to the problem of their grammaticalization by establishing an auxiliary function in the verbal periphrases of tense, aspect, and diatheses;
- 3) the analysis of the syntactic properties of the 'be'-verbs, i.e. of their place in the sentence structure; their argument structure features, etc.;
- 4) the confrontation of languages based on different properties concerning occurrence, semantic variation, functional specifics, gramamticalization paths, etc. of the 'be'-verbs with a special regard to the question of if and how languages can be typologically classified from this point of view.

Workshop proposals dealing with various topics concerning the 'be'-verbs in the word languages, especially from typological/contrastive and/or diachronic/genetic perspective with a special regard to language change, re-analyses and unidirectional processes (grammaticalization) are expected. Furthermore, cross-language studies on denoting the 'be'-concept and its use by metaphoric and metonymic shifting are welcome. In the research field of word formation resp. derivation issues on various types of nominalization of the 'be'-verbs can be the subject of the proposed papers, too.

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## Gerundial *ist zum* vs. prepositional infinitive *ist zu*: What diachrony and dialects tell us about the functional differences

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Gerundials are verbal substantives in construction with BE/SEIN (NP *ist zum Kochen*). Their main constructional opponent is the prepositional infinitive/PI (NP *ist zu kochen*), which has taken over massively from erstwhile and dialectally still overruling gerundial constructions. Diachrony tells us that gerunds were more frequent in earlier stages of languages. Gerunds are highly underspecified with respect of several categorial codes such as diathesis, modality, and finiteness. Dialectal spoken German has retained most of the old gerundial construals and does not show any prepositional infinitive. Does this allow us to draw conclusions about principled differences between written and spoken (more dialogical) texts, or is there reason to believe that the cohesive density and argumentative encoding between spoken codes and written ones are behind both the diachronic development and the two coding types? Solid lists of the opposing inventories (gerunds vs. PIs) and solutions with respect to either line of argumentation (spoken code vs. structural preference of expressive underspecification) will be offered.

- (2) mannes sun ist ze sellene in hant manno (Tatian 93,1)  
 des Menschen Sohn ist zu gesellen-DAT in die Hände der Menschen

Despite its somewhat vague literal rendering, (2) has traditionally been called Modalpassiv “modal passive” in grammar writing on Old and Middle High German (Demske 1994, Eroms 2006). It is to be noted that modern standard (written) German would not use something like the verbal substantive illustrated in (2). See (3a) for Standard German, while (3b) mirrors a South German dialectal variety which is totally out in the Standard.

- (3) a Der Menschensohn ist in die Hände der Menschen zu übergeben.  
 b Der Peter ist in seine Hände/ihm in die Hände zum Übergeben.

(3a) obligatorily replaces the gerund by a prepositional infinitive, whereas the gerundial form – the verbal substantive – is retained in the dialectal form in (3b). The present discussion is about examples like (2), about what came of it in modern German as in (3b), and how the gap between OHG and modern written German, on the one hand, and dialectal South German, on the other hand, is to be explained.

Modern German has but one gerundial type. Its arealsociolectal as well as grammatical distribution, however, is quite unique. See (4a) vs. (4b).

- (4) a Es/XP ist zum [DP Lachen/Verkräften/Verzweifeln/Mäusemelken/Käsereiben/Saufüttern].  
 b \*Es ist zum [VP [DP Säue- [V<sup>c</sup> füttern]]].

As to modern German, it should follow that secondary incorporation as in (5b) is illicit (see Bayer 1993 - cf. (5b) vs. (5a)). (5d) reflects the deriving movement steps: the direct object *die Kühe* exorporates out of the innermost PP taking with it the left phase edge, VP, to label the new predicative constituent as a secondary VP. The resulting predicative constituent is a verbal substantive – a true complex gerundial. See also (5c1-2, d) which mirrors the derivation step by step.



## A *fi* 'be' as a modal verb in Romanian

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Our analysis diachronically approaches constructions with two verbs in Romanian, in which the matrix verb *a fi* 'be' precedes a verb in a non-finite mood (infinitive or supine) or in subjunctive. In these constructions, *a fi* has mainly modal meanings (*must, can, want, etc.*).

We firstly give an inventory of the constructions since the XVI century till present. We use (DLR 2010) as a main source. For illustration, two, out of about ten syntactic patterns with the modal *a fi*, are given below:

i. *A fi* + Supine (Note that the Romanian supine is formed by means of a preposition (here *de*) and a past participle.):

- (1) *Este de stabilit adevărul.*  
Is DE.establish.SUP truth- the  
'It is necessary to establish the truth.'

ii. Dative + *a fi* + Infinitive

- (2) *Îmi este a cânta acum.*  
me.CL.DAT is to sing now.  
'I feel like singing now.'

For each syntactic pattern, we will specify the personal/impersonal use of the verb *a fi*, one or several possible modal meanings, depending on the context, and other relevant features.

The study of these constructions shows that the distinction between the predicative value of *a fi* and non-predicative one (i.e. copula or semi-auxiliary) is not clear, although Benveniste (1960) emphasizes this distinction. For instance, for the structure in (1), (GLR 2005: 515) admits two grammatical analyses, (3a) and (3b):

- (3) a. *Este* (=Predicate) *de stabilit* (=Subject of *este*) *adevărul* (=Subject of *de stabilit*)  
b. *Este* (=Copula) *de stabilit* (=Predicate Nominal) *adevărul* (=Subject of *este*)

However, if the noun *adevărul* precedes the verb *a fi*: *Adevărul este de stabilit* (with the same meaning), (GLR 2005) says that only (3b) is correct, as if the word order of the dependents could change the nature of the verb *a fi*. The paradox is obvious, because no difference in meaning exists that corresponds to these different syntactic analyses.

Our solution is to consider the verb *a fi* as a *raising* verb (cf. (Pollard&Sag 1994: 133), (Ionescu 2011)). A raising verb fills its subject position with the subject of its complement. If *a fi* is treated as a raising verb, the above examples, rewritten in (4a), get only one analysis (4b):

- (4) a. *Este de stabilit adevărul. / Adevărul este de stabilit.*  
b. *este* (=Predicate), *de stabilit* (=Complement of *este*), *adevărul* (=Subject of both *este* and *de stabilit*).

Relying on Romanian syntactic patterns with the modal *a fi* –much more numerous than in other Romance languages– we will show that the modal *a fi* is not only a raising verb but also a *control* verb. That is, it is a verb sharing with its verbal complement a semantic argument, that receives different roles from each verb (Borsley 1996). For example, in (2) the dative complement *îmi* is the Experiencer of the matrix verb *este* but also the Agent of its verbal complement *a cânta*. Further, we will show that, diachronically, Romanian strengthened its structures with modal *a fi* as a control verb (having its own dative complement).

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## Das Verb *bëc* 'sein'/'to be' und seine Funktionen im kaschubischen Tempus- und Genusystem aus diachroner und synchroner Sicht

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In dem Beitrag sollen die diversen Funktionen von *bëc* 'być'/'sein'/'to be' im modernen Kaschubischen Verbalsystem einer komplexen Analyse unterzogen werden. Die kaschubische Grammatikschreibung, angefangen mit den fundamentalen Werken von Lorentz (1919, 1927) bis hin zu neueren Arbeiten (wie Breza\Tredler 1981), lässt auf einzigartige Beschaffenheit, Verteilung und Funktion aller mit *bëc* gebildeten (temporalen und passivischen) kopulativen Konstruktionen schließen. Die besagte Einzigartigkeit besteht zum einen in der konsequenten Erhaltung der genetisch mit dem Polnischen zusammenhängenden slawischen Elemente des Diathese- (*być/bëc* mit dem Partizip Passiv perfektiver und imperfektiver Verben; vgl. Czarnecki 2011) und Tempus-Paradigmas (*bëc* mit präteritaler 1-Verbform); zum anderen baut sie aber auf den – diachron wie synchron nachweisbaren – Verbindungen von *bëc* mit dem Partizip im kaschubischen Tempus-Bestand auf.

Auf Grund eines sowohl diachron als auch synchron konzipierten konfrontativen Vergleichs mit dem Polnischen und Deutschen sollen in erster Linie genuine Affinitäten (bzw. Äquivalenztypen) aufgedeckt werden. Zugleich wird den vermeintlich autonomen, in der Tat aber wahrscheinlich aus dem kaschubisch-deutschen Sprachkontakt resultierenden (Bartelik 2011) Konstrukten von *bëc* und Partizip samt weiteren anscheinend typisch kaschubischen Entwicklungs- und Wandeltendenzen ein ihnen gebührender Platz eingeräumt.

Die empirische Grundlage der Untersuchung bilden aus der Monatsschrift „Pomerania“ (Jahresausgabe 2012) exzerpierte kaschubische Belege, die einen wohl ganzheitlichen Überblick über die von *bëc*-Verbindungen synchron geführten Funktionen gewährleisten und die den aufbau- und funktionsgleichen polnischen und deutschen Formen gegenübergestellt werden.

Der Beitrag zielt dementsprechend erstens auf eine gründliche Darstellung der kopulativen Leistungen von *bëc* ab, vgl.

- (1) jô doch jem stôri  
ich doch bin alter  
'ich bin doch alt'.  
(2) òn je szkólnym  
er ist Lehrer<sub>INSTR</sub>  
'er ist Lehrer',

wo auffällige Gemeinsamkeiten mit dem Polnischen und Deutschen feststellbar sind. Zweitens sollen die auxiliären Leistungen von *bëc* untersucht werden, die Relikte der gemeinsamen, genetisch slawischen, kaschubisch-polnischen Entwicklung sind, wie etwa im passivischen

- (3) bûdink je wëbûdowóny  
gebäude ist gebautes  
'das Gebäude ist erbaut',

sowie in temporalen Überresten des analytischen Perfekts

- (4) jô jem robił  
ich bin gemachter  
'ich machte'/'ich habe gemacht',

vgl. das altpolnische

- (5) ja jeśm był  
ich bin gewesener  
'ich bin gewesen'  
(Rospond 2003).

Letztendlich sollen auch die oben bereits erwähnten Verbindungen von *bëc* mit dem Partizip thematisiert werden, die im Kontext der aufschlussreichen „Perfekt-Diskussion“ im Polnischen (vgl. Piskorz\Abraham\Leiss 2013; Kątny

1999, 2009; Łaziński 2001; Nomachi 2006) allen ihren bisher formulierten Grundthesen (Grammatikalisierung, Paradigmatisierung, Bildungsrestriktionen u.a.) entsprechend untersucht werden.

Der Beitrag versteht sich als eine grammatisch orientierte empirische Studie von *bęc*-Funktionen im modernen Kaschubischen, die dem Peripherie-Konzept (u.a. Popowska-Taborska 1980) folgt und dieses hoffentlich um neue Erkenntnisse erweitert, einerseits bezüglich der retardierenden kaschubisch-deutschen Sprachkontakt-Wirkung, andererseits hinsichtlich der Erhaltung alter analytischer Tempusformen.

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## Expressing possession with have and be: a view from Flemish

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This paper concerns Flemish event possessives (EvPs) (1-2), whose matrix subjects are interpreted as possessing and being affected by the event expressed in the embedded clause. Assuming Broekhuis & Cornips's (1994),(1) is unexpected: it has a nominative matrix subject instead of the predicted dative.

- (1) We zijn (\*het) nog geweest dat onze valiezen plots openscheurden.  
 we.NOM are it PRT been that our suitcases suddenly open-ripped
- (2) We hebben (het) nog gehad dat onze valiezen plots openscheurden.  
 we.NOM have it PRT had that our suitcases suddenly open-ripped  
 'We've had it happen to us that our suitcases suddenly ripped open.'

I argue that the matrix subject in (1-2) occupies the same (applicative) relation to the clausal domain as that observed in the possessor of the Flemish External Possessor pattern (FEP) (Haegeman and Danckaert 2011):

- (3) Het is jammer dat [Pieter] dan net [zijn stoel] omver gevallen was.  
 it is too bad that Pieter then just his chair over fallen was  
 'It is too bad that Pieter's chair had fallen over just then.'

Instead of residing in a DP-internal position the FEP possessor occupies a higher position in the clause (see also: Deal 2011, 2013).

Broekhuis & Cornips (1994) argue, in line with the analysis of *have* as *be* + preposition/case (Benveniste 1966; Freeze 1992; Kayne 1993), that Dutch *zijn* and *hebben* ('be' and 'have') assign dative(4) and accusative case (5) respectively.

- (4) Hem is de fietsband lek.  
 him is the bike tire punctured (Broekhuis & Cornips 1994: 180)  
 [hem<sub>DAT,IO</sub> [is [SC de fietsband lek<sub>NOM</sub>]]]

- (5) Hij heeft de fietsband lek.  
 he has the bike tire punctured (Broekhuis & Cornips 1994: 180)  
 [hij<sub>NOM.S</sub> [had [<sub>SC</sub> de fietsband lek<sub>ACC</sub>]]]  
 ‘He has a punctured bike tire.’

As expected, the matrix subject with Flemish *hebben*-EvP (2) is nominative. The availability of a pronominal direct object *het* (‘it’) in *hebben*-EvPs, but not with *zijn*-EvPs, follows as well. However, the matrix subject of the Flemish *zijn*-EP does not surface with the expected dative case (1).

The matrix subject of event possessives is an affected possessor (as shown by a.o. the ‘ban on the dead possessor’ diagnostic). I argue that this forces it into a higher clausal applicative position (Kim 2012; Pyllkkänen 2002; Rivero 2009) where it receives neutral nominative case. I treat the EvPs as small clauses with full clause propositional subjects (Belvin & Den Dikken 1997) (Fa functional head; Pe the empty preposition expressing possession):

(6) *zijn*-EvP: [<sub>AppIP</sub> We<sub>j</sub> [<sub>AppI</sub> Appl [<sub>FPT<sub>j</sub></sub> [<sub>F</sub> F+Agr<sub>i</sub>] [<sub>AgRP</sub> [<sub>CP</sub> dat...] [<sub>Ag<sub>r</sub></sub> t<sub>i</sub> t<sub>j</sub>]]]]]]]

(7) *have*-EvP: [<sub>AppIP</sub> We<sub>j</sub> [<sub>AppI</sub> Appl [<sub>FPT<sub>j</sub></sub> [<sub>F</sub> F+Agr<sub>i</sub>+Pe [*het<sub>k</sub>*]] [<sub>AgRP</sub> [<sub>CP</sub> dat...<sub>k</sub>] [<sub>Ag<sub>r</sub></sub> t<sub>i</sub> t<sub>j</sub>]]]]]]]

The availability of such a higher position in Flemish is independently motivated on the basis of the FEP-pattern (3) in which the possessor (here *Pieter*) does not occupy a DP-internal position adjacent to the possessee (here *zijn stoel*) but is separated from it by an adjunct and which (crucially) also carries an affectedness reading.

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## The loss of BE as mutative marker

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*Mutative* or *mutational* verbs are intransitive verbs expressing motion (change of place) or a change in condition. In many languages, such as Dutch and French, they form perfects with a form of BE instead of HAVE as auxiliary. In English, however, BE was replaced by HAVE in this function. Van Gelderen (2006: 172) states that while in Early Modern English BE was used “with certain intransitive verbs (e.g. of motion)”, a situation which endured to the 19<sup>th</sup> century, this is no longer the case in Modern English. Denison (1993: 366) refers to the “especially rapid retreat” of the BE perfect in the 18<sup>th</sup> century, in particular.

While formerly other intransitive verbs and all transitive verbs employed HAVE as auxiliary of the perfect, HAVE was generalised to all verbs in the active voice, and BE restricted to the passive. In English this process was accompanied by the loss of the dynamic or durative auxiliary *weorþan*. Traugott considered the generalisation of BE to the passive “a very natural change”: nonmutative verbs outnumbered mutative ones and HAVE plus past participle was not heavily loaded with different functions (Traugott 1972: 145) – so that, according to Denison (1993: 366), who comments on this, “explanatory weight is given to the heavy functional load on BE in collocation with past participles and the correspondingly light load on HAVE”.

In Afrikaans, which derives from 17<sup>th</sup> century Dutch under the influence of considerable language contact, BE was in the course of the 19<sup>th</sup> century likewise replaced by HAVE with past participles of mutative verbs. Unlike in English, the Dutch equivalent of *weorþan*, viz. *worden* (earlier *werden*), remained in Afrikaans as auxiliary of the passive. However, its imperfect form, viz. *werd* (earlier *wierd*) was lost in Afrikaans along with the loss of almost the entire set of imperfect forms. In the case of Afrikaans it is possible to hypothesize that the loss of imperfect *werd* increased the functional load of BE vis-à-vis HAVE, as BE was now at the same time the auxiliary of the (mutative)

subset of active perfects and the only auxiliary of the passive perfect – sufficient reason for abolishing the specialised marking of mutatives by BE. It could be predicted that speakers who no longer employed the imperfect were therefore less likely to mark mutatives by BE than those still making use of the full set of imperfects.

Though not many texts are available, the usage of BE vs HAVE with mutative verbs was compared to the speaker's (or writer's) command of the imperfect in a number of texts covering the period 1797 to 1879. A clear correlation could be found between the presence or absence of mutative BE and the speaker's command of the imperfect.

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## Verbs 'to be' in Mochica language

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The Mochica language is considered, for the time being, an extinct linguistic isolate of the northern coastal area of Peru. Mochica also known in the literature by the names of Yunga, Yunka, Muchik or Chimu has been documented since Colonial times. The oldest preserved evidences of Mochica texts created by missionaries date the seventeenth century (Oré 1604; De la Carrera y Daza 1644). The latter is unfortunately the only grammatical description of the language whilst it was still spoken.

The Mochica language, spoken until the second half of the twentieth century, constitutes an enigma for Amerindian Linguistics when compared to surrounding languages spoken in the region, due to its highly unusual typological features. A particularity of the Mochica language is the presence of multiple verbs 'to be'. The following cases demonstrate the various possibilities of verb 'to be' with the first person singular:

- (1) Moñ e. (De la Carrera 1644: 31)  
 1PS COP  
 'I am'
- (2) Moñ ang.  
 1PS COP (De la Carrera 1644: 31)  
 'I am'.
- (3) Moñ fe.  
 1PS COP (De la Carrera 1644: 31)  
 'I am'.
- (4) Moñ eiñ.  
 1PS COP (De la Carrera 1644: 31)  
 'I am'.

In cases (1), (2) and (3), the different verbs 'to be' -e, -fe (sometimes -f), -ang remain unchanged for all syntactic persons. Case (4) -eiñ refers only to the first person singular; and the forms differ for other persons and numbers. Besides these cases, De la Carrera (1644) also mentions chi- as another verb 'to be', which behaves like an auxiliary verb and has the additional meaning 'to exist'. Because of their functions and appearance in the religious texts written by De la Carrera (1644), loc- (to be, to love, to stand) and fel- (to sit) can also be identified with syntactic and semantic characteristics of the verb 'to be'.

In this presentation I will describe the paradigm of the verbs 'to be' in Mochica and pay special attention to case (4), since the same set of affixes is suffixed to all Mochica verbal roots. The co-occurrence with other finite verb forms motivates Hovdhaugen (2004: 35) to postulate that these affixes are personal copula particles. My own approach leads to two provisional interpretations of this phenomenon: a) the presence of a non verbal copula or b) a zero copula.

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## The BE perfect in Old High German and Old Saxon: A copula construction?

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According to Bybee/Perkins/Pagliuca (1994), the BE perfect, which exists alongside the construction with HAVE in many contemporary Indo-European languages such as Italian and German, originates from a resultative source construction. The resultative meaning is achieved compositionally by combining the copula BE with an adjectival past participle (e.g. engl. *She is gone*, see Nedjalkov/Jaxontov 1988). In the course of the grammaticalization process, the temporal focus shifts from the resultant state to the previous event and the construction loses its compositionality. As a consequence, the present perfect function arises.

It is generally assumed that Old High German *uuesan* + past participle, which is the precursor of the German *sein* perfect, represents this compositional source construction (e.g. Schrodtt 2004: 12). This analysis mainly builds on formal criteria such as the inflection of the past participle. However, in order to identify the function of a construction, semantic features of the construction and contextual features, e.g. the combination with particular adverbials, have to be taken into account.

I conducted a corpus investigation within Old High German and Old Saxon vernaculars and examined the occurrences of *uuesan* + past participle. In my presentation, I will show that even in the earliest vernaculars not all occurrences of the BE construction function as resultatives in the way defined by Nedjalkov/Jaxontov (1988). Rather, the construction varies between resultative and present perfect use. Evidence for this comes from the fact that *uuesan* + past participle combines with directional phrases, which imply dynamicity (e.g. *nu is the hêlago Krist, uualdand selbo an thesan uuîh cuman* H 521-522 ›now Christ, the Lord himself, has come to this fane‹), or iterative adverbials, which prohibit the designation of one single resultant state (*Ther thrîa stunton jâhi, \ so thîko inflóhan wari* O V,15,25 ›The one that said yes [I love you] three times, had escaped so often [denied him so often]‹). These results suggest that, even in the oldest stages of German, BE + past participle is weakly grammaticalized and semantic compositionality is reduced.

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## Der Absentiv: Spur und Folge der Grammatikalisierung des Infinitivs? Hinweise aus dem Schweizerdeutschen

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Im Deutschen lässt sich der Infinitiv wie in vielen anderen Sprachen (vgl. Haspelmath 1989) auf eine nominale Form mit finaler Semantik zurückführen. Im Vortrag soll anhand eines Vergleichs von Standard- und Schweizerdeutsch der Frage nachgegangen werden, inwieweit diese Tatsache zur Erklärung des Absentivs beitragen kann.

Seit de Groot (2000) den Terminus *Absentiv* geprägt hat, findet eine angeregte Debatte über den Status der Konstruktion statt. Unter den Forschenden, die grundsätzlich eine grammatische Kategorie 'Absentiv' annehmen, besteht wenig Zweifel, dass das Standarddeutsche über einen Absentiv verfügt. Im Fall der eng verwandten schweizerdeutschen Dialekte ist die Lage weniger klar: De Groot (2000: 718) spricht ihnen den Absentiv ab, während Vogel (2007: 272 f.) dafür argumentiert. Auf jeden Fall gibt es einen strukturellen Unterschied zwischen den diskutierten Konstruktionen:

Standarddeutsch:

(1) *Anna ist essen*.

Schweizerdeutsch:

(2) *d Anna isch ga ässe.*  
 ART:DEF Anna ist zum/gehen essen

Im Schweizerdeutschen ist ein zusätzliches Element (*ga*) vor dem Infinitiv obligatorisch, das nach Löttscher (1993) auf die allative Präposition *gen* zurückgeht. So gesehen stünde der Schweizerdeutsche Absentiv strukturell dem Italienischen (*Gianni è a boxare*) näher als der standarddeutschen Konstruktion.

Allerdings ist *ganicht* einfach eine Präposition oder Partikel, sondern ein Hybrid, der im alemannischen Gebiet Süddeutschlands als finale Infinitivpartikel fungiert, in der Schweiz aber als "verbales Element" 'gehen' (vgl. Löt-scher 1993 und Brandner/Salzmänn 2012) reanalysiert worden ist.

Diese Reanalyse spricht dafür, den Absentiv mit Vogel (2007: 257 f.) so zu erklären, dass *sein* strukturell an die Stelle von *gehen* getreten ist, das schon früher reine Infinitive binden konnte (*Er geht einkaufen* → *Er ist einkaufen*). Das statische *sein* bewirkt gegenüber der Konstruktion mit *gehen* eine Fokusverschiebung. Diese ist im Schweizerdeutschen allerdings schwächer, weil durch das *ga* die 'gehen'-Komponente präsenter ist. Als Folge davon besteht zwischen den Absentiven im Standard- und im Schweizerdeutschen keine vollständige Äquivalenz (etwa in Bezug auf die Verwendung temporaler Adverbiale).

Erste Beobachtungen aus einer Korpusuntersuchung legen darüber hinaus eine Interpretation des Absentivs als aspektuelle Periphrase, die zur Markierung eines Ereignishintergrunds dient, nahe. Diese Hypothese deckt sich mit der Herleitung der Absentiv-Konstruktion aus der finalen Semantik des Infinitivs und der Ersetzung von *gehen* durch *sein*.

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## Das Verbum substantivum aus synchroner, diachroner und typologischer Sicht

Kotin, Michail L. (University of Zielona Góra, Adam-Mickiewicz University, Poznań, Poland)

Die Verben der *be*-Gruppe zeichnen sich in vielen Sprachen der Welt, darunter in der gesamten Indogermania, durch eine Reihe von formalen, semantischen und syntaktischen Merkmalen aus, welche ihre Sonderstellung im Sprachsystem prägen, u. a. (i) historisch bedingter, in modernen Sprachen fortlebender Formensuppletivismus (engl. *am*, *is*, *are*, *be*, *was*; dt. *bin*, *ist*, *sein*, *war*; russ. *jest'*, *byt'*, *byl*, *budu*; poln. *jest*, *sq*, *być*; lat. *sum*, *es*, *esse* etc.); (ii) Fehlen oder Unschärfe interner Morphemgrenzen (engl. *a(-)m*, *a(-)re*, dt. *bi(-)n*, *bi(-)st*, *i(-)st*; lat. *su(-)m*/*s(-)um*, *es(-)*, *es(-)t*, *su(-)mus*/*s(-)um-us*); poln. *jest-em*, *jest-eś*, *jest-*, *jest-eś-my*, *s(-)q*/*sq* etc.); (iii) ausgeprägte Kopulafunktion in Kopula-Prädikativ-Konstruktionen (*Peter ist lehrer/fleißig*) neben kopulaähnlicher Semantik in lokativen und damit vergleichbaren „paralokativen“ Sätzen (*Er ist da*, *Peter ist in Rom*, *sie sind in Schwierigkeiten*) [vgl. u. v. a. Arutjunova/Širjaev 1983, 159] und (selten vorkommender) Vollverbsemantik als einwertiges („theo-zentrisches“) Existenzverb (*Gott ist*) [vgl. Kotin 2014, 8-10]; (iv) Tendenz zur Grammatikalisierung (Auxiliarisierung) in den Kategorialbereichen des Tempus resp. des Aspekts (vgl. das deutsche *sein*-Perfekt, das *am-Subst. Inf.-sein-Progressiv*, das alt-slawische analytische Perfekt, das slawische analytische Futur, das englische *be-ing*-Continuous, das lateinische Plusquamperfekt, die Gerundialformen im Lateinischen, aber auch z. B. in der Altgermania etc.) und der Diathese (vgl. Vorgangs- und/oder Zustandsformen des Passivs im Deutschen, Englischen, Russischen, Polnischen etc.); (v) eine sehr spezifische Rolle in den Derivationsprozessen, insbesondere Nominalisierungen wie dt. *Sein* neben *Wesen*, engl. *being*, gr. *ὄν* neben *ὄντια*, russ. *bytije* etc. Einige dieser Eigenschaften haben universaltypologische Geltung, während andere sprach- bzw. sprachfamilienspezifisch sind [vgl. Locker 1954, 481-510, Graham 1965, 223-231, Verhaar 1967-1973]. So ist die Existenzsemantik keine universaltypologische Eigenschaft der Kopulaverben: Im Arabischen oder Chinesischen sind die Kopulaverben, *kāna* resp. *chi*, keine exklusiven Existenzverben [vgl. Shehadi 1969, 112-114, Hashimoto 1969, 72-75]; im Ungarischen oder Türkischen sind die Kopulae auch nicht substantivierbar im Sinne einer typischen indogermanischen *sein*-Substantivierung. Daher wird eine direkte Affinität der Existenzsemantik zur kopulativen Funktion aus typologischer Sicht in Frage gestellt [vgl. Graham 1965, 225-227]. Darüber hinaus ist die ontologische und genealogische Korrelation zwischen Existenzsemantik und Kopulafunktion der *be*-Verben auch für die Indogermania umstritten. Kahn [1973, 199; 222; 228-230], Busch [1960, 10], z. T. Maierborn [2003] postulieren die Primärrolle der Kopulafunktion der Seinsverben in der Indogermania, während die Existenz-

verbsemantik davon abgeleitet und sekundär sein soll. Dagegen wird bei Abraham 1991, Leiss 1992, Öhl 2009, Bybee 2010 u. v. a. davon ausgegangen, dass sich die Kopulafunktion aus der genuinen Existenzverbsemantik im Ergebnis einer Grammatikalisierung ausbildet. Im vorliegenden Referat wird eine prinzipiell andere These aufgestellt, nämlich, dass die Seinsverben genuine Verben einer „vermittelten Existenz“ sind, welche lediglich über zwei obligatorisch gebundene Argumente definiert werden kann, wohingegen die unvermittelte, „reine“ („theozentrische“) Existenz erst später, durch Reduktion des rechten Arguments kodiert werden konnte. Eine Grammatikalisierung liegt dabei lediglich dann vor, wenn das rechte Argument semantischen Abbau erfährt, so z.B. beim deutschen Perfekt, das jedoch nicht homogen ist, sondern eine gestaffelte Periphrase darstellt, bei der der Grammatikalisierungsgrad von der Aktionsartsemantik des partizipialen Komplements abhängt (etwa bei dt. *Peter ist erwacht* [Teilgrammatikalisierung wegen terminativer Aktionsart von *erwachen*, die eine Existenzlesart evoziert – vgl. *der erwachte Peter* vs. *Peter ist lange gefahren* [Vollgrammatikalisierung, da die durative Vollverbsemantik die Existenzlesart ausschließt, vgl. *\*der lange gefahrene Peter*]).

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## Konvergenz der syntaktischen und semantischen Funktionen von *być*, *sein* and *to be* im Polnischen, Deutschen und Englischen

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*być/sein/to be* gehören in den im Referatstitel genannten Sprachen zu den meist gebrauchten Verben und weisen dort eine ausgesprochene Formenvielfalt des entsprechenden Paradigmenbestandes und einen bei keinem anderen Verbalstamm anzutreffenden Suppletivismus auf. Diese formal-morphologische Eigenschaft der *sein*-Verben scheint eine linguistische Universalie zu sein und sollte daher aus universaltypologischer Perspektive auf deren hypothetische funktionale Belastung hin überprüft werden, auf die sie zweifelsohne schließen lässt. In meinem zunächst eher sprachkontrastiv als sprachtypologisch ausgerichteten Beitrag wird nun aber versucht, eine Art Pilotstudie zur Funktionsleistung des Verbums substantivum im Zusammenhang mit Formenvielfalt und Suppletivismus des *sein*-Paradigmas zu präsentieren.

Als erste Hypothese kann gewagt werden, diesen Formensuppletivismus im kognitiven Bereich der Sprachkompetenz anzusiedeln, und zwar als Sonderstellung des *sein*-Konzepts und seines Funktionspotentials, die u.a. gerade durch eine sonst für andere Verben ungewöhnliche Kompliziertheit der Konjugationsformen bewerkstelligt wird. Ferner erfüllen die *be*-Verben verschiedene syntaktische und semantische Funktionen. Statusmäßig können sie daher als Kopulaverben, Auxiliarverben, Modalitätsverben und Vollverben verwendet werden (vgl. Engel 2004, Stettberger 1993). Dabei bezeichnen sie Existenz, Zustand, Besitz, Eigenschaften (in Verbindung mit einem Adjektiv), Herkunft, Lage usw. (vgl. Kotin 2014).

Die Grundlage der Untersuchung ist ein Textkorpus, bestehend aus dem deutschsprachigen Text von „Die Blechtrommel“ von Günter Grass. In das Korpus werden ebenfalls die Übersetzungen des Textes in das Polnische und Englische aufgenommen, die dem sprachlichen Vergleich dienen sollen. Dadurch konnte ein der Aufgabenstellung adäquates Kontrastkorpus erstellt werden.

Es soll eingangs überprüft werden, ob und in welchen Funktionen/Stellungen im Satz das entsprechende Verb in den benannten Sprachen ausgelassen werden kann. In einem folgenden Schritt der Untersuchung soll schließlich festgestellt werden, bei welchen Funktionen und in welchen Stellungen die *sein*-Verben durch ihre direkten Pendant

in den jeweils anderen zwei Sprachen wiedergegeben werden. Des Weiteren wird überprüft, durch welche sprachlichen Mittel die angenommenen und festgestellten Funktionen der *be*-Verben (Existenz, Zustand, Besitz, Eigenschaften, Herkunft, Lage) in den untersuchten Sprachen ausgedrückt werden.

Die Untersuchung und die Analyse der Belege soll damit eine Aussage darüber möglich machen, mithilfe welcher unterschiedlicher sprachlicher Konzepte die einzelnen Funktionen in den jeweils anderen Sprachen umgesetzt werden.

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## Die Konstruktion ‚sein‘ + Infinitiv vom Mittelhochdeutschen bis zum Neuhochdeutschen

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Theoretischer Ausgangspunkt ist die Position der modistischen Universalgrammatik des 13. und 14. Jahrhunderts, wonach jedes Prädikat sich in eine Kopula ‚sein‘ und ein Komplement dekomponieren lässt. In diesem Sinn wird jede Kopula als Auxiliar bzw. jedes Auxiliar als Komposition aus ‚sein‘ + weiteren grammatischen und lexikalischen Komponenten verstanden. Der Absentiv erweist sich aus dieser Perspektive beispielsweise als Konstruktion aus einer Kopula sowie einem lexikalischen Element, wobei die Wortartqualität als einziges grammatisches Element hinzugefügt wird. Berücksichtigt man, dass Wortartqualitäten bei den Modisten nicht als lexikalische, sondern als grammatische Kategorien eingeordnet werden, dann sind Konstruktionen bestehend aus ‚sein‘ + Substantiv, Adjektiv oder Verb völlig parallel konstruiert. Eine Differenzierung zwischen ‚sein‘-Auxiliar und Kopula ist nicht erforderlich. Vor dem Hintergrund dieser Position wird die Frage bearbeitet, wie der Absentiv im Deutschen einzuordnen ist. Ausgehend von ersten Belegen im Mittelhochdeutschen wird der Grammatikalisierungsprozess von Konstruktionen wie

- (1) Er ist arbeiten      Absentiv  
 (2) Er ist am arbeiten    Progressiv  
     nachgezeichnet.

Im Mittelhochdeutschen sind folgende Konstruktionen sowohl im Präsens als auch im Präteritum belegt:

- (3) ‚sein‘ + Partizip Präsens  
 (4) ‚sein‘ + Infinitiv

Die Konstruktion in (3) wurde als Progressivum eingeordnet (seit Aron 2014), während (4) als Reduktionsform („Abschleifung“) des Progressivums missverstanden wurde, die schließlich „zur Vermischung der Formen“ und in der Folge zum Verlust des Progressivums geführt habe (so Paul/Wiehl/Grosse 1989:311, dabei Inhalte älterer Auflagen unverändert beibehaltend). Berücksichtigt man jedoch den aktuellen Forschungsstands, so wird deutlich, dass es sich um kein Progressivum handeln kann, sondern vielmehr ein Absentiv im Sinne von de Groot (2000) vorliegt:

- (5) *dar zuo ist mir unkunt, wie vil der ritter sî erslagen, die mit dem künege wâren jagen*  
 ‚außerdem ist mir nicht bekannt, wie viele der Ritter erschlagen wurden, die mit dem König jagen waren.‘  
 [Lancelot von Ulrich von Zatzikoven um 1200]

Während das alte Progressivum im Gegenwartsdeutschen durch das *am*-Progressivum ersetzt wurde, findet sich der Absentiv form- und funktionsgleich auch im Neuhochdeutschen.

Ziel des Vortrags ist es, den Grammatikalisierungsprozess dieser Konstruktion nachzuzeichnen und eine Einordnung dieser Konstruktion im Rahmen des ATM-Kategorienkomplexes (unter Berücksichtigung der Argumente u.a. von Abraham (2008), de Groot (2000; 2007), Langl (2003) und Vogel (2009)) vorzuschlagen.

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## Das Verb Sein: Eine besondere Form von Suppletivismus in indogermanischen Sprachen

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### Research questions

Wegen seiner Irregularität ist das indogermanische Verb Sein Gegenstand von zahlreichen Abhandlungen zur Suppletion. Dabei gilt eine Flexionsform als suppletiv, wenn sie nicht nach allgemeinen phonologischen oder morphologischen Regeln abgeleitet werden kann. Auffallend ist, dass sich das Verb Sein in seiner irregulären Form in vielen indogermanischen Einzelsprachen über Jahrtausende hinweg erhalten hat. Im Vortrag wird als **erstes** die Art der Suppletion behandelt. Die Rückführung auf einen bloß morphologischen Wandel, bei dem Formen zweier miteinander verwandter Paradigmen zu einem neuen Paradigma kombiniert werden, genügt nicht. Denn das Verb Sein zeigt auch analogische Umbildungen, die bislang nicht genügend berücksichtigt worden sind. Warum an bestimmten Stellen im Paradigma dieses Verbs Analogien eintreten konnten, wird daher **zweitens** mit analogietheoretischen Überlegungen und mit den Gebrauchsweisen dieses Verbs begründet. Hier spielt eine Rolle, ob das Verb als *verbum existentiae* oder als Kopula und ob es bejaht oder verneint verwendet wird. Die Grammatikalisierungspfade verlaufen hier unterschiedlich. **Drittens** wird der Frage nachgegangen, ob tatsächlich allein die hohe Gebrauchsfrequenz zu einer Beibehaltung von Suppletivformen, d.h. zur ganzheitlichen Speicherung des Suppletivparadigmas, des Verbs Sein führt. Gibt es noch andere als performanzökonomische Gründe?

### Approach

In der Indogermanistik ist der Forschungsansatz der heute in der Vergleichenden Sprachwissenschaft übliche. Laryngalthorie und Ablauttheorie werden angemessen berücksichtigt. Die Beschreibung des Suppletivwesens folgt der Auffassung von der Regelmäßigkeit dieser Erscheinung. Die angewendete Analogietheorie zielt auf einen prognostischen Wert bezüglich der Formklasse und der Richtung der Analogien ab. Man unterscheidet eine strikt deterministische, eine statistisch-probabilistische und eine implikationale Analogie. Hinzu kommen Ansätze der heutigen Grammatikalisierungsforschung.

### Method

Die sprachvergleichende Methode wird angewandt. Für das Suppletivwesen beim Verb Sein werden quantitative und qualitative Beschränkungen und die Distribution von Suppletivformen, also ihre unmittelbare paradigmatische Nachbarschaft, die vertikal oder horizontal sein kann, ermittelt. In ähnlicher Weise wird für die beim Verb Sein eingetretenen Analogien die Art der Gerichtetheit erfasst. Darüber hinaus werden pragmatisch orientierte Grammatikalisierungspfade aufgedeckt, mit Hilfe von gebrauchorientierten linguistischen Methoden.

### Data

Die Daten stammen aus den germanischen Sprachen, dem Lateinischen, Griechischen, Altindischen, Hethitischen und Litauischen.

### Expected results

Es werden neue Einsichten in die Systematik von Suppletivwesen und Analogie erwartet. Der Grad der Altertümlichkeit bzw. der Grad der Neuerung innerhalb eines Verbalparadigmas wird sichtbar gemacht. Der Unterschied zwischen bejahten und verneinten Formen und der Verwendung als *verbum existentiae* oder als Kopula ist bei der Beschreibung der Formenbildung des Verb Sein bislang nicht ausreichend berücksichtigt worden. Der Einbezug von allgemeinsprachlichen Prinzipien wirft ein neues Licht auf ein uraltes Verbalparadigma.

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## The covert 'to be' predication in German, Gothic and Polish language from the diachronic and typological point of view

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The covert 'to be' predication in German, Gothic and Polish language from the diachronic and typological point of view.

In this paper I examine the possibility of omitting the verb 'to be' in various contexts and constructions across the languages. I explore cases in which the 'to be' verbs are formally not marked and the so-called covert predication is established. The study will have three main aims: Firstly, I try to group individual types of the covert 'to be' structures in two typologically distinct languages areas: in (Old High) German and Gothic as Germanic languages, on the one hand, and Polish as a Slavic language, on the other hand. My analysis is based on the approach of Givón (1990), in which participial, infinitive and nominal structures as non-finite structures are distinguished. Secondly, I will investigate the syntactic properties and the semantic components of the non-finite/covert 'to be' structures, using the investigation approaches of Geist/Błaszczak (1999), Kotin (2007) and Kotin (2012). Thirdly, the corpus-based contrastive investigation (on the Bible texts) is to allow diagnosing if there are parallel tendencies in translation with respect to the omission of the 'to be' verbs in the studied languages. Another important aim is to illustrate differences between the overt and the covert 'to be' structures with respect to their distribution in typological and historical perspective.

The analysis will also bring answers to the following theoretical questions:

- In what relationship are the terms of 'finiteness' and 'predication'?
- What is the most important criterion for distinguishing between clauses and non-clauses?
- What is the grammatical status of structures with the covert predication?
- Is it possible to bring down non-finite structures with the covert 'to be' verb-form and finite structures with the overt 'to be' verb-form to an ontological 'common denominator'?

Methodologically, the analysis draws on authentic data. The corpus data will be analysed using the classical method of historical comparative linguistics and diachronic typology, including the methods of evaluation of syntactic and semantic features. The historical material (20 text samples) for this research has been obtained on the basis of a self-compiled corpus of historical texts, namely the Old High German 'Tatian' (9<sup>th</sup> century) and the Gothic Bible (4<sup>th</sup> century), from which exemplars of (both covert and overt) 'to be' structures are extracted and their equivalents in the Polish parallel texts (the Polish Bible) are found. The paper also contains examples from modern (German and Polish) spoken texts, since the studied covert 'to be' constructions are common in spoken language.

The quantitative results of the investigation of the parallel texts show that the structures with the covert 'to be' verb are much more frequently used in the Polish language than the German language. Historical studies (Old High German vs. Gothic; Latin vs. Old High German; Greek vs. Gothic) are currently being conducted. The qualitative results indicate that the constructions with the covert 'to be' predication can be treated as clauses, even though there is no finite verb-form in the structure.

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## ***To have been or not to have been – The auxiliiation of the verbum substantivum in German (plu)perfect constructions***

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“The frequent grammaticalization of these two concepts [i.e. *have* and *be*; SZ] is likely not arbitrary, but driven by their semantic natures, particularly the concept EXISTENCE, the unifying notion at the core of these expressions.” (Clancy 2010: 9)

With an emphasis to the outstanding role of *be*-verbs in various languages of the world, the paper addresses the auxiliiation of German *sein* in perfect constructions. In particular, the focus will be on the recently observed deictic use of *war gewesen* (‘was been’) in Modern High German such as *Ich war vorhin beim Bäcker gewesen* (Duden 2009: §741), i.e. a past perfect form which seems to indicate simple past tense and is primarily documented in the spoken register. Whereas this usage is commonly stigmatized as substandard, it seems in line with the cross-linguistic logic of development of past perfects: it is commonly assumed that the pluperfect undergoes an “aoristic drift” from an anaphoric tense expressing anteriority with respect to a past reference time to a “simple” past tense denoting past situations with respect to the speech time (cf. Squartini 1999: 56; Bertinetto 2010). While this drift longs for an explanation itself as it seems to run counter the general assumption that grammatical markers arise along the path from deictic to anaphoric functions (cf. e.g. by Heine et al. 1991), the German construction in particular is a striking case as it seems to be restricted to instances of the verb *sein*, and is furthermore bound to specific discourse functions. In consequence, it is questionable whether the form is morphologically a pluperfect or rather a “contamination” of preterite and perfect, as suggested e.g. by Maurer 1960 (referring to Ziemer 1883) and McLintock (1980: 16).

Both hypotheses will be discussed from a diachronic perspective. Based on an empirical analysis of data from Old High German to Modern High German, the diachronic development of the pluperfect, in general, and *war gewesen*, in particular, is pursued down through the centuries with respect to its grammatical semantics and discourse functions. In this respect, it is shown that early instances of the pluperfect used as a “simple past” can be traced back to Middle High German, where this effect is triggered by a “clash of perspectives”, i.e. the usage of an anaphoric tense in a deictic discourse mode. This seems to be a catalyzing factor for the development of pluperfects with a widened semantic scope, as described cross-linguistically also for languages such as Italian and French (cf. Bertinetto 2010). The comparison with such “non-conventional uses” of the pluperfect reveals, however, that the German form *war gewesen* behaves differently as it seems to preserve its perfect semantics. The analysis hence suggests that the participle *gewesen* functions as an extension mechanism, such as described analogously for double perfect forms (DPF) by Rödel 2007 and Kaṭny (2010: 66), and denotes the existence of a state. Against this background, *war gewesen* does not only demonstrate once again the outstanding role of *be*-verbs, but, what is more, constitutes an excellent case study for examining the grammaticalization of *sein* and the interrelationship to its basic existential concept (cf. Kotin 1999, Clancy 2010).

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## **WORKSHOP: TYPOLOGY OF THE LANGUAGES OF EUROPE AND NORTHERN AND CENTRAL ASIA**

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The proposed workshop is meant to continue a series of workshops on the Languages of Europe and North and Central Asia (LENCA). The LENCA languages include any languages of the following families: Indo-European, Uralic, Turkic, Mongolic, Tungusic, Korean, Japanese, Chukotko-Kamchatkan and the various language isolates that exist in the region.

The first topic we would like to see addressed is typology of action nouns in languages of Europe and North and Central Asia (infinitives, verbal nouns, *masdars*, *supines*, *gerunds*, *participles*, etc.).

Functional verb forms show a privative opposition of finite versus non-finite forms; the latter may distinguish *participles*, *converbs*, *infinitives*, *gerunds*, *verbal nouns*, etc. A set of functional verb forms is language specific. There may be an element of arbitrary decision when linguists define a non-finite form of a particular language as, say, an infinitive or as a verbal noun, or just call all of them infinitives and count them (Infinitive 1, Infinitive 2, etc.). Irrespective of this additional difficulty, when trying to identify similar verb categories in different languages one can discover that language material does not always fit into the above-mentioned framework. To begin with, functional and formal categories do not always coincide; e.g. for Turkic languages, the distinction of finite versus non-finite verb forms does not hold, since central Turkic verb forms, so-called *participles*, function both as finite and non-finite predicates. Confusion only grows when we proceed to analyze non-finite categories. The category of action nouns is one of the most complicated ones.

Quite a number of forms can represent a nominalized action and act as action or event nominals (Comrie 1976), e.g. *infinitives*, *verbal nouns*, *masdars*, *participles* and even, in certain positions, *converbs*.

Infinitive properties and functions may differ throughout languages distinguishing this category. Therefore, it is not quite clear when and why this or that form of a language can be defined as an infinitive. Nevertheless, linguists appear to have a certain, maybe partially intuitive, set of criteria which allow them either to speak of infinitive forms in some languages, e.g. Russian, German, English, French, Turkmen, Altay, Khakas, Shor, Kazakh, Bashkir or Tatar, or to state the absence of such forms in Tuvan, Tofan, Mongolian, Evenki or Khanty. A most common set of infinitive features seems to be as follows.

The infinitive is a non-finite verb form, it does not, hence, express absolute tense or mood distinctions. It usually denotes an anticipatory or potential action, often seen as the purpose of a head action (therefore it is sometimes mixed with purpose *converbs* or *supines*). It easily combines with *phasal*, modal (emotive, intentional, desiderative) and propositional attitude (evaluative, commentative) predicates (Koptjevskaja-Tamm 1988). It does not usually accept personal markers, although its action can be assigned to an agent which appears in the dative case unless it is shared with the host predicate. With this exception, the infinitive preserves the valency pattern of a verb stem. It can also be modified by adverbs and entities used in adverbial functions. The infinitive has all the other verb categories: those of voice, causality, actionality, modality, negation, etc. (a set of verbal categories is language specific).

Verbal nouns are most close to infinitives. These two terms are often used as synonyms. A research on typology of verbal nouns has shown that in both cases a very similar set of properties is meant (Bondarenko 1980). However, some differences between these two classes can be found. Those are especially relevant for languages having both categories: see a contrastive analysis of infinitive(s) and verbal noun(s) in Bashkir by *Grammatika baškirkogo jazyka* 1981: 318-323, in Tatar by Jusupov 1985: 203, in Turkish by Csató 1990 and Erdal 1998, etc. Turkic verbal nouns share most of the infinitive features listed above, but, contrary to the infinitive, they are capable of referring to their agents by means of possessive affixes added to their markers. They freely combine with case markers and postpositions, may accept the affix of plurality and even be counted. Still, it is not easy, if at all possible, to draw a borderline between these two categories of verbal forms.

The infinitive can denote an action without referring it to any situation of reality. It refers not to events, but to their mental projections, actions in general, virtual actions: non-assertive, non-indicative, non-factive (Lyons 1977: 793). In this respect, the infinitive differs from factive event nominals referring to real actions. The difference between these two kinds of action nominals is illustrated by the Turkish forms *-dik* (a participle, factive) and *-ma* (an infinitive, non-factive) (Bazin 1968: 114-126). Thus, among factive event nominals one finds *participles* in the first place. Some verbal nouns can function as factive event nominals (Erdal 1998). With rare exceptions (*converbs* of purpose, of a pretended action and the like), most *converbs* are factive; cf. Čeremisina et al. 1986: 63 contrasting infinitives and *converbs* as non-indicative versus indicative forms.

There are at least two other terms which should be discussed in connection with the infinitive. They are the supine and the converb of purpose. These two categories of verb forms represent a non-factive event, seen as the purpose of one's motion (supine) or as the purpose of any action (converb of purpose). Infinitives and verbal nouns can normally function also in purposive adverbial constructions. However, some languages have specialized converbs of purpose.

As we can see, forms belonging to these categories can have very differing morphological, syntactic, semantic and pragmatic properties in different languages, thus presenting a challenge for working out their typology.

The problems we are addressing are as follows:

- What properties should a form have so that we could call it 'infinitive' (the 'minimal' set of features)?
- What morphological and syntactic properties possess the form/s defined as infinitive/s in target languages (case studies)?
- What is/are the source/s for forming the infinitive/s in a language?
- What are the properties that distinguish infinitives and other types of action nouns (e.g. masdar, gerund, supine, participle, etc.)?

The second point of interest of this workshop is the category of Possession in languages of Europe and Northern and Central Asia. The category of possession is often expressed by so-called possessive affixes in LENCA. Possessive affixes have numerous functions, also that of marking the subject of the action expressed by a non-finite verb form, including verbal nouns. Various infinitive constructions are structured according to the patterns of possessive constructions.

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## (Non-)finiteness, constructions, and participles in Lithuanian

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Participles in Lithuanian are polyfunctional verbal forms sharing morphosyntactic properties of verbs and adjectives. Traditionally, such forms are regarded as non-finite, for the reason that they do not show inflection for mood and person and instead inflect for case and gender (see Klimas 1987, Wiemer 2001). However, in different environments in which these forms appear they in fact show different combinations of verbal and nominal properties, i.e. elaboration vs. reduction of tense distinctions, availability and case-marking of overt subjects, presence of overt adjectival morphology and possibility to inflect for case (see Lehmann 1988; Cristofaro 2003, 2007; Nikolaeva 2013 on cross-linguistic criteria of finiteness). This paper offers a detailed investigation of the interplay of verbal and nominal features in the various uses of participles in Lithuanian, based both on elicited and naturally occurring data.

When used as main predicates in clauses expressing indirect evidentiality participles fully inflect for tense, select nominative subjects, and agree with them in number and gender, thus showing behaviour minimally different from that of ordinary finite verbal forms (1).

- (1) *Kartkarčiais j-is čia atvažiuo-dav-ęs, tar-ė, bet gana retai.*  
 at.times he-NOM here come-HAB-PST.PA.NOM.SG.M say-PST.3 but enough seldom  
 'He said he used to come here from time to time, but quite seldom.' (LKT)

When participles appear as heads of complement, adverbial or relative subordinate clauses, they show different degrees of reduction of tense distinctions, non-nominative case marking of overt subjects (if allowed at all), and different degrees of elaboration of adjectival morphology. For instance, in different-subject complement constructions,

participles fully inflect for tense, show no adjectival inflection and license subjects in the accusative (Arkadiev 2012) (2).

- (2) *Vis-i j-ie žadėj-o [netrukus ateĩ-si-ant pasauli-o pabaig-q].*  
 all-NOM.PL.M they-NOM promise-PST.3 soon come-FUT-PA world-GEN.SG end-ACC.SG  
 ‘All they promised that the end of the world would come soon.’ (LKT)

Finally, when participles are used as components of periphrastic verbal forms (passive, perfect/resultative, avertive), their tense morphology is severely reduced or frozen, while adjectival features are elaborated to a degree almost similar to that found in the attributive function, cf. (3), where the participle in a resultative construction agrees with the zero dative subject of the infinitive.

- (3) ... *visada reiki-a [∅<sub>DAT</sub> bū-ti pasireng-us-iam prasmeg-tĩ].*  
 always need-PRS.3 be-INF prepare-PST.PA-DAT.SG.M fail-INF  
 ‘One always needs to be prepared to fail.’ (LKT)

The following conclusions may be drawn from an analysis of morphosyntactic behaviour of Lithuanian participles: as argued in typological literature, finiteness is not a binary but a scalar parameter comprising many different features; moreover, the degree of reduction of verbal features need not necessarily correlate with the degree of elaboration of nominal or adjectival features, and vice versa; rather, morphosyntactic features of participles (or infinitives, verbal nouns etc.) are determined by constructions in which they occur, and it is these constructions, rather than forms themselves, which should be regarded as (non)finite (cf. Creissels 2009).

### Abbreviations

ACC – accusative, DAT – dative, FUT – future, GEN – genitive, HAB – habitual, INF – infinitive, M – masculine, NOM – nominative, PA – active participle, PL – plural, PST – past, SG – singular.

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## Infinitive patterns in Italian and other Romance languages

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It has long been proposed that noun and verb are better conceived not as discrete, but as continuous categories (Ross 1973, Simone & Pompei 2007). The verb-noun *continuum* includes different kinds of noun, some of which are characterized by verbal semantic features, such as aspectual and actional ones; for example, nouns referring to events (i.e. *event nouns*, Gross & Kiefer 1995) can show the verbal characteristics of duration, dynamicity and telicity.

Verbal nouns are realized by language-specific morphosyntactic strategies. For example, event nouns can be rendered by forms belonging to verbal paradigms: alongside the gerund, the *mašdar*, the gerund and the participle, many languages use the infinitive (Simone 2003). This is the case with Italian and other Romance languages (for French see Gross & Kiefer 1995 and therein quoted references; for Spanish see De Miguel 1995 and Bosque & Demonte 1999).

The nominal uses of the Italian infinitive have been widely analyzed (Skytte 1983, Jansen *et al.* 2002, Simone 2004). Nevertheless, one feature has been underestimated - the syntactic and semantic differences between bare infinitives (1) and infinitives preceded by a determiner (2) -:

- (1) *Girovagare per Roma mi rilassa.*  
wander.INF for Rome PRON.1SG-ACC relax. PRES.3SG  
'Wandering around Rome relaxes me'.
- (2) *Dopo un'ora di questo improduttivo girovagare tornammo indietro*  
After a hour of this pointless wander.INF go.PAST.1PL back  
'After one hour of this pointless wandering we went back'.

Our proposal is to distinguish four different patterns of determiner and infinitive: bare infinitive (e.g. *girovagare* 'to wander'), demonstrative plus infinitive (e.g. *questo girovagare* 'this wandering'), definite article plus infinitive (e.g. *il girovagare* 'the wandering') and indefinite article plus infinitive (e.g. *un girovagare* 'a wandering').

Our analysis includes three points. First, it shows the relation between the distributional properties and the semantic variation of these different kinds of nominal infinitives. Secondly, it intends to identify different degrees of 'verbiness' and 'nouniness' related to each kind of nominal infinitive. Thirdly, in a broader perspective, it aims at showing differences and similarities within other Romance languages, in order to identify the Romance infinitive patterns.

As for the first two points, we drew data from *La Repubblica* written corpus in order to clearly show the syntactic differences between the patterns identified. Such kinds have been evaluated against their compatibility with two different sets of features. First, we have examined typical verb properties, such as the agent expression, the expression of duration with verb-specific constructions, the possibility to be modified by adverbs, to be negated, and to govern a direct object. Secondly, we have considered features typical to nouns, such as the possibility to be modified by adjectives, the expression of the object as a complement (with the use of a preposition), and the possibility to express the duration by specifically nominal syntactic structures. As for the third point, we will show the results of a preliminary analysis driven on Spanish and French, referred to data drawn from *CREA* Spanish corpus and *Le Monde* French corpus.

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## Abbreviations

ACC accusative; INF infinitive; PAST past tense; PRES present tense; PRON pronoun; 1SG first person singular; 1PL first person plural; 3SG third person singular.

## The Tough construction in Latin and Old Turkic

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The term 'Tough construction' has been used for referring to sentences in which, in English, the syntactic subject is logically the object of a non-finite verb qualifying an adjective, as in

- (1a) This problem is tough to solve.

This gets derived from

- (1b) It is tough to solve this problem

when the speaker wants to topicalize the object of the verb, in this case ‘this problem’; in (1b) the topic is the ‘solution of the problem’. Montalbetti, Saito & Travis (1982), Comrie & Matthews (1990) and others have shown that in other languages such topicalization can also apply to other participants involved, that the NP referring to them does not need to become subject, and that the verb form does not need to be an infinitive as in English. It turns out that different languages arrive at a configuration one would call ‘Tough’ through different devices and mechanisms available in each language.

In the Tough constructions of German and French, the infinitive (synthetic, unlike English) is governed by prepositions expressing ‘purpose’, *zu* in German and *à* in French:

- (2) Dieses Problem ist schwer zu lösen.  
 (3) Ce problème est difficile à résoudre.

This paper will look at the Latin and Old Turkic counterparts of the Tough construction, which both make use of the supine form, ending in *-gAll* in Old Turkic and usually in *-tū* in Latin; they don’t appear to have been mentioned in the extensive literature on this matter. The Old Turkic supine is a converb:

- (4) yuyka är-kli            tupul-galı    uçuz är-miş,            yinçgä är-kli-g            üz-gäli    uçuz  
 thin    COP-PART    pierce-SUP    easy    COP-EVID    fine    COP-PART-ACC    break-SUP    easy  
 ‘They say that what is thin is easy to pierce and what is fine is easy to break.’

Note the accusative in the second part of this sentence (from Toñ IS6), showing that Old Turkic is unlike English (but like some other languages to be mentioned) in not automatically making the topic into the subject.

- (5) köküz-läri    bürt-gäli    yumşak  
 breast-3PL    touch-SUP    soft  
 ‘Her breasts are soft to the touch’.

The Latin supine comes from the dative of a verbal noun:

- (6) Hoc    iucund-um                            cogni-tū    est  
 this    pleasant-NEUT.SG.NOM    learn-SUP    COP.3SG  
 ‘This is pleasant to hear about.’  
 (7) puer    difficil-is                            doc-tū  
 child    difficult-MASC.SG.NOM    educate-SUP  
 ‘a child which is difficult to educate’  
 (8) res    mirabil-is                            vis-ū  
 matter    wonderful-FEM.SG.NOM    see-SUP  
 ‘a thing which is wonderful to see’

Basically, the Latin and Old Turkic supine express ‘purpose’ or ‘aim’ (to be detailed in the lecture); see Erdal 2004: 409 for the consistent future projection of the *-gAll* forms also when they are objects of actionality verbs: They are thus semantically similar to the German and French Tough constructions. This, in turn, shows the way to the purposive source of the English *to*-infinitive, the Slavic *-ti / -t’* infinitive, the Modern Hebrew infinitive in *le-* and infinitives of a number of Turkic languages formed from the verbal nominal in *-Ar* in the dative case form.

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## Two types of nominalizations in Balkar

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The Balkar language (Turkic, Kypchak) has two types of nominalizations: a perfective nominalization with the suffix -*ɣan* (1) and an action nominal with the suffix -*uw* (2):

- (1) ol dušman üj-nü cac-xan-i-n kör-dü.  
 he enemy house-ACC destroy-PFCT-POSS3-ACC see-PST  
 He saw that an enemy had destroyed a house.
- (2) ol dušman üj-nü cac-uw-u-n kör-dü.  
 he enemy house-ACC destroy-NMN-POSS3-ACC see-PST  
 He saw an enemy destroying a house.

The aim of this paper is to describe a number of properties of Balkar nominalizations. We will show that Balkar nominalizations can be divided into two types not only morphologically, but also with respect to certain differences in argument marking and semantic interpretation. Another sub-focus of the paper is syntactic variation within these two types related to the case marking of the arguments of nominalizations.

The research is based on the data elicited from native speakers of Balkar (the Cherek dialect). The material was collected in 2013 in the village of Verxnjaja Balkarija, Kabardino-Balkarija, Russia.

The two nominalizations have different aspectual properties. For “*ɣan*”-nominalizations, the normal, “unmarked” interpretation is perfective (3), while “*uw*”-nominalizations normally allow only imperfective reading (4):

- (3) ol xasan-ni zotel et-ken-i-n ešit-ti.  
 he Hasan-ACC cough do-PFCT-POSS3-ACC hear-PST  
 He heard Hasan cough (once).
- (4) ol xasan-ni zotel et-üw-ü-n ešit-ti.  
 he Hasan-ACC cough do-NMN-POSS3-ACC hear-PST  
 He heard Hasan coughing (repeatedly).

For both nominalizations there are several ways of case marking of the subject. It can receive the nominative case, like a finite clause subject, or the genitive case, like a possessor within a noun phrase. The third alternative for the subject is the accusative case marking, which has no analogue within a finite clause, or within a noun phrase:

- (5) alim <sup>OK</sup>qarnaš-i/ <sup>OK</sup>qarnaš-i-n/ <sup>OK</sup>qarnaš-i-ni ojna-uw-u-n kör-dü.  
 Alim brother-POSS3./ brother-POSS3-ACC/ brother-POSS3-GEN play-NMN-POSS3-ACC see-PST  
 Alim saw his brother playing.

Mostly, subjects with any of the possible case markings are acceptable. However, proper nouns and personal pronouns behave unlike common nouns: in the position of the subject of an “*uw*”-nominalization they cannot be in the nominative case and must bear accusative or genitive morphology. For “*ɣan*”-nominalizations, there is no such restriction.

Nominalizations with differently marked subjects also differ in the syntactic behaviour of their inner argument. If the subject is in the nominative, the direct object can be displaced from the nominalized clause and appear to the left of the subject of the matrix clause. With genitive or accusative subjects such displacement is impossible:

- (6) alma-si-n ustaz <sup>OK</sup>bala-si/ \*bala-si-n/ \*bala-si-ni aša-ɣan-i-n  
 apple-POSS3-ACC teacher child-POSS3 child-POSS3-ACC child-POSS3-GEN eat-PFCT-POSS3-ACC  
 ešit-ti.  
 hear-PST.3SG

A teacher heard that it was someone’s child who had eaten the apple.

Finally, the accusative case marking of subjects is a puzzle itself. While nominative and genitive marked subjects are well described in the literature (e.g. [Kornfilt 2008], [Ljutikova, Graščenkov 2008]), the question how the accusative case is received by the subject is of particular interest. There is a number of approaches to accusatively marked sub-

jects in subordinate clauses (for example, [Kornfilt 2003], [von Heusinger et al. 2011], [Baker, Vinokurova 2010]); however, none of them allows to account for Balkar nominalizations.

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## Development of infinitives in Turkish

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The present talk aims at investigating the development of the infinitives in *-mA* and *-mAK* in Turkish. In modern standard Turkish, complement clauses implying obligatory control are based on the bound morphemes *-mA* or *-mAK*. See example (1).

- (1)  
 Ayşe [kitap okumak] istiyor.  
 Ayşe book read-MAK.INF want-PRES3  
 'Ayşe wants to read a book.'

These bound morphemes display, depending on their combinability with possessive and case suffixes, a complementary distribution. Their combinational distribution has been, however, subject to a gradual change. Today, the infinitive in *-mAK* has a rather restricted use. Since it is not capable of taking possessive suffixes, which denote person and number of the subject, it only appears in subject or predicate positions of impersonal constructions, and in control constructions. In such clauses it competes with the short form *-mA*, which can, however, also appear in other complement clauses having their own subjects (Karakoç 2013). As for the older stages, Kerslake (1998) claims that the verbal noun *-mA* existed only as a derivational suffix in Old Anatolian Turkish, while the form *-mAK* could take possessive suffixes. Prokosch (1980), however, provides examples from early texts for the grammatical use of *-mA* taking possessive suffixes. In Old Anatolian Turkish and Ottoman Turkish texts studied so far, complement clauses based on *-mAK* without a possessive marker, but having an overt subject in nominative are very common (example 2). Such constructions are alien to the modern language, since the use of an overt subject makes the possessive marking on the predicate obligatory. Besides, genitive marking of a specific overt subject is necessary. The situation becomes more complex as there are also examples attesting constructions with genitive subjects and possessive-marked *-mA* in some older texts (example 3), just as in modern Turkish. It seems to be the case that these types coexisted.

- (2)  
 Siz dahi böyle hâli otur-mak mağul değil-dir.  
 you:NOM also that way vacant sit-MAK.INF conceivable not-COP3  
 'It is not good that you are sitting vacant.' (Prokosch 1980: 110)

- (3)  
 Sen-iñ var-ma-ñ münāsib değil.  
 you-GEN go-MA.INF-POSS2SG appropriate not  
 'It is not appropriate that you go.' (Prokosch 1980: 110)

Our knowledge of the developments in such complement clauses based on infinitives is far from being complete. The present talk intends to address the following general questions: (1) How did the so-called short form *-mA* develop as a grammatical morpheme? (2) Which stages of development can be observed concerning the relationship be-

tween *-mA* and *-MAK*? I will argue that the given types of complement clauses (examples 2 and 3) may indicate among others genre-related and/or stylistic differences. Based on the theoretical approaches developed by Johanson (e.g. 1975) the talk will analyze data compiled from a huge amount of edited texts from 13th century onwards in Turkish.

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## Forms and functions of the infinitive and supine in contemporary Votic

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Finnic languages have a rich inventory of non-finite forms. Rather intensive research has been done on the subject (Erelt 1984, Toivonen 1995, Habicht 2001, Ylikoski 2003, Penjam 2008, Lees 2010), but the studies mainly base on the material of major Finnic languages with a well documented literary tradition: Finnish and Estonian. Considerably less attention was paid to minor unwritten Finnic languages.

This presentation analyses the distribution, functions, and forms of two action nominals – infinitive and supine – in a nearly extinct Votic language (historically these forms correspond to the Estonian so-called *da-* and *ma-* infinitives, but there are many differences both in the form and functions). The paper also considers the changes in the use of the infinitive and supine that can be traced in Votic over the last few decades.

The study is based on field materials that we recorded from the last speakers of Votic during the past 12 years. The corpus includes samples of spontaneous speech and elicited questionnaires. Among earlier sources on the Votic language we refer to the grammar by Ariste (1968) and several text collections, e.g. (Kettunen, Posti 1932).

The general distribution of the infinitive and supine forms in Votic is rather typical for Finnic languages. The infinitive appears 1) in constructions with modal verbs; 2) with emotions verbs; 3) with the verb *alkema* 'to begin'; 4) in dependent clauses with the meaning of purpose. The supine forms are used mainly with motion verbs, and also with the verbs *eppema* 'to learn', *eppetema* 'to teach', and analytical constructions with *nejsema* 'to become'. However, there are several zones of indeterminacy where the choice of the infinitive vs supine form is not strictly defined. This concerns first of all phasal verbs, cf. *tämä nepetti kejtä suppia* (3SG finish.IMPF.3SG cook.INF soup.PART) 'She finished cooking the soup' and *tämä nepetti tširjutema tširja* (3SG finish.IMPF.3SG write.SUP letter.PART) 'She finished writing the letter'. In some constructions there is semantic competition between the infinitive and supine, e.g. in clauses that have a meaning of purpose (and thus require the infinitive form) but the main verb is a motion verb (and requires the supine).

In contemporary Votic, there is only one form of the infinitive, while the supine combines with case affixes and has the inessive, elative, abessive, and unmarked illative forms. The ability for the Votic infinitive to attach case affixes was apparently lost in the course of the last century. According to Ariste (1968: 77), the inessive forms of the infinitive were quite often in his data, and the translative forms occurred in folksongs, although not in the everyday language. Another noticeable change is that the abessive forms only survived in combination with the supine, while the abessive forms of nouns were totally replaced with a prepositional phrase.

The paper also analyses the sources of the recent changes in the use of Votic infinitive and supine, and considers the influence of the neighbouring languages.

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## The -gAll/-Gili form in Old and Modern Uyghur

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The Old Uyghur form *-gAll* is usually defined as a temporal converb. However, in our VATEC corpus, the overwhelming majority of its functions are typical for infinitives. Only in a very limited number of manuscripts, it has, indeed, converbial functions expressing an action preceding the action of the main verb (Erdal 2004: 479). We argue that we should treat *-gAll* as two homonymous forms: *-gAll I* and *-gAll II* which could have different origins; *-gAll I* being an infinitive form, while *-gAll II* is a temporal converb (Nevskaya 2010). Their morpho-syntactic and semantic features differ dramatically both in Old and Modern Uyghur.

In Old Uyghur, the functions of *-gAll I* are very similar to those of Indo-European infinitives, therefore we can almost always use an English infinitive translating Old Turkic infinitive phrases. We find the form *-gAll* with phasal, emotive, intentional, desiderative, evaluative, commentative, causative predicates in actant positions, and as an adjunct with the semantics of purpose with verbs denoting a voluntary action. The latter constructions are mostly same-subject ones. In exceptional cases, the infinitive can appear in a different-subject construction with the semantics of purpose. The agent of the action expressed by the infinitive can appear in the sentence as a nominal phrase in the dative or, very rarely, in the nominative.

The VATEC corpus does not have instances of the temporal use of the form *-gAll II*. It is limited to Buddhist texts. In such constructions, the converb expressed a factive action preceding the action of the main clause.

In Modern Uyghur, the verb form *-Gili* is considered to be a converb. Indeed, it is used in sentences expressing the time which passed between an event and the time of speaking, see (1), corresponding to *-gAll II* in Old Uyghur. It can express possibility of an event in combination with the verb *bol-* ‘be, become’ (2).

- (1) *Bu yär-gä käl-gili üč ay bol-d-i.*  
 this place-Dat come-Cv 3 month become-Pst-3  
 ‘Three months have passed since I came here.’

- (2) *Uni kör-gili bol-ma-y-du.*  
 it:Acc see-Cv become-Neg-Prs-3  
 ‘One cannot see it / It is not possible to see it’.

In constructions with motion verbs, *-Gili* acts as their adjunct, while with such verbs as *başla-* ‘to start’, *una-* ‘to agree’, *qoy-* ‘to put’, *-Gili* forms take actant positions, corresponding to Old Uyghur *-gAll I*, see (3), (4), (5).

- (3) *Uni kör-gili käl-d-im.*  
 (s)he:Acc see-Cv come-Pst-1Sg  
 ‘I came to see her/him.’
- (4) *U yiqli-yili başli-d-i.*  
 (s)he cry-Cv start-Pst-3  
 ‘(s)he started to cry.’
- (5) *U billä bar-yili uni-mi-d-i.*  
 (s)he together go-Cv agree-Neg-Pst-3  
 ‘S(h)e did not agree to go together.’
- (6) *U meni mañ-yili qoy-mi-d-i.*  
 (s)he I:Acc go-Cv put-Neg-Pst-3  
 ‘S(h)e did not let me go.’

There are quite a number of postverbal constructions with actional (*U yiqli-yili turdi.* ‘(S)he has started to cry.’), proximative (*U mañ-yili qop-ti.* ‘(S)he is about to leave.’), or avertive (*U yiqil-yili tas qal-di.* ‘(S)he nearly fell down.’; *Yaz-yili-wat-imän / Yaz-yili-qil-iwat-imän.* ‘I am about to write.’) semantics. In Turkic actional and avertive constructions we often find converbs, while infinitives are typical for proximative constructions (Nevskaya 2005).

Even this short overview of the semantic and morpho-syntactic features of *-gAll* and *-Gili* shows: they could be two homonymous forms, probably, of different origin.

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## On the typology of predication within possessive constructions

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Tripartite possessive constructions that may be seen as linguistic reflections of the anthropological ownership relation will be discussed according to their components possessor – predication – possessum (Aikhenvald et al. 2013). The linguistic varieties of the construction reflect various cognitive and social options, too.

Data are taken from Turkish (as a case of Oğuz-Turkic), Kazakh (as a case of Kipchak-Turkic), Estonian (as a case of Finno-Ugrian), Japanese and Arabic on the one hand, Greek, Latin and other (Western and Eastern) Indo-European languages on the other. Data from a Turkish-German language contact project are taken into consideration.

There are two main *hypotheses*: The well-known linguistic typification of the component ‘possessor’ (Heine 1997, Stassen 2012 and others) can be supplemented through a closer look on the expression scale of the ‘posses-sum’ and, in particular, on the expression scale of the ‘predication’. - Specifically, there are predications with an *adjective schema* (Turkic and Japanese), predications with a *nominal schema* (Arabic, Estonian and an option of Indo-European) and predications with a *verb schema* (another option of Indo-European). In a functional view, it seems to be interesting that corresponding varieties of cognitive and social relationships seem to underscore these various predication schemata.

As a result, seen from a typological point of view, a main opposition shows up, namely the distinction between constructions of existence, of topicalization, of conjunctive and oblique ones vs. *habere*-constructions which are prominent in Western Indo-European. It will be argued that *habere*-constructions developed through mediation of Latin which, itself, successively operated as a recipient language (< Greek) and as a donor language (> Germanic languages) and underwent a change within the lexical structure of the predication.

Comparative linguistic methods are used.

## The intersection between complement clauses and dep-structures in Dzungar Tuvan

Rind-Pawłowski, Monika (Goethe-Universität Frankfurt, Germany)

Dzungar Tuvan is a variety of Tuvan which is spoken by approximately 2000 people in the North of Xinjiang, China. The talk is based on my research on this variety carried out between 2007 and 2011 within the frame of my doctoral thesis (Rind-Pawłowski 2014) and complemented by the material of Mawkanuli (1999, 2005).

In Dzungar Tuvan, as typically in Turkic languages, complement clauses are created by the nominalization of the complement predicate. The suffixes *-GAn* and *-Vr* serve to create these action nouns (Isxakov & Pal'mbax 1961), being attached either to simple verb stems or to auxiliary verb constructions. They are case-marked according to the valency of the superordinate predicate.

As a cross-linguistic rule (cf. Dixon 2006), complement clauses can only be governed by predicates which require that their argument is an event. In Dzungar Tuvan, a subgroup of these specific predicates allow the speaker to express this event not only by a complement clause, but also by a quotational structure based on the converb *dep* ‘saying’, in which the content is expressed in the form of a finite clause cf. (Šamina 2001, 2008, 2010). The use of this *dep*-structure is limited to superordinate predicates that a) directly or indirectly presume a speech act (e.g. ‘tell’, ‘hear’), b) express an act of nonverbal communication (e.g. ‘write’), c) express mental processes (e.g. ‘think’, ‘believe’, ‘wish’, ‘forget’, ‘realize’, ‘consider to be’) or d) express the emotional reaction to a mental process (e.g. ‘be glad about’, ‘look forward to’, ‘find it disgusting’, ‘find it a pity’).

The talk will focus on the question, which circumstances cause the speaker to choose either the complement clause or the quotational structure.

In combination with *verba dicendi*, the typical way of quoting is the *dep*-structure. A complement clause is only used when the reproduced speech act is not quoted according to the original formulation, but roughly summarized or altered. As for verbs of auditive perception, the type of evidentiality (reportive or direct-perceptive) is distinguished

through the choice of the subordinate clause type: The *dep*-structure is preferred for the quotation of speech acts, whereas the complement clause usually refers to directly perceived events. Mental processes and emotional reactions receive a higher degree of intensity when expressed by the *dep*-structure. Moreover, the grammatical structure of the clause itself may require its embedding in a *dep*-structure: Imperatives cannot be nominalized and thus exclude their embedding in complement clauses. Besides, the finite clauses followed by *dep* are considered easier to form by mother-tongue speakers, so that clauses with many arguments and subordinated clauses are rather embedded in a *dep*-structure than in a complement clause.

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## Purpose constructions in Kazakh

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In our lecture, we will describe formal and semantic subtypes of purpose constructions in Kazakh paying a special attention to the factors that predetermine the choice between their formal types. The Kazakh language has a rich system of purpose constructions. One has a choice between 1) constructions with the infinitive form *-U* in the Nominative or Dative case *-U-GA* (1), or with the postposition *üşin* (2), and 2) constructions of direct or indirect speech with the citation particle *dep*, see (3) for a same-subject construction and (4) for a different-subject one. *Dep*-based constructions express an additional modal component of the subject's wish and intention to fulfil the action of the dependent clause, while infinitive purpose constructions express two event propositions.

- (1) Balalar dop oina-u-γa šiq-t-i.  
Kids ball play-Inf-Dat go out-Pst.  
'Children go out doors to play with a ball.'
- (2) Ūšaq qon-u üšin tömende-d-i.  
plane land-Inf for get.down-Pst-3  
'The plane lowered in order to land.'
- (3) Ol Astana-γa ok-u-γa tüs-eyin de-p kel-d-i. (or *okuya tüsu üšin*)  
s/he Astana-Dat study-Inf-Dat enter-Imp1Sg say-Cv come-Pst-3  
'He came to Astana in order to study at the university.' – he wanted to study
- (4) Žambur-da qal-ma-sin de-p, ana-m mayan qolšatir berdi. (or *qal-mau üšin*)  
Rain-Loc stay-Neg-Imp-3 say-Cv mother-Poss1Sg me umbrella give-Pst-3  
'My mother gave me an umbrella so that I would not get wet in the rain.' – she wanted me not get wet

Infinitive forms in different Turkic languages have been discussed under various labels: Action Nominal Verb Forms, Infinitives, Action Nouns, etc. (Maliev 1953, Kazakh Grammar 1962: 324; Dmitriev 1968, Isxakov 1960, Netalieva 1963, Ščerbak 1977, Bondarenko 1980, Čeremisina & Nevskaja 2000, Nevskaya 2005). The Kazakh infinitive has common features with European infinitives in its syntactic functions, but differs from them in morphologic features because it is declined (1); it can accept personal affixes (5) and be governed by postpositions (2). It usually denotes an anticipatory or potential action, often seen as the purpose of a head action. It easily combines with phasal,

modal (emotive, intentional, desiderative) and propositional attitude (evaluative, commentative) predicates, as well as with causative verbs, filling complement positions of these predicates.

With verbs of activities in the main clause, the infinitive forms adjunct clauses expressing their purpose; see (1), (2) and (5). The subject of the dependent clause can appear in the Nominative, see (1) and (2), or in the Genitive (5).

- (5) Bala-si-niñ oqu-ya bar-u-in-a žaydai žasa-d-i.  
 child-Poss3-Gen study-Dat go-Inf-Poss3-Dat condition do-Pst-3  
 ‘He did everything for his son to go for study.’

With verbs of non-controlled actions or with nominal predicates in the main clause, the infinitive expresses a very specific meaning of a logical consequence: the state expressed in the main clause should prevent the infinitive action, see (6).

- (6) Basqa kala-da tur-u üšin, qız-ım ayle žas.  
 other city-Loc live-Inf for daughter-Poss1Sg too young  
 ‘She is too young to live alone’ – i.e. she cannot live alone because she is too young.

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## Comparative constructions with Actional Nominal Verb Forms in Kazakh

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Comparison is “a mental act by which two objects are assigned a position on a predicative scale” (Leon Stassen 1984). The semantics of comparison is encoded in various types of comparative syntactic constructions (CCs). Following Maya Čeremisina (Čeremisina 1976), we understand Comparative Constructions as constructions involving a “module” of comparison, i.e. a predicative scale, which is usually encoded as a gradable predicate, and two objects: 1) the object of comparison (**the compare NP**), and 2) **the standard** of comparison, i.e. **the object** that serves as the “yard-stick” of comparison. In Comparative Constructions, there is usually also **a marker of comparison** that signals comparative relations – a comparative case affix, a postposition or a comparative predicate that is normally present in the NPs expressing the standard of comparison.

Situations of reality can also be compared to other situations, thus building complex CCs, i.e. complex sentences in which two propositions are assigned a position on a predicative scale, see (1) where two situations of reality are compared.

- (1) Ol da äkesi qarayanday qaraydı.  
 ol da äke-si qara-yan-day qara-y-dı.  
 she and father-POSS3 look-PP-COMPR look-PRS-3  
 ‘And she watches (glances) like her father does (watches).’

In Turkic languages, the most common type of complex comparative sentences is the synthetic one, with the predicate of the dependent clause in an Actional Nominal Verb form. In Kazakh complex sentences with comparative semantics, the predicate of the dependent clause has the form -GAN-dAy consisting of the past participle – GAn and the marker with comparative semantics –dAy, sometimes also combined with the –p converb of the verb bol- ‘be’: -GAN-dAy; -GAN bolip; V-p V-GAN-dAy, see (2) and (3).

- (2) Saršegirdiñ sarı közderi ašumen ot burkip turyanday qaradı.

Saršegir-din	sarī	köz-der-i	aşu-men
Sarshegir-GEN	yellow	eye-PL-POSS3	anger-INS
ot	burk-ıp	tur-yan-day	qara-d-ī
fire	splash-CVB	stand:AUX-PP-CMPR	look-PST-3

‘Sarshegir’s yellow eyes were sparkling with anger like fire.’

The comparative affix *-dAy* with actional nominal verb form *-GAn* expresses both real and unreal comparison. A real comparative situation is translated into English with the help of the conjunctions *like, as, just like, exactly as*. In unreal comparative constructions, *-GAndAy* is translated into English with the conjunctions *as if, as though, compare* example (3) featuring a real comparison to (4) and (5) with unreal CCs:

(3) Keşe Assem ana-si dayındayanday tätti tort pisirdi.

Keşe	Assem	ana-si	dayında-yan-day
yesterday	Assem	mother-POSS3	make-PP-COMPR
tätti	tort	pisir-d-i.	
tasty	cake	bake-PST-3	

‘Yesterday Assem baked as tasty a cake (just) like her mother had made.’

(4) Samat undemey tilin žutip qoyıanday qaldı.

Samat	unde-mey	til-in	
Samat	make.sounds-CVB:NEG	tongue-POSS2SG	
žut-ıp	qoy-yan-day	qal-d-ī.	
swallow-CVB	put:AUX-PP-COMPR	stay-PST-3	

‘Samat was silent as if he swallowed his tongue.’

(5) Ol basın şaykap žılayanday bolip ketti.

ol	bas-ın	şayka-p	žıla-yan-day
he	head-POSS3ACC	shake-CVB	cry-PP-COMPR
bol-ıp	ket-t-i.		
be-CVB	go-PST-3		

‘He/she went away shaking his head as if (he) was crying.’

In our lecture, we will give a description of Kazakh actional nominal verb forms expressing comparative semantics and show the peculiarities of the constructions they form.

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**WORKSHOP:****VALENCY AND TRANSITIVITY IN CONTACT: A CROSS-LINGUISTIC PERSPECTIVE**

Convenors: Grossman, Eitan (Hebrew University of Jerusalem, Israel); Michaelis, Susanne Maria (Max Planck Institute for Evolutionary Anthropology, Leipzig, Germany)

The aim of this workshop is to explore a topic that has not yet received significant cross-linguistic attention, namely, valency and transitivity in conditions of language contact.

The borrowing ('global copying,' 'matter replication') of lexical and grammatical items is one of the more visible outcomes of language contact. It has long been observed that in language contact situations, not every outcome is equally possible or likely: content items are more easily and frequently borrowed than grammatical items, some grammatical subsystems (e.g., morphology) appear to be more resistant – although not immune – to borrowing than others (e.g., phonology and syntax). In other words, there are cross-linguistic constraints on borrowing (Moravcsik 1978, Thomason & Kaufman 1988, Matras 2009b, 2011). The borrowing of verbs has often been discussed in the context of borrowability scales (or 'hierarchies'), e.g., NOUNS < VERBS < ADJECTIVES. Such scales make predictions about the relative frequency, number, or chronology of borrowings. They can also be read implicationally, i.e., 'if adjectives have been borrowed, so have verbs and nouns' (see Haspelmath 2009 for the various readings of borrowability scales).

Another aspect of verb borrowing that has been the object of considerable research in recent years is that of morphosyntactic integration or 'accommodation.' Wichmann and Wohlgemuth (2008) and Wohlgemuth (2009) have proposed a typology of accommodation strategies, according to which there are four main ways in which languages integrate loan verbs: (1) light verbs, (2) indirect insertion, (3) direct insertion, and (4) paradigm transfer. Wohlgemuth (2009) argues that these strategies can also be seen as a hierarchy, i.e., LIGHT VERBS < INDIRECT INSERTION < DIRECT INSERTION < PARADIGM TRANSFER (but see Matras 2009 for a critique of this typology).

Almost entirely neglected from a cross-linguistic perspective, however, is the integration of loan verbs into extant valency and transitivity patterns of the recipient language. For example, Modern Hebrew (Afroasiatic, Israel) has a borrowed verb root *t.l.f.n.* 'to telephone.' Compare the borrowed verb lexeme in (1a) with the native lexeme in (1b):

- |      |                                   |              |      |                                   |              |
|------|-----------------------------------|--------------|------|-----------------------------------|--------------|
| (1a) | <i>tilfan-ti</i>                  | <i>ela-v</i> | (1b) | <i>hitkašar-ti</i>                | <i>ela-v</i> |
|      | telephone.PST-1SG                 | to-3SGM      |      | telephone.PST-1SG                 | to-3SGM      |
|      | 'I called him, I telephoned him.' |              |      | 'I called him, I telephoned him.' |              |

The loan verb is integrated into a valency pattern in which other verbs of verbal address occur, characterized by the preposition *el* 'to,' rather than the 'default' accusative pattern (exx. 2a-b):

- |      |                  |           |             |      |                 |             |
|------|------------------|-----------|-------------|------|-----------------|-------------|
| (2a) | <i>nišak-ti</i>  | <i>et</i> | <i>Rona</i> | (2b) | <i>nišak-ti</i> | <i>ot-a</i> |
|      | kiss.PST-1SG     | ACC       | Rona        |      | kiss.PST-1SG    | ACC-3SGF    |
|      | 'I kissed Rona.' |           |             |      | 'I kissed her.' |             |

In Icelandic, loan verbs are mostly assigned to NOM-ACC (64%) or NOM-DAT (36%) valency patterns, which closely reflects the statistical distribution of native verbs with respect to these patterns. No loan verbs are assigned to the NOM-GEN valency pattern (Barðdal 2006, 2008).

However, the topics to be dealt with in this workshop go well beyond the integration of loan verbs into recipient language valency and transitivity patterns. For example, a major issue dealt with by a number of the abstracts is the contact-induced borrowing or replication of valency and transitivity patterns themselves, whether on a small scale, as part of metatypic processes, or in the process of pidginization, creolization, and mixed-language formation (Ross 1996, Michaelis 2008).

Such phenomena raise largely unexplored research questions, to be dealt with in the proposed workshop:

- How are loan verbs integrated into native valency and transitivity patterns? How can this integration be described?
- What factors – whether formal, functional, or sociolinguistic – determine the outcomes of borrowing?
- Is the integration of loan verbs into native patterns determined primarily by the meaning of the verb lexemes and of the valency patterns (or, in another view, of other verbs that participate in the same construction), or by 'pivot-matching' (Matras 2009a) between formally similar constructions?

- Does the type or degree of bilingualism or sociolinguistic contact situation influence the outcome of borrowing?
- Do the results of contact-induced change shed light on the productivity of valency and transitivity patterns?
- Are loan verbs implicated in changes in the frequency or distribution of valency and transitivity ‘use patterns’ (Heine & Kuteva 2005)?

There is also a range of questions that deal specifically with pidgins, creoles, and mixed languages, e.g.:

- Do pidgins show simplification/restriction in valency patterns compared to the corresponding patterns in the contributing languages?
- Do creoles retain valency patterns of the corresponding substrate languages, and if so, which verbs are mostly affected? Does frequency play a role here?
- What happens in mixed languages: are the valency patterns copied along with the ‘matter’ (verb stems and/or verbal morphology) from one of the contributing languages, or is there a mismatch between ‘matter’ and ‘pattern’ of the copied verb?

Transsecting the whole spectrum of language contact situations are questions related to particular construction types, e.g., ditransitives, experiencer constructions, causatives, weather constructions, serial verb constructions, complex predicates, and others.

We are especially interested in formulating cross-linguistic generalizations about language contact, which are subject to empirical evaluation on broader samples. This workshop appears to be in a good position to explore such questions, since we have received abstracts dealing with languages from every macro-area, including Africa, Australia, Eurasia, Pacific, North America and South America. Pidgins, creoles, and mixed languages are well represented, in both language-specific and comparative perspectives. Contact situations involving languages of different families (e.g., Basque/Romance, Mosetenan/Romance, Dravidian/Romance, Turkic/Sinitic, !Ui/Germanic, and more) are well represented, as are situations involving languages from the same family (Oceanic, Sino-Tibetan). Similarly, some of the proposed papers treat situations of stable long-term bilingualism, while others deal with contact without extensive bilingualism; furthermore, a range of types of social embeddedness are also represented – in some cases, bilingualism is symmetrical, while in others it is imposed ‘from above.’

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## Experiencer verbs in Malabar Indo-Portuguese

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In the Malabar (SW India), the first Asian region settled by the Portuguese in the early 16<sup>th</sup> century, Indo-Portuguese developed in close contact with Malayalam. Although they were thought to be extinct (e.g. Smith 1995), the Indo-Portuguese creoles of the Malabar are currently being documented and described, despite the scarcity of remaining speakers (Cardoso 2006). Data collected in the form of interviews and elicitation in Vypeen (Cochin/Kochi) and Cannanore/Kannur adds to – and to a large extent calls into question – previous records from the late 19<sup>th</sup>-century (Schuchardt 1882; 1889), to provide insights into the oldest of all Eurasian creoles.

One of the most striking features of Malabar Indo-Portuguese is the degree of convergence with its major substrate language, Malayalam. Isomorphism can be identified in many domains, including word order and TAM marking, but very much so when it comes to verbal valency. In this talk, we will describe in detail the valency of experiencer verbs, which in Malabar Indo-Portuguese (1) derive etymologically from Portuguese verbs (2) but treat their arguments, with respect to case-marking, very much like Malayalam (3):

(1) Malabar Indo-Portuguese [Cannanore; elicitation, field data]

*tudə-pə māga tə gusta*  
all-DAT mango AUX like  
'Everyone likes mangoes'

(2) Portuguese [own knowledge]

*todos gostam de manga*  
all.PL like.PRS.3p of mango  
'Everyone likes mangoes'

(3) Malayalam [Asher & Kumari 1997: 199]

*ennikə avaḷe iṣṭam aaṇə*  
1s-DAT 3sf-ACC liking be-PRS  
'I like her.'

The adoption of this particular case-marking pattern amounts to the development of the so called “dative subject” in Malabar Indo-Portuguese, which is one of the most robust features underlying the South Asian *Sprachbund* (see Emeneau 1956; Subbarao 2012). Since there are no records of these languages prior to the 19th-century, the diachrony and exact circumstances of this development are difficult to reconstruct. However, the available 19th-century corpora (preserved in the Hugo Schuchardt Archive at the University of Graz) suggest dative experiencers coexisted with nominative experiencers, and were distributed along social lines. At that time, access to Portuguese/English and daily use of Malayalam appear to have been the determining factors governing (or blocking) the adoption of a Dravidian-like valency pattern for experiencer verbs.

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## On contact-induced shifts in argument realization: “expanding” ditransitive constructions in 19th century Belgian Dutch and present-day Afrikaans

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This paper is concerned with a specific type of contact-induced lexicogrammatical change, viz. shifts in the array of argument realization patterns available for certain classes of verbs in the recipient language that can be related to the structural possibilities of semantically related verbs from the source language. We focus on shifts in ditransitive complementation in two situations of strong language contact, viz. 19<sup>th</sup> Century Belgian Dutch and present-day Afrikaans.

Though it is well-known that 19<sup>th</sup> Century Belgian Dutch was heavily influenced by French, the extent of this influence in the domain of argument realization has never been systematically investigated. We will present the results from a case study into the lexical possibilities of the so-called *aan*-dative, which was used in 19<sup>th</sup> century Belgian language with all kinds of ditransitive verbs which, in Netherlandic Dutch, were limited to the double object construction (on these constructions, see, e.g., Colleman & De Clerck 2011). In contemporary comments, this “over-use” of *aan* was sometimes attributed to French influence, i.e. to the range of application of the grammaticalized French preposition *à* (see, e.g. De Vreese 1899). On the basis of corpus data from both literary prose and ego-documents from the period 1830-1880, we will investigate (a) exactly how wide-spread this over-use of *aan* was at the time and (b) whether there is any corroborating evidence for the hypothesis that this was a matter of French influence.

The second part of the paper turns to an ongoing shift in the complementation patterns of ‘dispossession’ verbs with the prefix *ont-* (‘away’) in present-day Afrikaans, which are increasingly used in a construction with a NP object and a PP with *van* that seems to be modeled on the English construction attested with verbs like *rob*, *strip*, etc.: i.e., *iemand ontneem van iets* etc. (lit. to away-take s.o. from sth) rather than *iemand iets ontneem* (lit. to away-take s.o. sth). This process will be illustrated with data from a corpus of Afrikaans newspaper texts that includes both broadsheet and tabloid material, and linked to other ongoing shifts in the area of ditransitive complementation (such as the rise of recipient passives). From a construction grammar perspective, both shifts can be seen as argument structure constructions (cf. Goldberg 1995, 2006) extending their lexical and semantic scope under the influence of partially functionally and formally equivalent constructions in the dominant language—thus, as a kind of *polysemy copying* (Heine & Kuteva 2005) or *semantic map assimilation* (Gast & van der Auwera 2012) in the domain of argument realization. As such, the investigation adds to the small but growing body of literature on constructions in language contact (e.g. Dogruöz & Backus 2009, Höder 2012).

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## Valency and transitivity in contact: the case of Coptic

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Coptic (Afroasiatic, Egypt), which was in intensive and long-term contact with Greek, is estimated to have approximately 5000 Greek-origin loan word types, with many tens of thousands of tokens. Of these types, close to 1000 are loan verbs. The question explored in this paper is the integration of loan verbs into recipient language valency and transitivity patterns.

For example, in Greek, the verb *diôkein* is a bivalent transitive, taking nominative and accusative as its core arguments:

(1) Koine Greek (Indo-European)

*ediôkon ton iêsoun hoi ioudai*  
 pursue.IMPF.3PL ART.ACC Jesus.ACC ART.PL.NOM Jew.PL.NOM  
 ‘The Jews pursued Jesus.’

In Coptic, however, the Greek-origin loan verb *diôke* is a bivalent intransitive, with its second argument marked by the preposition *nsa-* ‘after’:

(2) Coptic, Sahidic dialect

*nere-ni-ioudai-diôke nsa-iêsous*  
 IMPF-ART.PL-Jews-pursue after-Jesus  
 ‘The Jews pursued Jesus.’

This native valency pattern is typical of verbs whose meaning involves pursuit or persecution, e.g., *pôt nsa-* ‘run after, pursue.’ However, Coptic has a transitive pattern with accusative marker *n-/mmo-*, analogous to the Greek transitive construction in (1) above:

(3a) Coptic, Sahidic dialect

*a-f-baptizei n-iêsous*  
 PRET-3SGM-baptize ACC-Jesus  
 ‘He baptized Jesus.’

(3b) Coptic, Sahidic dialect

*a-f-baptizei mmo-f*  
 PRET-3SGM-baptize ACC-3sgm  
 ‘He baptized him.’

The valency and transitivity of the Greek-origin loan verb *diôke* differ from that of the Greek verb *diôkein*, but are matched to that of semantically similar verbs from the inherited part of the lexicon, e.g., *pôt nsa-* ‘pursue.’

	Greek <i>diôkein</i>	Coptic <i>diôke</i>	Coptic <i>pôt</i>
Valency	Bivalent	Bivalent	Bivalent
Valency pattern	NOM-ACC	NOM-OBL (‘after’)	NOM-OBL (‘after’)
Transitivity	Transitive (A/P)	Intransitive (S/E)	Intransitive (S/E)

This raises fascinating empirical and theoretical questions: given the existence of functionally analogous transitive constructions in Greek and Coptic, why is *diôke* integrated into a different – intransitive – valency patterns?

Based on a sample of 100 Greek-origin verbs in Coptic, the hypothesis developed in this paper is that the integration of loan verbs into target-language valency and transitivity patterns is primarily motivated by the respective **meanings** of the lexical item and of the valency pattern, or, in a slightly different perspective, of other extant verbs that participate in the same valency pattern.

## Verbal borrowing in Abasolo del Valle Mixtec

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It has been claimed that a verb is very hard to transfer from one language to another. One of the main reasons is that verbs have been considered to be the less free form of the language since they usually convey the morphology of it, which makes it so difficult for verbs to be borrowed in a language contact situation. In fact, it is claimed that verbs are not really borrowed as verbs but as nouns (Moravcsik, 1975). However, more recently, Wichmann and Wohlgemuth (2005) have proposed that there are four strategies that languages can follow in verbal borrowing. These are: the light verb, the indirect insertion, the direct insertion and the paradigmatic transference. Consequently, the main question that this paper will try to answer is: How are Spanish verbs transferred into Abasolo del Valle Mixtec? Are they transferred as nouns or do they follow one or more of the strategies pointed out by Wichmann and Wolgemuth?

According to our observations so far, the incorporation of Spanish verbs in Abasolo del Valle Mixtec follow the *indirect insertion strategy* since the causative prefix *sa*<sup>1</sup> is required, as in examples (1-3).

- (1) *ño kuu ña sa<sup>1</sup>ba<sup>1</sup>ta<sup>2</sup>llar<sup>2</sup> ntsitsa tsin*  
*ño kuu ña sa<sup>1</sup>-ba<sup>1</sup>ta<sup>2</sup>llar<sup>2</sup> ntsitsa tsin*  
 DET COP DET COMP.CAUS-to battleINT 1SG  
 ‘I battled so much with this’ {txt002e}
- (2) *kini ntsitsa nche'e tsa ka'an sa<sup>2</sup>re<sup>2</sup>nu<sup>2</sup>nciar<sup>22</sup> so*  
*kini ntsitsa nche'-e tsa ka'-an sa<sup>2</sup>-re<sup>2</sup>nu<sup>2</sup>nciar<sup>22</sup> so*  
 ADJ INT to look at-1SG ADV to believe-1SG INCOMP.CAUS-to quit INT  
 ‘I get angry, I am thinking to quit (the job)’ {txt168e}
- (3) *nikachi vi ku'un yu kaki kwacha, sa<sup>2</sup>de<sup>2</sup>ma<sup>2</sup>ndar<sup>2</sup>*  
*ni-kachi vi ku'un yu kaki kwachi sa<sup>2</sup>-de<sup>2</sup>ma<sup>2</sup>ndar<sup>2</sup>*  
 COMP-tell 3PL to go 1SG to put to blame INCOMP.CAUS-to lawsuit  
 ‘They told me to lawsuit, to lawsuit (them)’ {txt082e}

It is clear that the causative prefix *sa*<sup>1</sup>- is what makes it possible for the Spanish verb to be accommodated in the language. However, what is more important is that the causative *sa*<sup>1</sup>- is a result of a grammaticalization process of the lexical causative *sa*<sup>2</sup>’<sup>22</sup>. As a matter of fact, what this paper will try to show is that in a language contact situation, the transfer of verbs is possible but the process could be complex.

All the data that we will use in the paper comes from spontaneous conversations that we have recorded from several native speakers of Abasolo del Valle Mixtec.

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## Object clitics and null objects in contact: Evidence from the West Thracian Greek dialect

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The aim of this paper is to examine the hypothesis of syntactic borrowing of features of verbal transitivity (as well as the formal factors involved in the integration transitivity patterns) into the dialect of West Thracian Greek on the basis of spontaneous speech data. Western Thrace is considered a complex linguistic area since it is comprised of a bilingual Greek-Turkish community and a Greek dialect in a continuous strong contact with Turkish and Standard Greek. Preliminary results show that West Thracian Greek allows null definite objects in contrast to Standard Greek but similar to Turkish. The data show that the tendency for omission of the object is more frequent in contexts where Standard Greek shows obligatory use of 3<sup>rd</sup> person clitic (than in contexts of use of 1<sup>st</sup> and 2<sup>nd</sup> person; Tables 1, 3). It appears that the syntactic borrowing follows the characteristics of syntactic transfer in cases of bilingualism and L2 acquisition (Interpretability Hypothesis; Tsimpli 2003, Tsimpli & Dimitrakopoulou 2007, Tsimpli & Mastropavlou 2007) and that the transfer of transitivity characteristics in the case of language contact affects uninterpretable fea-

tures rather than interpretable features (see the omission of definite articles in contrast to indefinite articles, too; Tables 2, 4). We will show (a) how approaches to L2 acquisition can offer insights to cases of language contact and change; (b) the factors that determine the integration of the transitivity patterns to which loan verbs participate in the case of speakers of the dialect of West Thracian Greek (that allows null objects) and Standard Greek (that uses clitic objects that are marked for case and phi-features) which are both in strong contact in the area of Thrace with Turkish (that allows null objects and does not use clitics).

	3 <sup>rd</sup> PERSON CLITIC		1 <sup>st</sup> /2 <sup>nd</sup> PERSON CLITICS	
	Use	Omission	Use	Omission
3 speakers, village Lavara	58	2	9	0
5 speakers, village Metaksades	146	15	42	0

Table 1. Use and omission of object clitics in obligatory contexts

	DEFINITES		INDEFINITES	
	Use	Omission	Use	Omission
3 speakers, village Lavara	65	4	5	0
5 speakers, village Metaksades	249	28	53	0

Table 2. Use and omission of definite and indefinite articles in obligatory contexts

	3 <sup>rd</sup> PERSON CLITIC		1 <sup>st</sup> /2 <sup>nd</sup> PERSON CLITICS	
	Use	Omission	Use	Omission
One speaker (age 77, village Metaksades)	14	6	3	0

Table 3. Results from the data of one speaker: Use and omission of object clitics in obligatory contexts

	DEFINITES		INDEFINITES	
	Use	Omission	Use	Omission
One speaker (age 77, village Metaksades)	28	1	12	0

Table 4. Results from the data of one speaker: Use and omission of definite and indefinite articles in obligatory contexts

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## Loan valency patterns in creoles: Evidence from the *Atlas of Pidgin and Creole Language Structures (APiCS)*

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Creole languages show lexical material which goes back to a very large extent to the European (or other) lexifier languages. For instance, verbs in Seychelles Creole overwhelmingly stem from (dialectal) 18<sup>th</sup> century French: *manze* 'eat' (< French *manger*), *koze* 'speak' (< French *causer*), *gete* 'watch' (< French *guetter*) etc. But, as I will demonstrate and illustrate in this talk, creole languages consistently show valency patterns that cannot be traced back to their lexifier languages, but derive from their substrate languages. Some characteristic patterns of Atlantic and Indian Ocean creoles, which have mainly African languages as their substrates, are sketched schematically in the following table, where they are contrasted with patterns of their European lexifiers.

CONSTRUCTION	CREOLE	AFRICAN SUBSTRATE(S)	EUROPEAN LEXIFIER(S)
ditransitive	double-object 'Peter gives Marcel a mango'	double-object 'Peter gives Marcel a mango'	indirect-object 'Peter gives a mango to Marcel'
experiencer	body part is subject 'My head is aching (me)'	body part is subject 'My head is aching (me)'	experiencer is subject 'I have a head-ache'
raining	rain is subject 'Rain falls'	rain is subject 'Rain falls'	expletive subject 'It is raining'
motion-to/-from	identical marking 'I go/come Leipzig'	identical marking 'I go/come Leipzig'	different marking 'I go to/come from Leipzig'

South Asian, Southeast Asian, Australian and Pacific creoles partly show different patterns which can analogously be traced back to the relevant sub- or adstrate languages of these world regions.

Interestingly, this phenomenon has not been systematically described in creole studies, where most of these phenomena have been discussed in isolation (see e.g. Lefebvre 2011). The present paper argues, on the basis of large-scale cross-creole evidence (see the *Atlas of Pidgin and Creole Language Structures*, OUP 2013), that in the process of creolization creoles have to a large extent preserved the valency patterns of their respective substrates. The process through which this could have happened must be due to universal tendencies of second language use where speakers transfer entrenched abstract valency patterns from their native language(s) into the new developing creole. The amount of transferred "loan" patterns is certainly different from other less dramatic contact situations, but the qualitative outcomes as such seem to be very similar to what we find in other contact situations, e.g. in languages which have been in longstanding bilingual contact.

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## Valency – changing processes in a contact variety: the evidence from Cameroon Pidgin English

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Cameroon Pidgin English (CPE) is an expanded pidgin/creole spoken by some two million people, primarily in the Anglophone west regions, but also in urban centres throughout the country (Ayafor 2004).

This paper explores processes of valency change with a particular focus on (a) lexical and (b) constructional patterns. In the case of the former, verbs surface in CPE with different valency properties than in English, the lexifier language, but not as a consequence of participation in a productive syntactic construction. In the latter case, verbs undergo valency changes as a consequence of the serial verb constructions in which they participate, constructions that are built around a small set of frequently occurring verbs including 'take', 'make' and 'give'.

### Research questions

- Does CPE show simplification/restriction in valency patterns compared to the corresponding patterns in the contributing languages?
- Does CPE retain valency patterns of the corresponding substrate languages, and if so, which verbs are mostly affected?
- To what extent does high/low transitivity (in the sense of Hopper and Thompson 1980) influence the availability of a verb to valency changes?

### Approach and method

In the absence of a full corpus of CPE, we explore data from a range of sources including transcribed spoken data (e.g. Ayisi and Longinotto 2005, Todd 1979) and elicited data. The approach is descriptive-typological. We also explore comparative data from West African 'Standard' Englishes (e.g. Davies 2013, Huber 2012), expecting some typological differences to surface.

### Preliminary findings

#### (a) Lexical patterns

- One-place verbs: intransitives becoming transitive, e.g. *waka* (< *walk*) 'walk', 'travel' but also 'visit'; *laf* (< *laugh*) 'laugh at'; *luk* (< *look*) 'find', *shwim wata* 'swim water'.

- Two-place verbs: monotransitives becoming intransitives, e.g. ‘middles’ (*dat haus bil* (< *build*) *las yea* ‘That house was built last year’, *mek ol dat chop i los* (< *lose*) ‘Make all that food disappear’, as well as examples like *dinai* (< *deny*) ‘refuse’.
- Three-place verbs: these verbs are unlikely to lend themselves to change because of their transfer semantics (a cross-linguistic prototype), but we have some examples of these verbs in monotransitive frames, e.g. *draif* (< *drive*) ‘drive away’.
- Category change (A to V) is a well-known feature of creoles (CPE examples include *hongri* ‘be hungry’, *veks* ‘be angry’).
- Incorporation of phrasal verb particles: CPE has a number of verbs in which the English particle is incorporated into the verb, which can then take a prepositional (*fo*) complement, e.g., *shidon* (< *sit down*) ‘sit, stay, live’, *shidon fo daun* ‘sit down’.

#### (b) Constructions

- Valency increasing: CPE has productive valency-increasing constructions, which are realised by means of serial verb constructions (e.g. ‘make’ causative, ‘give’ benefactive, ‘take’ instrumental).
- Valency reducing: CPE has no passive for valency reduction; in addition to the valency-reducing ‘middle’ verbs mentioned above, CPE also employs the impersonal (‘pseudopassive’) construction, with an impersonal pronoun subject (CPE lacks expletive constructions, with some acrolectal exceptions).
- We observe that the same set of frequent verbs occur in serial verb constructions and ‘light verb constructions’ (Wohlgemuth 2009) e.g. *mek kompetishon* ‘make competition, compete’, *gi oda* ‘give order, order’.

In terms of areal features in the substrates, prototypical Bantu languages are well known for their productive valency-changing verb morphology, but some non-Bantu Bantoid languages of Cameroon (e.g. Kenyang) lack a morphological passive and causative, and also employ alternative constructions (impersonal pseudopassive, periphrastic causative) (Green & Tabé Oben, in prep.).

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### Dative experiencers as an Eastern-Circum Baltic isogloss?

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The paper presents an attempt at demonstrating how the evidence in favour of language contact can be provided for typologically frequently recurrent patterns. In particular, the paper aims to demonstrate that dative experiencer predicates in the Eastern Circum-Baltic area (and originally probably also including its Western part, namely, Scandinavian languages) constitute an important isogloss of the area. The main argument lies in the complexity of the correspondence in dative experiencer constructions. Thus, not only do the patterns themselves superficially correlate across the languages, but also the respective syntactic properties of the dative experiencers show similarities.

While dative experiencer pattern is not typologically infrequent (Gupta and Tuladhar 1980; Bossong 1998, Haspelmath 2001, Verhoeven 2010, inter alia), it still appears striking that the languages under investigation exhibit correspondences over a whole array of parameters and properties, e.g., the employment of the same conceptualization of the experience events, correspondences in derivational verb morphology, common tendencies in the renewal

of the dative encoding, correspondences in syntactic behaviour, and a higher type frequency of this pattern than in other *Standard Average European* (SAE) languages, even closely related ones (Bossong 1998).

The dative experiencers seem to pass or fail the same subjecthood tests across Estonian, Finnish, Russian, Latvian and Lithuanian.

Furthermore, the very morphological realization of the dative-like argument exhibits diachronic correlations that cannot be explained as typologically frequently recurrent drifts and hence as potentially independent changes. In Finnish and Estonian (to a different degree though) as well as in Russian we observe that the old case-marking, the genitive, used for coding of various meanings from the dative domain (such as predicative possessors, experiencers, recipients, etc.) is being replaced by a new one based on the adessive (at X) periphrasis, cf. more conservative (i) as opposed to (ii):

- (i) *Minun on sääli* + PART Finnish  
I:GEN be:PRS.3SG sorry  
(ii) *Minulla on sääli* + PART Finnish  
I:ADESS be:PRS.3SG sorry  
'I am sorry (about someone).'

Estonian allows only for the adessive case here, while Russian still uses the old dative here. The predicative possessor in turn can only be encoded by the adessive case in Estonian and the adessive-like PP in Russian. This is also the standard coding in Finnish which, however, still attests the old strategy, namely, the genitive exactly as does Old Russian with its dative-marked predicative possessors.

Russian splits here even from other Slavic languages in introducing the adessive periphrasis for marking experiencers, cf. (iii):

- (1) *U menja bolit golova* Russian  
At me aches head  
'I have a headache'

The experiencer of this verb in other Slavic languages as well as in Old Russian is marked either with accusative or dative but not by a PP. Other languages at issue, namely, Latvian and Lithuanian are more conservative and attest only the old strategy. Interesting is Livonian which splits here into two dialects, one of which uses the old Finnic strategy (the old genitive) for encoding the dative functions while the other dialects employs the new strategy, namely, the former adessive case to encode dative functions:

	Old DAT strategy	New DAT strategy (based on a locative expression)
Russian	<i>dative</i>	<i>adessive PP</i>
Finnish	<i>genitive</i>	<i>adessive and allative</i>
Estonian	-	<i>adessive and allative</i>
Livonian / North-eastern, Salis dialect	-	<i>dative &lt; adessive and allative</i>
Livonian / South-western, Curonian dialect	<i>dative &lt; genitive</i>	-
Latvian	<i>dative</i>	-
Lithuanian	<i>dative</i>	-

Table 1. *Diachronic changes in the encoding of the DAT domain*

Additionally, a number of predicates discussed here constitute themselves material borrowings providing another piece of evidence for the main claim that the dative experiencer constructions in the East of the Circum-Baltic area did undergo mutual convergence effects.

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## How the English came to like French *please*: Syntax and semantics of psych verbs in the medieval English-French language contact situation

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It is a well-known fact that the Norman Conquest of 1066 led to a contact situation between English and French for more than four hundred years which resulted in a number of linguistic consequences for the English language, for example the massive borrowing of loan words from French (e.g. Burnley, 1992, Hogg, 2000). Although these so-called lexical borrowings have been investigated in some detail (e.g. Rothwell, 1980, 1983) hitherto no study has comprehensively and systematically dealt with the syntactic and semantic factors involved in determining the integration of French verbs into the valency and transitivity patterns of English. We seek to fill this gap in a research project on argument structure in this contact situation.

In her study on the loss of case marking, Allen (1995) found that the verb *please* was borrowed from Old French (OF *plaire, plaisir*) and gradually replaced the Old English (OE) verb *queman* ‘please’. Although OE *lician*, another native verb with the same argument structure, existed it was *queman* that was replaced and not *lician* because the latter was nearly synonymous to *please* requiring an animate, volitional THEME. In our corpus study on these verbs we make two observations: 1. at the beginning of the borrowing process *please* occurs with a PP having the function of an indirect object, as in French, predominantly in texts based on a French original (see example (1)); 2. in Middle English texts based on a French original the native verb *liken* (ME form of ‘like’) occurs with a PP having the function of an indirect object (see example (2)). Possibly, the French pattern occurring with *please* was transferred to native verbs with a similar meaning.

- (1) *And þe wordes of my mouþe shul ben, þat hij plesen to þe*  
 And the words of my mouth shall be that they please to you  
 ‘And the words of my mouth shall be such that they please you.’  
 (EARLPS,21.842)

- (2) *But zif this matiere plese to ony worthi man þat hath gon be þat weye he may*  
 but if this matter pleases to any worthy man that has gone by that way he may  
  
*telle it Zif him lyke to þat entent ...*  
 tell it if him like to that intent  
  
 ‘But if this matter pleases any worthy man that has been gone that way he may tell if that intent pleases him that’  
 (MANDEV,83.2108)

In this paper we will investigate changes in transitivity/valency and tackle the following questions by taking a closer look at the verbs of liking and other verbs in the psych domain: a) Is there a difference between the replacement of an extant verb and the borrowing of a new verb? b) How is the mismatch of syntactic patterns dealt with? c) More generally, do the verbs borrowed from French share certain semantic or syntactic properties? Our investigations are based on data extracted from syntactically annotated corpora for Old French (Martineau, 2009; Prévost and Stein, 2013), Old English (Taylor et al., 2003), and Middle English (Kroch and Taylor, 2000) as well as from direct translations of OF texts, for example the ME text *Ayenbite of Inwyrt* (Morris, 1866).

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## Valency patterns of Nlŋg in contact

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Nlŋg is the last living member of the !Ui branch of the Tuu language family (cf. Güldemann 2000, 2005). Nlŋg is a moribund language currently spoken by less than 10 elderly individuals in the Northern Cape Province of the Republic of South Africa. All speakers of Nlŋg use a variety of Afrikaans (Germanic) as their language of daily communication.

Present-day Nlŋg employs a variety of argument marking patterns. Apart from a very common two-argument pattern with both arguments unmarked, as in (1b), and an obliquely-marked recipients/goals of three-argument verbs, a range of prepositionally-marked two- and three- argument patterns are found in the corpus, as in (2a–2e) from Ernszt et al. (2013).

- (1) a. *sa hoo-a mari!*  
1PL.E get-PFV money  
'We got money!'
- b. *Na lae ll'aa u ng l'kx'ain.*  
1SG send go 2PL OBL town  
'I send you to town.'
- (2) a. *A a si ll'ae !auk-a ng n/ŋg.*  
and 2SG IRR go become.frightened-STAT OBL 1SG.OBL  
'And you should be afraid of me.'
- b. *U ke si ll'aa ng ll'qann!*  
2PLFOC IRR die OBL hunger  
'You will die of hunger!'
- c. *N/ŋg#ee huniki hoo ng ki.*  
people all get OBL 3SG  
'Everybody gets (a piece) of it.'
- d. *#oo ke n!ao kuni-si n!a l'hee.*  
man FOC load cart-SG COM grass  
'The man loads the cart with grass.'
- e. *#oo ke #unna xabasi ng !khaa.*  
man FOC fill-PFV glass-SG OBL water  
'The man filled the glass with water.'

The present paper investigates the gradual integration of Afrikaans valency patterns into Nlŋg in the context of language attrition (Sands et al. 2007). For this, valency patterns found in the extensive corpus of the present day variety of Nlŋg are compared with available historical Nlŋg corpora from different periods (from the 1910-s, 1930-s and from 1960-s) allowing to trace the growing influence of Afrikaans on the valency patterns. In addition, available data from meanwhile extinct genealogically related languages of the Tuu family are taken into consideration. They show less variable – and presumably, more conservative – valency patterns than the present-day Nlŋg.

Among the major directions of change is the extension of the set of verbs that allow for an oblique-marked argument encoding partially corresponding to non-canonical marking patterns of Afrikaans and the increasing polysemy of the comitative preposition.

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## **WORKSHOP: VERBAL PREFIXES AND PARTICLES. EMPIRICAL RESEARCH IN GRAMMATICAL ASPECT AND LEXICAL SEMANTICS**

*Convenors: Będkowska-Kopczyk, Agnieszka (University of Bielsko-Biała, Poland); Glynn, Dylan (University of Paris 8, France); Parrott, Lilli (University of Paris 8, France)*

The prefixes (preverbs, coverbs *etc.*) and particles (adpositions, intransitive prepositions *etc.*) associated with verbal constructions, such as those in the Slavic, Finno-Ugric and Germanic languages, represent one of the most complex fields of linguistics. At once central to the aspectual system and verbal semantics, understanding their interdependent role in both the grammar and the lexicon is crucial to language description.

The aim of the workshop is to bring together empirical linguists working on these phenomena, regardless of their theoretical orientation. The insights from examining these phenomena in different languages and from different points of view, it is believed, will advance each individual line of research. These lines of research include:

### **Semantics:**

Our understanding of the semasiological and onomasiological structure of verbal prefixes and particles is crucial to their description. From introspection-based research in polysemy and near-synonymy (Janda 1986, Šarić 2008) to current corpus methods employing advanced multivariate statistics (Divjak 2010), advancing analytical methods in order to improve descriptive rigor is crucial for the description of this notoriously difficult domain of research.

### **Comparative:**

One of the most difficult problems for the description of verbal prefixes and particles is the abstract and subtle nature of grammatical semantics involved. One solution is to use other related languages and grammatical systems as *tertia comparationis* in the analysis. This approach has a relatively well developed tradition (Sokolova & Lewandowski 2010; Šarić 2013) but this is less well developed in the Germanic tradition and has yet to be applied in corpus-driven research in the field.

### **Sociolinguistics:**

The extralinguistic structuring and variation of prefixes and particles have received little systematic attention, this is despite the fact that often choice between prefixes and use of certain particles can be stylistically or regionally motivated or marked. With the development of electronic corpora, the possibility for developing this dimension of our understanding of these phenomena is increasing.

### **Typology:**

How do these phenomena inform typological research? Research into the families of constructions (Holvoet 2003) and into semantic-conceptual phenomena more generally (Talmy 2000) across languages can help explain language relations and human linguistic structuring. Prefixes and preverbs, as canonical examples of grammatical semantic structuring, have an important role in this regard.

### **Constructions:**

Can construction-based research improve over lexical / morphological based-approaches? Construction grammar developed in languages with relatively simple morphology, yet complex syntax. The analytical apparatus is designed to account for complex structures such as those displayed in the interaction of lexical and morphological coding of events and scenes (Fried & Östman 2004). For our understanding of verbal prefixes, how does this analytical apparatus improve upon the traditional lexical and morphological approach (Sokolova 2013)?

### **Aspect and Aktionsart**

Understanding the interaction of aspect and Aktionsart in the preverbal system has a long and well-respected tradition in the Slavic linguistic research. (Bondarko 1971, Belaia 1996, Mlynarczyk 2004; Ignatova 2008 *inter alia*). Although this tradition continues and will necessarily play a role in this theme session, understanding how verbal particles interact with aspect in Germanic languages represents a relatively new line of research and one where Germanic linguists could learn from the Slavic and Finno-Ugric research.

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## Semantic and syntactic features of the Slovene prefix *v-* 'inwards': a cognitive corpus-based analysis

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The aim of this presentation is twofold: 1) to reevaluate an account of the Slovene prefix *v-* 'into' offered by Maria Wtorkowska (2004) and 2) to set up a semantic network of the prefix's spatial and abstract sub-meanings on the basis of a cognitive corpus-based analysis. Using data from the Dictionary of Standard Slovene Language, Wtorkowska proposes a list of fifteen, unrelated, meanings of the prefix. These meanings emerge mainly from the lexical features of the base verbs and different figure/ground alignments of the scene participants (Talmy 2000). Although the author states that, in Slovene, *v-* indicates a direction of motion 'into something, inwards', she does not present any relationships among the listed senses.

Following cognitive studies of spatial particles in Slavic (e.g., Janda 1986), I will offer a semantic description of the Slovene prefix *v-* that is organized around the prefix's prototypical meaning. In verbs of motion and action the prefix prototypically denotes the Figure object's motion into a spatial (prototypically container-shaped) ground. The ground can be encoded by a prepositional phrase, as in (1) and (2) or it can be lexicalized in the verb (Talmy 2000), as in (3):

- (1) *vstopiti v sobo* 'to enter a room'
- (2) *vлити mleko v lonec* 'to pour milk into a pot'
- (3) *vročiti listino* 'to serve a document' 'to cause a document to come into someone's hand'

I claim that *v-* prototypically denotes motion inwards, i.e. a type of translational motion into a container-shaped Ground entity (Talmy 2000). Depending on the figure/ground alignment, i.e. the scene construal (Langacker 1987), the Figure object's motion can be conceptualized either as self-agentive (1) or caused (2) and (3); yet the central meaning of *v-* remains the same.

This presentation will aim to discuss also the following issues:

- the physical and abstract sub-meanings of *v-*;
- the relationship between the prefix's meaning and the meaning that emerges from the base verb;
- containment and proximity vs. the locative and adlative meaning of *v-*;

- encoding the complex event of motion by *v-* considered as a Path satellite (Talmy (2000)) and the prepositions *v* ‘into’, *na* ‘on’, and *skozi* ‘through’ occurring in prepositional phrases that refer to various shapes of the ground referents;
- the relationship between the spatially-based meaning of *v-* and its meaning in the temporal domain.

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## The polysemy of the Croatian verbal prefix *od-*

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Since its beginnings, cognitive linguistics and cognitive grammar (Langacker 1982, 1987, 1988a, 1988b, 1988c, 1988d, 1991, 2000, 2008, 2009; Taylor 2002) have taken a keen interest in spatial prepositions, verb particles and verbal prefixes (e.g. Brugman 1981; Lindner 1981; Rudzka - Ostin 1985; Janda 1985, 1986, 1988; Lakoff 1987; Taylor 1995; Šarić 2003, 2006a, 2006b, 2008). These structures combine two central concerns of cognitive linguistics: the linguistic coding of space (a basic cognitive domain present in a range of linguistic forms) and a search for the conceptual motivation of linguistic units.

In this paper we shall present our empirical study of the Croatian verbal prefix *od-* and its allomorphs *oda-*, *o-*, and *ot-*, addressing both their prototypical spatial sense (ablativity) and a number of their conceptually motivated meaning extensions.

In this way we shall (once more, cf. Belaj 2008, 2011) depart from the Croatian descriptive tradition of ignoring the semantic motivation behind different uses of the same prefix (e.g. Babić 1986). However, we shall also depart somewhat from the cognitive linguistic tradition of relying (exclusively) on semantic networks to explain the polysemy of linguistic categories (e.g. Janda 1985, 1986, 1988).

While we acknowledge the importance of low-level patterns, categorization by prototype and the value of indirect conceptual links established through meaning chains, the aim of this paper is to show that the polysemy of the prefix *od-* can be reinforced by postulating a single superschematic structure, viz. the ablative superschema inherent to all verbs prefixed by *od-*. This should not suggest that we subscribe to a monosemy approach, rather we suggest that the superschema allows us to unify the patterns established in our database and thus facilitates polysemy.

We will also try to compare occasional cases where the same base verb features two prefixal alternatives, *od-* and *iz-*, both of which instantiate the schema of ablativity (e.g. *otrčati utrku* lit. *off-run race* ‘finish (running) the race vs. *istrčati utrku* lit. *out-run race* ‘finish (running) the race’).

As we survey the different conceptual clusters of *od-* verbs which elaborate the ablative superschema and depart from the spatial ablative prototype, we shall pay special attention to the (morpho)syntactic reflexes of these extensions. We expect syntactic anomalies/changes with clusters/verbs distant from the category prototype. The category prototype itself will be meticulously defined by referring to a number of parameters such as the status of the trajector and landmark as concrete or abstract, their mutual distinctness, trajector’s motion through the spatial vs. nonspatial domain, the transitivity of the verb, and overall (non-)metaphorical interpretation.

We will compile our database from the most authoritative dictionary of contemporary Croatian (Anić 2004), and verify the verbs’ usage patterns in the Croatian National Corpus. As some examples can only be properly interpreted with the help of the context (e.g. *otrčati od kuće* off-run from house; ‘run away from the house’ vs. *otrčati utrku* lit. off-run race ‘finish the race’), the use of contextualized corpus examples will be essential for capturing and illustrating the different patterns in our database.

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## Verbal prefixes/particles in aspectual composition

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In the talk we provide a deeper analysis of the function of prefixes/particles in aspectual composition and the role they play in realizing a telic incremental theme predication (ITP). Incremental theme verbs (e.g. *eat, drink*) are well known for the fact that the referential properties of the incremental theme arguments (ITA) affect the telicity of the whole predication (e.g. Krifka 1986, Filip 1993/1999). We focus on the contrast between Germanic and Slavic, which differ concerning aspectual composition. Slavic languages, like Polish (1), make use of the perfective/imperfective opposition to realize a telic ITP. Germanic languages lack a grammaticalized aspectual distinction and mainly employ nominal determination, i.e. (in)definite article, for aspectual composition. In contrast, most Slavic languages, with the exception of Upper Silesian Polish and Bulgarian/Macedonian, lack a definite article.

(1)	(a)	On	pił	wodę	(*w	godzinę).
		he	drank.IMPF	water.ACC	in	hour
		<i>He drank water.</i>				
	(b)	On	wy-pił	wodę	w	godzinę.
		he	WY-drunk.PF	water.ACC	in	hour
		<i>He drank the water in an hour.</i>				

Similarly to the Slavic languages, Germanic ones have a large set of verbal particles (Stiebels 1996, Müller 2002), which interact with aspectual composition. This is exemplified by German (2), in which case the verbal particle requires a quantized ITA.

(2)	(a)	*Er	hat	Wasser	aus-getrunken.	
		he	has	water	AUS-drunk	
	(b)	Er	hat	das	Wasser	aus-getrunken.
		he	has	DEF	water	AUS-drunk

*He drank the water out.*

The German examples look very much like what we can observe in Upper Silesian (3). A definite article is required to get a telic reading. In addition, the verb has to be used in the perfective aspect, like in Polish, for a telic interpretation. This is exhibited by the contrast between (3) and (4), as the unprefixated and imperfective verbs in (4) only license an atelic reading, irrespective whether the definite article is present or not.

(3)	(a)	#Łon	wy-pioł	woda.			
		he	WY-drunk.PF	water. ACC			
	(b)	Łon	wy-pioł	ta	woda	(za	godzina).
		he	WY-drunk.PF	DEF	water.ACC	in	hour
		He drank the water in an hour.					
(4)	(a)	Łon	jod	jabk-o	(*za	godzina).	
		he	drank.IMPF	apple-ACC.SG	in	hour	
		<i>He ate/was eating (of) an apple.</i>					
	(b)	Łon	jod	te	jabk-o	(*za	godzina).
		he	drank.IMPF	DEF	apple-ACC.SG	in	hour
		<i>He ate/was eating (of) the apple.</i>					

The prefixed verbs in the three languages require a quantized ITA, as shown by the definite interpretation in (1b) and the necessary presence of the definite article in (2b)/(3b). Nevertheless, only in the Slavic languages do prefixes add a perfective reading. The data raise the question whether telicity is really dependent on perfective aspect or rather results from the lexical semantic of the prefix.

The data for the three investigated languages were elicited from native speakers and supplemented by data from the literature (for example Wierzbicka 1967, Müller 2002). We used grammaticality tests which were discussed by, for example, Filip (1993/1999) among others, to decide whether certain constructions get a (i) definite, (ii) perfective and/or (iii) telic reading in the investigated languages.

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## Polysemy of the verbal prefix *od-* and the preposition *od* in the Standard Macedonian

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Verbal prefixes and prepositions in the Indo-European languages are known to go back to the same source. In Old Slavic adverbs became prepositions in combination with nouns and turned into prefixes when combined with verbs (Khaburgaev 1974: 327). There are a lot of studies of Slavic prefixes and prepositions containing discussion about how their semantics should be represented, what are semantic relationships between different meanings etc. (Dobrushina, Mellina, Paillard 2001; Janda 1986; Svenonius ed. 2004; Paillard, Seliverstova ed. 2000, a.m.o.).

In this paper, I examine conceptual relations between various meanings of the verbal prefix *od-* 'from' and the preposition *od* 'from' in Standard Macedonian, trying to establish possible directions of semantic evolution, thus proposing semantic network for both: the preposition and the prefix. The study reported in the paper is done in the spirit of Cognitive Linguistics (Landau, Jackendoff 1993; Langacker 2008; Paillard, Seliverstova ed. 2000). In particular, I assume that locative uses of the preposition and the prefix are original from both a conceptual point of view, and are starting point for development of more abstract uses, including temporal, causal and some others. The data for this study mostly come from a morphologically annotated newspaper corpus of Macedonian (soon to be launched on the internet), but also from fiction literature and some secondary sources like grammars and dictionaries of Macedonian.

I show that in the Standard Macedonian, like in the rest of Slavic languages, both the verbal prefix *od-* ‘from’ and the preposition *od* ‘from’ have a wide range of uses, connected in semantic networks. Although they come from a common origin and still have similar semantics in their locative uses, they show very different developments in non-spatial domain (special attention is paid to cases where a non-locative use of the preposition/prefix apparently cannot be derived from their locative meaning). The semantic network of the preposition *od* includes such uses as *source – causation, reason, stimulus, material, possessive, locative, agent in passive constructions*. In contrast, prefix *od-* goes in a direction common to all Slavic languages, marking of perfectivity (Bondarko 1971; Zaliznyak and Shmelev 2000; Janda 2006 etc). Comparison of semantic networks for both, prefix and preposition clearly shows that semantic evolution of a locative marker depends on its morphological status and syntactic distribution.

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## Beats-and-Binding topics in the (mor)phonology of {con-} and {ex-} in English

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This paper aims to examine selected aspects of word-medial lenitions in the Latinate prefixes ({con-} and {ex-}) in English, in particular those involving [ŋ/n] in {con-} and [s/z] in {ex-}. The discussion in the case of the {ex-} prefix builds on the work by Sobkowiak (1996). In the case the {con-} prefix the analysis builds on the insight by Chomsky–Halle (1968: 419) who observed the difference in the nasal assimilation of the pair such *Congress*, *Concord* [ŋ] and *Congress / Concordance* ([n]). The thought was later developed by Hoarde (1971), who proposed the explanation in terms of the difference in different syllabification pattern.

My interpretation is couched in the paradigm of Beats-and-Binding phonology (cf. e.g. Dziubalska-Kołodziej 2002, 2009), which is a syllable-less model in the paradigm of Natural Phonology. B&B’s account of rhythmic typology is what makes this a particularly good model for analyzing my data. To recall briefly, in B&B a suggested scenario for the structuring of phonology is four-layered, with the stipulation that “rhythm comes first” (Dziubalska-Kołodziej 1995: 66).

I explore this possibility proposing that the tonic beat in Prototypical Stress Timed languages contains a stress concentrator ( $\Sigma$ ), which propagates through bindings on the tonic (bearing both and also secondary stress) vowel inducing the lenition. This type of lenition, which is caused purely by level 0 (rhythmic preferences), is called the ‘worst-case scenario’ here. The basis for the analysis is a corpus of lexical entries, collected from several English online and paper pronouncing dictionaries and for a (e.g. Forvo) as well as recordings by the author of a native speaker as a collateral corpus. The analytical criterion was the presence of the nasal and the sibilant as the final consonant in the prefixal formative. In the case of {ex-} the data initially categorized into seven types were further collapsed into four algorithms, taking into account also a phonological reaction to /h/. I also show that English prefixation involves an active process of reanalysis (c.f. Bynon 1977), also called back formation (e.g. Nagano 2007). Additionally, the analysis motivates the claim that there is no duality in English prefixation (class 1/2; *cohering* versus *non-cohering*): since OE there seems to have been only one phonological mechanism for English prefixation: there is no communication between the root and the prefix, which leads to reanalysis.

I propose to interpret the varying realizations with {con-} (and to some extent, also valid for {in-} and {syn-} Latinate prefixes) as a natural phonological process of lenition. The sigma fosters the obliteration of the morphological boundary. Assuming the reason for the phenomenon discussed is the elimination of a morpheme boundary, which is fostered by the stress, the assimilations and lenitions operate as if morpheme internally, that is, a natural phonological process is free to unfurl.

$$k^{\Sigma} \rightarrow o \leftarrow \Sigma \eta \mid S^{\vee} \rightarrow$$

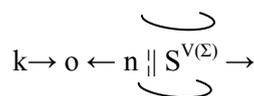


Fig. 1. A visual representation of the  $\Sigma$  dynamics for the {con-}.

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## A usage-based quantitative study of *believe* and its near-synonyms in Polish

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The present paper offers a quantitative, usage-based, semasiological study of the Polish verb *wierzyć* ‘believe’ (something to be true/in God/someone) or ‘trust sb’ and its prefixed near-synonyms *uwierzyć* ‘believe’ (sth to be true/in God/somebody) or ‘trust sb’ and *zawierzyć* ‘begin to trust sb or sth, entrust sth to sb’. The aim of the paper is to discuss the semantico-syntactic behaviour of the lexemes in question relative to a range of formal and semantic properties, including: object semantics, aspect, tense, mood, person, number, subject form and object form. It is hypothesized that the verbs will differ with respect to aspect, mood, object form and, possibly, tense.

The prefix *u-* is known to change the aspect of a verb by perfectivising it. It can signal the completion of an action, e.g. *ukraść* ‘to steal sth’, the removal of something, e.g. *uprowadzić* ‘kidnap’ or the completion of an action despite difficulties, e.g. *usiedzieć* ‘sit’. The prefix *za-*, in turn, expresses reaching the goal of an activity, the utmost intensity of an activity or state, e.g. *zabić* ‘kill’, *zamrozić* ‘freeze’, a momentary action, e.g. *zabeczeć* ‘bleet’, the beginning of an action or state, e.g. *zachorować* ‘fall ill’, or trespassing the boundaries, e.g. *zasiedzieć się* ‘to stay somewhere for much too long’ (*Dictionary of the Polish Language*).

The data for the study come from the *National Corpus of the Polish Language*. It is a 40 million word corpus consisting of fragments from books, newspapers, magazines, recorded conversations, promotional leaflets and websites. A demo version of 7.5 million is freely available and this is the part that has been used for the purpose of the present study. 300 instances of each verb have been extracted from the Corpus and coded manually for the semantico-syntactic features listed above (Divjak and Gries’s ID tags). The results were then submitted to Correspondence Analysis (Glynn 2012) and Logistic Regression Analysis (Speelman 2012), exploratory and confirmatory statistical tests. While the former determines patterns of use, the latter evaluates the statistical significance of the findings and descriptive accuracy of the analysis.

The methodology adopted is the quantitative, usage-based cognitive linguistic analysis of the verbs in context (Geeraerts *et al.* 1994). Working with language corpora means instant access to large samples of generically diversified evidence. Quick and easy data retrieval, naturally, facilitates empirical verification of research hypotheses. Once annotated, the material extracted from the corpus lends itself to a variety of analyses, including the detection of correlation patterns otherwise elusive and potentially imperceptible to the human eye for the sheer number of tokens. It is assumed that that corpus data reflect, at least to a certain extent, the choices made by language users and that the frequency of an item testifies to its significance within the system.

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## Russian prefix *pro-* and Latvian *no-* as productive perfectivizers of borrowed verbs

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In terms of verbal prefixation, Latvian, the Baltic language, shows both formal and contentive similarities with the Slavic languages. The Baltic languages have not developed the aspectual system as a grammatical category as the Slavic languages. In Latvian, prefixation is relevant not only for *Aktionsart*, but also the aspectual opposition among a certain number of verbs, including borrowed verbs. In this paper, the Russian prefix *pro-* and the Latvian prefix *no-* are compared in their function of perfectivizing borrowed verbs. Although the aspectual system of both languages differ, both prefixes are productive perfectivizers of borrowed verbs. A focus on perfectivization of borrowed verbs allows to shed light on the word-formation tendencies of the languages and see whether the prefixation of borrowed verbs mirrors that of native verbs.

The research is based on the empirical data: the list of more than 500 parallel borrowed verbs in both languages are being compiled and the prefixability of *pro-/no-* for the borrowed verbs is analyzed. The data are taken from the database of periodicals: for Russian [www.integrumworld.com](http://www.integrumworld.com) and for Latvian [www.news.lv](http://www.news.lv). The choice of the mass media language is explained by the fact that it often reflects the linguistic changes and allows to follow newly derived verbs.

Two prefixes does not differ in expressing perdurativity (ru. *prosīdet' čas* / lv. *nosēdēt stundu* 'sit for an hour') and perfectivity (ru. *pročitat' knigu* 'read a book' / lv. *nodziedāt dziesmu* 'sing a song'). The Russian prefix *pro-*, based on its spatial meaning "through", perfectivizes verbs: *pročitat'* 'read (through)' and even with the abstract lexical meaning (*prodemonstrirovat'* 'demonstrate'). The prefix is one of the most productive prefixes perfectivizing borrowed verbs (Guiraud-Weber 1999, Janda & Lyashevskaya 2013). The prefixability of the Latvian *no-* is the highest (40% of 1230 borrowed verbs according to Horiguchi 2013). Desemantizing its spatial meanings "down", "away" and "off", it perfectivizes verbs with the wide range of lexical meanings (*nodemonstrēt* 'demonstrate'). In both languages, aspectual pairing of borrowed verbs by prefixation is in a state of flux: unprefixated verbs may function as bi-aspectual verbs, even in Russian where the verbal aspect is grammaticalized. Both prefixes are often confronted by other prefixes which perfectivize verbs, keeping a tighter lexical connection with the base verb (for 'marinate' – ru. *zamarinovat'*: the prefix *za-* 'future-oriented nature, covering', lv. *iemarinēt*: the prefix *ie-* 'in' against *promarinovat'* / *nomarinēt*, for 'balance' – ru. *sbalansirovat'* / lv. *sabalansēt*: the prefix *s-/sa-* 'together' against *probalansirovat'* / *nobalansēt*).

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## Bi-aspectual verbs and their prefixation in Croatian

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In Lehmann's Formal-functional Theory of Aspect (2009), this category is viewed as derivational and grammatical at the same time, because it is possible to derive aspectual pairs with opposite aspectual meanings (*kupovati<sup>i</sup>*, *pročitati<sup>p</sup>*) from the verbs which do not have aspectual affixes (*kupiti<sup>p</sup>*, *čitati<sup>i</sup>*). However, all Slavic languages have bi-aspectual verbs (*ručati<sup>i/p</sup>*, *kopirati<sup>i/p</sup>*), which express both aspects, even without any special aspectual affixes (for Croatian see Barić et al. 1997). There are various explanations of this phenomenon: in some theories it is considered that such verbs have lost the possibility to express aspectually opposing meaning; some linguists speak about aspectual neutralisation (Kravar 1980) and others describe them as aspectless (Mønnesland 2003).

Unlike for Russian, for which dozens of papers about this topic are published, only few works appeared in literature, which directly or indirectly elaborate such verbs in Croatian (Belić 1955-56, Magner 1963, Lazić 1976). The most recent study (Smailagić 2011) brought a list of bi-aspectual verbs.

The following paper should make clearer the status of bi-aspectual verbs; it will deal with verbs which do not have any proof of formal aspectual difference (Ex. 1).

(1) *Marko je kopirao<sup>i?p?</sup> knjigu.*

The goal is a new, empirical, corpus-based investigation of the possible change of bi-aspectual verbs to affixed verbs, which can form aspectual pairs through the means of prefixation or suffixation. It is assumed that native speakers, when using bi-aspectual verbs, will try to derive new verbs using the existing affixes because they make the aspectual meaning more transparent (Ex 2).

(2) *Marko je iskopirao<sup>p</sup> knjigu.*

The main hypothesis is that prefixation will be more frequent in the group of bi-aspectual loan verbs (*parkirati<sup>i/p</sup>*), while new verbs from bi-aspectual verbs of Slavic origin (*večerati<sup>i/p</sup>*) will be derived by both: suffixes and prefixes. In that respect, it can be assumed that the older loan verbs, from 17<sup>th</sup> to 18<sup>th</sup> century (Jernej 1959), like *diktirati<sup>i/p</sup>* will form aspectual partners more easily than newer loans like *daunlodirati<sup>i/p</sup>*.

It is impossible to avoid discussion, if we are dealing with aspect or *Aktionsart* in such cases. Further, based on Lehmann's theory it will be showed why at least some of new derivatives should be considered as aspectual partners and not as resultative *Aktionsart* derivatives.

This contribution will be made in the light of formal-functional theory. The hypotheses presented above should be proved in the biggest Croatian dictionary Hrvatski enciklopedijski rječnik, available at <http://hjp.novi-liber.hr/> and in three different Corpora of Croatian language. It should be emphasised that the first two represent standard Croatian language: Croatian National Corpus, Hrvatska jezična riznica; and Croatian Web Corpus shows which forms do we use in colloquial Croatian.

As first tentative research shows, the differences in attesting some forms should be expected, for instance *iskopirati<sup>p</sup>* had in CNC 19, in HJR 13 and in CWC 1.060 hits. Although this prefixed verb is very common in colloquial Croatian, the same still hasn't gained its entry in the biggest descriptive dictionary of contemporary Croatian. Why that is so, is a question to answer.

Key words: aspect, bi-aspectual verbs, prefixes, derivation

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## Corpora of Croatian language:

- Croatian National Corpus [http://filip.ffzg.hr/bonito2/run.cgi/first\\_form](http://filip.ffzg.hr/bonito2/run.cgi/first_form)  
 Hrvatska jezična riznica <http://riznica.ihjj.hr/index.hr.html>  
 Croatian web Corpus <http://nlp.ffzg.hr/resources/corpora/hrwac/>

## Comparative study of the Ossetic preverb system

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Ossetic is one of the few Indo-European languages which during nearly two thousand years have developed in close contact with the Caucasian languages. During this period a lot of new features emerged in the Ossetic language as a

result of the areal contact with languages possessing quite different grammatical structure. As previous researchers pointed out (Abaev 1949, Ahvlediani 1963, Isaev 1987, 1966, Thordarson 2009), one can find many features in Ossetic, unusual for an Iranian language, but every time the question arises: which contact language or language family those phenomena come from.

The Ossetic system of preverbs is unique among the Iranian languages: all other modern Eastern Iranian languages (and other Iranian languages as well, to the best of my knowledge) have retained the old Iranian preverbs that have been lexicalized and are no longer productive at the synchronic level. The combination of the locative meaning with the deictic component in Ossetic preverbs is also an interesting and unusual feature: deictic preverbs are not attested as productive elements in any Iranian language, see Isaev (1987). However, deictic and locative preverbs are very common in the neighboring Caucasian languages.

Thus, modern Ossetic features a completely new and highly productive system that plays an important role in expressing locative, deictic and aspectual meanings. This system is interesting from the typological standpoint as it represents the result of interaction between internal trends of language development and areal influence: there are no borrowed prefixes in Ossetic, the system is the result of PAT structural replication in terms of Matras&Sakel (2007). The aim of the study is to compare the Ossetic preverb system with those of the languages of other families indigenous to the Caucasus — Kartvelian (Georgian), Nakh-Dagestan (Ingush) and Abkhaz-Adyghe (Adyghe). General structure of the preverb systems, grammatical characteristics of the preverbs and their semantics (with the help of semantic maps) are compared.

I came to the conclusion that Adyghe preverbs differ from Ossetic both in structure and semantics. (The study of the Adyghe preverb system is based on the fieldwork data, see Mazurova 2009). The Ingush system (Nichols 2011) seems quite different structurally from Ossetic but shows some similarity of the meaning expressed by preverbs. The Georgian system (Aronson 1990, Rostovcev-Popel 2012, Tomelleri 2009) shows most similarities with Ossetic: the structure and the semantics of two sets is quite close, although not in the least degree identical. I claim that the Ossetic preverb system has emerged under the strong influence of the South Caucasian (Kartvelian) languages resulting in not just copying of the pattern but in the developing of new concepts.

The study of the meaning of Ossetic preverbs is based on the data elicited from informants with the help of spatial questionnaires and on the data from the Ossetic National Corpus ([corpus.ossetic-studies.org](http://corpus.ossetic-studies.org), [ossetic-studies.org/ru/texts/iron](http://ossetic-studies.org/ru/texts/iron)).

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## The verbal prefix *o(b)*- in Croatian: The semantic network and challenges of a corpus-based study

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This analysis discusses the semantic network of the Croatian verbal prefix *o(b)*- and the challenges that an empirical study of this prefix relates to. There is no comprehensive account of this prefix so far. The prefix *o(b)*- is polysemous in Croatian and in other Slavic languages. We follow the theoretical premises of cognitive linguistics, taking into consideration approaches to prefixes and spatial particles in Slavic and Germanic languages (e.g., Janda 1986; Hampe 2002; Tyler and Evans 2003; Przybylska 2006; Janda and Nessel 2010; Dewell 2011, Šarić 2013), and analyses of

the equivalent prefix in other Slavic languages (Twardzisz 1994; Baydimirova 2010; Będkowska-Kopczyk and Lewandowski 2012)), assuming that prefixes form networks of closely interrelated sub-meanings.

This analysis(a) works out a semantic network of the verbal prefix *o(b)-* in Croatian and(b) presents the challenges encountered in a corpus-based study and suggest ways of overcoming these challenges.

In differentiating the submeanings of the prefix *o(b)-*, the borders between these submeanings seem fluid and unstable, and they often overlap. This is expected in the cognitive linguistic framework. In certain cases, the semantic categorization of prefixed verbs seems highly subjective, depending on the perspective of a particular language user. Our analysis addresses subjectivity as an interfering factor in working out the semantic networks of prefixes and ways of overcoming subjective judgments.

In working out the semantic network of *o(b)-*, we use two publicly available and relatively comprehensive corpora of Croatian (*Croatian National Corpus* and *Croatian Language Repository*). Our preliminary corpus-based research on the prefix *o(b)-* has revealed a number of issues that make statistical evaluations of verbs prefixed with *o(b)-* problematic. On the one hand, there are no (or very few) occurrences in the corpora for some verbs that are rather common in everyday language. On the other hand, some verbs that are rare in everyday language are very frequent in the corpora used. We have also observed discrepancies between the typical and most frequent context types in which a prefixed verb is used in our corpora and the meanings that dictionaries provide as primary.

With respect to the challenges we have encountered so far in working out the semantic network of the prefix *o(b)-* using corpora, our presentation discusses the following issues:

- Are corpora really helpful in working out radial networks of prefixes, and what features of a corpus increase its value in a semantic analysis?
- How important are statistical data in working out semantic networks?
- How should (or should not) such data be acquired and used?

Our preliminary analysis suggests that presenting statistical data on the basis of our corpora would be misleading and would probably lead to false conclusions. It appears more promising to work with several different sources of material that provide better insight into the use of prefixed verbs. However, using different sources potentially raises new issues, which we will also address.

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## The paths of prototype shift: A case study of ZA- in Russian and Bulgarian

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‘Prototype’ is “a prototypical notion” (Geeraerts 2006) because different meanings often compete for its status according to different criteria (Goschler & Stefanowitsch 2008, Schmid 2010). The picture can be further complicated by the fact that a prototype is not an invariable category and can shift over time (Dickey 2007). The research question of this study is: what are the regular paths for a prototype shift and which factors are at play?

This study focuses on the prefix ZA- in Russian and Bulgarian, one of the most productive, frequent and polysemous prefixes in both languages. Since the Russian ZA- and the Bulgarian ZA- are historically related and synchronically similar, one might expect that they share the prototype. We test this hypothesis against diachronic and

modern corpus data (type and token frequencies of verbs attested in the Russian National Corpus and the Bulgarian National Corpus).

We adopt the Cognitive Linguistic approach and model the polysemy of ZA- in these two languages as a radial network of interrelated submeanings organized around the spatial prototype. In order to account for the relative salience of different submeanings within these models we use type frequencies of individual verbal lexemes that represent a given submeaning of a prefix. Comparing Russian and Bulgarian, we contrast their radial category profiles (centers of gravity) and identify their overlap and mismatch.

For both languages the prefix ZA- is the result of the grammaticalization of the noun *zad* ‘back’, which suggests that the original prototype of ZA- is the spatial meaning COVER/BEHIND. We propose that, having the same meaning of ZA- as the point of departure, Russian and Bulgarian take their prototype shift along one shared and two different paths:

- In both languages, ZA- develops an INGRESSIVE meaning, which is characterized by the highest type frequency (36% in Russian; 66% in Bulgarian). We describe it in terms of a shift from the spatial domain (COVER/BEHIND) to the domain of grammatical categories (Aktionsart).
- In Russian, there is one more spatial meaning that competes for the status of prototype – DEVIATE (*zajti k drugu* ‘drop by a friend’s house’, Janda 1986), which is not attested in Bulgarian. We describe this prototype shift in terms of metonymic specification and idiomatization.
- In Bulgarian, the COVER/BEHIND meaning is outcompeted by the ACQUIRE A QUALITY meaning (*hitreya* ‘play tricks’ – *zahitreya* ‘become sly’), which is not common for the Russian ZA-. We call this shift metaphorical extension of the original prototype.

Our findings suggest that the path from the spatial domain to the domain of grammatical categories, shared by both languages, can be viewed as a regular path of a prototype shift. The other two paths – metonymic specification in Russian and metaphorical extension in Bulgarian – are language specific. The crucial factors that play a role are frequency and salience, and cognitive mechanisms of metaphor and metonymy.

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## Repetitive *pere-* in Russian: single vs. multiple prefixation competing

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The paper deals with the repetitive prefix *pere-* in Russian (such as in *pere-čitaj* ‘to read one more time’, *pere-delaj* ‘to re-make’). This prefix can be a) attached immediately to the root, as in *pere-pisaj* ‘to rewrite’ or be followed by some other prefixes, as in *pere-pod-pisaj* ‘to re-sign’ (cf. general description of multiple prefixation in Russian in [Tatevosov 2009]). There are three possibilities for different verbs:

- 1) only unprefixated: *pere-smotretj* <film> / <sup>?</sup>*pere-po-smotretj* <film> ‘to watch <the film> again’;
- 2) only prefixed: *pere-na-bratj* / \**pere-bratj nomer* ‘to dial the number anew’;
- 3) competing parallel forms with the prefix and without it: *pere-steklitj* / *pere-o-steklitj* <balkon> ‘to glaze <the balcony> anew’.

The initial hypothesis is that the structure of the *pere-*derivate results from the structure of the «aspectual pair» (the pair of the perfective verb and the imperfective one with the same lexical meaning), which the initial verb belongs to.

For the aspectual pairs with the unprefixated imperfective (*smotretj*) and the derived prefixed perfective (*smotretj* > *po-smotretj*) *pere-* is attached to the unprefixated imperfective verb and not to the prefixed perfective (possibility 1: *smotretj* > *pere-smotretj*). For the aspectual pairs with the prefixed perfective and the derived imperfective (*na-bratj*

*nomer* > *na-biratj nomer*) *pere-* is attached to the prefixed perfective verb and not to the imperfective one (possibility 2: *na-bratj* > *pere-nabratj*). Thus in both cases *pere-* is attached to the initial, not derived verb of the pair. The possibility 3 arises in a natural way as a combination of 1 and 2 for aspectual triplets like *steklitj* > *o-steklitj* > *o-stekljatj*, in which the unprefixed imperfective (*steklitj*) and the secondary one (*o-stekljatj*) act as competing pairs to the perfective: [*steklitj* – *o-steklitj*] > *pere-steklitj* / [*o-steklitj* – *o-stekljatj*] > *pere-osteklitj*.

However the larger amount of data shows that the real picture is much more complicated and the field of competition for prefixed and unprefixed *pere-*derivates (especially in colloquial speech) is actually much wider. E.g. there are also verbs like *pere-tjanutj* / *pere-o-btjanutj* <divan> ‘to upholster <the sofa> anew’ derived from the pair *ob-tjanutj* (pf) – *ob-tjagivatj* (ipf), for which we expect *pere-ob-tjanutj*, and not *pere-tjanutj* (which is actually more frequent). From the other side, unexpected prefixed verbs such as *pere-po-smotretj* (instead of *pere-smotretj*), *pere-na-pisatj* (instead of *pere-pisatj*) are also occasionally attested.

To clear this picture the paper presents the numeric data on the sample of about 200 repetitive verbs on *pere-* from Grammar dictionary [Zaliznjak 1977/1980]. For each of them the existence of parallel prefixed / unprefixed competing form is checked in National Russian Corpus ([www.ruscorpora.ru](http://www.ruscorpora.ru)) and in Internet (searching in [blogs.yandex.ru](http://blogs.yandex.ru)) and their frequencies are compared.

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## Conceptual foundations of the distribution of Croatian prepositions *u/na* and *iz/s(a)* with place names

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When it comes to linguistic units codings spatial relations, and in particular to prepositions as prototypical representatives of that category, Cognitive Linguistics, especially Cognitive Grammar (Lakoff 1987, Langacker 1987, 1991, 1999, 2008, Croft & Cruse 2004) offers a more than adequate theoretical framework for the analysis of their distribution and use. In this paper we take up the challenge of providing the conceptual motivation for a special type of complementary distribution between two pairs of semantically close prepositions in Croatian: the prepositions *iz* vs. *s(a)*, and *u* vs. *na*. Their distribution in prepositional phrases of the type *iz/s(a) + GEN*, whose general spatial meaning can be defined as ablativity, and in prepositional phrases of the type *u/na + ACC*, whose general spatial meaning can be defined as contact directivity, may appear to be completely arbitrary, i.e. unmotivated. This is particularly the case with examples where the prepositions alternate in combinations with the same types of units, such as names of countries, islands, peninsulas, city blocks etc. (for example, *u Australiju/iz Australije*, but *na Kubu/s Kube* in cases of two insular states or *u Istru/iz Istre*, but *na Pelješac/s Pelješca* in the case of two Croatian peninsulas, etc.). Other interesting cases involve the alternations of these Croatian prepositions with nouns such as *selo* (Eng. *village*), *ulica* (Eng. *street*) etc. (for example *na selo/u selo*, *iz ulice / s ulice*), which result in obvious semantic shifts. The aim of this paper is to critically analyze the above mentioned and other similar examples from the conceptual point of view. We will analyze the motivation for these prepositional usages by relying on the conceptual quality of the spatial landmarks coded as prepositional complements, i.e. their higher or lower degree of structural complexity and compactness. We will show that their varying conceptual complexities, which result from different experience levels and knowledge of the world, sanction the use of the different prepositions.

Keywords: Croatian, prepositions, prepositional distribution, *iz*, *s(a)*, *u*, *na*, conceptual relations, conceptual motivation, conceptual complexity, world knowledge.

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## The preverb-verb construction in Indo-European: Synchronic analysis and diachronic development

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In archaic Indo-European languages like Hittite, Vedic Sanskrit and Homeric Greek preverbs are separate adverbial particles with various types of function (spatial, aspectual etc.). An example from Vedic (Rigveda) is *prá ... bharati* ‘brings forward, offers’, where the preverb (*prá* ‘forward’) and the finite verb (*bharati* ‘brings’) can be separated (Pinault 1995). In this example, from a main clause, the stress is on the preverb and not the verb. However, already in post-Rigvedic Sanskrit, post-Homeric Greek and Classical Latin, and in modern Russian, Latvian and German, univerbation of the preverb and verb is widely attested. For instance, in German we find verbs with (unstressed) “inseparable prefixes” like *gehörchen* ‘obey’.

This paper focuses on three interrelated research questions. I explore, first, the evidence for a Preverb-Verb Construction in Indo-European, following the tenets of Construction Grammar that there is no strict distinction between lexical units and syntactic structures (Goldberg 1995, Booij 2010). Second, I examine, on the basis of the comparative evidence in Indo-European languages, whether this construction is reconstructable for Proto-Indo-European. Third, I test an account of the univerbation of the preverb and verb as syntactic incorporation.

The analysis of the Preverb-Verb Construction is based on an extensive investigation of Indo-European languages and modeled within Construction Grammar. Moreover, following Ackerman & Webelhuth (1998), I argue that the Preverb-Verb Construction involves analytic word formation (“periphrastic exponence”), with semantic information being encoded lexically but realized syntactically.

I propose that this construction is reconstructable for Proto-Indo-European on the basis of the daughter languages. This proposal is again couched within Construction Grammar, in combination with the Comparative Method of historical linguistics (Barðdal & Eythórsson 2012).

Finally, I adopt an analysis of the univerbation of the preverb and verb as syntactic incorporation. Concomitantly with this incorporation, the stress of the preverb is lost, and it thus becomes dependent on verb. The univerbation proceeds at a different rate for different verbs in individual languages; in some cases it is evidently very early, as in Rigvedic *yás ... prabhárati* ‘who brings forward, offers’ (where *pra* is unstressed and attached to *bhárati*, which is stressed in a dependent clause introduced by a relative *yás* ‘who’). In the spirit of Ackerman & Webelhuth (1998), I argue that the univerbation is motivated by the resolution of the mismatch between the syntax and the semantics of the Preverb-Verb Construction. A clue to the nature of the incorporation is given by the existence of “near-inseparable” prefixes in Gothic, Old Irish and Lithuanian, representing an intermediate stage between archaic preverbs and later prefixes. For example, in the Gothic string *ga-u-hva-sehvi* (preverb-question.particle-clitic.pronoun-verb) ‘if he saw anything’, only clitics can break up the prefix-verb cluster in a particular clause position. This clearly constitutes strong evidence for analytic word formation.

In summary, the Preverb-Verb Construction, instantiating periphrastic exponence, can be reconstructed for Proto-Indo-European. Univerbation in the daughter languages is motivated by the resolution of the tension between the syntax and the semantics of this analytic construction.

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## Landscaping the verbal prefixes of Slavic

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In a closely related set of languages such as that of the Slavic Genus, differences in the use of derivational morphology such as verbal prefixes are difficult to analyze because of the multitude of functions and factors which are rarely clear cut. The paper presents a method to do so using parallel texts.

Using a word aligned, morphologically tagged and lemmatized parallel corpus of prose in all major Slavic languages (ParaSol), I compare the use of prefixes in translationally equivalent verb forms across languages. This gives

me an extensionally defined handle on the domain of use for each prefix and makes a comparison of interlanguage differences as well as differences between verbal prefixes possible. The data is evaluated both using clustering algorithms as well as qualitatively using a web interface that visualizes the contrasting prefixed forms in context.

The method succeeds in showing well known contrasts as well as new and more surprising differences in use. For example, the North Slavic languages use *vy-* ‘out from’ where South Slavic have *iz-* ‘idem’ (Vaillant 1963). However, while it has long been known that South Slavic Slovene is transitional to North Slavic in Slovene dialects using *vy-* rather than *iz-*, the parallel data additionally show that *iz-* in literary Slovene is functionally more similar to North Slavic than the other South Slavic languages. Another new finding is that the functional domain of *pri-* and *do-* also shows a clear South Slavic vs. North Slavic distribution, even though these prefixes are used across all of Slavic (fig. 1). The method thus enables new insights into the variability of functional domains of verbal prefixes in Slavic.

Fig 1. Similarity of Slavic translations of Bulgakov’s *Master and Margarita* in terms of the functional distribution of the prefix types *do-* and *pri-*.

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