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# **BOOK OF ABSTRACTS**



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## PLENARY LECTURES

**Marianne MITHUN** (University of California at Santa Barbara)

### Enhancing our Cognitive Leaps

A major aspect of what we do as linguists is to seek generalizations. With the discovery of a generalization, we feel a sense of scientific achievement. Underlying this sense may be an idea that generalization is a cognitive process fundamental to language acquisition and use: speakers do not simply memorize all of the sentences they will ever need as children, then bring them out as needed over their lifetimes. But the best scholarship also involves recognizing the right moment to leap. Settling on generalizations prematurely can obscure understanding that might emerge from further observation. This issue is explored here with a recurring pattern that has intrigued linguists over generations.

In head-marking languages, there is a strikingly frequent match in form between pronominal affixes or clitics representing arguments on verbs, and those representing possessors on nouns.

Barbareño Chumash: Chumashan family, California

k-niw	'I dance'	(he?=)k-tiq	'(this) <b>my</b> face'
p-niw	'you dance'	(ho?=)p-tiq	'(that) <b>your</b> face'
s-niw	's/he dances'	(ho?=)s-tiq	'(that) <b>his/her</b> face' etc.

Siewierska (1998, 2004) provides an impressive cross-linguistic survey of such patterns and the issues they raise. In a balanced sample of 270 languages, she identified 157 (58%) that display head marking on both verbs and nouns. Of the 157 languages, 83% showed at least some phonetic correspondence between the verb and noun affixes.

Explanations for the parallels have been proposed from various directions. Some involve structural generalizations over clauses and determiner phrases. Some involve semantic generalizations over the relations of participants to events on the one hand and possessors to possessions on the other. Some involve generalizations over the discourse-pragmatic status of arguments (especially subjects) and possessors, such as givenness or identifiability.

As Siewierska shows, however, the parallelisms are not identical across languages. In some languages, possessives match subjects, in others objects, and in still others ergatives, etc. Some languages show perfect correspondences across paradigms, others show mostly identical forms, and still others simply show some similarities. None of the structural, semantic, or pragmatic generalizations accounts for the arrays of systems we find, yet the recurring parallelisms cannot be accidental.

The arrays become explicable once we untangle the myriad ways in which the systems come into being and continue to evolve through time. Possessive constructions can develop from various clause structures, and clause structures can develop from various possessive constructions, via a variety of routes. Once the new possessive or clause structures emerge, they may continue to evolve in various ways, not necessarily in parallel with their sources, accounting for the situations in which the matches are mostly or only somewhat identical. Examples of each kind of development involve sequences of cognitive steps, but not necessarily the leaps we might have imagined at first glance.

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**Marian KLAMER** (Leiden University)

### Typology, contact and grammaticalization: Evidence from eastern Indonesia

An intriguing issue that is currently gaining interest is the nature of the relationship between grammaticalization, typology and contact. While it is clear that cross-linguistic similarities in grammaticalization patterns reflect universal patterns of human language structure and evolution, we also know that similarities may be genetically inherited, or areally diffused. However, to date much remains

unclear about how similar grammaticalization patterns are affected by similar typological structures or by the contact area where languages are spoken.

Here I study the role of typology and contact in grammaticalization of verbs and nouns in eastern Indonesia, focussing on the Timor-Alor-Pantar (TAP) family of approx. 25 Papuan languages (Holton et al. 2012, Holton and Robinson 2014a,b, Klamer 2014) and its Austronesian neighbours.

Located some 1000 km from the Papuan mainland and surrounded by islands with Austronesian languages, TAP speakers must have been in contact with Austronesian for at least 3000 years. Today Indonesian is the dominant Austronesian language spoken as second language by virtually everyone. Despite their shared linguistic past, salient typological contrasts still exist between the two genealogical groups, for instance in word order (SVO [Austronesian] vs. SOV [TAP]). At the same time, within the TAP family itself, many similarities can be observed in the grammaticalization of verbs into adpositions and applicative prefixes, and of nouns into numeral classifiers.

In this talk I first sketch the typological features of the TAP family that play an important role in allowing these two grammaticalization processes to take place. Then I discuss the role of contact with Austronesian. Contact appears to have affected grammaticalization in the verbal and nominal domain in fundamentally different ways: the grammaticalization of verbs involves many cognate forms and is *not* obviously influenced by contact with Austronesian, while the grammaticalization of nouns into classifiers does not involve any cognates, and *is* influenced by Austronesian. In the final part of the paper I propose an explanation for this. Different types of contact at different times affected the grammaticalization of verbs and nouns in different ways.

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**Ian ROBERTS** (University of Cambridge)

#### **Formal and Functional Explanations: New Perspective on an Old Debate**

In this presentation I will suggest that the different perspectives on linguistic theory and data that are usually referred as “formal” and “functional” (see Newmeyer 1998) are, and should be, closer to each other than is typically thought. In particular, I will propose that the juxtaposition of formal and functional is misleading – commonalities and asymmetries across human languages are shaped by both formal constraints and functional pressures (cf. Newmeyer 2002, 2003, 2005, Anderson 2008, Haspelmath 2008, Nichols 2008, Kiparsky 2008). More specifically, I will suggest that two recent theoretical innovations make a rapprochement possible. The first is Chomsky’s (2005) programme for “approaching UG from below” and in particular the role of the “third factor(s)” in language design. I will present a particular view of the third factor in relation to language acquisition, change and typology which gives rise to an elegant formal theory of parameters and parameter hierarchies.

The second innovation has to do with the nature of parameters themselves. These have been described as formal features of functional heads since Chomsky (1995). But one aspect of the nature of parameters has been neglected, and developing takes us further, by a slightly surprising route, towards functionalism.

The principles-and-parameters approach is based on an analogy with genetics. The parametric genotype (e.g. the setting of a putative “directionality parameter” as head-final vs head-initial) gives rise to the surface phenotype (OV/VO, Pre/Postpositions, etc.). But an important concept in genetics has gone largely undiscussed and unexploited in work in this tradition: that of pleiotropy. In genetics, pleiotropy occurs when one gene influences multiple, seemingly unrelated phenotypic traits. In terms of the standard principles-and-parameters model, we could think of pleotropic parameters as “deep” parameters which profoundly influence the overall shape of a grammatical system. Such parameters are in principle independent of important but lower-level microvariation of the kind that has been the focus of much fruitful recent work which has achieved a high level of descriptive adequacy (see Kayne 2005 for a good summary

and defence of this approach). Arguably, though, detailed description of microvariation puts aside the deeper and harder questions relating to language acquisition, language change and areal phenomena. I will suggest that there are four central pleiotropic formal features (PFFs): Person, Tense, Case and Order. After briefly describing their properties, I will offer a speculation as to why these and not other features, e.g. negation, are pleiotropic. The case of Order may be self-evident, since this feature is required for linearization. But why, in particular, Person, Tense and Case? I will explore the idea put forward in Wiltschko (2014), that Person and Tense instantiate anchoring features, which relate syntax to the speech situation. Wiltschko shows that there are systems which use other features for these purposes (in our terms, these features would bind the relevant variables at the semantic interface). Similarly, Case licenses arguments, and Carstens (2010) suggests Gender “goes proxy” for Case in Bantu. These features, then, are ultimately grounded in functional and communicative aspects of the speech situation: the speech-act participants, temporal deixis and participant roles. UG readily (but not necessarily) grammaticalises these functional/communicative properties as formal features. In this way, our study of PFFs can be seen as a formalisation of many of the intuitions behind functionalist accounts of typological variation, and we bring closer together two distinct, but (in our view) non-antagonistic, approaches to understanding linguistic diversity.

# ROUND TABLE

## “INTERACTION AND LINGUISTIC STRUCTURE”

*Plenary speakers*

**Mira ARIEL** (Tel Aviv University)

**Asli ÖZYÜREK** (Radboud University Nijmegen & Max Planck Institute for Psycholinguistics)

*Discussants*

**Kasper BOYE** (University of Copenhagen)

**Bert CORNILLIE** (University of Leuven)

**Petra HENDRIKS** (University of Groningen)

*Description*

Relationships between linguistic systems on the one hand and their use in communication and cognition on the other, have, in one way or another, always been a topic of study and theorizing in the language sciences. Recent years have witnessed an increased interest in the dynamics of human interaction (not limited to verbal interaction), in both its cognitive underpinnings as well as its consequences (linguistic and otherwise). On the one hand, linguistic systems guide (and constrain?) interaction and cognitive processing, but at the same time (properties of) these systems can be argued to emerge from their being adapted to their use in interaction. The exploration of these issues moreover coincides with an increased use of combinations of traditional and advanced methodologies (such as neuro-imaging and computational modelling).

The goal of this round table is to discuss theoretical positions and methodological considerations that (should) guide future research into relationships between linguistic structure and human interaction. What are causes and what are effects in this connection? What role is played by features of interaction that are not traditionally thought of as linguistic? Can interaction differ across cultures as a consequence of different ‘grammars for interaction’? Are there general patterns of interaction and if so, do these have any relationship to general patterns in linguistic structure? What are the advantages and disadvantages of specific methodologies in the scientific enterprise of unravelling the complexity of the dynamics of the connection between human interaction and structural properties of human languages?

**Mira ARIEL** (Tel Aviv University)

**Or: From a Logic-Based to a Usage-Based analysis**

Grammar is the product of many complementing, as well as competing forces. Our cognition, our sociocultural norms, our inferential abilities, our discursive needs, the grammar as it has evolved so far, and specific interactional strategies adopted by speakers of specific languages all provide potential motivations for how grammar is (Ariel, 2008). Since each of the above can offer plausible accounts for linguistic phenomena, and since, moreover, each source presents a complex set of potentially competing motivations, it’s hard to know where linguists should look for explanations for natural language. Luckily for us, however, speakers too experience this very quandary (unconsciously, of course). Engaging in interaction, speakers are forced to make countless decisions about how to optimally convey their messages and interpret their addressees. Natural discourse then represents the aggregate resolutions speakers have made. Its grammatical patterns reflect the linguistic solutions (and compromises) spontaneously worked out by speakers, given the multitude of motivations above. In order to offer a psychologically real grammar, then, all linguists need do is study natural discourse.

I will discuss a single example, the connective *or*, where following a philosophical tradition, linguists (i) privileged a single source, our cognition. Moreover, (ii) the cognitive underpinning for natural language *or* was inspired by a *long, highly conscious* tradition of *philosophers* thinking about disjunctions from a single, word-to-world truth-conditional perspective. (iii) The analysis was complemented by an imagined picture of how speakers use *or*, cutting out the real “middleman”, natural interaction. The result is a linguistic account which misses out on the essence of natural language *or*, namely ‘alternativity’.

The logic-based account for *or*, initiated in the Gricean Turn (Grice, 1989, Horn, 1972), reduced its semantics to what was taken to be *or*'s logical counterpart ( $\vee$ ). *Or*'s core meaning is therefore 'inclusive', where the speaker commits to any one of the alternatives being the case and possibly to all of them. *Or*'s predominant discourse reading was assumed to be 'exclusive', however, where only one alternative is the case. My usage-based analysis revealed a very different picture. An examination of the actual use of all the 1053 *or* tokens in the Santa Barbara Corpus of spoken American English showed that *or* does not receive an exclusive reading (as currently defined). Instead, it is associated with very many readings, the most prevalent one being a Higher-Level category, where the speaker lists alternatives merely as pointers to a higher-level, possibly ad-hoc, concept she has in mind. Moreover, the 'inclusive' linguistic meaning assumed on the logic-based approach cannot account for many of *or*'s readings in interaction. I will propose a procedural, nontruth-functional core meaning for *or*, whereby the addressee is instructed to construct a context-relevant interpretation, which must meet one condition: the disjuncts must constitute alternatives to each other. But co-alternativity is only the starting point for the numerous interactional roles served by *or* constructions. The nature and goal of the specific alternativity relation, as well as the number of alternatives the speaker commits to (none, one, all), are pragmatically derived. My ultimate conclusion will be: Let logic be logic and language be language.

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**Asli ÖZYÜREK** (Radboud University Nijmegen & Max Planck Institute for Psycholinguistics)

#### **Situating language in face-to-face communication: Multimodal language use, typology and insights from the brain**

In everyday face-to-face conversations speakers use and perceive communicated messages not only through the speech channel but also through other, visual modalities like face and the hands. Nevertheless, most of our assumptions about what is "linguistic" has been based on what is documented mostly in the spoken or written modalities. However, recent research has shown that especially the manual channel (e.g. co-speech gestures) conveys rich semantic and pragmatic information relevant to what is conveyed in speech. To name a few: speakers point to entities around them using demonstratives; to empty spaces to refer to third persons; can make a typing gesture as they say "I worked all night" or mark information structure with their gestures. Due to advances in collecting multimodal language corpora (e.g. MPI; SOAS London), it is becoming clear that what is conveyed semantically, pragmatically and even syntactically in gestures seems to differ across languages. Such usages are also shown to be dynamic and sensitive to the shared common ground assumptions among the interlocutors. These findings suggest we need to start thinking of new language typologies depending on different multimodal patterning and having implications for multilingual communities.

Furthermore, there is accumulating behavioral and even neural evidence from the listeners' perspective that they incorporate information from both channels into their understanding of the message. These studies strikingly show that in doing so, the brain actually does not seem to differentiate whether we receive semantic/pragmatic information from a spoken or manual channel. This corroborates the notion that studies of language and what is considered as "linguistic" (within and across languages) need to be expanded to incorporate information conveyed and perceived from multiple channels in dynamic face-to-face communication – reflecting a unique evolutionary advantage achieved by our species.

# GENERAL SESSION PAPERS

## ORAL PRESENTATIONS

**Joana AGUIAR** (CEHUM-University of Minho)

### **Porque clauses in European Portuguese: a sociolinguistic perspective.**

In European Portuguese, porque “because” clauses convey causal relations, namely real world causality (1), epistemic causality (2), and speech act causality (3), following Sweetser’s terminology. The aim of this study is to show that the distribution and the frequency of occurrence of porque clauses depend not only on linguistic factors, such as the syntactic constraints, but also on social variables, such as the education level and the age of the informant.

Currently, the syntactic status of porque clauses is still an on-going discussion. In fact, these clauses are not a homogenous group: they may be either adverbial (central) (1) or supplementary (2) (3):

- (1) O João escorregou porque o chão estava molhado.  
John slipped because the floor was wet.
- (2) O João não gosta de marisco, porque não comeu nada.  
John doesn’t like seafood, because he hasn’t eaten anything.
- (3) Vai desligar as luzes. Porque precisamos de poupar energia.  
Turn off the lights. Because we need to save energy.

Mobility and scope tests show that supplementary porque clauses are independent structures that are loosely attached to a sentential anchor (Mendes, 2013). On the other hand, central adverbial clauses are integrated in the main clause (Lobo, 2002).

Taking in consideration the syntactic and the semantic classification of porque clauses in Portuguese, this paper explores the frequency of occurrence of these structures and their distribution according to the level of education, age and sex of the informant. The corpus of analysis is composed by 120 argumentative texts written on demand and 48 texts collected from blogs. The informants are European Portuguese speakers, stratified according to sex, education and age.

The results show that epistemic causality is more frequent in texts written by older informants and by informants with more years of schooling. On the contrary, children tend to present causal relations as factual, corroborating the idea that real world causality is easier to process (Noordman & Blijzer, 2000). Regarding the distribution of syntactic structures, young informants use more adverbial clauses introduced by porque ‘because’. This may happen because these structures are more common in school contexts (Lopes, 2004) and in question-answer pairs (Diessel, 2004). Furthermore, the acquisition and the proficiency in using other structures are still under development at this age (Lopes, 2004). This study also sheds some light on the production of complex structures. It is known that paratactic structures are acquired first (Mithun, 1988; Hopper & Traugott, 2003; Lust et al., 2009). Nonetheless, when used to establish causal relations, juxtaposition and coordination are rare in the texts written by young informants and frequent in the ones written by educated adults. This seems to indicate that the production of complex structures is dependent, among other factors (Diessel, 2004), on the semantic nexus conveyed. In terms of connectors used, adults with 9 to 12 years of schooling tend to use a broader variety of connectors. Overall, this work is a contribute to frequency and sociolinguistic studies on European Portuguese, still incipient.

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**Ulrike ALTENDORF** (Leibniz Universität Hannover)

**Caught between Aristotle and Miss Marple ...  
A proposal for a perceptual prototype approach to ‘Estuary English’**

“Come now, Miss Marple,” said Colonel Melchett good-humouredly, “haven’t you got an explanation?”

“Oh, yes, I’ve got an explanation,” said Miss Marple. “Quite a feasible one. But of course it’s only my own idea. Tommy Bond,” she continued, “and Mrs. Martin, our new schoolmistress. She went to wind up the clock and a frog jumped out.”

(Agatha Christie, *The Body in the Library*)

More than thirty years after the term was coined by David Rosewarne (1984), linguists have not come anywhere near to agreeing on a linguistically sound definition of the concept of ‘Estuary English’ (EE). One could therefore argue that it was time to lay it to rest. However, there are at least two reasons for not doing so. For one, EE has come to stay (e.g. Deterding 2005, Kerswill 2006, Eitler 2006, Hickey 2007, Kristiansen 2008, Bonness 2011). The second reason for not giving up on the concept yet is its rather “annoying” habit of raising theoretical and methodological questions which I consider more important than the concept itself. The most important of these questions is of epistemological nature and concerns the categorization of linguistic experience.

In this paper, I will argue that EE is a heuristic conceived of and popularized by linguistic laypeople and not by expert linguists. These laypeople react to what they perceive as a strikingly recurring pattern in an inherently complex linguistic situation that they seek to simplify whereas linguists seek to understand it in its complexity. Following Taylor (2003, 75), I will suggest describing the resulting folk category in terms of the graded structure/prototype approach (for the role of prototypes in social dialectology, see Kristiansen 2008 and Pustka 2009). In terms of prototype theory, David Rosewarne (1994, 4) succeeded in identifying attributes, such as T Glottalling, L Vocalization, Yod Coalescence and ST Palatalization, that have a high frequency of occurrence in all members of the category. Unfortunately, they also have low cue validity. That the category nevertheless seems to function is probably due to a conceptualization of the core that relies not only on the presence but also – unconsciously – on the absence of certain attributes, such as post-vocalic non-prevocalic /r/. I will concede that this makes EE a less than perfect prototype category in the eyes of experts. However, following Putnam’s (1975) “division of linguistic labor”, it is a scenario typical of the construction of meaning by non-experts.

In support of the prototype hypothesis, I will present data from an on-going project in perceptual dialectology. It includes judgements of gradience of membership of about 150 speakers from the South-East of England, the Midlands and Scotland. Asked to rate the recordings of three young middle-class speakers from three south-eastern towns with regard to how typical they think they are of EE, these speaker-listeners are remarkably consistent in their responses. Almost everybody considers the speaker from Canterbury to be least typical whereas the speakers from Colchester and London receive similarly high prototypicality ratings. These perceptual results tally with the phonetic analysis of these speakers’ speech samples which show a decrease in the frequency of “EE” variants in the speech of the Canterbury speaker (see Altendorf 2003).

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**Pedro ALVAREZ-MOSQUERA** (University of Salamanca)

### **Social contact and language attitudes: The case of young Afrikaans speakers in South Africa**

The social challenges of post-apartheid South Africa have attracted scholarly attention across multiple disciplines (Duckitt and Thobi, 1998; Dawes and Finchilescu 2002; Gibson 2006; Williams et al. 2008; Paolini et al. 2010, among others). From a sociolinguistic viewpoint, the ethnic diversity and the co-existence of the 11 official languages seem to play an important role in shaping South Africans' daily lives (Franchi and Swart 2002; Kamwangamalu 2003; Kajee 2011). In such multilingual contexts, language and ideology tend to be central factors in the individuals' identity formation process and the development of intergroup relations (Makihara and Schieffelin 2007; Norton and Toohey 2011; Adams et al. 2012). In this paper, we depart from the strong connection between language and identity in order to study the effects of the overall lack of social contact on a specific community: young Afrikaans speakers. Recent research studies underline that lack of contact among members of different social groups might lead to extreme categorical perception and social anxiety (Oaten et al. 2008; Sacco et al. 2011; Schaafsma and Williams 2012). Therefore, despite young South Africans having been born after the end of Apartheid –based on our recent focus group and interview data (2012 and 2013) and an ongoing sociolinguistic project on social distance with over 280 participants (2014) –preliminary results reveal the prevalence of pre-democracy negative stereotypical features attributed to Afrikaans white speakers among black South Africans. Finally, this paper also discusses some of the liminal strategies that young Afrikaans speakers undertake in order to redefine their identity or to establish positive associations with it.

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**Tijmen C. BAARDA** (Leiden University)

**Non-Muslims and the emergence of Modern Standard Arabic: the gradual end of mixing in writing in early twentieth-century Iraq**

During the past two centuries, the language that linguists now commonly call Modern Standard Arabic developed as a language with roughly the same norms of correctness for all its users. The hegemony of this new standard language also stretched out to its non-Muslim users, such as Christians, whose earlier usage of Arabic is known as different from that of Muslims and full of mixing with other languages and/or adapting different scripts. The traditional use of other languages and scripts by non-Muslims in the Middle East is often explained as a means of expressing the community's identity, but the adaptation of Modern Standard Arabic in the nineteenth and twentieth centuries or the refusal to do so can also be seen as a marker in the user's stance towards an Arab identity.

Research on the emergence of Modern Standard Arabic often focuses on formal policies and discourses in creating and imposing a new standard language, such as the role of language academies in the coining of new words. However, by mapping the variation in the use and appearance of Arabic over time and according to location and context, a more detailed picture could become available. Research on the use by non-Muslim minorities of Arabic and parallel usage of alternative languages and scripts, such as Syriac and Coptic, is particularly interesting because of the highly visible changes that are apparent as Modern Standard Arabic becomes better established.

On the basis of various kinds of texts produced by Christians in Iraq in the beginning of the twentieth century, this paper will present the preliminary results of a project that aims to analyze a large corpus of written material and the extent to which their use of Arabic conforms to the use of Arabic by the wider Arabic-speaking community. The texts, written by different authors and employing different genres, show parallel usage of Arabic and Syriac, and Arabic written in Syriac script (Garshuni). Different phenomena are visible for specific Christian denominations. As the standardization of Arabic was already well on its way since the nineteenth century, the texts form an interesting case in this process that only gradually came to encompass all of the Arabic-speaking world.

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**Dative Subjects in Germanic: A computational analysis of lexical semantic verb classes across time and space**

One of the functions of the dative is to mark non-prototypical subjects, i.e. subjects that somehow deviate from the agentive prototype. As all subbranches of Indo-European (cf. Barðdal et al. 2012), the Germanic languages exhibit structures where the subject or the subject-like argument is not in the nominative case, but in the accusative, dative or genitive, for instance. The focus of this paper is on the dative, leaving accusative and genitive subjects aside, in particular homing in on lexical semantic similarities and differences between the different Germanic languages. We will compare Modern Icelandic, Modern Faroese, and Modern German, on the one hand, and the historical Germanic languages, i.e. Gothic, Old English, Old Saxon, Old High German, Middle English, Middle Dutch, Middle German, Old Icelandic and Old Swedish, on the other. The goal of this comparison is to document the semantic development of the construction across time, and to reconstruct a semantic field for Proto-Germanic on the basis of this comparison. As the Germanic languages are both genetically and areally related, we will suggest a computational model aiming at disentangling genetic and geographical factors, in order to estimate to which degree the two interact with each other across languages and across historical eras.

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**András BÁRÁNY** (University of Cambridge)

#### **Cross-linguistic evidence for dissociating Case and Agree**

Hungarian has differential object agreement, i.e. only a proper subset of direct objects in the language trigger object agreement. At the same time, direct objects in Hungarian are overtly marked for accusative, as shown in (1). In (1a), the verb only agrees with the subject (SUBJ) but not the indefinite object. In (1b), the verb agrees with both arguments (OBJ). Both kinds of direct objects have the accusative suffix -t.

- (1) a. Lát-ok               egy           gyerek-et.  
           see-1SG.SUBJ    a              child-ACC  
           'I see a child.'  
   b. Lát-om               a             gyerek-et.  
           see-1SG.OBJ      the          child-ACC  
           'I see the child.'

I propose an analysis of Hungarian object agreement based on Agree: the verb agrees only with objects which have a syntactic, formal feature [D], but not those objects that lack it. In (1b), the definite determiner introduces [D].

Evidence for this treatment of Hungarian object agreement comes from the distribution of agreement with personal pronouns. While first person pronouns never trigger object agreement and third person pronouns always do, second person pronouns only require object agreement when the subject is first person, a kind of inverse agreement system (É. Kiss 2013). I show that the distribution of agreement can be derived by Cyclic Agree (Béjar and Rezac 2009) and resembles the patterns found in Algonquian languages, as well as the Siberian language Chukchi (Bobaljik and Branigan 2006; Comrie 1980).

I further interpret (1) as indicating that a failed Agree relation with the direct object does not mean that the direct object fails to be licensed, as it is still case marked (Preminger 2014). Therefore, Hungarian fits in with languages in which case marking and object agreement are independent of each other and provides further evidence that case licensing does not have to happen by Agree (e.g. Amharic, see Baker 2012; Kramer 2014).

This paper thus provides empirical evidence for a revision of the concepts of Case and Agree as suggested by Chomsky (2000, 2001), in order to capture fit with a wider range of languages and provide a more realistic model of comparative syntax.

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**Andreas BAUMANN, Christina PRÖMER, and Nikolaus RITT** (University of Vienna)

### **Therapeutic responses to Early Middle English schwa loss in the domain of morphonotactics**

We start from the observation that many of the word forms produced through schwa deletion were phonologically dispreferred and/or morphonotactically ambiguous. In particular, schwa-loss increased the number of word-final clusters drastically (final schwa deletion produced e.g. *blind* < *blind+e* 'blind, adj.', *land* < *land+e* 'land, dat.', or *errand* < *erende* 'errand'; checked schwa deletion produced e.g. *brenn+d* < *brenn+ed+e* 'burnt', *betaken+d* < *bitacen+ed* 'signified', or *wern+d* < *wern+ed+e* 'warned'). They violated the well-established preference for CV sequences (cf. e.g. Clements & Keyser 1983, but also already Jakobson 1962), and were particularly marked because they occurred in the prosodically weak coda position. They were also problematic since they could occur both in morphologically simple items (e.g. *bind* 'bind') and in morphologically complex ones (e.g. *brenn+d* 'burnt'). Word forms ending in them required additional processing time for disambiguation. (Post et al. 2008)

Natural Linguistic Theory (e.g. Dressler & Dziubalska-Kołaczyk 2006) makes a number of clear predictions concerning the coda clusters emerging through schwa deletion, e.g. that (a) they ought to be historically unstable and either disappear or become less frequent, (b) they ought to be less stable in morphologically simple items than in morphologically complex ones because in the latter their phonological markedness may serve as a signal of morphological complexity, and (c) isomorphy between morphologically motivated clusters and simple lexical ones ought to be minimized or reduced. (cf. also Ritt 2009)

Our paper presents a new method of identifying changes that might represent 'therapeutic responses' to schwa loss. It exploits diachronically layered corpora such as the Penn-Helsinki Parsed Corpora of Middle and Early Modern English for generating 'virtual' language stages against which actual developments are then compared. In the case of coda clusters produced by schwa loss we proceed like this: we take pre-schwa loss data and interpret them as if schwa loss had been fully implemented; then we search for word final clusters in that virtual post schwa loss English, classify them in phonological and morphonotactic terms, establish type-token frequencies, and do the same with actual post schwa loss data; finally, we identify statistically significant differences between virtual and actual data, and check to what extent they confirm the predictions implied in Naturalist Linguistic theories.

In our presentation we report a number of quite encouraging results. In particular, a number of idiosyncratic and only partly understood changes in the history of English may indeed represent therapeutic responses to the effects of schwa loss. These include the emergence of 'irregular' past tense forms such as *built*, or *spilt*, the replacement of *-and* by *-ing* as the present participle suffix, and the voicing of /s/ in regular noun plurals and the 3rd person singular present tense of verbs.

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**Oleg BELYAEV** (Lomonosov Moscow State University)

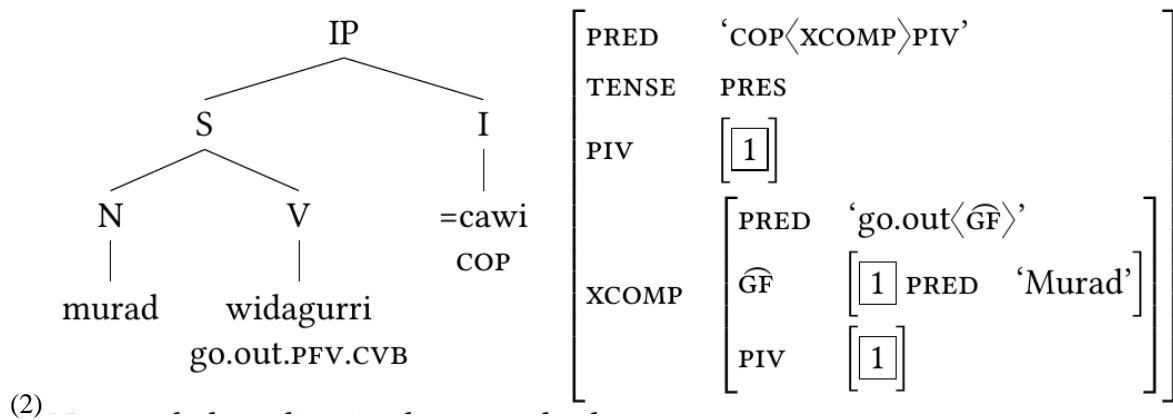
**Shiri clause structure: A nonconfigurational account**

Shiri (Dargwa > East Caucasian) possesses an elaborate system of TAM forms, most of which are based on the use of a converb and an auxiliary (usually the clitic person marker or copula). Sumbatova & Lander (2015) show that there are certain traits of biclausality in Dargwa finite clauses. One of the key facts is that locative adverbs, when they are in peripheral position, and the copula may agree with the ergative argument instead of the absolute:

(1)	wac'a-l-c:i-w	murad-li žaqɑ	b-uc-ib-li	ca<w>i
	forest-OBL-INTER-M[ESS]	Murad boar	N-catch.PFV-ANT-CVB	COP<M>
‘Murad has caught a boar in the forest.’				

Such sentences are analyzed as involving two levels. The lower contains the lexical verb and its arguments, while the upper contains the copula and a zero absolute argument coreferential with one of the core arguments; the copula and peripheral adverbs agree with the “upper” absolute.

My proposal involves adopting Sumbatova’s analysis to the framework of Lexical Functional Grammar (LFG), using Falk’s (2006) approach to ergativity. Since LFG separates c- and f-structure, there is no need for overt null elements. I assume that the copula occupies the INFL node, whose complement is the flat category S, which contains the lexical verb and its arguments. At f-structure, the copula selects an XCOMP and a PIV which is identified via structure sharing with either GF or PIV of the XCOMP. As has been argued elsewhere (Belyaev 2013), gender agreement in Dargwa is triggered by PIV; hence, the choice of the structure sharing pattern determines the agreement pattern.



The upper stratum’s PIV value (the null absolute) is linked to either the subject (GF) grammatical function or to the absolute (PIV) grammatical function of its XCOMP, which represents the core clause. Exactly the same structure is used when the copula is attached to a predicative noun or adjective, with the noun or adjective’s PRED being found in the XCOMP position. For the analysis to work, the adjectives must also be assumed to have their own subjects, and there is in fact independent evidence that adjective phrases have a VP-like structure (examples from Tanti, Sumbatova & Lander 2015):

(3)	[haq-le q'uqa-se]	dubur
	high-ADV beautiful-ATTR	mountain
‘a mountain, beautiful because it is high’ (adverbial modification)		

- (4) [(sun-na) **ful-be** x:anc'-se] rurs:i  
 self-GEN eye-PL blue-ATTR girl  
 'blue-eyed girl' (subject of AdjP)

This analysis allows us to capture the relevant facts while generalizing over different clause types and without stipulating more phrase structure than it is necessary. It also avoids relying on anaphoric coreference, instead describing the relation between the PIV of the higher stratum and the copula agreement controller through LFG's mechanism of structure sharing.

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**Sofía BEMPOSTA-RIVAS** (University of Vigo)

#### The Status of *Dared* in Middle English and Early Modern English: A Corpus-driven Study

The verb *dare*, considered a pre-modal verb in OE, is attested in constructions showing modal and lexical features in Late Middle English and in Early Modern English, as in (1), that is, in so-called blend, mixed, hybrid or ambiguous verbal constructions (Duffley 1994; Denison 1998; Beths 1999; Taeymans 2004a,b, 2006; Schlüter 2010).

- (1) Louely Eleanour, *Who darde* for Edwards sake *cut* through the seas.  
 (a1592 R. GREENE Frier Bacon (1594) sig. C) (OED s.v. *dared* 4 β.)

*Darde* in this example, on the one hand, selects a bare-infinitive clause as its complement, which is a prototypical syntactic feature of modals, and, on the other hand, takes *-ed* inflection for the simple past (*dared*), the latter being characteristic of lexical verbs. Although most so-called blending features are not under discussion in the relevant literature, there is no consensus regarding the adscription of simple past *dared* selecting a bare-infinitive complement as either a modal or a lexical property. In fact, *dared* is considered a blend in Denison (1998) and Schlüter (2010), and a modal verb in Beths (1999) and Taeymans (2004a,b).

This study reviews the previous literature and investigates both the rise, evolution and status of *dared*, and the obsolescence of *durst* in simple past and conditional contexts in Middle English and Early Modern English. The data are retrieved from two corpora: the Penn-Helsinki Corpus of Middle English (PPCME2) and the Penn-Helsinki Parsed Corpus of Early Modern English (PPCEME), as well as from the *Oxford English Dictionary* and the *Middle English Dictionary*.

The data show that the regularization process that main verb *dare* undergoes may have favoured the replacement and obsolescence of *durst* by the form *dared* in simple past contexts and by the form *dare* in conditional contexts. It is also shown that *durst* is losing its referential role to past events and is gradually replaced with *dare* in conditional contexts and with the new weak past form *dared* in non-conditional contexts in Early Modern English. This finding is of importance here since, according to Beths (1999: 1101), the only indicator of the status of *dared* as either modal or lexical is precisely the context in which it is used, that is, assertive or non-assertive. In line with this explanation, Beths (1999: 1101) and Taeymans (2004b: 101–102) maintain that auxiliary *dared* is restricted to non-assertive contexts and tends to select bare infinitive complements. In this study I argue that there is no supporting evidence for the classification of the new past tense form *dared* in non-assertive constructions as modal simply because this form replaced the old form *durst* in past and conditional contexts. My findings evince that the form *dared* for simple past shows the same evolution of the lexical form *dares* for third person singular, with a time lag between them. Both *dares* and *dared* illustrate layering and a preference for non-assertive contexts (Jacobsson 1974: 62; ; Quirk et al. 1985: 138–39; Heine 1993, Duffley 1994: 218). As is the case with *dares*, *dared* plus a bare-infinitive complement is here analysed as a blend construction (cf. Beths 1999; Taeymans 2004b).

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**Anna BERGE (Alaska Native Language Center)**  
**Lexical Differentiation in Aleut (Unangam Tunuu)**

Eskimo-Aleut is a well-established, uncontroversial language family; however there is good reason to reexamine the nature of the relationship between Eskimo and Aleut, as a rigorous reconstruction of Proto-Aleut is still lacking, Bergsland (1989) and Fortescue, et al. (2010) admit that many proposed Eskimo-Aleut cognates are tentative, and the source(s) of the non-cognates remain unknown. Despite still firmly-held beliefs that Aleut developed in relative isolation until the period of Russian colonization, and that most grammatical developments could be attributed to language internal changes (e.g. Bergsland 1989, Golovko 1996), more recent work from a number of fields is suggestive of long-term linguistic and cultural contact, including archaeology (Hattfield 2010), genetics (Crawford, et. al. 2010), and comparative linguistics (Leer 1991 and Fortescue 1998, 2002, with respect to grammatical features shared with neighboring non-Eskimo languages, and most recently, Berge 2014 with respect to the distribution of cognates and non-cognates in the lexicon).

Despite an excellent tradition of work on the lexicon in the Eskimo-Aleut languages, there are still vast areas to be explored. Thus, most work on comparative Eskimo-Aleut has focused on the evidence for the relationship of Eskimo and Aleut. Little has been written about the non-cognate vocabulary, beyond general observations about the surprisingly large number of non-cognates among flora and fauna and sea hunting tools (Liapunova 1995, citing Menovshchikov, Bergsland 1986), the lack of obvious borrowings from neighboring non-Eskimo languages, and the relatively large number of items borrowed into or from the neighboring Yupik languages (Bergsland 1986, 1994). What this means, however, is not clear, as neither the percentage nor the semantic spread of non-cognates to cognates in these lexical domains is known. Further research in this area could yield interesting results; for example, Berge (2014) points out that of more than 30 kinship terms, only 5 are cognate between the languages; that basic body part terms, e.g. *kilmañ* 'belly,' do not have Eskimo cognates, but non-basic terms such as *kuygin* 'vertebrae of loin, sacrum,' do; and that Aleut terms with cognates in Eskimo languages often co-exist with non-cognate doublets, as in *ataqan* 'one' (cognate with Proto-Eskimo \*atarucir 'one') and *tagatañ* 'one' (non-cognate).

More systematic studies of the phonological developments in Aleut and the unsourced vocabulary may clarify whether divergence is a result largely of language internal motivations, as has been assumed, or of language contact, as seems increasing likely. To this end, and as part of a larger project on prehistoric developments in Aleut, this paper reports on the degree of cognate and non-cognate vocabulary related to material culture and on the possible sources of the non-cognates, and clarifies the status of questionable cognates. The data are collected from Bergsland 1994 and Fortescue et al. 2010, entered into Excel spreadsheets, and coded for degree of relationship. The examination of domain-specific cultural terminology also provides the foundation for comparative lexicostatigraphical studies of Aleut and neighboring non-Eskimo languages.

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### The syntactic and informational status of cross-clausal constituents

Information structure is taken to be set at the level of the clause (Lambrecht, 1994; Bertrand, 2010). However, in Ancient Greek and Latin, a constituent syntactically and semantically belonging to a sub(ordinate)clause can play an information role in the matrix. Two cases are at stake: *prolepsis* (1) and “extraction” (2). We address here the question whether the clausal limitation of information functions can be maintained. We match the properties in Table 1 with the informational status of these two constructions, pursuing hypotheses present in Panhuis, 1984; Bertrand, 2010; Dal Lago, 2010; Faure, 2010; Longrée D. & Halla-Aho H., 2012. Our analysis is based on a corpus made of Xenophon’s and Plato’s works.

- (1) skhōlēn skopōn tí t<sub>i</sub> eīē. (Xenophon, *Memorabilia* 3.9.9.1)  
 leisure examining what (trace) it.was [Ancient Greek]  
 ‘Examining what leisure was.’
- (2) Eroū nūn me opsopoífa hētis moi dokeî t<sub>i</sub> tékhnē eīnai. (Plato *Gorgias*, 462d8)  
 ask now me cookery what to.me seems (trace) occupation to.be [Ancient Greek]  
 ‘Ask me what kind of occupation cookery seems to be to me.’

*Table 1*

	Prolepsis	Extraction
Type of constituents	DP	Any
Possible non-adjacency /subclause	Yes	No
Case assignment	In the matrix	In the subclause
Function in the subclause	Subject	Any
Syntactic function of the subclause	Argument	Argument/adjunct
Matrix predicates	Emotive/cognitive/declarative	Any

Syntactically, languages tend to avoid extraction from subject positions, while they allow for extractions from other positions. Greek and Latin are exceptional in that they allow for subject extraction. This is related to the possibility for the matrix verb to ‘super’-assign case only to constituents marked as nominative. This is shown by the discontinuous constituent in (3), where *hékastai* the determiner of *hodōn* is in the subclause in the nominative, whereas *hodōn* is extracted and is assigned the genitive case (from the possibility of case-stacking

on an NP see Pesetsky 2012). This assignment gives it access to the matrix. On the other hand, constituents that may not be assigned case by the matrix predicates may not move further up than the edge of the embedded clause, even to a discourse-functional position. This is not expected in Phase Theory (Chomsky 2000, Citko 2014), where the edge of the clause could serve as an escape hatch. This framework thus needs revision in the light of these new facts.

- (3)    hodōn                epimelouménous  
             roads-GEN        attending  
             hópōs    hōs hēmerótētatai                hékastai        t<sub>i</sub>                gígnontai.                (Platon, *Leges*, 761a5)  
             how        the.most.level                each-NOM (trace)    they.become  
             'by attending to the roads, that they all may become as level as possible.'

Therefore, it seems that the limitation of pragmatic functions to the clause level may be due to syntactic rather than informational restrictions (see Rizzi 2006).

Regarding functional properties, “extracted” constituents entertain a topical, possibly frame-setting relation with the subclause (see Dankaert 2012). Proleptic phrases, on the other hand, play a role in the matrix, be it topical or focal. We’ll address the question whether or not they also play a role with respect to the subclause.

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## The distribution of zeros in agreement paradigms: exploring diachronic universals

Establishing diachronic universals is no trivial enterprise. Using reconstruction is not a viable option, as it often relies on assumptions about what is natural and universal in the first place. Historically attested changes get one further, but there are only few families that we know the history of with any confidence. In this paper we consider one way out based on statistical explorations of synchronic data with the goal of estimating the most likely diachronic trends behind these data (cf. Maslova 2000, Dunn et al. 2011). We apply one such method to evaluate the validity of a principle that have been claimed to affect the structure of agreement paradigms. This principle (“Watkins Law”) predicts that paradigms develop in such a way as to have zero forms in the third rather than in the first and second person. This happens if a third person marker is reanalyzed as part of the stem, giving thus rise to zero marking in the third person (cf. Watkins 1962:94 on Proto-Iranian and Persian), or if a language never developed overt marking for the third person to begin with (e.g. as in the Uralic languages, Collinder 1965:58). A common explanation for this principle goes back to Benveniste’s (1946) characterization of third person as a “non-person”: Zeros are more likely to be found in the third person because of its “impersonal, non-referring nature”. Under either the reanalysis or the non-development scenarios, we expect that languages should preferentially develop and maintain paradigms with zero-marked third person and disfavor paradigms with only the third person overtly marked, as well paradigms where all persons have overt exponence.

We estimate universal trends in diachrony on the basis of synchronic distributions: To this end, we evaluate each family in our sample as to whether its daughter languages are biased towards having a zero in the third rather than the first or second person. If there is a bias, this means that daughter languages have preferentially innovated in the same direction, or they kept what was there in the proto-language. Either way, this implies that there was a systematic preference in the development of the given family. The absence of a bias suggests random fluctuation in the diachronic development.

We surveyed 351 verbal agreement paradigms from 314 languages. For the sake of simplicity, we only look at person distinctions, and only a binary distinction between first and second vs. third person. Because non-singular number typically adds overt exponence, we limit our study to singular number.

Watkins' Law receives no support when tested against a large cross-linguistic sample: there is no cross-linguistic tendency for languages to develop paradigms with zero-marked third person and overt marking for first and second either via reanalysis or by non-development. This results does not invalidate Watkins' Law as a description of what happened in individual paradigms, but it means that diachronic processes in accordance with Watkins' Law are not motivated by a universal principle, that is, it cannot be said to be a "natural" development.

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#### **Syntactic mixing across generations in an environment of community-wide bilingualism**

One of the key effects of sustained language contact is code-switching, i.e. the switching from one language to another either within or across utterances. Over time this can lead to language change, sometimes resulting in a mixed code with new structures. Here, we explore changes in code-switching during language acquisition and more broadly across generations in a population with community-wide bilingualism. This kind of bilingualism is the most common one in the world, partly as the result of national languages and *linguae francae* encroaching on vernaculars worldwide. Despite this, most research on acquisition and trans-generational patterns in bilingual situations has so far focused not on community-wide but on individual bilingualism, where a single child, or a small group of children, is raised bilingually in an otherwise monolingual community.

A quantitative analysis of a trans-generational, conversational corpus of Chintang (Tibeto-Burman) speakers with community-wide bilingualism in Nepali (Indo-European) reveals that children show more code-switching into Nepali than older speakers. This confirms earlier proposals in the literature that code-switching in bilingual children decreases when they gain proficiency in their dominant language, especially in vocabulary. Contradicting expectations from other studies, our corpus data also reveal that for adults, multi-word insertions of Nepali into Chintang are just as likely to undergo full syntactic integration as single-word insertions. Speakers of younger generations show less syntactic integration. We propose that this reflects a change between generations, from strongly asymmetrical, Chintang-dominated bilingualism in older generations to more balanced bilingualism where Chintang and Nepali operate as clearly separate systems in younger generations. This change is likely to have been triggered by the increase of Nepali presence over the past few decades.

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***Needless to say* and related evidential expressions in English and Spanish:  
a diachronic corpus-based study**

Expressions or formulas such as *needless to say* or (*it*) *goes without saying* and their Spanish equivalent *ni que decir tiene*, illustrated in (1)-(3) below, allow the speaker/writer to make certain assertions regarding the obviousness of what s/he is about to state and ‘the likelihood of its being a fact’ (Chafe 1986: 264). By employing such formulas, speakers/writers acknowledge that this is known information and hence ‘engage more directly in the interaction by negotiating meaning and truth values’ (Moon 1998: 229). They are thus modal expressions referring to ‘a speaker’s attitude towards, or opinion about, the truth of a proposition expressed by a sentence’ (Simpson 1993: 47), and are used to shade categorical assertions (Adolphs 2007: 257). Moreover, these expressions are used both as hedging devices and as a face-saving strategy (cf. Degand 2014; Traugott 2014).

- (1) *It goes without saying that the books are not ordinary ones.* (1897. *Literature* 27 Nov. 185/2, *OED*, s.v. *go* v. 20 *that goes without saying*).
- (2) *She has a real degree in science and so, you know, she's very critical of what we do, needless to say.* (2011. *Meet the Mythbusters*, NPR Science, COCA)
- (3) La Priora, *ni que decir tiene*, [...] no sabía qué hacer con aquella loca y la metió en celda incomunicada de castigo. (1956. R. Sánchez Mazas, *La vida nueva de Pedrito de Andía*, CORDE). ‘The Prioress, **it goes without saying**, [...] didn’t know what to do with that madwoman and as a punishment, she locked her up in a cell.’

In this corpus-based study we aim to shed light on the origin and evolution of these evidential expressions in both English and Spanish. Our purpose is twofold. On the one hand, we set to briefly describe their synchronic usage and how these might syntactically and pragmatically differ from or be similar to synonymous evidentials or stance adverbials (Biber et al 1999) such as *of course*, *evidently*, *naturally*, *obviously*, *no doubt*, and *not unexpectedly* (cf. González-Álvarez 1996; Simon-Vandenbergen & Aijmer 2007; Cornillie 2009, 2010, among others). On the other, we aim to trace the diachronic development of these constructions from their earliest attestations.

Our preliminary findings suggest that these predominantly left-periphery forms have undergone a process of (inter)subjectification over time (cf. López-Couso 2010; Traugott 2003, 2010) to acquire an essentially interactional function, aimed to seek agreement with the interlocutor(s). They also seem to have evolved from matrix clause structures (cf. (1)) into parenthetical clauses (cf. Dehé and Kavalova 2007; López Couso and Méndez Naya 2014), as in (2) and (3) above. Furthermore, while *needless to say* has its roots in the sixteenth century, (*it*) *goes without saying* and *ni que decir tiene* are only attested from the nineteenth century on, the former being a borrowing from the much older French expression *cela va sans dire*.

Data for the present paper will be retrieved from several diachronic and synchronic sources, including *Early English Books Online* (EEBO), ARCHER (3.2), the *Corpus of Late Modern English Texts* (CLMET3.0), the *Corpus of Historical American English* (COHA) and the *Corpus of Contemporary American English* (COCA) for English, and from the *Corpus diacrónico del español* (CORDE) and the *Corpus de referencia del español actual* (CREA) for Spanish, respectively.

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### **Turbulence-related aspects of melodic structure**

Within frameworks following the autosegmental mode of melodic structure segments are represented as atomic units composed of autonomous phonological primitives. Each such prime corresponds to identifiable phonetic reality and is directly interpretable at any level of derivation. The property of turbulence should thus be a manifestation of a cognitive element present in the structure of a relevant melody. This presentation will focus on the phonological structure and behavior of turbulent sounds in German with a view to defining system-specific mechanisms underlying both the organization and interaction of elements within these melodies. The analysis will be conducted within the model of Government Phonology (Kaye, Lowenstamm and Vergnaud 1985; 1990, Harris 1994, Gussmann 2002). More specifically, the structure of German turbulent sounds will be determined on the basis of their peculiar responses to phonological processes, degemination and spirantization in particular. These effects as well as the behavior of the voiced velar plosive indicate the necessity of recognizing the autonomous element of noise responsible for the property of turbulence. The operation of the two processes also makes it possible to define the structural difference between fricatives and affricates. It will be demonstrated that in German degemination targets segments that do not have to be completely identical. In detail, reduction will be attested both in [t+t, d+d] as well as [s+z] and [d+t] sequences (Wiese 1996). Affricate-related effects of degemination are even more interesting, revealing a special status of the manner-defining element of noise (and occlusion) in the affected segments. The analysis will propose the existence of a German-specific relation involving the manner primes which exposes the relevant segments to the simplifying

effects of the Obligatory Contour Principle. The evidence on consonant weakening also discloses a significant difference between the dialects of German that can be attributable to the operation of dialect-specific parameters concerning the status of elements. Further, we shall propose that element-binding is directly responsible for spirantization effects in Northern Standard German and its correlation with final obstruent devoicing (FOD, Brockhaus 1995).

In conclusion, the presentation is intended to bring to light the significance of the noise prime in the structure of turbulent sounds and its special role in triggering the processes of degemination and spirantization through its ability to enter inter-element binding (or bridging) relations. Also, the relationship between prime bridging and OCP will be proposed.

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#### **Argument structure in flux: On the emergence of two valency-increasing constructions in the history of English**

Studies on English verb valency (Visser 1963-1973, van Gelderen 2011, among others) have drawn attention to the numerous diachronic changes undergone by English in that area of grammar. The simplification of most inflectional categories and consequent morphological opacity, coupled with the loss of transitivizing/causativizing affixes (e.g. Gmc *-j-/i-*), lie behind developments such as the emergence of an increasing number of labile verbs capable of being employed in valency alternations (i.e. transitively and intransitively) with no formal change.

In this paper, we will examine two kinds of valency-increasing constructions in the history of English. On the one hand, occurrences of intransitive verbs of manner of speaking (*grunt, sigh, whisper*) and verbs of gestures and signs (*clap, nod, smile*) governing a nominal object, in a pattern that, following its initial description in Levin (1993), has usually come to be known as Reaction Object Construction (ROC). Witness (1):

- (1) 1591/Greene/Second Pt. *Conny-catching*: that the horse-stealer **clap** him **good lucke**. (OED *clap* v.<sup>1</sup>II.5.d).

ROCs can generally be paraphrased as ‘to express N by V-ing’; in the above example, ‘to express/wish good luck by clapping’. They emerge in English in late Middle English (Bouso 2014), but only grow in frequency from Modern English onwards, their expansion coinciding with that of other kinds of unsubcategorized objects, in particular so-called ‘aspectual’ cognate objects (e.g. *to cough a sinister cough*; cf. Lavidas 2013/2014).

These ‘augmentation’ processes in intransitives take place alongside changes affecting another frequent intransitive pattern, namely the construction first discussed by Goldberg (1995) under the label ‘Intransitive Motion construction’ (IMC), as in (2):

- (2) OE *Homilies of Aelfric*: *þæt wif ... efste to ðære byrig*. (DOE *ef(e)stan* A.1.a) ‘the woman ... hurried to the city’

In the variant of the IMC most commonly attested since Old English (Fanego 2012/Huber 2014), the construction conforms to a schema of the form [SUBJ-V-DIR], where V is a verb of manner of motion such as OE *efestan* ‘hurry’, and DIR a directional particle or phrase, i.e., a ‘satellite’, in the terminology of Talmy (1985/2000). That the IMC is a construction with its own non-compositional meaning is apparent from the fact that a variety of non-motion verbs, including sound emission verbs such as *rustle* (originally, ‘to make a soft crackling sound’), can also be accommodated into the construction, their meanings then conforming to the meaning of the structure in which they are embedded through the principle of ‘coercion’ (Goldberg 1995/Michaelis 2004). The morphosyntactic context effectively extends the argument structure

of the verb into a directional meaning and adds, furthermore, an implication of concurrent result: in (3) below the rustling is a result of the minstrels' motion. In other words, "it is the motion that brings about the sound emission" (Croft 2012:302).

- (3) 1594/Lyly/*Mother Bombie*: These minstrelles... **rustle into euery place.** (OED *rustle* v.2.a. 'To move with a rustling sound')

In our presentation, we will explore the interconnections between the valency-increasing constructions above mentioned, and the relationship between the emergence, at some point during Middle English, of the variant of the IMC illustrated in (3) and developments taking place in the system of English resultative constructions generally (Broccias 2008/Mondorf 2011/Traugott/Trousdale 2013:76ff).

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### Pronouns and agrammatism in a functional theory of grammatical status

Agrammatism is a cluster of symptoms associated with Broca's aphasia. It is defined in terms of an impaired ability to produce grammatical expressions, including affixes, grammatical words like auxiliaries and articles, and more or less schematic constructions (e.g. Goodglass & Menn 1985). Agrammatic data thus provide a testing stone for any theory of what it means to be grammatical.

This paper employs agrammatic speech production data in order to test Boye & Harder's (2012) theory of grammatical status. According to Boye & Harder (2012), grammar consists of expressions (morphemes, words, constructions) that are conventionalized as discursively secondary. In contrast, lexical expressions

have the potential of being discursively primary (i.e. carriers of the main point of an utterance). This theory is intended to account for the whole inventory of what are traditionally considered grammatical expressions. In some cases, however, the theory suggests a classification which differs from traditional ones. In particular, pronouns are traditionally considered grammatical, but Boye and Harder (2012) argued that some pronouns are in fact lexical. Thus, pronouns present an ideal case for testing Boye & Harder's theory in contrast to traditional conceptions of grammar.

The hypothesis is that pronouns classified as grammatical based on Boye & Harder (2012) are more severely affected in agrammatic speech production than pronouns classified as lexical. This hypothesis is tested in two studies, a French one and a Danish one. In the French study, speech production data (Sahraoui 2009; Sahraoui & Nespolous 2012) from 6 patients diagnosed with agrammatic aphasia are contrasted with comparable data from a control group consisting of 9 non-brain damaged speakers of French. In the Danish study, speech production data from one patient diagnosed with agrammatic aphasia are contrasted with comparable data from two control groups each consisting of 19 non-brain damaged speakers of Danish.

In both studies, pronouns are classified as grammatical or lexical based on the tests for grammatical status in Boye & Harder (2012: 13-18). For instance, French *moi* is classified as lexical and French *je* and *me* as grammatical due to the fact that the former can be focalized (e.g. in a cleft construction like *c'est moi qui...*) and addressed in subsequent discourse, while the latter cannot (cp. \**c'est je/me qui...*). In each study, subsequently, the grammatical-pronoun share of the total number of pronouns is calculated for each of the speakers, and agrammatic shares are compared to shares found in the data representing the non-brain damaged speakers.

Our preliminary results (the Danish agrammatic speaker, two French agrammatic speakers and all the non-brain damaged speakers) support a pronoun classification based on Boye & Harder (2012), and thus also Boye & Harder's theory: the grammatical-pronoun shares are significantly smaller in agrammatic speech than in the speech of non-brain damaged speakers. This quantitative analysis is supplied by a qualitative analysis which gives an idea of the strategies developed by agrammatic speakers in order to compensate for their impaired ability to produce grammatical pronouns.

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### **Revisiting “switch-reference”: on the contact-induced origin of clause chains in Chini (Papuan)**

Ever since Jacobsen (1961) identified switch-reference constructions in North American languages, the prevailing view among linguists of diverse theoretical backgrounds has been that switch-reference systems are based on the category of subject (Haiman & Munro 1983; Finer 1985). The canonical approach thus presupposes that switch-reference constructions are organized with respect to their referential tracking function, where subject continuity and discontinuity across clause boundaries are marked. In her paper on switch-reference marking in Central Pomo, Mithun (1993) shows that supposed exceptions to canonical marking pose a fundamental problem for traditional analyses of switch-reference. She points out that “formal similarities between the Central Pomo markers and their equivalents in other languages suggest that... systems previously identified as switch-reference may in fact be clause-combining devices” (119). It is this question – indeed, challenge – that forms the basis for the present study.

In Papuan languages with clause chaining, switch-reference systems have largely been analyzed according to the canonical approach, where the referential tracking function of the markers is thought to link the dependent medial clauses in the chain until the independent final verb in the chain. Here I investigate switch-reference constructions and their broader clause chaining structures in Chini, a Ramu language of Papua

New Guinea. I rely on six hours of transcribed narrative and conversational data collected during seven months of fieldwork, in order to show that a careful look at these constructions reveals a system based on clause-linking strikingly similar to what Mithun (1993) proposes.

In Chini, two pairs of clausal enclitics are used to link the medial clauses of realis and irrealis clause chains (respectively: *ki* and *va*; *ti* and *mi*). Similar to switch-reference devices identified in Central Pomo and other languages, these markers signal a binary distinction between continuous/'same' (*ki* and *ti*) and discontinuous/'different' (*va* and *mi*) eventhood. Medial clauses linked only by 'same' markers are more dependent on the final verb for TAM, polarity, and other categories, while medial clauses linked by 'different' markers are less dependent. Each marker thus signals realis or irrealis modality of the clause chain as a whole and continuity or discontinuity between the events represented by each medial clause.

After describing the formal and functional properties of these constructions, I discuss how Chini's switch-reference system likely originated through contact with neighboring languages. Given the formal identity between the two clitics used for different-marking (*va* and *mi*) and markers of conditional *if*-clauses (also *va* and *mi*), I suggest that grammatical calquing led to an extension of the constructional use of protasis-marking to other types of discontinuous eventhood marking. The clitics used for same-marking (*ki* and *ti*), however, appear to be the grammaticalized forms of sequential adverbial clause linkers (*nda-ka/-ki* and *nda-ta/-ti*). I argue that it was in fact contact with Manat and other nearby Trans New Guinea languages (i.e., which do have switch-reference and clause-chaining) that caused the grammaticalization of the same-marking constructions and also fueled the grammaticalization of the different-marking constructions, resulting in the current system.

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**Line BURHOLT and Ruben SCHACHTENHAUFEN** (Department of Nordic Studies and Linguistics, University of Copenhagen)

#### **Differences in phonetic reduction for grammar vs. lexicon**

According to previous experimental studies, grammatical elements in a text are less attended to than lexical elements (Rosenberg et al., 1985; Vinther et al., 2015). Here we investigate whether the grammatical status of a word not only affects the perception of words in a text, but also the way the word is produced in conversation.

Boye & Harder's (2012) usage-based theory of grammatical status defines grammatical words as words that are dedicated to expressing background information, whereas lexical words have the potential to express foreground information (the main point of an utterance). From this definition, it follows that lexical words can be focused, whereas grammatical words cannot.

We present the results of an ongoing corpus study based on the Danish speech corpus DanPASS (Grønnum, 2009) which consists of phonetically transcribed monologues and dialogues from 27 native speakers of Danish. Within this corpus, we searched for tokens from a predefined list of grammatical and lexical words. The list consisted of verbs, determiners and adverbs that were ambiguous with respect to the grammatical-lexical contrast. For instance, "have" ('have') is both an auxiliary and a full verb, and "en" is both an article ('a') and a numeral ('one').

Words (or rather word variants; see above on ambiguity) were classified as either grammatical or lexical based on the focalization criteria in Boye & Harder (2012: 13-18). For instance, words that could be focused by means of a focus marker like 'only' or 'just' were classified as lexical. Thereby "have" is lexical in "Du \_har \_en stor firkant" ('You \_have\_ a big square'), but grammatical in "Du \_har\_ passeret et posthus" ('You \_have\_ passed by a post office'). In the same way, "en" is lexical in "Du har \_en\_ stor firkant" ('You have \_a\_ big square'), but grammatical in "De skal være cirka en centimeter fra toppen" ('They should be about \_one\_ centimeter from the top').

We compared the pronunciation of lexical and grammatical words/word variants, taking into account that there are differences between items in the potential for reduction (Schachtenhaufen, 2013). We present and

discuss the analysis of the corpus study, as well as categorization criteria, criteria for determining differences in reduction level and results of statistical tests. While some (already short) items may have little potential for reduction, we expect to find overall differences in the reduction of grammatical vs. lexical words/word variants. More specifically, we expect to find a more distinct pronunciation of lexical items (e.g. the full verb *have*) than of grammatical items (e.g. auxiliary *have*), supporting the concept of grammar as dedicated background information in both perception and production.

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**Giuseppe G.A. CELANO** (Leipzig University)

## Information structure and subordinators in Herodotus' Histories

In a number of languages, a subordinate clause (Cristofaro 2003) can show different subordinators on the basis of whether it is topical or focal:

### Example (1) (Italian)

- A: Perché studi il greco?  
why study.2SG.PRS.IND the Greek?  
“Why do you study Greek?”

B: Perché amo il bello  
because love.1SG.PRS.IND the beautiful  
“Because I love beauty”

B: \*Poiché amo il bello

Although poiché and perché can both introduce a causal clause in Italian, only the latter is, as Example (1B) shows, used with a focus causal clause. In this contribution, I investigate the same phenomenon in the Ancient Greek (AG) of Herodotus' Histories. I search the XML text of the PROIEL Treebank (Haug-Jøhndal 2008), which includes Book I and parts of Books IV, V, VI, and VII, for a few subordinators (*ἐπει*, *ἐπειδή*, *ἐπειδάν*, *διότι*, *ὅτι*, *πρίν*, and *ώστε*) and I review the results manually in order to qualify and quantify their relationships with information structure (Erteschik-Shir 2007): are there any subordinators used to only/mainly introduce topic or focus clauses in AG? (Celano 2013(a); 2013(b); Dik 2007; Matić 2003).

I will extract subordinate clauses computationally (using XQuery 3.0 implemented in BaseX 7.9) and order them according to their positions with respect to their superordinate clauses. Adopting the theoretical framework by Lambrecht 1994, I will review the results to ascertain whether a relationship between position and information structure holds for the AG subordinators. Since the data are freely available and the procedure is fully documented, the research is, as far as possible, reproducible and verifiable (see Celano 2014).

Some preliminary (non-manually reviewed) results seem to point out that in AG there exist information-structure-sensitive subordinators:

Table (1)

case, subordinator, preceding the superordinate clause, following the superordinate clause, total,  $\chi^2$  ( $df=1$ )

1, èπéí, 114, 8, 122,  $\chi^2 = 92.0984$  p-value < 2.2e-16 p\_two-tailed < 0.001

2, έπειδή, 14, 2, 16,  $\chi^2 = 9$  p-value = 0.0027 p\_two-tailed < 0.01

3, έπειδάν, 28, 1, 29,  $\chi^2 = 25.1379$  p-value = 5.337e-07 p\_two-tailed < 0.001

6, πρίν, 12, 12, 24, χ<sup>2</sup> = 0

7, ώστε, 0, 17, 17, χ<sup>2</sup> = 17 p-value = 3.738e-05 p\_two-tailed < 0.001

If one relies on the (usually valid) assumption that clauses preceding the superordinate clause are topical while clauses following the superordinate clause are focal, Table (1) seems to show that ἐπεί, ἐπειδή, and ἐπειδόν are mainly used to introduce topic subordinate (temporal/causal) clauses; instead, the subordinator πρίν seems to be able to equally introduce both focus and topic clauses, while ώστε only introduces a focus clause.

I expect that close inspection of the data reveals that clause position is related to pragmatic function (topic/focus), which will be evaluated on the basis of context, relying on whether clause content can be taken to be already known, inferable, or new.

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**Michela CENNAMO** (University of Naples Federico II)

### Aspects of grammaticalization in Romance voice systems

In this talk I will discuss some aspects of the grammaticalization of lexical verbs as passive auxiliaries in Romance and the reanalysis of reflexives as voice markers, focusing on the diachronic relationship between auxiliation and serialization, and the direction of the changes, trying to detect general and areal features of the grammaticalization patterns investigated (Bisang 2008; Heine & Kuteva 2011, among others). More specifically, I will consider the grammaticalization of some motion (COME), activity (DO/MAKE) and change of state (BECOME) verbs in the transition from Latin to (Italo-)Romance, in relation to the status of serial/light verbs — whether intermediate stages in the auxiliarization process (Rosen 1977, Giacalone Ramat 2000, among others) or a different syntactic category (Butt 2003) — and to the linearity of the relationship between serial verb and auxiliary (following the path verbal lexeme > serial > auxiliary) (Heine 2003, Hopper & Traugott 2003 and recent discussion in Bisang 2011, Börjars & Vincent 2011, among others).

I will argue that, although characterized by maximal desemanticization on a par with auxiliaries, the serial uses of the verbs under investigation in (Italo-)Romance seem to exhibit a different type rather than a reduced degree of decategorialization. I will also show that the relationship serial verb-auxiliary is non-linear: the same lexeme, in fact, can have simultaneously auxiliary and serial uses, the latter developing, for some verbs, after their auxiliary uses (Cennamo 2006, 2007).

Other types of grammaticalization instead, appear to follow a linear path, like the reanalysis of the reflexive morpheme as a voice marker, proceeding from anticausative to passive and optionally to an impersonal/indefinite reinterpretation, the latter attested to a different degree in Romance (Cennamo 1993, 2014, forthc.). Evidence for this claim is also given by changes currently taking place in Brazilian Portuguese, involving the loss of the reflexive as a passive marker, whilst its impersonal/indefinite function is retained (Cyrino 2007, 2013).

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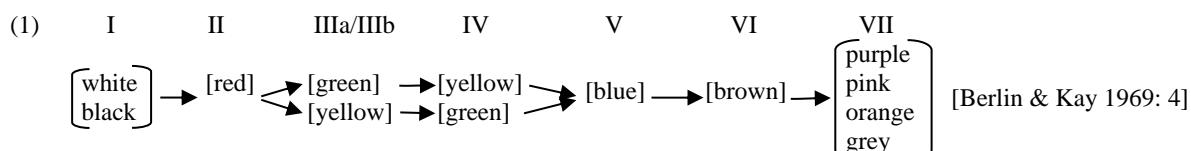
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**Chariton CHARITONIDIS** (University of Cologne)

**The power of semantic constraints in word formation:  
the case of colour verbs in Modern Greek and English**

This lecture deals with the fundamental role of semantic constraints in word formation. The object of investigation are the colour verbs in Modern Greek (MG) and English (EN). The analysis is based on the studies by Berlin and Kay (1969), Kay & McDaniel (1978), and Kay & Maffi (1999) on Basic Colour Terms (BCTS).

In (1) the main findings of Berlin and Kay (1969) are given. As can be seen, seven stages of BCT systems are defined, depending on the number of BCTs that a particular language has. Languages with eight to eleven BCTs are assigned to stage VII.



Possible/established verbs in MG and EN address a primary categorial core (Stages I–V), cf. MG *kokinízo* ‘make/become red’ (*kókino* ‘red’) and EN *to redder* ‘make/become red’. Possible verbs/neologisms are adjacent to this primary core, cf. MG *movízo* ‘make/become purple’ (*mov* ‘purple’) and EN *to pinken* ‘make/become pink’ (Stages VI–VII). In the case of MG, very fresh neologisms are far away from a cognitive core (i.e. beyond Stage VII), cf. *ladhízo* ‘make/become olive-green’ (*ladhí* ‘olive-green’), whereas not possible/forced verbs are cognitively dissociated, cf. *!trapezízo* or *!potirízo*, whose bases *trapézi* ‘table’ and *potíri* ‘glass’, respectively, refer to objects without a characteristic colour, etc.

In the lecture I will argue that the formalization of the MG and EN colour verbs is feasible. All we need is a causative/inchoative structure with special semantic conditions on the end-state ([+Loc]) argument, see (2) and (3), respectively.

## (2) MG colour verbs

[+dynamic ([<sub>volitional-i</sub> ], [<sub>j</sub> ]) ; [+dynamic ([<sub>i</sub> ], [+dynamic, +IEPS ([<sub>j</sub> ], [+Loc ])]), <base>]  
[+BCT][+PRIMARY]  
[+BCT][-PRIMARY]  
[−BCT][+CHAR]

## (3) EN colour verbs

[+dynamic ([<sub>volitional-i</sub> ], [<sub>j</sub> ]) ; [+dynamic ([<sub>i</sub> ], [+dynamic, +IEPS ([<sub>j</sub> ], [+Loc<sub>[+BCT]</sub> ])]), <base>]

In (2) and (3) ‘IEPS’ [Inferable Eventual Position or State] refers to a sequence of places or states (progression). The indices *i* and *j* co-index the agent and patient arguments, respectively. The base argument is co-indexed with the [+Loc] argument. In the inchoative variant the underlined part of the structure drops (Lieber 2004).

In the semantic skeleton for the MG colour verbs in (2), three disjoint conditions are defined, i.e. [+BCT][+PRIMARY], [+BCT][-PRIMARY], and [−BCT][+CHAR]. [+PRIMARY] refers to the distinction between primary and non-primary BCTS in Kay & McDaniel (1978), i.e. colour terms up to the emergence of blue and colour terms after the emergence of blue, respectively (cf. (1)). [+CHAR] stands for ‘characteristic colour’ and refers to colour adjectives derived from the names of objects/substances having a characteristic colour, cf. *asimí* ‘silver’, etc. The options [+BCT][-PRIMARY] and [−BCT][+CHAR], will additionally drop the causative (=underlined) part of the semantic skeleton.

In the semantic skeleton for the EN colour verbs in (3), a single condition is defined, i.e. [+BCT]. This suggests that non-BCTS tend to yield no verbs in EN, cf. \**to beige*, \**to maroon*, etc.

According to an extensive internet research, I will finally show that systematic gaps linked to the causative/inchoative paradigm of *-ízo* derivatives are due to the semantics of the base rather than deficiencies in the base’s morphophonological character. The lower the evolutional stage that a base can be fitted to, the more likely an *-ízo* derivative will be produced.

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**Jaehoon CHOI (Ghent University)**

## On the not-at-issue meaning of jussive particles in Korean

This paper aims to rethink the semantics of jussive particles in Korean. We draw attention to the not-at-issue meanings of jussive particles in Korean and propose an analysis in terms of multidimensional semantics (cf. Kim 2014; Kim and Sells 2007).

Korean has three types of jussive clauses: imperatives with ‘la’ particle (1), promissives with ‘ma’ particle (2), and exhortatives with ‘ca’ particle (3).

- (1) Ney-ka ka-la.  
 you-Nom go-Imp]  
 ‘You go.’

- (2) Nay-ka ka-ma.  
I-Nom go-Prom  
'I will go.'
- (3) Wuli-ka ka-ca.  
we-Nom go-Exh  
'Let's go.'

It has been proposed by Zanuttini et al. (2012) (see also Portner 2007) that Korean jussive particles bear person features: 2nd person on imperative 'la'; 1st person on promissive 'ma'; 1st person plural inclusive on exhortative 'ca'. These particles bind jussive subjects via agreement, restricting the person interpretation of the subjects.

Additionally, we observe that jussive particles indicate speaker-addressee relationship: the speaker is superior to or at the same level as the addressee. Hence, (1-3) is felicitous if uttered by a teacher to her student. There are more reasons to believe that this observation is correct. First, the addressee honorific particle 'yo' is used instead of jussive particles when the address is superior to the speaker (e.g., when uttered by a student to her teacher), as evidenced by the contrasting subject forms in (1-3) and (4-6). Second, 'yo' is in complementary distribution with jussive particles: \*-yo-{la/-ma/-ca} or \*{-la/-ma/-ca}-yo.

- (4) Tangsin-i ka-yo.  
you.Honorific-Nom go-Addressee.Honorific  
'You go.'
- (5) Cey-ka ka-yo.  
I.Humble-Nom go-Addressee.Honorific  
'I will go.'
- (6) Cehuy-ka ka-yo.  
we.Humble-Nom go-Addressee.Honorific  
'Let's go.'

The speaker-addressee relationship in (1-6), I argue, is not-at-issue content for reasons. To name a few, the relationship cannot be independently negated by any means. While negating (1) yields (7) and this affects the at-issue meaning, the relationship of (1) does not change in (7). Whatever relationship felicitously established in (1) is immune to negation. Also, the relationship does not add a condition to a conditional. That is, whether the addressee can catch the train has nothing to do with the relationship in (8).

- (7) Ka-ci mal-ala.  
go-CI Neg-Imp  
'Don't go.'
- (8) Ppalli ka-la. Kulemyen, kicha-lul thal-swuiss-ta.  
quickly go-Imp then train-Acc catch-can-Decl  
'Go quickly. Then, you can catch the train.'

These facts clearly reveal not-at-issue characteristic of jussive particles. We thus claim that Korean jussive particles are associated with two dimensions of meaning. Taking the imperative jussive particle as an example, the imperative particle, on the at-issue tier, controls second person interpretation of subjects, as represented before the colons in (9). On the not-at-issue tier, jussive particles denote the speaker-addressee relationship, as represented after the colons in (9) (where 'a $\geq$ b' stands for 'a is superior to or at the same level as b'). See (10) and (11) for promissives and exhortatives, respectively. When the addressee is superior to the speaker, the not-at-issue meaning of 'yo' emerges.

- (9)  $[[\text{Imp}^\circ]] = [\lambda x:x=\text{addressee}(c).[\lambda w.\text{vP}(x)(w)]] : [\lambda y:y=\text{addressee}(c).[\lambda z:z=\text{speaker}(c).[y \leq z]]]$
- (10)  $[[\text{Prom}^\circ]] = [\lambda x:x=\text{speaker}(c).[\lambda w.\text{vP}(x)(w)]] : [\lambda y:y=\text{speaker}(c).[\lambda z:z=\text{addressee}(c).[y \geq z]]]$
- (11)  $[[\text{Exh}^\circ]] = [\lambda x:x=\text{speaker}(c)+\text{addressee}(c).[\lambda w.\text{vP}(x)(w)]] : [\lambda y:y=\text{speaker}(c).[\lambda z:z=\text{addressee}(c).[y \leq z] \& [y \geq z]]]$

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**Eduardo COTO** (University of Santiago de Compostela)  
**'The employee got fired' vs 'The book got published':  
new trends in subject animacy and subject responsibility**

Constructions like *The employee got fired by the boss*, consisting of *get* followed by a verbal past participle and an overt agent *by*-phrase, are usually known as ‘central’ *get*-passives (Collins 1996: 45), in opposition to various other sequences (e.g. *get dressed*, *get frustrated*, *get married*) also containing *get* followed by an *-ed* form, but not being considered to qualify as passive structures. Authors such as Carter & McCarthy (1999: 52) point out a number of features which characterise central *get*-passives in contemporary English. These concern the possibility of taking an agent *by*-phrase, the dynamic meaning of the lexical verb, the adversative semantic implication of the past participle, and the animacy and responsibility features of the subject. These properties vary with respect to the most widespread passive periphrasis, the *be*-passive: although generally infrequent, agent *by*-phrases are more common in *be*- than in *get*-passives (Johansson & Oksefjell 1996: 69), *be*-passives can be found both with dynamic and stative verbs (Huddleston & Pullum et al. 2002: 1442) and are usually more neutral in meaning (Fryd 2008: 13–14), and if speakers talk about animate and responsible beings, there is a greater chance for them to use the *get*- rather than the *be*-passive (Seoane 2009: 373–374). Interestingly, my recent research on British English and Indian English (Coto-Villalibre 2014a, 2014b) has shown that some of the characteristics distinctive of central *get*-passives are not complied with and that substantial differences between one variety and the other can be detected, especially, as the title suggests, regarding subject animacy and subject responsibility.

Can the list of features described above still be considered as definitory of central *get*-passives or is this construction undergoing a change? I will try to settle this issue by analysing the defining characteristics in three Outer Circle varieties, where English is used as a second language, namely India, Hong Kong and Singapore; British English will serve as the reference variety. The corpora selected for the study are the spoken components of the *International Corpus of English* (ICE), as they contain material adequate for cross-varietal comparative analyses. Firstly, I will study the syntactic, semantic and pragmatic characteristics of central *get*-passives and, secondly, I will analyse the similarities and differences across the different varieties, paying special attention to the influence of the substrata. Do English as a Second Language (ESL) varieties of English share a common underlying pattern as regards the properties of central *get*-passives, and does this pattern differ from the English as a Native Language (ENL) variety? If so, it would be of great interest to determine the extent to which they differ, and if these constructions occur more freely in new environments and serve new functions (e.g. occur with inanimate and non-responsible subjects, and in beneficial or neutral contexts). The results might shed light on those theories (Schneider 2007: 38) which contend that standard varieties tend to be more conservative than non-standard varieties, and that the latter often exhibit morphosyntactic variation involving constructions available in standard varieties which adopt new functions and meanings.

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**Sonia CRISTOFARO** (University of Pavia)

**Frequency as an explanatory factor in typology:  
reassessing the evidence in diachronic perspective**

Frequency has long been recognized to affect linguistic structure to the extent that high-frequency items undergo phonetic reduction at a faster rate than low frequency ones, and are represented and accessed as single units. These effects are plausibly related to cognitive automatization and consequent reduction of articulatory gestures (Mithun 2003, Bybee 2001 and 2007).

In typology, frequency has been invoked in a different sense: overt marking is selectively used for less frequent, rather than more frequent meanings, because the latter are easier to identify and hence less in need to be indicated overtly. This idea underlies the general notion of typological markedness, manifested in classical explanations of the use of zero vs. overt marking in grammatical domains such as singular vs. plural, inalienable vs. alienable possession, and various argument roles within different alignment systems (Greenberg 1966, Comrie 1989, Croft 2003, Haspelmath 2006 and 2008, among others). These explanations, however, are based on the synchronic distribution of zero vs. overt marking in these domains, not how these patterns actually arise diachronically in individual languages. The paper presents extensive cross-linguistic evidence about this process, and argues that this evidence poses several challenges for frequency explanations.

Many languages, for example, display a pattern whereby different meanings (singular vs. plural, alienable vs. inalienable possession, different argument roles) are all originally zero marked, and overt markers for some of these meanings arise over time from the reinterpretation of elements used for other functions (through grammaticalization or other processes of form-meaning redistribution within complex expressions). The meanings encoded by the overt markers are those related to the original meaning of the source construction, while the other meanings retain zero marking. In such cases, the distribution of zero vs. overt marking is a result of the properties of the source constructions that give rise to the overt markers, rather than the frequency of the meanings being encoded.

Also, the reinterpretation processes that give rise to overt markers are plausibly driven by context-induced inferences (Bybee, Perkins, and Pagliuca 1994, Heine 2003, Traugott and Dasher 2005), and there is no direct evidence that they are also driven by the low frequency of the meanings encoded by the markers.

In some languages, zero vs. overt marking for different meanings (for example singular vs. plural) is also sometimes a result of processes whereby these meanings were all originally marked overtly, and regular phonetic changes eliminated some of the markers. These changes cannot be related to frequency, and, cross-linguistically, they affect both markers encoding more frequent meanings and ones encoding less frequent meanings.

Contrary to other linguistic phenomena, then, the cross-linguistic distribution of zero vs. overt marking for different meanings does not obviously originate from frequency. A full understanding of this phenomenon requires diachronic data about the particularized, often context-dependent processes that give rise to the relevant patterns (for example, what source constructions can give rise to specific overt markers, in what contexts, through what mechanisms), rather than data about the frequency of the meanings being expressed.

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**Anna DE MARCO and Emanuela PAONE** (University of Calabria)

### **Prosodic and non-verbal carriers of emotion in L2: teaching Italian through video dubbing tasks**

Recent studies (Dewaele, 2005) have highlighted that L2 learners from distant cultures may experience difficulties in expressing and perceiving emotions in the target language. The present research explored whether video dubbing tasks could encourage L2 learners to develop a pragmatic competence of affective communication in the target language. As shown by different studies (Brooke, 2003; Dubreil, 2003; Burston 2005; McNulty, Lazarevic 2012), video technology constitutes a high motivational tool, which guarantees students' participation with a lower affective filter (Burston, 2005). The goal of our study was to make learners of Italian aware of the paralinguistic features (facial expressions, gestures) as well as the prosody (rhythm, loudness, speech rate) as carrier of speaker's emotional states in L2. We selected a series of video clips containing specific emotional contexts, i.e. the expression of basic emotions (Darwin, 1982; Ekman, 1982): anger, disgust, fear, surprise, sadness and joy.

A group of L2 learners of Italian (with B1 level proficiency) coming from different countries (Ecuador, Mexico and Cuba) was involved in the experiment. In the first phase of the experiment, learners watched the video clips without soundtrack focusing on visual details only. A brainstorming activity fostered students to guess the general meaning of the scenes: participants, places, actions. They were asked to pay attention to participants' facial expressions and gestures and to hypothesize the content of their interactions, i.e. possible communicative intentions of participants. In addition, learners were asked to write a possible script for each scene. In the second phase, students were shown the video clips with their original soundtrack and verified their hypotheses. At this stage, close attention was paid to the prosodic features of vocal emotions expressed by the actors. To facilitate this task, students were previously given a brief description of vocal cues involved in the expression of emotions in Italian (Anolli, Ciceri, 1992; Anolli et al., 2008). Learners were asked to listen to the dialogues and to try to repeat what they heard. Such activity encouraged their listening comprehension skills, whereas the pronunciation practice prepared them for the dubbing activity (Burston, 2005). Learners transcribed the dialogues in order to have their own personal script. Video editing was carried out by *Windows MovieMakers*. An external audiotape recorder and a professional microphone were employed in the recording sessions. Learners rehearsed their dialogue parts, and tried to dub the scenes. After the recording sessions, we carried out an acoustic analysis (i.e. duration, speech rate, pitch range and intensity) of learners' performances, comparing them with those of Italian actors. Results revealed a significant improvement in fluency, phonetic accuracy and prosody. In particular, emotions better performed were sadness and anger; fear and disgust were more difficult to perform, probably due to cultural differences in the vocal expression of such emotions. Furthermore, learners improved their knowledge of non verbal communication linked to the expression of emotions in Italian.

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**Anna DE MARCO and Mariagrazia PALUMBO** (Università della Calabria)

### Discourse markers in the Italian migrants' speech

Our study focuses on discourse markers (DMs) in the languages spoken by Italian emigrants in Munich (Krefeld 2004, Melchior Krefeld 2011), an area in which migration is still an ongoing phenomenon. Moreover, although there is a great deal of research in the German context (Schmid 2005, Vedovelli 2011, Barni 2011) a few studies have been focused on the use of discourse markers (De Fina Bizzoni 2003, Clyne 2003). In the context of Italian migration, previous research have pointed out that DMs are part of the mixed bilingual code, in which they tend to a sort of functional specialization depending on the DMs used in the host language (De Fina 2003, p. 37).

The DMs taken into account in this study, *allora* "then", "well" (partly corresponding to the German "also"), and *magari* "if only", "maybe", have not been thoroughly investigated in the literature.

Data have been collected through semi-structured interviews conducted in Munich with 31 Calabrian emigrants belonging to different generation of speakers. In order to activate a bilingual language mode, the interviews were run both in Italian, Italian dialects and German. Two groups of informants have been identified: the first group (20 informants), mostly living in an Italian-speaking familiar context and the second group (11 informants) living in a bilingual context (exogamous marriage, friendship both with German and Italian people, schooling in Germany). In our data, 56 DMs occurrences have undergone a functional and distributional analysis.

Our research questions are the following: a. which kind of functions and distributions of DMs can be observed in the emigrants' speech? b. is there any difference in the use of discourse markers by the two groups of emigrants? c. what kind of changes can be observed in form, function and distribution of DMs both at an intergenerational level and in the two groups of emigrants?

We hypothesize that the two groups of Italian speakers show different uses of the DMs due to social factors and to the functions DMs display in the different languages. More precisely, where the Italian DMs have a correspondence in German, it is possible that the two forms (for example *also* and *allora*) are both maintained in Italian with a difference in the functions, when they do not have a clear-cut correspondence, Italian DMs tend to be preferred to the German ones. Therefore *allora* tends to be displaced by the corresponding German form *also*, whereas *magari* is maintained. In particular the analysis has shown that the first group of informants employs Italian DMs, while the second group of informants use both Italian and German DMs. In these informants, *allora* does not change from a distributional point of view, but it is replaced by *also* used as a turn introducer.

Our analysis shows that in the context of migration, the use of DMs (function and distribution) is affected both by the attitude of the speakers towards the host language and culture and by the host languages lexical resources.

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**Noemi DE PASQUALE and Luisa CORONA** (Università degli Studi di Salerno)

**The “classical” way to encode motion. Variation and continuity in the expression of motion events in Ancient Greek and Latin**

According to Talmy’s theoretical framework (2000), both Ancient Greek and Latin belong to the Satellite-Framed type, since they preferentially encode Path outside the verbal root. Their daughter languages, however, are classified as Verb-Framed.

In this paper, we analyze the morphosyntactic devices employed by Ancient Greek and Latin for the encoding of the basic semantic component of a motion event, i. e. Path (see Croft et al. 2010; Grinevald 2011) and investigate the possible starting point of the typological shift from Satellite-Framing towards Verb-Framing (see Iacobini & Fagard 2011).

Our work is based on a corpus analysis of literary texts belonging to the classical period (5th century b. C. for Ancient Greek and 1st century b./a. C. for Latin) and their translations into Modern Greek and Italian. As for the labelling of the collected data, we used a coding grid adapted from Fortis & Vittrant (2011).

The preliminary results of our work show that:

both in Ancient Greek and Latin, the Path information is conveyed by more than one lexical item within the clause: it can be simultaneously expressed by satellite preverbs, adpositions, case markers and verbal roots. Furthermore, though displaying the main features of SF languages, Ancient Greek and Latin also share traits of the VF type (such as a low degree of Manner salience);

non-preverbed directional verbs, such as *eo*, *venio*, *proficiscor*, *mitto*, already appear in Classical Latin and could represent the bridge towards a preferential VF strategy of Path expression;

in Classical Latin, when reinforced by prepositional phrases, preverbs encode the same portion of Path expressed within the adnominal locus (*exire ex castris*; *ad Galbam adcurrunt*);

the low frequency of elaborated Paths in Latin could be taken as one of the main factors driving the typological change into VF Italian.

In Classical Greek:

when both the preverb and the preposition express Path, they can refer either to the same portion (*ἐς τὴν λόχιμην ἔσβανε*) or to different portions of this semantic component (*ἀπῆλθε ἐς τὰς Σάρδις*);

in co-occurring within a clause, the preverb and the preposition can diverge, though encoding the same subcomponent of Path (*ἐς Τύρον προσσχόντας*);

with respect to Latin, Ancient Greek seems to be prouer to describe elaborated Paths, either through the combination of satellite preverbs and adpositions (*ρέων ἀπὸ μεσαμβρίης μεταξὺ Συρίων τε καὶ Παφλαγόνων ἐξιεῖ πρὸς βορέην ἄνεμον ἐς τὸν Εὔξεινον καλεόμενον πόντον*), or through the less stable strategy of multiple preverbalization (*ύπ-εκδύς*).

From a variationist and diachronic perspective, our work proves that only a detailed investigation of the different constructions employed for the expression of Path can account for the gap between system and usage, as well as for the phenomena involved in typological shifts. Furthermore, our empirical results provide an inventory of the morphosyntactic means used for the encoding of Path in Ancient Greek and Latin. From a methodological point of view, our description can be exploited as a tool for the typological comparison among different languages.

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**Ömer DEMIROK (MIT) and Balkız ÖZTÜRK (Boğaziçi University)**

### The Logophoric Complementizer in Laz

The main aim of this paper is to analyze the properties of the Logophoric Complementizer (LC) in Laz, an endangered South Caucasian language spoken in Turkey, and to provide morphological evidence for the ‘monster operator’ responsible for the indexical shifting attested in the case of attitude predicates as well as for the discourse/pragmatics related projections *Mood<sub>SpeechAct</sub>* and *Mood<sub>Evaluative</sub>*, which have been incorporated into the CP domain in the cartographic literature (Rizzi 1997, Cinque 1999). There are three phenomena associated with LC in Laz:

- i) LC in Laz is only compatible with the attitude verbs ‘say’ and ‘think’. The spell-out of LC exhibits person-variation (i.e. matrix subject and LC co-vary in person feature (compare 1a and 1b below).

- (1) a. Himuk [ma noseri v-ore ya] iduşun.am.s  
     3 [1 smart 1-be 3.LC] he.thinks  
     ‘He<sub>i</sub> thinks that he<sub>i</sub> is smart.’  
     b. Ma [ma noseri v-ore ma] v.iduşun.am  
     1 [1 smart 1-be 1.LC] 1.think  
     ‘I<sub>i</sub> think that I<sub>i</sub> am smart’

- ii) LC defines the pronouns within the clause it embeds as ‘logophoric’ and requires indexical shifting as in (2). As an embedded wh-word can be interpreted at the matrix-level in the presence of LC, the quotational construal for the embedded clause is impossible, which we take as evidence for indexical shifting in the sense of Sudo (2012) among others. We argue that the LC constitutes the morphological reflex of the Monster Operator responsible for the indexical shifting.

- (2) Himuk [ma mi malimben ya] tk.u?  
     3 [1 who 1.love LC] she.said  
     Lit: ‘Who did she<sub>i</sub> say I<sub>i</sub> love t?’  
     “Who did she<sub>i</sub> say she<sub>i</sub> loves?”

- iii) The choice of the LC variants (i.e. *ya/ma*) is sensitive to the two pragmatic roles defined by Sells (1987), namely SOURCE and SELF, which we associate with the syntactic projections of *Mood<sub>SpeechAct</sub>* and *Mood<sub>Evaluative</sub>*, respectively, following Speas (2004). The use of LC variant *ma* is licensed if and only if the SELF, i.e. the person whose mind is being reported, in the embedded proposition is anchored to the external speaker (=the SOURCE of the matrix utterance). The causativized speech predicates induce an interesting asymmetry between the controller of allomorphy in LC and the logophoric locus of the indexical shift (i.e. the subjects of the attitude verbs *say* and *think*). As (3) shows, the locus of the indexical shift is the *causee* argument (not the matrix subject). However, the LC cannot reflect the person value of the *causee* argument or the matrix subject as it has to appear in the default form *ya*. This implies that the syntactic projections associated with pragmatic roles are needed independent of the Monster Operator regulating the indexical shift.

- (3) a. Mai si<sub>k</sub> [ma<sub>k/\*i</sub> noseri v-ore ya/\*ma] g.ozit.ap.i  
     1 2 [1 smart 1-be LC/\*1.LC] I.made.you.say  
     Lit: ‘I<sub>i</sub> made you<sub>k</sub> say that I<sub>k/\*i</sub> am smart.’  
     b. Si<sub>i</sub> ma<sub>k</sub> [ma<sub>k/\*i</sub> noseri v-ore ya/\*ma] m.ozit.ap.i  
     2 1 [1 smart 1-be LC/\*1.LC] you.made.me.say  
     Lit: ‘You<sub>i</sub> made me<sub>k</sub> say that I<sub>k/\*i</sub> am smart.’

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**Holger DIESSEL** (University of Jena)

### Pre- and postposed subordinate clauses: syntactic structure, processing, and grammaticalization

Subordinate clauses have been studied extensively in linguistic typology (e.g. Cristofaro 2003; Shopen 2007; VanValin and LaPolla 1997); but there is one aspect of subordination that has received little attention in this research: the linear organization of complex sentences or more specifically the position of subordinate clauses. In this paper I investigate the crosslinguistic distribution of pre- and postposed subordinate clauses and their interaction with other parameters of clause linkage.

Drawing on data from a stratified sample of one hundred languages, the paper shows that the position of subordinate clauses correlates with aspects of their syntactic structure and argues that the structural asymmetries between pre- and postposed subordinate clauses can be explained by the combined effect of processing and grammaticalization. The analysis considers five major types of subordinate clauses, i.e. relative clauses, complement clauses, temporal clauses, causal clauses, and purpose clauses, and concentrates on frequent constructions. While the various types of subordinate clauses differ in important ways, I found a number of structural asymmetries between pre- and postposed subordinate clauses that are strikingly similar across the various types of subordinate clauses.

- First, preposed subordinate clauses are more strongly ‘desententialized’ than their postposed counterparts. A number of studies have pointed out that prenominal relative clauses are often reduced and nominalized (Lehmann 1984), but the same tendency occurs with complement and adverbial clauses, though the degree of desententialization is stronger in relative clauses than in other types of subordinate clauses (Schmidtke-Bode 2009; Schmidtke-Bode and Diessel forthcoming).
- Second, preposed subordinate clauses include fewer subordinators than postposed subordinate clauses. Only 23 percent of all preposed subordinate clauses are marked by a (free) relativizer, complementizer, or adverbial conjunction, whereas 54 percent of all postposed subordinate clauses include a free subordinate marker. What is more, preposed subordinate clauses typically include the subordinator at the end of the clause, whereas postposed subordinate clauses are commonly marked by an initial subordinator (Diessel 2001).
- Finally, preposed subordinate clauses are structurally less variable than their postposed counterparts. They tend to have rigid word order and often exclude the occurrence of particular mood and epistemic markers, whereas postposed subordinate clauses are often fairly flexible with regard to word order and more easily compatible with mood and epistemic markers. Finally, there is some evidence that preposed subordinate clauses are more strongly bound by intonation than postposed subordinate clauses (Diessel and Hetterle 2011).

Having described the cross-linguistic asymmetries between pre- and postposed subordinate clauses, I argue that preposed subordinate clauses involve an anticipatory link to the upcoming main clause that restricts their pragmatic function and structural variability, which in turn leads to grammaticalization processes that account for the compactness of preposed subordinate clauses. Since postposed subordinate clauses include a backwards-oriented link to the preceding main clause, they are pragmatically and structurally more variable than their preposed counterparts. In many languages, postposed subordinate clauses can serve a range of different functions expressed by different word orders and different intonations, and they overlap with paratactic sentences, with which they share the backwards orientation towards the preceding clause or discourse.

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**Martin DRÁPELA** (Masaryk University)

**A headline news event in a (multitude of) functional perspective(s)**

The presentation is a modest contribution to the long line of studies dealing with the information structure of language in the framework developed by Czech and Slovak researchers, the framework of functional sentence perspective (FSP, cf. Drápeľa 2015). In this contribution the FSP framework is approached from the Firbasian point of view, represented mainly by Svoboda (1981, 1989), Firbas (1992), and last but not least Dušková (forthcoming in 2015).

A commonly held view of information structure is that a sentence/clause is bipartitional, i.e. only the theme (topic) and the rheme (non-theme/focus) are recognized. In the Firbasian approach, however, it is also within the thematic and the non-thematic sections of a communicative field (on “communicative field” see e.g. Svoboda 1968) where it is possible to assign different degrees of communicative dynamism (communicative weight) to their constitutive communicative units. The Firbasian approach thus adopts a pluripartitional view of a sentence/clause (Firbas 1983) in which “any linguistic element can become a carrier of CD [=communicative dynamism] as long as it conveys some meaning, and hence information, in the development of communication” (Firbas 1992: 7).

Taking inspiration from Hladký’s (1987) quantitative analysis of several newspaper reports of the same event, the author presents the results of an FSP analysis of ten incipient communicative fields in ten news stories reporting on a single headline news event. Although Hladký did employ the FSP analysis in his paper, he used it only for “the calculation of contextual dependence” (Hladký 1987: 121, note 5). The informational function of news reports nevertheless invites a more detailed investigation of the degree of variation in the ascription of new information to items existing in the shared stock of knowledge of the news reporter and/or the audience.

A tentative study of this topic using a limited and manually parsed corpus (Drápeľa 2006) has shown that even within bipartitional analysis it is rather difficult to identify at least a single communicative field whose FSP would be identical in several news reports of the same event. Since “... automatic computational tools cannot provide reliable analyses of the informational characteristics of noun phrases (e.g. ‘given’ v. ‘new’ information; ‘anaphoric’ or ‘exophoric’ reference; and the distance from a previous co-referent if anaphoric)” (Biber et al. 1999: 37), the data analyzed for the present talk are again drawn from a small, manually collected and FSP parsed corpus of parallel news stories. Can, however, an increase in parallelism reveal a certain degree of uniformity in functional perspectivization of a headline news event? This contribution presents the results of both the bipartitional and the pluripartitional FSP analysis.

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### Approaches to the evolution of autonomous morphology

Aronoff (1994) proposes that all mappings between syntax and phonology are mediated by an autonomous, morphological component of the grammar, which he terms the ‘morphemic level’. Evidence for the existence of the morphemic level is provided by synchronic and diachronic study of inflectional morphology. Inflectional classes may show a degree of correlation with morphosyntactic features (eg. grammatical gender), with semantic properties (eg. natural gender), or with phonological features (eg. stem-final segment), but are not perfectly predictable on these grounds; instead, the principal information provided by inflectional class markers is morphological, indicating how to inflect the lexeme (Aronoff 1994, Corbett & Baerman 2006). Patterns of stem allomorph distribution may coincide with a particular phonological context (eg. a following front vowel), with a syntactic feature (eg. plural), or with a semantic feature (eg. futurity), but are underdetermined by such properties (Aronoff 1994, Esher 2014). Detailed comparative-historical study of Romance verb conjugation by Maiden (e.g. 2011a, 2011b) shows that wholly arbitrary, morphemic patterns of stem allomorphy are perpetuated over many generations of speakers, and actively exploited as templates for analogical change, suppletion and defectiveness.

Adopting the view that morphology is an autonomous component of the grammar, how and why did this component evolve? I will examine how this question would be answered within three existing proposals for the evolutionary emergence of morphology within human language.

- Heine & Kuteva (2005, 2007) propose that morphology results from grammaticalisation processes, since many common morphological and lexical categories can be traced back to lexical items or syntactic structures which have undergone grammaticalisation. This approach is successful in explaining the source of morphological forms, but does not address the question of abstract morphological structure.
- Carstairs-McCarthy (2005, 2010) explicitly considers stem allomorphy and inflectional classes, suggesting that these phenomena are brought about by speakers applying the cognitive principle of synonymy avoidance to context-sensitive phonological alternations. This approach accounts both for the existence of different forms, and for the organisation of these forms into (autonomously) morphological oppositions.
- Hartmann (2014), advocating a Construction Grammar (CG) approach, appears to deny the autonomy of morphology, reducing the evolution of morphology to that of syntax and the lexicon. In fact, the existence of autonomously morphological structure is not incompatible with CG (see Goldberg 2003, Booij 2010); but while CG captures the usage-based and inferential-realisation nature of speakers’ morphological knowledge, it does not explain the existence of distinctively morphological structure.

In summary, all three proposals contribute to understanding the evolution of morphological forms, but only Carstairs-McCarthy addresses the evolution of abstract morphological structure. Drawing on information-theoretic approaches to morphology (eg. Ackerman & Malouf 2013), I will suggest an additional motivation for such structure. Individual morphemic patterns improve learnability by facilitating reliable inferences about the inflected wordforms which realise a lexeme; morphemic patterning in general may thus be a further aspect of linguistic structure imputable to cultural evolution in the sense of Kirby et al. (2014), in which systematicity develops through iterated learning.

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### Singulativity and Plurativity in Grammar and Variation

We provide evidence from various languages (a) that Singulativity (= Singv) and Plurativity (= Plv) play a significant role in expressing unity, quantity, size, and evaluation in various ways in the grammars of languages, (b) that there are close morpho-syntactic and semantic connections between Gen(der), Cl(assifier), Num(ber), Size, Evaluation, and Singv/Plv, and (c) that linguistic variation depends on the various heights in which categories and features are found, and the various category ingredients that particular grammars make use of (Wiltschko (2014)). Singv morphemes are well-documented devices for shaping individual (count) units (from kinds), and Plv morphemes form group units (or wholes from potentially scattered individuals; Greenberg (1972), Fehri (2003), Mathieu (2012), Zabbal (2002) for Singv; Blench (2007), Mous (2012), Fassi Fehri (2012), Treis (2013) for Plv).

The architecture of the grammar and its various components, processes, or entities building projections or heights have been explored in the literature to account for cross-linguistic and intra-linguistic variation (including roots, lexical or functional categories, or features, NumP (#P), CIP (DivP, SizeP), GenP, or heights at which affixes are attached (Abney (1987), Marantz (1997), Borer (2005)).

If Singulatives/Pluratives project as Cl, and Pl(urals)/Sing(ulars) as Num, then Singv and Pl can co-occur, and their hypothesized complementary distribution in some languages can only be variational (Doetjes (2012), among others). In fact, we argue that their co-occurrence in Arabic varieties is ‘real’, as in e.g. Standard, Lebanese, or Moroccan Arabic (= MA):

- (1) debbaan “flies (kind)” □ debbaan-at “fly-unit; one fly” □ debbaan-aat “many fly-unit, flies” (MA)

Second, cases of double plurals or double Singv/Plv are documented in a variety of languages, giving rise to intensive expressions (bigger size or plural of abundance, depreciative, etc.):

- (2) qawl “saying” □ ?aqwaal “Pl many sayings” □ ?qaawil “Pl of Pl (i) “a lot of sayings”; (ii) “a lot of gossips” (SA)

- (3) hrayef “professions” □ hrayf-i “profession-Cl; a professional” □ hrayf-i-a “profession-Cl-Cl; a professional group” (MA)

Third, plurals are not necessarily higher than singulatives, and instances of ‘high’ singulatives/pluratives are found:

- (4) ?usquf “bishop” □ ?asaaqif “bishops” □ ?asaaqif-at “a bishop group” (SA)

Fourth, diminutive and augmentative morphemes behave mostly as modifiers (denoting decrease/increase in size, or affective/evaluative meanings), although they may occasionally behave as heads (Cl) in some languages, with a portioning that produces countable units (Wiltschko (2006, 2008), de Belder (2008), Steriopolo (2013)):

- (5) lben □ lbeyy-in □ lbin-a “(i) Cl reading: a discrete small portion of buttermilk; (ii) evaluative reading: an appreciated small quantity of buttermilk” (MA)

- (6) raahil “traveler” □ rahhaal (augmentative “big traveler”) □ rahhaal-at (augmentative + Cl; “exhaustive augmentative”; (SA))

Once these ingredients of grammar are in place, and a DM format assumed, then a natural and systematic treatment of the various uses and patterns of Gender, Cl, and Pl becomes available, and they would no longer appear to be unrelated or listed, as has been hitherto the standard practice. The analysis extends to Arabic varieties, Cushitic, Celtic, and Russian.

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### Non-verbal predication in Gban

1. Gban (Bovo dialect; < South Mande < Niger-Congo; ca. 55 000 speakers in Côte d'Ivoire; own field data) has two main (types of) constructions for non-verbal predication.

The first construction type (section 2) is based on the verb *yè(e)* ‘live; be’. The second type (section 3) is based on a focus marker plus an element *yà / nì* of obscure origin.

2.1. The *yè-e-constructions* have the following form:

“(subject NP) + predicative markers + *yè(e)*<sup>in the imperfective form</sup> + complement NP/AdjP/PP/AdvP/etc.”.

For example:

- (1) *ɛ yèe [d' nó là]*  
 3SG[...] IPFV\be road this on  
 ‘[— Where that stone is?] — It’s on this road’

2.2. The *yè-e-constructions* cover most semantic types of non-verbal predication, including:

a) non-existential **locative** (1);

b) **existential locative** (which is formally identical to the non-existential locative; in “**general**” existential sentences a dummy ‘there’-adverb is used, cf. (2b)) (2a–b):

- (2a) *kpu kpɔ “ yèe mūmā*      (2b) *[mū dò] yè-é yé yè, <...>*  
 dog 3SG[...] IPFV\be yard:in man one 3SG-IPFV.PREH[...] IPFV\be there  
 ‘There’s a dog in the yard’ ‘There was a man <...>;’

c) **”definite” possessive** (“belonging”) (3):

- (3) *[kɛ́ nɛ́] “ yèe [i mɔ]*  
 hoe this 3SG[...] IPFV\be me for  
 ‘This hoe’s mine’;

d) **”indefinite” possessive** (“having”; there are two varieties, an “adnominal-existential” one (4a) and a “locative” one (4b)) (4a–b):

- (4a) *[i mɔ sá] “ yèe yé*      (4b) *sá “ yèe [i kɔ]*  
 me for house 3SG[...] IPFV\be there house 3SG[...] IPFV\be me in.hand  
 ‘I have a house’ (“There’s [my house]”) ‘I have a house’ (“House is on me”);

e) **status/property assignment** (with adjectives (5a) and nouns (5b)):

- (5a) *Sɔki “ yèe gaggà (métlɛ fɛl)*      (5b) *ɛ yèe mū*  
 Soku 3SG[...] IPFV\be long metre two man  
 ‘Soku’s (two metres) tall’ ‘He’s (a) [real] man’.

(Cf. example (5b) with example (5b') below, where a contrasting classification interpretation is represented. However, not in all cases the contrast is so clear, and there were some rare examples of *yèè*-constructions seemingly used in the classification function. At the same time, the *yò/ni*-construction cannot be used in any of the functions in a)–e). Probably we are dealing with a marked : unmarked contrast.)

### 3.1. The *yò/ni*-construction has two (complementary distributed) formal varieties:

- I) “subject<sup>2</sup> NP + *li* <FOC\_OBJ> + *yò* (NP + *yé* ‘with’);
- II) “subject NP + predicative markers + *-li/-lè* <FOC> + *ni* in the imperfective form +(NP + *yé* ‘with’”).

The first variety is used when the sentence has grammatical properties “non-past + indicative + affirmative”. It includes a postpositional focus particle *li* (anomalous here, as it is normally used to modify direct objects and non-verbal dependents) and an invariable element *yò*. Cf. examples (6), (8), (5b') below.

The second variety is used with all the other combinations of tense-mood-polarity properties. It includes a subject-modifying focus suffix *-li/-lè* and a variable verb *ni* in the imperfective form. Cf. examples (7), (9), (10) below.

As can be seen from the examples, in both varieties the NP expressing the predicated identity or class is placed first in the sentence. The other (topical) referent may not be expressed at all (examples (6), (5b'), (9) below) or may be introduced in the end of the sentence by a postpositional phrase with *yé* ‘with’ (examples (8), (10) below) or by a left-detachment topicalizing construction (example (7) below).

### 3.2. The *yò/ni*-construction in Gban is a specialized device employed to mark **identification** ((6), (7), (8)) and **classification** ((5b'), (9), (10)) types of non-verbal predictions:

- |   |   |
|---|---|
| (6) <i>Sòkù li yò</i><br>Soku FOC_OBJ <i>Yò</i>   | (7) [ <i>kúgwoyì bë</i> ], <i>Sòkù Ø-lè-kè ni, (...)</i><br>thief this Soku 3SG-FOC-IND.NEG[...] IPFV\be_it<br>‘[— Who’s this?] — This is Soku’ ‘That thief — it’s not Soku, {it’s Jean}’ |
| (8) [ <i>ɛɛ yé</i> ] <i>li yò</i> [ <i>lè né yé</i> ]<br>thee mother FOC_OBJ <i>Yò</i> woman this with<br>‘This woman is your mother’   |   |
| (5b') [ <i>mú (dò)</i> ] <i>li yò</i><br>man one FOC_OBJ <i>Yò</i>  | (9) <i>wè Ø-lè-kè ni, w à ky!</i><br>animal 3SG-FOC-COND.AFF[...] IPFV\be_it 1PL[...] him IPFV\catch<br>‘[Who/what is it?] It’s a man’ ‘If it’s an animal, we’ll catch it!’               |
| (10) <i>gbágyì Ø-li-è</i><br>Gban:M 3SG-FOC-IPFV.HEST[PST...] IPFV\be_it him; with<br>‘He <sub>i</sub> [this man yesterday] was a Gban’ |   |

4. The functional distribution of the *yèè*- and *yò/ni*- constructions in Gban conforms to the major split between “**equative**” (subsuming identifying and classifying predictions — cf. section 3) and “**ascriptive**” (subsuming all other predictions, including nominal/adjectival “assigning” predictions and also possessive/locative × existential/non-existential predictions — cf. section 2) non-verbal predictions in Hengeveld’s [1992: 106, 125–126] classification.

Gban, thus, can be classified as belonging to the “equative vs. non-equative” type in Hengeveld’s systemic typology [ibid. 227–228] — a type conforming also to the “specialized” parts-of-speech system type of Gban (meaning that nouns, adjectives and verbs constitute three separate classes [ibid. 62–72]; this type seems to correlate with the “equative vs. non-equative” type [ibid. 227, 232]).

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### Verbal agreement with collective noun-based subjects in British and American English: How complexity influences agreement mismatches

Collective nouns in English, given their inherently plurality, may take singular or plural verbs depending on the speaker’s focus either on the collectivity or on the individual members. Further complications arise

when these collectives take *of*-complementation, as in (1):

(1) a group<sub>SG</sub> of British skiers<sub>PL</sub> were<sub>PL</sub> horrified to see a man [BNC: CCK 737]

Plural *of*-dependents interact with verbal agreement inasmuch as they very frequently determine the number of the verb, thus overriding canonical agreement with the collective noun (Dekeyser 1975: 45–51). Whereas the literature on the topic has dealt with syntactic, semantic, dialectal and processing factors which condition the verbal patterns of collective noun-based subjects (Dekeyser 1975; Levin 2001; Hundt 2006, 2009; Acuña-Fariña 2009), the potential effects of *of*-dependents have been overlooked on many occasions. Using samples of the written parts of the *British National Corpus* (BNC) and the *Corpus of Contemporary American English* (COCA), this investigation extends previous studies on the matter by considering, from a syntactic point of view, the consequences which *of*-dependents have for verbal number in a set of twenty-three singular collective nouns (i.e. determiner + collective + *of* N; lists retrieved from Biber et al. 1999: 249 and Huddleston and Pullum et al. 2002: 503).

This study analyses the (syntactic and structural) complexity of the plural *of*-PPs and focuses on its role as a determinant factor of verbal number. In particular, this paper aims at measuring the impact on the number of the verb of (i) the morphology of the plural noun in the *of*-dependent (i.e. overt vs. non-overt plurality as in *boys* vs. *people*), (ii) the syntactic structure and the typology of the possible (clausal and non-clausal) modifiers within the *of*-PP (i.e. syntactic complexity), and (iii) the structural design of the *of*-PP and its modifiers in number of words (i.e. structural complexity).

The results from this study confirm that the presence of a plural noun within the *of*-PP adjacent to the verb favours a remarkable rate of plural agreement, which is known as ‘attraction’ in the literature (Bock et al. 2001; Acuña-Fariña 2009), a tendency which is particularly relevant in the case of non-overtly-marked plural nouns such as *people* (90.62% of plural verbs vs. 61.39% in the case of overtly-marked plural nouns such as *boys*). The analysis of the complexity of the *of*-dependent, however, reveals a remarkable decrease in plural verbal forms. The data obtained evince that, as the syntactic and structural complexity of the prepositional dependent progressively increases, the rate of plural agreement diminishes significantly (i.e. from 68.05% of plural verbal forms in local syntactic domains to 59.17% in the most complex structures). Thus, contrary to expectations, the influence of the plural dependent on the number of the verb significantly weakens in the most (syntactically and structurally) complex collective noun-based subjects under scrutiny. This finding suggests that (unmarked) singular number can be taken as an option which facilitates the cognitive load of complex constructions such as the ones investigated here.

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### Aoife FINN (Trinity College Dublin) The role of agentivity in Māori neuter verbs

This paper introduces neuter verbs, they are one of the five traditional Māori verbal categories. It explores the issues and results surrounding their correct categorization and the categorization of their agentive argument. Neuter verbs are commonly known as ‘stative verbs’ in Māori and Oceanic literature. The subject of neuter verbs is the patient, see example (1) from Biggs (1969: 57). The agent is an optional argument, when present it is preceded by the particle i, see (2) from Bauer (1997: 493). The patient subject of neuter verbs has led to charges that both Māori and neuter verbs are ergative in type, see Harlow (2007):

25-27) for summary. On that account the early aim of this study endeavoured to investigate the case-system of Māori and offer a satisfactory account of neuter verbs within that case-system.

- (1) Kua mutu te mahi  
TNS finish DET work  
“The work is completed”
- (2) Ka matakutia te tamaiti i a koe  
TNS frighten DET child AGT ART 2SG  
“The child was frightened by you”

Moreover, neuter verbs are quite distinct from the other verbal categories. Amongst other things, neuter verbs have a particular imperative form, they do not passivize, they undergo a different nominalization process and they are said to be restricted in terms of tense and aspect markers, see Bauer (1997: 490 - 500). They are unlike regular transitive verbs, in which the immediately post-verbal subject is agentive, see example (3) from Harlow (2007, 105). Moreover, they are dissimilar from the passive voice, see (4) from Bauer (1993: 396). Data and judgements on grammaticality come from Māori informants, Māori language media and also from the reference grammars of Bauer (1993, 1997), Biggs (1969) and Harlow (2007).

- (3) Ka hoko te matua i ngā tīkī  
TNS buy DET parent OBJ DET ticket  
“The parent buys the tickets”
- (4) I koohete-tia a Pani e Huia  
TNS scold-PASS ART Pani PASS.AG Huia  
“Pani was scolded by Huia”

This study is grounded in a Role and Reference Grammar model, see Van Valin (2005). In particular, verbal class tests as per Role and Reference Grammar were applied to neuter verbs. Amongst others, Verkuyl (1989) provided further explanation on verbal classes. In addition, other possible explanations for neuter verbs distinctiveness were considered. These theories were also applied to neuter verbs. For instance, ergativity in the manner of Dixon (1994) was examined. The possibility of unaccusativity was also explored, see Levin (1995).

The results were primarily intended to shed light on the case-system of neuter verbs. Nevertheless, they also proved to be illuminating regarding the optional agentive argument. In particular, the verbal class tests found that agentivity plays a central role in distinguishing neuter verbs. That being so, ergativity did not present itself as a likely explanation. In concordance with Hooper (1984), it was further shown that stativity is not a decisive characteristic of neuter verbs. Therefore, it can be concluded that ‘stative verbs’ is a misleading and redundant term for neuter verbs. In sum, stativity and ergativity are not so pertinent in categorizing neuter verbs. Accounting for the role of the agentive argument is an essential step in clarifying the case-system of Māori. Therefore, these results represent an important progression in further categorizing neuter verbs, the role of their agentive argument and the case-system of Māori.

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#### **New literacies and linguistic innovation: The case of Internet memes**

The paper proposes a systematic approach to “Internet memes” (henceforth, IM), from a linguistic and semiotic point of view. IM owe their name to the notion proposed in 1976 by evolutionary biologist

Richard Dawkins, identifying a “replicable unit of cultural information”, or a “cultural gene”. Since the early Two Thousands, by IM is meant a wide range of “culturally shared pieces of media” (Constine 2009), such as “popular themes, catchphrases, images, viral videos, jokes” (*Wikipedia*, “List of Internet Phenomena”, [bit.ly/WikiInternetPhenomena](http://bit.ly/WikiInternetPhenomena); retr. Dec. 2, 2014).

So-called “Internet phenomena”, “virals” or IM represent a key and a growing form of communication, and a proper “new literacy” (Lankshear & Knobel 2007, Milner 2012), in a global, transnational perspective. Albeit being Internet-based phenomena, their effectiveness is not limited to the Internet: they circulate through means such as the social networks and the mobile technologies, which are increasingly inseparable from “real-life”; they are employed to carry, modify, and spread social and cultural contents related to political, economical, religious, artistic, and identity issues; they become expressions of common language and cultural references in popular culture, enhancing linguistic innovation.

Despite their growth in social discourse, and despite key hints coming from sociolinguistics (Zappavigna 2012, Blommaert 2014) and media studies (Shifman 2013), IM are still far from being studied systematically. In order to achieve such a goal, we propose to employ IM as a heuristic means: a particular type of sign that aims at provoking the spectator’s response. In opposition to the loose folk category of “virality”, we back the paradigm of “spreadability” (Jenkins 2013), by the light of which we identify the essential features, the mechanisms of functioning, and the actual and potential uses of IM, in order to outline a general, modelling theory (Marino 2014).

The paper will provide key illustrative analyses of IM; we will focus in particular on two of them: Lolcats and the formula “Keep Calm and X” (a “snowclone”; Pullum 2004, O’Connor 2007), which are both particularly useful in order to show the linguistic innovations produced by the appropriation of such new literacy. Lolcats are funny images of cats with peculiar captions (e.g., “I can haz cheezburger?”), out of which an entirely new variety of English (Lolspeak) has developed (Gawne & Vaughan 2012, Fiorentini 2013). “Keep Calm and X” (as well as its counterparts in other languages, such as Italian) is a widespread formula used over the Web, in advertising, and in everyday interactions as a softened imperative form, which rapidly developed new pragmatic meanings.

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### Verb Serialization and Telicity

Japanese lexical V-V compounds (1a-c) have attracted much attention, e.g. [2], [5], [8], [9], [11]. However, these focus on argument synthesis based on argument structures of V<sub>1</sub> and V<sub>2</sub>, offering accounts of various sorts. This paper investigates the aspectual dimension of V<sub>1</sub>-V<sub>2</sub> combination. First, it shows that V<sub>1</sub> cannot be telic unless V<sub>2</sub> also is, while any other patterns are possible. Second, (im)possible combinations are shown to follow from the aspectual classes of predicates of [1].

- (1) a. cause/resultative compounds:  
*odori-tukareru* ‘dance(atelic)-get.tired(telic)’, *obore-sinu* ‘drown(telic)-die(telic)’, etc.
- b. manner compounds:  
*tabe-nokosu* ‘eat(atelic)-leave(telic)’, *koroge-otiru* ‘roll(atelic)-fall.down(telic)’, etc.
- c. coordinating compounds:  
*hikari-kagayaku* ‘shine(atelic)-glitter(atelic)’, *naki-sakebu* ‘cry(atelic)-scream(atelic)’, etc.
- d. impossible compounds:  
<sup>\*</sup>*naosi-tukau* ‘repair(telic)-use(atelic), use after repairing’, <sup>\*</sup>*hiroge-uru* ‘spread(telic)-sell(atelic), sell after spreading (merchandise)’, <sup>\*</sup>*koware-nokoru* ‘break(telic)-remain(atelic), remain after breaking’, <sup>\*</sup>*taosi-fumu* ‘knock.down(telic)-step.on(atelic), step on after felling’ [cf. *fumi-taosu* ‘step.on(atelic)-fell(telic)’], i.e. knock down (something) by stepping on it], etc.
- e. *Taroo-ga TV-o [naosi sosite tukat-ta]* ‘Taroo [repaired and used] a TV’

The ones in (1d) with a telic V<sub>1</sub> and an atelic V<sub>2</sub> are impossible (while obeying the argument synthesis conditions). Of 1157 V-V examples in [10], there is only one potential counter example. We note that V<sub>1</sub> *naosi* (telic) and V<sub>2</sub> *tukat* (atelic) can describe a temporary coherent event (1e), but not as a compound (1d). Also, when switched around, illicit <sup>\*</sup>*taosi-fumu* (telic-atelic) becomes licit *fumi-taosu* (atelic-telic). An attempt to characterize Chinese/Japanese resultative compounds is [7] employing ‘temporal iconicity’: V<sub>cause</sub> must precede V<sub>result</sub> (surface linear order). (1a) and (1b) are fine, if ‘manner’ is a kind of ‘cause’. But, since (1e) is good, so should illicit <sup>\*</sup>*naosi-tukaru* be (others likewise).

Assuming (2) by [1] (cf. [4] and [6]), ASPECTUAL COMPOSITION for V-V compounds (3) is stated. With (3c-(i)) a termination point is imposed on atelic V<sub>1</sub>, which is still compatible with (2a), rendering possible *odori-tukareru* (1a). In contrast, (3c-(ii)) requires telic V<sub>1</sub> to satisfy (2a) but that contradicts (2c), rendering <sup>\*</sup>*naosi-tukau* (1d) impossible.

- (2) a. Atelic (stative/activity): when the truth of a sentence *S* to which the predicate gives rise to is true at an interval *I*, *S* is true at all subintervals of *I* (down to a certain limit in size for activity).
- b. Telic (achievement/accomplishment): when the truth of a sentence *S* to which the predicate gives rise to is true at an interval *I*, *S* is false at all subintervals of *I*.
- (3) a. A V-V compound represents a single event with sub-events denoted by V<sub>1</sub> and V<sub>2</sub>.
- b. When V<sub>1</sub> and V<sub>2</sub> match in telicity, the whole compound is of the same telicity as the head’s (V<sub>2</sub>). [N.B.: Japanese is head-final.]
- c. When V<sub>1</sub> and V<sub>2</sub> differ in telicity, (i) if V<sub>2</sub> is telic, a termination-point (distinct from an inception-point) is imposed on the interpretation of V<sub>1</sub>, or (ii) if V<sub>2</sub> is atelic, the truth-at-all-subintervals requirement (2b) is imposed on the interpretation of V<sub>1</sub>.

The current paper is a contribution to research regarding not only under-explored aspectual properties of V-V compounds but also the nature of aspectual composition of complex eventualities.

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### Categorial status of bare verb stems in Lezgian

Unlike most other Nakh-Daghestanian languages, Lezgian allows the use of bare verb stems in some syntactic constructions. Previous descriptions (Haspelmath 1993) only indicate that this is possible in a periphrastic construction of the ‘do’-support type, see (1). In this construction, the lexical verb is in the form of a bare stem or a special periphrastic stem, while the verb ‘do’ bears all necessary verbal morphology. The use of the construction is triggered by a number of grammatical properties (negation in non-finite clauses, repetitive action) or by the information structure of the clause (predicate topicalization, predicate focus, predicate in the scope of the additive particle -ni), see Haspelmath (1993). In this paper, I show that bare verb stems in Lezgian have a wider distribution and can also:

- (a) function as a complement to the verb ‘be able’ (alternating with the infinitive in this function), as in (2),
- (b) combine with the verb ‘become’ to produce an intransitive construction from a transitive verb stem, see (3),
- (c) combine with the verb ‘become’ to produce an unaccusative version of an intransitive verb stem, see (4),
- (d) occur in some wh-constructions where verbal morphology is attached directly to the wh-word, see (5),
- (e) modify an NP, see (6).

On the basis of (im)possibility of participating in these constructions, I conclude that, unlike in English where lexical verbs are base-generated in V, we can distinguish between two types of lexical verbs in Lezgian depending on their categorial status/place of base-generation: bare verb stems are base-generated in either V as a complement to V (similar to non-inflected parts of complex verbs). Using some diagnostics like adverbial modification and negation I also show that the verb stems raise not higher than AspP and, finally, argue that the same analysis is true of “normal” verb forms with a TAM affix following the verb stem, as in (7), where a null little v head introducing the external argument is present. Data for this presentation come both from a corpus of original written texts and from elicitation.

- (1) c'aru.di        wil-er         $\chi$ kaž        q-uwu-na.  
Ts.(ERG)        eye-PL(ABS)        lift        REP-do-PFT  
‘Tsaru lifted up his eyes again.’
- (2) a.da-w-aj        rekü-wil-äj        q'il         $\chi$ kaž        že-zma-č-ir.  
that-AD-ELAT        shameful-ABSTR-IN:ELAT        head(ABS)        lift        be.able-PRS:CONT-NEG-PST  
‘He still couldn’t lift up his head because of shame.’
- (3) ha        i        ara-da        sadlahana        samolet        c:aw.u-z         $\chi$ kaž        xa-na.  
EMPH this        moment-IN        suddenly        aircraft(ABS)        sky-DAT        lift        become-PFT  
‘Exactly at this moment the airplane suddenly rose into the sky.’
- (4) am        wil-er.i-l-aj        mič'i-wal        fe-na        sadlahana        č:il-el        acuq'  
3SG(ABS)        eye-PL-SUPER-ELAT        dark-ABSTR        go-PFT        suddenly        earch-SUPER        sit  
xa-na.  
become-PFT  
‘Darkness came to her eyes, and she suddenly sat down on the floor.’
- (5) wun        kis        wučiz-zawa?  
you(ABS)        keep        silence why-PRS  
‘Why are you keeping silence?’
- (6) wal.a-n        alčud         $\chi$ il-er  
bush-GEN        twist        twig-PL(ABS)  
‘twisted bush twigs’

- (7) za       kil       χkaž-na.  
 I(ERG) hand(ABS) lift-PFT  
 'I raised my hand.'

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**Indefinites in topic position in Hungarian**

In Hungarian, two syntactic positions are theoretically available for indefinite arguments in the preverbal field of a neutral sentence: the Topic position and the Verbal Modifier (VM) position (É. Kiss 2002, Gécseg 2006, Gécseg & Kiefer 2009), with the verb cliticised on the VM. In some cases, the choice between the two positions seems to be totally free in a given context (1), whereas in other cases any change of the position of the subject results in a more or less considerable change in the acceptability or the contextual properties of the sentence (2), or even gives rise to an impossible word order variation (3).

- (1) a [Top Egy 'autó] 'meg-állt       a 'ház előtt.  
           a     car   Perf-stopped.3Sg the house in-front-of  
           ' A car has stopped in front of the house'  
   b [VM Egy 'autó] állt meg a 'ház előtt.  
           'idem.'
- (2) a [Top Egy férfit]   le-löttek   a metrómegállónál.  
           a     man-Acc Perf-shot.3Pl the subway-station-at  
           ' A man was shot at the subway station'  
   b ??[VM Egy 'férfit] löttek le a 'metrómegállónál.  
           'Idem.'
- (3) a \*[Top Egy 'kiskutya] 'ül a 'sarokban.
- (4)       a    puppet   sits the corner-in  
           ' A puppet is sitting in the corner'  
   b [VM Egy 'kiskutya] ül a 'sarokban.  
           'Idem.'

The possibility of having an indefinite expression denoting a brand-new referent in Topic position is rather surprising, since such indefinites are usually taken to be incompatible with topic function (Chafe 1976, Gundel 1985, but also see Alexopoulou & Folli 2010 for a counter-evidence in Italian and Greek). Moreover, a sentence containing a topicalized indefinite in Hungarian has in most cases the pragmatic properties of thetic sentences, i.e. it can be used as an answer to questions like 'What happened?'.

The purpose of this talk is to examine the factors that influence the syntactic position of an indefinite subject denoting a brand-new referent in the preverbal field of Hungarian neutral sentences. The data comes mainly from the Hungarian National Corpus (Oravecz, Váradi & Sass 2014) and the Internet.

The following parameters will be taken into consideration: the discourse type, the lexical semantic properties of the predicate (including features such as agentivity and telicity) and the informativeness of both the indefinite argument and the predicative constituent.

The first results show a correlation between syntactic position and informativity: a predicate with a rich semantic content tends to be prosodically autonomous and therefore its indefinite subject appears preferably in Topic position. On the other hand, non-agentive atelic verbs seem to behave like existential verbs and cliticise on their indefinite argument, contrary to agentive telic verbs in case of which the indefinite (as well as the definite) argument appears preferably in Topic position.

These facts can be related to the subdivision of thetic assertions into entity-centered and event-centered utterances (Sasse 1987, Lambrecht 1994): a preverbal indefinite tends to fill the VM position in an entity-centered and the Topic position in an event-centered utterance.

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**‘Factive’ predicates and aspectual potential**

The English system of finite complement constructions divides into two basic types, depending on whether the reported speaker or the actual speaker is represented as committed to the modal position in the complement clause. In reporting constructions, as illustrated in (1), the reported speaker, the family physician, is represented as committed to the truth of the proposition expressed in the that-clause. This proposition is not subscribed to by the actual speaker, as signalled by mistakenly

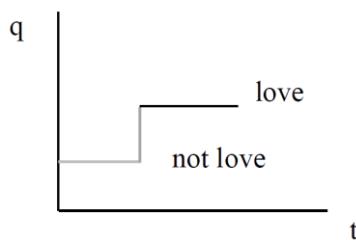
- (1) his mania was not diagnosed for almost two months, however, as his family physician mistakenly thought that his behavior was part of a ‘midlife crisis.’ (WB)

The second type of complement has been characterized in the literature as ‘factive’ according to the actual speaker (Kiparsky & Kiparsky 1970), irrespective of the represented speaker’s attitude, which may, as in (2), be rejection.

- (2) Saddam did not accept that he lost the 1991 Gulf war (WB)

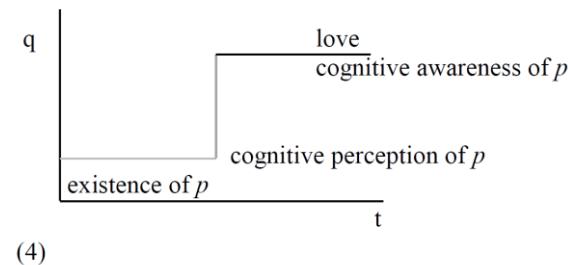
Traditionally, the factive interpretation of a complement clause is seen as dependent on the semantics of the complement-taking predicate: factive complements can be selected by predicates expressing emotion (e.g. love), cognition (e.g. accept) or perception (e.g. notice). What remains problematic, however, is that the literature has thus far strongly associated factivity with particular (potentially polysemous) lexemes, rather than exploring what semantic features are shared by their ‘factive’ subsenses.

This paper presents a new approach to the semantics of factive complement-taking predicates, by comparing the three semantic classes in terms of lexical aspect. If we adopt a visual representation of the event expressed by the predicate in terms of its different phases (based on Croft 2012), the three semantic classes are similar with respect to their aspectual potential. Each class may present an event in terms of 3 phases: a phase preceding the event, a transitory phase, and a phase involving the resultant state. An emotive predicate such as love, for instance, typically construes an event as a (transitory, non-inherent) state. A visual representation of the event of loving, as in (3), would then entail a first stage, in which the emotion is not yet triggered; a second stage for the inception of the emotion, and a third stage, indicating the resultant state of loving.



- (3) (based on Croft 2012)

Where emotive predicates typically profile the resultant state, cognition and perception predicates however tend to profile the transitory stage; the resultant state is only implied as a pragmatic implicature. Hence, these predicates are more dependent on contextual cues for their aspectual construal. A representation of the more abstract meaning components of emotion predicates is given in (4), with p standing for the proposition contained in the complement.



(4)

Notably, an additional factor accounting for the potential polysemy and ambiguity of these 3 predicate classes is their underlying semantic relationship: the emotional reaction towards a proposition entails the cognitive awareness of this proposition, and the cognitive awareness of a proposition in turn entails the cognitive perception of that proposition at some point, as shown in (4). The theoretical findings are based on sets of 200 examples of representative (in part ‘typically factive’, in part polysemous) verbs (love, bother, know, forget, notice, grasp) with that-complements, extracted from the Collins Cobuild Corpus.

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### Focus and negation in Modern Eastern Armenian

In this paper we are going to discuss the interaction between focus and negation in Modern Eastern Armenian (MEA). The goal of this discussion, besides a better analysis of not much studied language, is to sketch a possible solution to the problems concerning the compatibility of SOV languages with Kayne’s (1994) Linear Correspondence Axiom. MEA in fact exhibits a variety of word orders, which cannot be easily derived starting from an SVO structure, and, on the other hand, a T-final representation seems unsatisfactory as well.

As argued elsewhere – see Giorgi and Haroutyunian 2015 – MEA is a SOV language with residual V2 to mark FOCUS. The basic examples are the following ones:

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

SVO is possible as well:

- (3) Sirane kerel ē salore  
Siran eaten has plum-the

ē is a clitic and occupies the FOC head in Rizzi’s (1997) left periphery and the preceding phrase is in its specifier position. Negation exhibits the following pattern:

- (4) Annan č’-i kerel salore  
Anna not-has eaten the plum  
'Anna did not eat the plum'
- (5) \*Annan kerel č’-i salore  
Anna eaten not-has the plum

Negation is a clitic and forms a clitic cluster with the auxiliary. The clitic cluster obligatorily precedes the participle – cf. (4) and (5). Interestingly, the phrase *Anna* in example (6) can either be associated with focus or not. If focused, stress is obligatorily:

- (6) ANNAN / Annan č’-i kerel salore  
Anna not-has eaten the plum

In example (7), the only possible interpretation is with focus on *Anna*:

- (7) ANNAN չ'-ի salore kerel  
Anna has-not the plum eaten

Capitalizing on the Linear Correspondence Axiom (Kayne, 1994) – i.e., linear precedence reflects asymmetric c-command – and the consideration that in Armenian all (indicative) tenses, present tense included, are periphrastic (with the exception of the aorist, which might be argued to be an aspectual form, and not a temporal one), we propose that the auxiliary is inserted in the derivation as a bundle of features either in T, or in V. We will illustrate the following derivations:

- When in V the SOV orders (plus the appropriate derivations for case marking purposes) can be derived. SVO, in (3), is derived by moving the whole verbal form –i.e. participle + auxiliary – in T.
- When in T, we can derive the V2 sentences by means of movement to Foc.
- In example (4), V – i.e. the features of the auxiliary, plus the features of the participles – are raised so that negation can properly occupy the Neg position. Such a derivation is obligatory, and accounts for the ungrammaticality of (5).
- The focus sentences in (6) and (7) are derived again starting from the structure with the bundle of features of the auxiliary in T.

The distribution N-words, such as *nobody*, *nothing* etc. will also be briefly discussed.

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#### Verb-Adverb Modification in Frame Semantics: Why *lightly* isn't *playfully*, yet *playfully* can be *lightly*

Much work has been done in semantics to account for verb-adverb modification, especially in the framework of Event Semantics (e.g. Parsons, 1990; Eckardt, 1998; Piñón, 2007). Yet modification is not always a transparent addition of the property expressed by the modifier to an event. For instance, in (1), one would assume that Nancy hit Oliver with little force. This is confirmed by (2): The sentence sounds odd if we contrast *playfully* with *lightly*, suggesting that these adverbs' meaning contributions are similar. Yet the "force reduction" reading of (1) is not due to the lexical semantics of the adverb *playfully*, as this reading can be cancelled, cf. in combination with *hard* in (2). Similarly, for *angrily* in (3), a "force increase" inference arises (cf. incompatibility with *hard*), which can again be cancelled.

- (1) Nancy hit Oliver playfully on the arm.
- (2) Nancy hit Oliver playfully, but still rather ?lightly/ok hard, on the arm.
- (3) Nancy hit Oliver angrily, but still rather ?hard/ok lightly, on the arm.

Crucially, this is not an individual occurrence, but a systematic pattern, cross-cutting traditional distinctions between e.g. manner adverbs, mental-attitude adverbs, resultatives and subject depictives. Adverbs such as *playfully* or *angrily*, when combined with hit-verbs, can productively pick out the verb's force dimension for modification, decreasing or increasing its value.

A questionnaire study shows that speakers can readily compute and cancel this force inference. Further evidence for this is expected from a self-paced reading experiment, with sentences containing either a control adverb (e.g. *lightly*) or a target adverb (e.g. *playfully*), cf. (4). Longer reading times are expected for the target, due to the necessity to cancel the force-inference. The direct contradiction in the control should be read comparatively fast.

- (4) Nancy hit Oliver lightly/playfully, but still rather hard, on the arm.

This pattern cannot be modelled in a straight-forward manner within the framework of Event Semantics. Piñón (2007) provides some examples of conceptual axioms that determine which of a verb's dimensions can be modified by an adverb. Yet this doesn't follow naturally from the framework, as Event Semantics treats verbs and modifiers as sets of events and does not address conceptual dimensions.

To explain the nature of these inferences, a conceptually-oriented framework is called for. I propose to

model this pattern within Frame Semantics, as proposed by Barsalou (1992) and further developed by a.o. Gamerschlag et. al. (2014). Frames are recursive attribute-value structures used to model conceptual structure. Based on a type hierarchy to model world-knowledge (cf. Petersen & Gamerschlag, 2014), admissible inferences in the frame structure can be computed. In (1) above, an implicit value in the type hierarchy, *imp[hit, FORCE, playfully]*, will be connected to the value ‘lightly’ of the attribute FORCE. MANNER --> FORCE will then be defined as an inference in the type hierarchy between attributes of the type ‘hitting event’.

A Frame-based model of verb-adverb modification can thus explain conceptual inferences such as above based on a fine-grained type hierarchy over which inferences can be represented.

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## Pavel GRASHCHENKOV (Moscow State University & Institute of Oriental Studies) United Voices

In this paper, we introduce the feature geometry of *v* head that accounts for syntax and spellout of Turkic passives, anticausatives, middles, causatives and transitive impersonals. We propose that light *v* contains two different features, [ $\Theta$ ] and [acc]. The first one is responsible for the merge of external arguments, whereas the second one – for case assignment. “Burzio” passives as English (1) are thus examples of [- $\Theta$ ], [-acc] feature combination:

- (1) *The city was destroyed.*

We rely “anti-Burzio” phenomena on the rarely attested feature configurations. We borrow from (Alexiadou & Doron 2012) the idea that a language may choose whether to use its passive morphology to derive passive, anticausative or both. Contra (Alexiadou & Doron 2012), we propose that (at least in some languages) both passive and anticausative may be analyzed as instances of the same light *v* with different feature values. We also adopt Collins’ idea that passives as well as actives may introduce external  $\Theta$ -roles. Application of the passive morphology to a transitive verb in Turkic yields passive (2a) and anticausative (2b) readings:

- |     |                             |  |       |
|-----|-----------------------------|--|-------|
| (2) | išek      ač-y-l-dy         |  | Tatar |
|     | door      open-ST-PASS-PST  |  |       |
| a)  | (Somebody) opened the door. |  |       |
| b)  | The door opened.            |  |       |

Both (2a) and (2b) differ from the active clause in that they have the underlying internal argument promoted to the subject position. Based on the contrast between (2a) and (2b) we propose that the anticausative instance of the passive bears an agent demoting feature, [- $\Theta$ ], in addition. At the same time implicit agent in passive reading corresponds to the value [+ $\Theta$ ] of little *v*, so [-acc] and [- $\Theta$ ] should not necessarily come together.

Turkic passives may apply to intransitive (unaccusative) verbs to derive middle interpretation:

- |     |                            |  |       |
|-----|----------------------------|--|-------|
| (3) | alma      čyr-y-l-dy       |  | Tatar |
|     | apple      rot-ST-PASS-PST |  |       |
|     | Apples rot easily.         |  |       |

The grammaticality of (3) can be understood under the proposed analysis of the anticausative *v* as bearing [-Θ], [-acc] features. Middle formation from unaccusatives serves as an evidence that the internal argument can be promoted in the absence of the external argument, in other words, [-acc] is not dependent on [-Θ]. We also observe passive-marked unergatives, but only in the form of impersonal constructions:

- (4) \*Marat-Ø / Marat-ka jez-e-l-de Tatar  
     Marat-NOM / Marat-DAT swim-ST-PASS-ST-PST  
*It was good for Marat to swim.*

Turkic resort to (dative) adjuncts with unergatives, since i) true passives can not assign [-acc] to external arguments; ii) anticausatives do not license external arguments.

In (5), the causative morphology creates a transitive verb from an intransitive: it adds a causer (agent) and assigns the accusative to the causee, ex-subject of an intransitive. So the causative morpheme does the same job for intransitives as the light *v* does for transitives: it adds an external Θ-role and assigns accusative; i.e. it is [+Θ], [+acc].

- (5) min marat-ny jyz-dyr-dy-m Tatar  
     I Marat-ACC swim-CAUS-PST-1SG  
*I made Marat swim.*

So the featural composition of the causative *v* in (5) is [+Θ], [-acc]. Thus, we propose the following voice system:

- |     |                        |                     |              |      |
|-----|------------------------|---------------------|--------------|------|
| (6) | active, causative:     | +Agent, +Accusative | [+Θ], [+acc] | (5)  |
|     | passive:               | +Agent, -Accusative | [+Θ], [-acc] | (2a) |
|     | anticausative, middle: | -Agent, -Accusative | [-Θ], [-acc] | (2b) |

**Eitan GROSSMAN** (Hebrew University) and **Malte ROSEMEYER** (University of Freiburg)

**Presuppositions and language change:  
the grammaticalization of ‘finish’ anteriors in Spanish and beyond**

Anteriors (‘perfects’) are known to be grammaticalized from a number of lexical source constructions. In Europe, anterior constructions commonly derive from ‘possessive’ HAVE constructions as in (1), which exemplifies the RESULTATIVE > ANTERIOR pathway. Elsewhere in the world, however, lexical verbs meaning ‘finish’ (or items meaning ‘already’) are common sources for completives, which in turn can serve as sources for anteriors (see 2).

- (1) Old English Ic haefde hine gebundenne. (Bybee et al. 1994: 68)  
     I have.PST.1SG PRO.ACC.3SG bind.PTCP  
     ‘I have him in a state of being bound’
- (2) Sango tere amá tongasó awe, lo (Bybee et al. 1994: 70)  
     spider SBJ.hear thus finish PRO.3SG  
     kpé ti lo bíaní.  
     run to PRO.3SG truly  
     ‘When the spider heard this, he ran away for sure.’

Interestingly, however, in Spanish we find both of these types of anteriors. Like the HAVE anterior (3), the Spanish acabar + de + INFINITIVE construction can refer to a (recent) past situation (4).

- (3) Spanish Sara me ha llama-do  
     Sara PRO.ACC.1SG have.PRS.3SG call-PTCP  
     ‘Sara has called me.’
- (4) Spanish Sara acab-a de llamar-me.  
     Sara finish-PRS.3SG of call-PRO.ACC.1SG  
     ‘Sara (has) just called me.’

This paper has three goals: (a) to provide a cross-linguistic sketch of the FINISH > ANTERIOR pathway, (b) to illustrate the development of the ‘finish’ anterior in Spanish based on a corpus of 2500+ tokens extracted from historiographical texts (13th-20th century), and (c) to propose a theoretical explanation of the grammaticalization process, building on recent advances in diachronic semantics and pragmatics. Specifically, we argue that ‘finish’ source constructions with NP complements comprise an unarticulated – but inferrable – predicate. For example, interpreting the clause *acabar la cena* ‘finish the meal,’ requires listeners to infer an unarticulated predicate, such as ‘eat’ or ‘prepare’. As such, such constructions are already, from a pragmatic point of view, COMPLETIVE constructions. Building on this observation, we suggest that it is the pragmatically underspecified nature of the lexical verb *acabar* that facilitated the temporalization of the *acabar + de + INFINITIVE* construction.

Regarding the observed changes in the semantic and syntactic properties of the construction, we focus on the role of selectional restrictions, which are gradually relaxed over time. Since selectional restrictions are presuppositional in nature, we propose to account for the observed changes in terms of listener-triggered change, such as Eckardt’s Avoid Pragmatic Overload principle (Eckardt 2009) or Detges & Waltereit’s Principle of Reference (Waltereit & Detges 2008).

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**Katerina HARALAMBOPOLOU (Independent Researcher)**

#### **Time conceptualization in Modern Greek: From metaphor and beyond**

This study considers the conceptual metaphor approach (CMT) to the concept of time. As it is widely recognized, in the CMT it has been common to assume that there are two sets of mappings in terms of which time is metaphorically structured in terms of motion through space. These are the well-known Moving-ego and the Moving-time mappings (e.g., Clark 1973; Grady 1997a, b; Lakoff 1990, 1993; Lakoff and Johnson 1980, 1999; Moore 2000; Radden 1997; Shinohara 1999; Yu 1998). Moreover, a number of claims have been made as to the relative complexity of these mappings. In more recent versions of CMT, for instance, it has been claimed that the Moving-ego and the Moving-time mappings constitute instances of primary metaphor, in the sense of being ‘basic’ (e.g., Grady 1997a, b; Lakoff and Johnson 1999). Such a view is based on the claim that the primary source concept relates to a relatively simple image concept, while the primary target concept relates to a phenomenologically simple response concept. Yet, the evidence considered in this study suggests that there is not a single, relatively simple temporal concept which constitutes the primary target concept in the Moving-ego and the Moving-time mappings. More specifically, building upon the principled polysemy model (Evans 2004, 2005, 2007), I examine the Greek lexical item *xronos* ‘time’ and I argue that the putative primary target concept in the Moving-ego and the Moving-time mappings does not constitute a single unified concept which relates to a phenomenologically ‘simple’ experience but it rather relates to a complex category of temporal lexical concepts. In particular, examining data from the ILSP corpus, I present a lexical-semantic analysis of the lexical item *xronos* and I show that this form is paired with six distinct lexical concepts. In the same way, the fact that there is a diverse range of motion events which serve to elaborate the distinct temporal lexical concepts suggests that there is not a single unified concept of motion either. Based on the linguistic evidence presented, it is argued thus that, although the two mappings capture the structure of thought at a certain level of generalization, they are not able to shed light on the particularities in terms of the meanings conventionally associated with the lexical item *xronos* nor can they account for the differential patterning in terms of the nature and the range of motion events which structure the distinct lexical concepts associated with the particular lexical item. Accordingly, it is argued that the Moving-ego and the Moving-time mappings are stated at a too high level of abstraction and may not actually constitute primary metaphors, in the sense intended.

The utility of the present approach, therefore, is in providing a detailed analysis at a more specific level than that normally investigated by conceptual metaphor theorists. To this end, as Evans correctly observes,

it may be argued that the principled polysemy approach provides a perspective which complements conceptual metaphor theory and offers a means of testing some of the predictions made by conceptual metaphor scholars by investigating a different level of conceptual structure and organization.

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**Ingeborg HARMES** (University of Münster)

**This should be enough: a diachronic study of the Dutch auxiliary verb ‘zou’**

*Topic and goals:* Modal auxiliaries typically express modal meanings, but the Dutch modal zullen ‘shall’ is a special case in this regards, since next to some modal meanings it expresses a temporal meaning (future). The preterite form zou ‘should’ is even more special because in Modern Dutch it serves as the past time of zullen only in roughly 20% of its occurrences. For the rest, it serves functions which are absent in zullen, such as the marking of evidentiality, hypotheticality and mitigation. In addition, zou often functions as a modifier of another modal, as for example in zou kunnen ‘should can’, or zou moeten ‘should must’. All of this indicates that zou has become a separate auxiliary, independent of zullen. The aim of this talk is to present an overview of the diachronic development of the meanings and uses of zou, as well as of its grammatical properties. Special attention will be devoted to the question whether the meanings and uses of zou, and the evolutions in them, correlate with specific functional or grammatical structures, such as its appearance in indirect speech reporting, embedding under mental state predicates, or the occurrence in conditional structures.

*Method:* The study is corpus based. It involves an analysis of the meanings and uses and of the grammatical properties of zou in four language stages: Present Day Dutch (post 1980), Early New Dutch (1550-1650), Early Middle Dutch (1250-1300) and Old Dutch (before 1200). The data consist of samples of 200 instances per period, or, all the instances available for Old Dutch. For Modern Dutch two samples of 200 instances have been investigated, one exclusively written and one exclusively spoken. The samples were drawn from the Corpus Gesproken Nederlands, the CONDIV Corpus, the Corpus Gysseling and the online Digitale Bibliotheek voor de Nederlandse Letteren. All instances have been analysed in terms of their meaning or function, as well as in terms of a range of structural and functional features of the clause in which they appear (e.g. grammatical pattern, type of state of affairs, temporal structure, presence of other modal or evidential forms, etc.). The study uses a cognitive-functional model (as proposed in a cognitive-functional model, e.g. Nuyts 2001, 2008) as its analytical framework.

*Results:* Zou(den) expressed dynamic and deontic modal meanings in the older language stages. However, these meanings do not occur any more in Present Day Dutch. From Early Middle Dutch, the marking of hypotheticality (I assume this is not the same as expressing epistemic modality) is its most important function. In addition, in Modern Dutch zou often serves as a politeness marker, especially in combination

with other modal verbs, with verbs such as zeggen ‘say’ and niet weten ‘not know’, and in certain constructions with the adverbs graag and beter. Some of these combinations also occur in older language stages, but usually with zou expressing hypotheticality. The findings suggest that the pragmatic uses of zou developed from the hypothetical use.

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**Alexander HASELOW** (University of Rostock)

#### Analyzing spontaneous speech: An outline of *Micro-* and *Macrogrammar*

Anyone working with data deriving from spontaneous speech knows that speakers do not always produce the kinds of fixed (“well-formed”) syntactic units that are analyzed in “traditional” approaches to syntax, such as clauses and sentences. A syntactic analysis based on the clause-concept and morphosyntactic dependency relations alone cannot adequately deal with utterances such as the one marked with an arrow in (1), which appears to be an incoherent sequence of seemingly disintegrated lexical and syntactic units.

- (1)     A: you may think it wasn't three weeks very well spent  
       B: well no no not really  
       → **but** uh (.) could've been **yeah** better ways of spending it **you know like the South of France**  
       A: yeah  
             [*International Corpus of English* - Great Britain: S1A-059, 289-292]

In this talk I will present an approach to grammar that can account for such structures as it distinguishes two cognitive serialization principles according to which speakers build up a unit of talk in real-time speech production, *microgrammar* and *macrogrammar*. These two concepts have been inspired by and are closely linked to the notions of *microsyntax* and *macrosyntax* introduced in the works of Alain Berrendonner, Claire Blanche-Benveniste, and their colleagues. However, the model presented here encompasses more than syntax, namely the establishment of structural relations beyond a single utterance, and it is based on the cognitive principles of on-line speech production and processing (Auer 2009). *Microgrammar* is a serialization principle that refers to the formal means employed by speakers to structure a unit of talk based on internal hierarchization, embedding, constituency, and dependency relations. *Macrogrammar* refers to relational functions outside phrase-, clause- and sentence-internal dependency relations, and is based on serialization principles that rest upon aspects such as language planning, cognitive processibility, and textual coherence. The unit of talk in (1), for instance, is analyzed here as a coherent macrogrammatical unit that forms an integrated whole as it represents a particular conversational activity. Structurally, several macrogrammatical units (e.g. the self-reinforcing continuer “yeah”) surround and interfere with a clausal (*microgrammatical*) unit (“could have been better ways of spending it”), which illustrates the close interaction of *micro-* and *macrogrammar*.

*Micro-* and *macrogrammar* have many facets, providing a framework for the description of a broad range of linguistic phenomena. After a general outline of the basic principles of *micro-* and *macrogrammar*, this talk will focus on one particular manifestation of *macrogrammar* that is amenable to linguistic study, namely to structural units in the utterance-final field in English, such as “general extenders”, e.g. *and stuff*, *or something* (Pichler & Levey 2011), “final particles” (Haselow 2013), e.g. final *then* and *though*, or “tag questions” (Tottie & Hoffmann 2009). Based on an empirical study of their contexts of use and their function in the British section of the *International Corpus of English* it will be shown how these final elements serve the structuring of speech produced on-line and that they are an integral part of the structural unit they accompany from a “macrogrammatical” perspective.

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**Martin HASPELMATH** (Leipzig University)

### The serial verb construction: Comparative concept and cross-linguistic generalizations

Since the 1970s, serial verb constructions (SVCs) have been discussed widely in African, Oceanic and many other languages in different parts of the world. This paper gives an overview of the most important generalizations about serial verb constructions that have been proposed and that do seem to hold if a sufficiently restrictive definition of the concept is adopted. The main problem of the earlier comparative literature is that the notion of a SVC has not been delimited clearly, and/or has been formulated in much too wide terms. This can be seen as a result of the confusion between comparative concepts and natural kinds: Serial verb constructions have (most often implicitly) been regarded as natural kinds (universal categories), so that phenomena in additional languages were regarded as SVCs even when they had somewhat different properties. This procedure inevitably leads to a fuzzy and very broad understanding of the concept, with a prototype structure that does not allow falsifiable claims. Here I propose a narrow definition of SVC and formulate ten universals that are apparently true of all serial verb constructions in this narrow sense.

**Steffen HAURHOLM-LARSEN** (Universität Bern)

### Gender marking recruited for number marking in Garifuna (Arawak, Central America)

Garifuna has two genders, male and female, distinguished only in the 3rd person singular (1).

- (1) wûri anyûgi-**ru** l-uma ában wügûri anyûgi-**li** ha-ma bíyama iráhü-nyü anyûgi-nya  
 woman young-3.F 3.M-with one man young-3.M 3.PL-with two child-PL young-PL  
 ‘the young woman with a young man and two small children’

Gender of inanimate referents tends to be based on certain semantic categories, but these are not strictly systematic or homogenous. Masculine nouns include: piercing instruments, body parts, body products and wild plants. Feminine nouns include: containers, vehicles, trees, clothing, cutting instruments, domesticated plants and fruits and guns (Taylor 1977).

Nouns referring to human beings are marked for number, while non-human ones are not (3a). Nouns referring to animals trigger plural agreement, while inanimate ones do not (3b).

- (3) a. wügûri-**nyu** **há** **ha**-lúgura-ba-**nya** bíyama bágasu harú-**tinyu** **há**  
 man-PL 3.PL:DEM 3.PL-sell-FUT-3.PL two cow white-3.PL 3.PL:DEM  
 ‘those men are going to sell those two white cows’
- b. wügûri-**nyu** **há** **ha**-lúgura-b-on bíyama fáluma bíme-tu **tó**  
 man-PL 3.PL:DEM 3.PL-sell-FUT-3.F two coconut sweet-3.F 3.F:DEM  
 ‘those two men are going to sell those two sweet coconuts’

If necessary for disambiguation, inanimates can be marked as plural with a word scope enclitic =*büri* (4).

- (4) l-arihi-ni l-á:gu=**büri** anímalu lé  
 3.M-see-3M 3.M-eye=PL animal 3.M:DEM  
 ‘he saw the eyes of that animal’

Some masculine inanimate nouns, however, have been found to trigger feminine agreement in the plural (5) as first discovered by (Barchas-Lichtenstein 2012, 169).

- (5) a. agányeha n-á-**li** muréy lé pero agányeha b-á-**ru** muréy **tó**  
 buy 1.SG-PST-3.M nance 3.M:DEM but buy 2.SG-PST-3.F nance 3.F:DEM  
 ‘I bought that nance, but you bought those nances’

- b. gay-**ti** aban n-a:ri pero gay-**tu** sun b-a:ri  
 hurt-3.M one 1.SG-tooth but hurt-3.F all 2.SG-tooth  
 ‘one of my teeth hurts, but all of your teeth hurt’

However, according to Barchas-Lichtenstein such non-canonical number marking is not consistent across argument roles and conditioning factors are unclear.

In Garifuna there is a separate speech register which is traditionally only used by men and according to Munro et al. (2013) the non-canonical number marking exemplified in (5) is limited to men’s speech and to inanimate nouns of masculine gender. They believe that the male speakers innovated a mechanism for marking the number of inanimate masculine nouns by recruiting the female gender marker for this purpose. Based on a corpus of spoken narrative and conversation being compiled by the author, an attempt will be made to uncover whether non-canonical gender marking is indeed limited to male speech and completely absent from the mainstream Garifuna language. I will furthermore attempt to show if non-canonical gender marking applies to all agreement patterns (nominal, verbal, prepositional etc.) or whether it might be limited to certain parts of speech or whether other conditioning factors may apply.

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**Henrik HØEG MÜLLER** (Copenhagen Business School)

#### Danish bare nouns in argument position

This paper investigates the distributional and interpretational differences between, on the one hand, bare singular count nouns (BSs) and, on the other, bare plural count nouns (BPs) and mass nouns when they appear in argument position in Danish, as in (1), where the different adnominal modifiers used in the translation, *a*, *the* and *his*, indicate that ultimately the specific interpretation is determined by context.

- (1) Peter maler **hus/ hus-e**.  
 Peter paints **house/ house-PL**  
 ‘Peter paints (a/the/his) house/ houses.’

On the basis of correlations between syntactic position, generic vs. existential reading, prosodic cues and aspect, it is verified that BPs have a wider distribution than BSs. Contrary to BSs, BPs can function as generic arguments and they are not subject to limitations wrt. the aspectual classes of the verbs with which they combine. It is argued that Danish BPs’ ability to express genericity is related to the fact that in this interpretation they behave analogously with DPs, while their unlimited combination potential with any aspectual verb class is a consequence of the BPs’ status as NumPs (Dobrovie-Sorin et al., 2006) in the sense that their Number feature takes scope over the predicate so that V+BP-structures, such as e.g. *Ib knækker grene* (Ib brakes branches), denote iterated events. BPs carry a plural marker which is head of the functional category Number and, therefore, BPs are syntactically NumPs. Furthermore, the parallel examples with a BS as object is ungrammatical, cf. e.g. \**Ib knækker gren* (Ib brakes branch).

At the same time, however, BPs and BSs with so-called existential or non-generic meaning coincide in object position of activity verbs, cf. (1), and stative verbs that ex- or implicitly express possession.

The paper shows that V+BPs and V+BSs have a number of shared and divergent properties. Specifically, they share the properties of obligatory narrow scope (differences in scopal properties between BPs and singular indefinites are first treated by Carlson (1977ab) for English, and later this insight is applied to an array of other languages, see e.g. Dobrovie-Sorin & Laca, 2003 for examples from Spanish, Italian and Romanian), fixed V+BS/BP word order (Hansen & Heltoft, 2011), unit accentuation (Rischel, 1983), and atelicity (Nedergaard Thomsen & Herslund, 2002). However, just as it appears evident that BSs and BPs share an array of properties, it is equally clear that at the same time they differ from each other in terms of possibilities of modification, discourse referential properties, number neutrality and subject control constructions.

The empirical analyses presented in the paper lead to the conclusion that Danish has three kinds of noun incorporation constructions which form a continuum, where at one end the noun is a syntactically inert, lexical item (i.e. “real” morphological incorporation, such as **hjerteoperere** (heart-operate) and **rodbehandle** (root-treat), which is not treated in the paper), in the middle position its distribution is severely restricted (V+BS), and at the other end the noun has a freer (but still constrained) role in syntax (V+BP).

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**Andreas HÖLZL** (University of Munich)

### Towards a semantic map for questions

In many descriptions polar questions (PQ) and content questions (CQ) are clearly separated and, consequently, dealt with in different typologies. As opposed to these approaches, the present paper maintains that questions form one coherent category. In following Bhat (2004), content questions are analyzed into interrogative/indefinite words, focus markers, and the marking of questions, of which really only the last category belongs to the semantic domain to be investigated. More specifically, I argue that the theory of semantic maps (e.g., Croft 2003) presents a valuable tool to represent the whole category of questions.

The first part of the presentation briefly reviews and evaluates previous approaches. Siemund's (2001: 1019) implicational universal, for example, that “if a language uses a particle to mark constituent interrogatives [CQ], then this language will also allow the use of this particle in polar interrogatives [PQ]” does not apply to two language spoken on Sachalin island, Nivkh and Uilta.

Uilta (Tungusic; Tsumagari 2009: 14, 15)

- (1) ηui sinda-xa-ni=ga?  
who come-PAST-3SG=Q  
'Who came?' (CQ)
- (2) Sii ɻenneεε-si=i?  
2SG go.PRES-2SG=Q  
'Do you go?' (PQ)

The fact that some languages (such as Japanese) mark both functions in the same and other languages (such as Uilta) in a different way, may be described with the help of a minimal semantic map, CQ—PQ.

The second part of the paper aims at identifying further functions such as the marking of alternative or focus questions, which may be added to this map. The Tungusic language Evenki, for instance, employs the same marker =Gu for all these functions except for content questions (cf. Nedjalkov 1997) while other languages draw different or more fine grained distinctions. Based on a global sample of 50 languages, the most relevant points on the map as well as their interrelation will be presented. The investigation is intended to extend the scope of previous typologies such as by Miestamo (2011) who focused on polar questions, exclusively. A further difference is the fact that the encoding of individual functions is mostly reduced to marking [+/-]. An additional complication that has to be considered within this regard is represented by the Omotic language Zargulla, which has the unusual feature of unmarked polar questions as opposed to marked assertions (Amha 2007).

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**Martin HUMMEL** (Karl-Franzens-Universitaet Graz)

**Underspecification and inference at the adjective-adverb interface in French**

In both Romance and English, adjectives are directly converted to adverbs: to drive slow, to go direct, Sp. conducir lento, ir directo. As pointed out by Author (2014), the so-called short form of the adverb belongs to the oral tradition of English and Romance. By contrast, the written standard tends to prefer derived adverbs with the suffixes –ly or –ment(e). The paper shall analyze the short forms which become interesting when they conserve adjecitival morphological or semantic features.

In the domain of morphology, adverbial agreement is a popular phenomenon in Romance (e.g. Sp. vamos directos; cf. Ledgeway 2010, for Italian, Author, in print). In Old French, adverbs may be marked for subject case (e.g. “Robers comme vistes enquist” (1275)). In the domain of semantics, adjecitival features are conserved in to eat spicy, where spicy refers to a quality of the food. On a more abstract level, however, a manner interpretation is possible as well, e.g. in terms of a general behavior (Mexicans eat spicy). Sometimes, concrete interpretations parallel metaphorical ones: Fr. Voir grand ‘to see sth. big’ and ‘to think big = to have ambitious projects’. Metonymy can also be observed: Fr. Les cheminées fument bleu ‘The chimneys smoke blue’. In this case, the modifier bleu does not refer to the chimneys but denotes a quality of the smoke. In an even broader sense, the short adverbs may denote something which can only be identified by inferentially analyzing the whole event frame (circumstances): Fr. baiser utile ‘lit. to fuck useful = to use sex to achieve specific goals’. The opposition of event-oriented adverbs of manner and participant-oriented secondary predicates (Schultze-Berndt / Himmelmann 2004) is too simple to give a coherent account of the complex semantic relations that can be observed. In a certain sense, short adverbs can be considered underspecified modifiers which allow for a wide range of inferential interpretations (cf. also Fr. rêver tricolore, rire jaune, cravater large, truander petit).

The first purpose of the paper is to give a systematic account of the cognitive features that are salient in the event-schemes evoked by verb-modifier collocations. We assume that an adequate analysis is possible relating the evoked “scene” to formal “frame” elements (Fillmore 1977). In this sense, inflection is a formal frame element in Romance that may give salience to a specific feature of the scene (cf. “profiling”, Langacker 1999). We expect that the scene-frame-relations observed can be attributed to more abstract types of cognitive processing with metaphorical, metonymic and freer types of psychological association. The general topics discussed in Cognitive Linguistics are promising for this purpose (e.g. Croft 1991, 1993, Cruse 1982, Honeste 2001, Paradis 2001, Deignan 2003, 2007, Jackendoff 1996, Lakoff / Turner 1989, Turner / Fauconnier 1995, 2000). In addition, the following hypothesis shall be tested: According to Noailly (1994: 111), inferential interpretations of the above mentioned types are typically observed with transitive verbs denoting human activities, when the direct object is not overtly realized.

Corpus: Our database includes 13,000 examples (tokens) which correspond to over 2000 different verb-short adverb phrases (types) covering the diachrony of French. The data stem from Nouveau Corpus d'Amsterdam (Old French), Moyen Français (ATILF), Frantext (ATILF).

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**Jan HULSTIJN** (University of Amsterdam)

**Basic language cognition: The grammar of native speakers’ spontaneous speech as a function of level of education**

In the first part of this presentation, I will present my theory of Basic Language Cognition (BLC Theory) (Hulstijn, 2015), which is both a sociolinguistic and a cognitive theory of the knowledge and use of a first and second language. The construct of BLC refers to the knowledge of a language that all adult native speakers of that language (L1-ers) share. BLC is juxtaposed to Higher (or Extended) Language Cognition (HLC). The constructs of Core and Peripheral components of language proficiency stand in an orthogonal relationship to the constructs of BLC and HLC. Using these four main constructs, BLC Theory contains seven corollaries, pertaining to the levels of language proficiency attainable in first and second languages in balanced and unbalanced bilinguals. The corollaries constitute a research agenda. The question of how big or small BLC is, is crucial (i) in the debate between generative and usage-based explanations of language acquisition and (ii) for the definition of the notion of native-like L2 proficiency, playing an important role in the critical-age of L2 acquisition literature.

In Hulstijn (2015), I provide preliminary evidence suggesting that the shared receptive vocabulary of L1-ers of Dutch amounts to approximately 7,000 content words.

In the second part of the presentation, I will report on two recent investigations aimed at defining the size of BLC in terms of morpho-syntax. Detailed linguistic analyses will be reported on speech production data (approximately 12 hours of speech, 80,000 words) collected from 98 L1-ers of Dutch, differing in age (18 - 76 years old) and level of education and profession. The analyses pertain to NPs with heavy pre-nominal adjuncts, central embeddings, relative clauses, and sentence-initial subclauses of various types. In the second investigation, syntactic complexity of speech produced by members of parliament with higher levels of education (Corpus of Spoken Dutch) was analyzed. I propose that the study of differences of native speakers’ linguistic repertoire includes computations of speakers’ productivity (token frequency, type frequency, and hapax legomena) of multi-word units, in both completely formal syntactic patterns, and semantically defined constructions (Construction Grammar). An approach which takes both formal (grammar) and semantic (lexis) dimensions of language into account (as in usage-based linguistics), stands a better chance of accounting for language acquisition and language use than approaches that rest on either grammar or lexis.

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**Marianne HUNDT and Johannes KABATEK** (University of Zürich)

### Pseudo-titles, global language contact and discourse traditions

In English, nouns such as *lawyer*, *golfer*, and even *teenager* can be used as pseudo-titles preceding proper names. Such pseudo-titles are typically premodified in English but lack an article:

- (1) ... wealthy Chicago Patent Lawyer Lynn A. Williams (COHA, TimeMag, 1937)
- (2) ... famed golfer Walter J. Travis (TIME Magazine, 1929/01/21)
- (3) ... Cleveland teenagers Jerry Siegel (writer) and Joe Shuster (illustrator) (TIME Magazine, 2003/03/31)

Pseudo-titles have been studied extensively, e.g. with respect to their regional origin (US English) as well as the “discourse traditions” (Koch 1997) from which they spread (news writing, in particular *TIME Magazine*, see e.g. Haugen 1953, Rydén 1975, Bell 1988, Jucker 1992, Meyer 2002, Hundt & Payne, 2014).

Surprisingly, parallel constructions can also be found in the two Ibero-Romance global languages, Portuguese and Spanish:

- |                  |                         |       |                          |                         |
|------------------|-------------------------|-------|--------------------------|-------------------------|
| (4) ... Comemora | níver                   | hoje: | <u>vereador</u>          | Jair César de Oliveira, |
| commemorates     | birthday                | today | alderman                 | Jair César de Oliveira  |
| colunista        | Carlos Maranhão, [...], | juiz  | Roberto Sampaio da Costa |                         |
| journalist       | Carlos Maranhão, [...], | judge | Roberto Sampaio da Costa |                         |

*Today alderman Jair César de Oliveira, journalist Carlos Maranhão, and judge Roberto Sampaio da Costa are celebrating their birthday* (Brazil, 1997, <http://www.corpusdoportugues.org>)

- |                  |       |         |         |  |
|------------------|-------|---------|---------|--|
| (5) ... Eminente | Juez  | Supremo | Scarman |  |
| Eminent          | judge | supreme | Scarman |  |
- Eminent supreme court judge Scarman* (Argentina <http://veanegociador.com.ar/Inseg.htm>)

While examples like (4) can easily be found in Brazilian Portuguese (but not in European Portuguese), examples like (5) are extremely rare in Spanish. According to grammatical descriptions of both languages, constructions like in (4) or (5) should, strictly speaking, be ungrammatical, because the NPs typically require the use of a determiner. However, recent studies (Kabatek & Wall 2013) have shown that in Brazilian Portuguese, there appear to be more contexts in which bare nouns seem to be licensed in general. It is therefore not surprising that it is here that pseudo-titles are more likely to be found. The question is whether determiner drop in such cases can be attributed to language contact, as has been claimed for similar phenomena in newspapers (see e.g., for Spanish headlines, Sáez Rivera 2013).

Language contact between global languages such as English and Spanish needs to take into account that we are dealing with pluricentric languages (Clyne 1992, Hundt 2013), where different national and regional varieties (and certain discourse traditions) can take a leading role in linguistic innovation, which, in turn, may only take root in some varieties and traditions but not others.

On the basis of corpus evidence of English, Spanish, and Portuguese and a set of nouns that typically occur in English pseudo-title constructions, we aim to verify whether the novel pseudo-title uses in (Latin) American varieties of Portuguese and Spanish can be attributed to language contact with English, in particular US English. Other relevant factors, such as syntactic contexts (pre- and/or post-modification), propensity of a regional variety to license bare NPs more generally, affinity to US American discourse traditions, will also be considered.

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**Iván IGARTUA** (University of the Basque Country)

### Feminine animacy in the Slavic languages

An inflectional syncretism between the accusative and the genitive cases distinguishes animate nouns from inanimate ones in the Slavic languages. The extent to which this syncretism is realized with respect to number and gender varies greatly according to language, the East Slavic languages (Russian, Belarusian, and Ukrainian) being the systems that have most extended the animate subgender in noun declension. In some languages (e.g. Czech), other traits, like a distinctive nominative plural for animates, also serve as markers of the category.

In any event, the structure of grammatical animacy remains quite asymmetrical in all languages: either it is entirely restricted to the masculine gender (like in Slovenian, Serbian/Croatian, Polish, and Czech, among others) or it also applies in other genders, but only in the plural (East Slavic languages). Diachronically, it is a well-established fact that grammatical animacy developed first among masculine nouns.

Despite this traditional view, some morphological innovations arisen in different Slavic systems and at different times reveal what can be regarded as an incipient development of animacy in the singular paradigm of some feminine nouns. The evidence comes mainly from Old Church Slavonic (and, to a certain extent, Old Russian or Old East Slavic, cf. Meillet 1897, Krys'ko 1994), 16th century Sorbian (Jakubica's translation of the *New Testament*, cf. Ermakova 1990, Igartua 2009), and southern Russian dialects as attested in the 17th century (Kotkov 1963). The examples are independent enough (both in terms of time and linguistic/literary tradition) to count as separate instances of a structurally identical change.

The innovation affects consonant-stems like *matь* ‘mother’ and *dъšтъ/dočь* ‘daughter’ as well as some old *ū*-stem nouns (although in the latter case factors other than animacy may be involved). In these nouns, the original accusative form is replaced in the singular by the genitive form. The contexts where the replacement takes place, regardless of language, point to a kind of syntagmatic or even discursive condition on this morphological change. In addition, the rise of a new accusative-genitive syncretism in these feminine nouns seems to be severely limited from a broader grammatical viewpoint: our data do not include a single case of agreement in the genitive, although certain equivalent innovations in certain Russian dialects demonstrate that this is not impossible at all (Pen'kovskij 2004 [1975]).

On the whole, the inflectional change undergone in the singular paradigm by some feminine animate nouns forces us to reformulate, at least partially, the historical development of animacy in the Slavic languages, taking crucially into account the role played by several factors like analogical extension or structural mimesis, syntagmatic adjacency, and even discursive saliency.

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**Tabea IHSANE** (University of Geneva) and **Ji Young SHIM** (University of Geneva)

### Clausal complements in Verbal and Nominal Domains

The present study explores the nature of clausal complements to a verb and to a noun, headed by the indicative complementizer that (e.g., John believes (that)... vs. John believes the story \*(that) ...).

A crucial issue we investigate is the licensing conditions of null complementizers, as languages vary with respect to whether verbs and nouns taking CP complements allow such an element: for instance, the deletion of the complementizer is possible both in English and Korean, but it is not in standard French and Italian, as shown in (1); in the environment of a sentential complement to a noun, however, the null complementizer is not allowed in English, whereas it is obligatory in Korean, as in (2).

- (1) a. John believes (that) love cures everything
- b. Joon-un [salang-i motun kes-ul chiyuhan-ta-(ko)] mit-nun-ta  
        Joon-TOP love-NOM all thing-ACC cure.PRES-DECL-COMP believe-PRES-DECL
- c. Jean croit \*(que) l'amour guérit tout
- d. Gianni è convinto \*(che) l'amore guarisca tutto
- (2) a. John believes the story \*(that) love cures everything
- b. Joon-un [salang-i motun kes-ul chiyuhan-ta-(\*)-nun iyaki-lul mit-nun-ta  
        Joon-TOP love-NOM all thing-ACC cure.PRS-DCL-COMP-LNK story-ACC believe-PRS-DCL

In addition, the availability of subject extraction out of the embedded clause depends on (a) the presence vs. absence of the overt complementizer and (b) whether the clausal complement is selected by a verb or a noun. This leads to the following research questions of the study.

- (3) a. How do languages vary with respect to the licensing of a null complementizer?
- b. How do we account for the diverse subject extraction patterns out of the sentential complements to a verb and a noun?

The study provides a feature inheritance analysis of cross-linguistic variation on the distribution of a null complementizer and its relation to diverse extraction patterns out of the sentential complement. We propose that (i) the null C is a result of D-feature matching between its selecting head and the C, and that (ii) Spec, TP is a criterial position in English when the C head is overt, but not when the C head is null. On the other hand, Spec, TP is never a criterial position in Korean. To argue for this, we develop a feature inheritance approach proposed in Shim (2013) towards criterial freezing (Rizzi 2004).

The proposal that the null complementizer is a result of D-feature matching between the selecting head and the complementizer also offers an explanation for why the distribution of the complementizer que in standard French and che in Italian is restricted; the complementizers que and che are morpho-phonologically similar to interrogative operators and may possess different features, such as a wh-feature and a nominal/D feature (cf. Baunaz 2014 for French). Unlike that and ko, que/che is a lexical spell-out of multiple features on the C head, therefore, D-feature matching between its selecting head and the C does not lead to the phonological deletion of the C head in this language.

**Katarzyna JANIC** (Laboratory Dynamique du Langage)

### Between grammaticalization and metonymy.

### A development of reflexive marker into the antipassive function

The term ‘antipassive’ refers to a derived intransitive construction in which the AGENT is encoded as the unique argument, whereas the PATIENT is suppressed or demoted to the oblique position. Both transitive and antipassive constructions are denotationally similar referring to the same event. The antipassive has been extensively discussed in ergative languages. This results from the fact that the term itself was initially introduced with reference to languages with ergative alignment (Silverstein 1972). As a result, the accusative languages have never benefited from an in-depth investigation of antipassive, apart from a few attempts (Polinsky 2005). Importantly, many ergative languages, e.g. the Australian ones, use an antipassive marker diachronically related to reflexivity (Terrill 1997). The same polysemy also exists in accusative languages, for instance in Slavic or Romance family.

This paper that argues in favour of the recognition of the antipassive in accusative languages has one aim. It investigates those accusative languages in which the notion of antipassive is in a strong relationship with reflexivity in order to propose two possible developments of an antipassive marker. Building on Kemmer (1993), this study will first show that the development of the antipassive function of some derived verbs may result from the grammaticalization process of reflexive-based marker. For instance, in Slavic languages, a semantically coherent class of aggressive verbs ('push', 'hit', 'pinch', 'bite', 'beat', 'scratch' etc.) unanimously undergo the antipassivisation process. Once such verbs are combined with the reflexive marker, they can be recognized as antipassive derivations: Sobaka kusaet mal'čika 'The dog bites a boy' vs Sobaka kusaet-sja 'The dog bites [others]'). The extension from reflexivity to the antipassive is due to similar semantic conditions. Since these verbs express an antagonistic action that is detrimental to the AGENT, it is more plausible that the latter will perform it on some distinct entity, triggering the antipassive interpretation, rather than on itself, leading to the reflexive analysis. But the development of the antipassive function may also be triggered by the metonymic manipulation at the level of Argument Structure of those transitive verbs the Argument Structure of which presents a diversity in terms of semantic properties of PATIENT, (1).

The present study is based on data taken from a corpus of utterances elicited from native speakers, and expanded by examples from the literature. Ex. (1) illustrates a transitive use of the verb 'defend' in Russian, whereas ex. (2) shows its intransitive use.

Russian (personal communication, Dmitry Filonov)

- (1)     a. Student zaščitil devušku.  
student.NOM defend.3SG.M.PST girl.3SG.F.ACC  
'The student defended the girl.'
- b. Student zaščitil dissertationju.  
student.NOM defend.3SG.M.PST dissertation.3SG.F.ACC  
'The student defended his dissertation.'
- (2)     b. Student zaščitil-sja.  
student.NOM defend.3SG.M.PST-SJA  
'The student defended himself. (reflexive)'  
'The student defended [dissertation]. (antipassive)'

Ex. (1) shows that the same transitive verb may possess two different Argument Structures. In (1a) the verb 'defend' occurs with two participants 'student' and 'girl' that assume respectively two different semantic roles: the one of AGENT and the one of PATIENT. Nevertheless, both arguments present the same inherent semantic nature [+human], required condition to trigger a reflexivisation process. In (1b), the same verb still assigns to its participants different semantic roles, however the arguments differ in terms of the semantic properties: [+human] vs [-human]. Building on the analysis of ex. (1), it is legitimate to claim that the derived construction (2) fulfils all the necessary conditions to be analysed from two different perspectives. Depending on the transitive construction from which it is derived, ex. (2) can be treated either as a one in which -sja morpheme performs a reflexive function or as a one in which the same marker fulfils the antipassive function. Such derivation remains indefinite on an underlying level, constituting an interface between reflexive and antipassive domain.

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**Cynthia A. JOHNSON** (University of Ghent) and **Brian D. JOSEPH** (Ohio State University)

### Interpreting Reference in Greek, Latin, and Sanskrit: The Pragmatics of Agreement

Agreement is the covariance of features of one form (the target) with respect to properties of another (the controller; Corbett 2006). Targets typically have the same morphosyntactic feature values as controllers: in Latin

*quorum pars maxima est inter ...*  
 whose.PL portion.FEM.SG greatest.FEM.SG is between  
 ‘whose greatest portion lies between ... (Caesar *Gallic Wars* 5.24.4)

the target *maxima* ‘greatest’ agrees with *pars* ‘portion’ as a feminine singular noun. However, the covariance is not always based on morphosyntactic features but in some instances can instead reflect meaning-based properties; e.g. in Latin

*pars certare parati*  
 part.FEM.SG contend.INF ready.MASC.PL  
 ‘a part ready to contend’ (Vergil *Aeneid* 5.108)

the target *parati* ‘ready’ is masculine plural according to the meaning of *pars* ‘part’, which has as its referent in this context not a singular portion but rather a group of men. Importantly, the relevant meaning is not general semantic information, but rather the referent’s meaning in the context of usage, as “pragmatic agreement”; the target *parati* is masculine plural because *pars* refers to men. Agreement can therefore be informative about the proper interpretation of words and phrases in Classical literature.

In this paper, based on a constructed 770,000-word Latin corpus, containing material from Old Latin and Classical Latin, and a constructed Classical Greek corpus of approximately 66,000 words, with material from a variety of genres, we provide examples where agreement patterns elucidate the controller’s meaning in context. These examples include pragmatic agreement from Latin and Ancient Greek, but also agreement where a target modifies more than one controller, where animacy information regarding the coordinated nouns in context—not necessarily “referential” or “lexical” animacy—is revealed only by reference to agreement, where choices as to gender and number are made evident.

Finally, we consider the case of a particular agreement phenomenon in Vedic Sanskrit which requires a broad view of pragmatics. We first address the relevance of examining the Rigveda, as a special sort of fixed corpus, to several of the Workshop’s methodological issues, including: reliability of the text, inasmuch as the Vedic corpus has been handed down orally quite faithfully over millennia, and dealing with gaps in the corpus, inasmuch as there is compensatory information provided by the long and detailed grammatical tradition associated with the corpus. We then turn to the elliptic dual construction in Vedic (Oliphant 1912, Kiparsky 2010) wherein certain Vedic dual nouns, e.g. *dyavā*, do not mean ‘two heavens’, but instead refer to conventionalized pairs of deities or other conventionalized pairings, e.g., here, ‘Heaven and Earth’. These interpretations are supported by agreement patterns—the target has the same gender as the unexpressed member of the pair, as prescribed in the grammatical tradition—and the socio-cultural, and specifically mythological, context surrounding these religious texts.

We conclude, then, that pragmatics indeed has a place in the analysis of Classical languages, and understanding that place and determining its limits, especially as to the role of extra-linguistic parameters pertaining to cultural practices, can come from an examination of the choices authors make regarding agreement patterns.

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**Elsi KAISER** (University of Southern California) and  
**Merilin MILJAN** (University of Tartu, Tallinn University)  
**Estonian speakers' interpretations of morphological case:  
 Implications for Case/Agree**

Estonian, like other Finnic languages, displays case alternations, notably between (i) partitive and genitive case on objects in transitives and (ii) partitive and nominative case on subjects in intransitives. This differential case-marking has a semantic function, signaling quantity or verbal aspect. Partitive, genitive and nominative are also ambiguous as regards grammatical role: nominative and partitive mark both subjects and objects, and genitive marks both objects and possessors.

Generative, or Minimalist, accounts offer a simple syntax of case assignment for such instances. Three structural cases -- nominative, accusative, and partitive -- are posited. Nominative is associated with the subject position and assigned via agreement by T/Infl, and differential subject marking is accounted for by postulating that an object NP, which has received partitive, moves out of VP [ref.1–2] for some reason. Differential object marking is accounted for by positing a functional head for aspect [refs.1, 3–5] so that a telic head assigns the accusative case via Agree between [+bounded] (telic) verb and [+bounded] NP/DP; partitive is regarded an unmarked/default case [refs.1–6]. However, there is no *morphological* evidence for object agreement in Estonian.

In order to observe (i) what structures the otherwise ambiguous morphological cases are associated with and (ii) whether they interact with any inherent features of the nouns they are assigned to, we conducted a psycholinguistic experiment. The focus was on whether and how case, number and animacy influence what grammatical functions native speakers attribute to nouns. We investigated how speakers of Estonian, which has flexible word order, interpret sentence-initial nouns with nominative, partitive and genitive case, and *whether this is influenced by the nouns' animacy and number*. Participants (n=42) saw case-marked nouns (e.g. Hiirt... ‘mouse-PART’; Porgand... ‘carrot-NOM’) and completed fragments in writing. We analyzed the completions for what grammatical role participants attributed to the case-marked nouns.

Our results show that morphological case provides information about grammatical role, but interacts with animacy and number: Interpretation of *genitive-marked nouns* was largely determined by the nouns' animacy, which modulated whether a noun was interpreted as possessor vs. object. Interpretation of *partitive-marked nouns* was determined by number, which modulated whether the noun was interpreted as subject vs. object.

These results indicate that morphological case itself contributes information about the structure it occurs in. This finding poses a challenge to the accounts that let the syntax solely determine a value for the case feature of an NP. Furthermore, the fact that interpretation of the morphological partitive interacts with number indicates that it bears semantic content (let's say partitivity) -- rather than being the ‘unmarked’ case (cf.[1–6]).

Overall, the results suggest that *it is the inherent features of a nominal (animacy, number) that partly determine the value of a case feature in Estonian in interaction with the syntactic information that morphological case contributes*. Thus, it seems that a view where syntax alone (in terms of a relationship of agreement) decides what case to assign to an NP is not straightforwardly applicable to Estonian; rather, our results suggest that the case-marking patterns are better explained at the morphological level.

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**Laura KALIN (UConn)**

## Deriving Differential Object Marking: Optional Licensers and Nominal Features

### Overview

In this talk, I argue for two main theoretical conclusions: (i) Differential Object Marking (DOM) arises from an interaction between the set of nominals that require licensing in a particular language and the location of obligatorily-merged licensers in that language; and (ii) unmarked objects in DOM systems are not licensed (they lack abstract Case), following Danon (2006) and Ormazabal and Romero (2013).

### Data

The main source of data that I draw on is fieldwork on the Neo-Aramaic language Senaya. In Senaya, DOM is based on specificity: specific objects must trigger agreement on the verb, while non-specific objects must not, (1).

- (1) Aana xa ksuuta kasw-an(-aa).  
 I one book write.IMPF-SBJ.1FS(-OBJ.3FS)  
 ‘I will write a (specific) book.’ (Specific interpretation iff object agrees.)

DOM in Senaya interacts with an aspect-based agreement split, whereby exactly one nominal can trigger agreement in perfective aspect (always the subject), but two can trigger agreement in imperfective aspect (subject and object, as in (1)). Perfective aspect, then, is compatible with an object, but crucially only a non-specific (non-agreeing) object, as in (2).

- (2) Aana xa ksuuta ksuu-lii.  
 I one book write.PFV-SBJ.1SG  
 ‘I wrote a book.’ (Object must be non-specific.)

I argue that object position in perfective aspect is an unlicensed position. It is not plausible to claim that non-specific objects are licensed by adjacency to the verb (since they need not be verb-adjacent), nor is it plausible to claim that non-specific nominals are in some sense deficient (unable to trigger agreement), since in subject position, they do trigger agreement, (3).

- (3) Xa ksuuta mpel-aa.  
 one book fall.PFV-SBJ.3FS  
 ‘A book fell.’ (Speaker need not know which book fell.)

### Analysis

I propose that differential marking arises from the interaction of two factors that vary crosslinguistically, which I present informally here. First, I propose that all nominals have the potential to be licensed in a given derivation, but languages differ as to which subset of nominals *require* licensing (e.g., all specific nominals). Second, I combine this with the proposal that clauses typically have exactly one obligatory licenser, with secondary licensers merging only when needed for convergence (in the spirit of many previous proposals, e.g., Bobaljik 1993, Rezac 2011). A licenser that obligatorily merges is active (looks for a nominal to license) in every derivation, while a licenser that optionally merges will only merge and be active when its failure to do so would cause some nominal that requires licensing to go unlicensed.

The effect of having these two different types of licensers, and only a subset of nominals that require licensing, is the following. When an obligatory licenser merges in a structure, it will license the closest nominal, regardless of whether that nominal requires licensing. All other nominals will enter into a licensing relation only when the nominal requires it; in this situation, an optional licenser (typically drawn from a language’s independently existing inventory of licensors) will merge to license the nominal. It is in this latter context that DOM arises.

I implement my account formally in a minimalist syntax.

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**Simin KARIMI** (University of Arizona)**Marked and unmarked object: DP or NP?**

Persian direct objects are morphologically marked by *-râ* if specific, saturating the internal argument of the verb. Unmarked objects are combined with the predicate to specify its semantic domain. While the former moves away from the predicate (1a), the latter stays in situ in an unmarked word order (1b) (Karimi 2003).

1. a. Kimea kelid-ro be man dâd  
Kimea key-*râ* to me gave  
'Kimea gave the key to me.'
- b. Kimea be man kelid dâd  
Kimea to me key gave  
'Kimea gave me key(s).'

Regarding the syntactic status of these two elements, several analyses have been offered in the literature. The unmarked object has been suggested to be incorporated into the predicate (Dabir-Moghaddam 1997). Given Baker (1996), this would imply that the unmarked object does not receive Case. Others have considered *-râ* as a topic marker (Ghomeshi 1997). These discussions raise a number of questions: is the unmarked object a DP, saturating the internal argument of the verb, or an NP, lacking a clear argument status? If the latter, does it require abstract Case? Is the morphological marking of the object a syntactic or a post-syntactic phenomenon?

In this paper, I argue that both types of objects are, in fact, DPs, and require abstract Case. Evidence for this claim is provided by discourse constructions where the unmarked object can be contrastively focused (2a) or topicalized (even long-distance) (2b) (Note that Persian is a Null Subject language).

2. a. pro KELID be man dâd, na ketâb  
key to me gave, not book  
'She gave me KEYs, not books.'
- b. gushti behtar-e [pro be -g - i [ pro ti na – xor - e]  
meat better is SUBJ-say-2sg Neg-eat-3sg  
'As for meat, it is better you tell her not to eat.'

Crucially, the unmarked object may serve as the subject of a passive construction (3).

- (3)    kelid dar in kârkâne sâxte mi - sh - e  
key in this factory made HAB-become-3sg  
'Keys are made in this factory.'

Moreover, this paper provides a historical analysis of the development of the object marker *-râ*, and shows that the syntactic function of this element has gradually shifted from marking definite benefactive/possessive constructions in older versions of the language, to marking definite objects in the modern version (Key 2008). The benefactive/possessive function of *-râ* was still productive in Modern Classical Persian (about 10 centuries ago), and still occasionally show up in formal writings (4).

- (4)    pâdshâh-*râ* pesar-i bud  
king *râ* son – IND was  
'The king had a son.' Lit. For the benefit of Shah, there was (for him) a son.

The old function of *-râ* shows that it was not a morphological object marker, and its new function indicates that it combines a semantic property with Accusative Case. Thus its absence does not indicate absence of Case. The paper closes with a discussion of whether or not this marking appears in syntax, as traditionally assumed, or it is a post-syntactic operation, a la Marantz (1991) and Bobaljik (2008). Various pieces of evidence are offered to argue for a post-syntactic status of this phenomenon.

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**Lena KARSSENBERG & Karen LAHOUSSE (KU Leuven)**

**French *il y a* & *c'est* clefts: a corpus-based analysis of their Information Structure**

Whereas the well-studied *c'est*-cleft (1) is prototypically associated with a focus-background (value-variable, ‘specificational’) interpretation, *il y a*-clefts (2) are usually said to have an all-focus (‘presentational’) interpretation (Lambrecht 1994/2000).

- (1) Q: Who's singing? A: *C'est Louis qui chante.* ‘It's Louis who's singing.’  
 (2) Q: What's happening? A: *Il y a mon chef qui arrive.* ‘My boss is coming.’

*Il y a*-clefts are relatively under-researched and have not yet been described on the basis of corpus research. In this talk we will show that – contrary to previous claims in the linguistic literature – *il y a*-clefts do not only have an all-focus interpretation, but, just as *c'est*-clefts, can instantiate three possible Information Structure (IS)-articulations.

***Il y a*-clefts.** Our extensive corpus analysis in formal and informal written (Le Monde, YCCQA online forum) and informal spoken (CFFP) French shows (i) that, besides an all-focus articulation (1), *il y a*-clefts also frequently express focus-background (3) (see also Davidse 1999/2014 on *there*-clefts) and (ii) that they can even have a (contrastive) topic-comment articulation (4):

- (3) Q: *Quelle est votre meilleure série du moment?*  
 A: “How I Met Your Mother” *c'est génial, y'a aussi “Lost” qui est bien* (YCCQA)  
 ‘... HIMYM is great, there's also “Lost” that is good.’
- (4) *Ya les gens normaux qui doivent se lever à 10h ou midi et aller au lycée pour la rentrée. Et ya moi qui doit se lever à 4h du matin pour aller à mon lycée sport étude !* (www)  
 ‘... And there's me who has to get up at 4 AM to go to school!’

***C'est*-clefts.** Besides focus-background (1), *c'est*-clefts can also express all-focus (Doetjes et al. 2004) (5). Moreover, we show that *informative-presupposition* clefts (Prince 1978, Dufter 2008) (6) have a topic-comment articulation.

- (5) *Sous le sommet en surplomb d'une falaise (...), un peintre amateur attend, rêvant de pouvoir dessiner un corbeau d'une espèce rare. Mais soudain c'est une jeune femme qui tombe dans le vide sous ses yeux.* (www)  
 ‘... But suddenly (it's) a young woman (who) falls into the depths before his eyes.’
- (6) [tourist guide on Berlin] *C'est dans la section est, autrefois la partie soviétique, que j'ai été le plus charmé (...). De plus, c'est là que vous découvrirez les principaux clubs, bars et discothèques.* (www)  
 ‘... It's there that you will find the main clubs, bars and discotheques.’

Thus, surprisingly, both *c'est*-clefts and *il y a*-clefts can express all three possible IS-articulations defined in Lambrecht (1994): all-focus, topic-comment and focus-background. However, quantitatively speaking, *il y a*-clefts are specialized for all-focus (75% of our data), while *c'est*-clefts almost always express either of the other two options (cf. Dufter 2009).

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**Evelien KEIZER** (University of Vienna)

### English partitives in Functional Discourse Grammar: types and constraints

Although partitive constructions (e.g. ‘one/some of the boxes’) have been discussed in great detail and from various perspectives (logico-semantic, syntactic, pragmatic and discourse-oriented), none of the treatments proposed so far has succeeded in providing a satisfactory account of both their internal structure and the constraints on (in particular) the embedded NP. The present paper will contribute to this discussion by offering a unified account of partitives using the theory of Functional Discourse Grammar (FDG; Hengeveld & Mackenzie 2008).

Partitive constructions can take a variety of forms. In the prototypical case, the subset typically takes the form of a numeral or quantifier and the superset is denoted by a definite plural NP ('one/some of the boxes'); alternatively, the pronoun one appears in the head position of the higher noun phrase ('the biggest one of the four'). Less prototypical instances include partitives with indefinite supersets ('one of several problems'), as well as partitives in which the first noun is left unexpressed ('the elder of the two brothers') or is expressed lexically ('the older man of the two'). Also included in many discussions of the partitive construction are partitives denoting masses ('some of the milk'), as well as constructions with singular embedded NPs, either denoting a collection ('one of the crowd') or a single object ('some of the book'). As observed in many studies, however, there are restrictions on the form of the embedded NP (e.g. '\*many of objections', '\*three of some men'), which has led to the formulation of various so-called Partitive Constraints (e.g. Jackendoff 1977, Selkirk 1977, Ladusaw 1982, Reed 1996, De Hoop 2003).

Any analysis of partitive constructions will thus have to account for both the internal structure of partitives and the constraints on the possible combinations of elements (as established on the basis of corpus data). For such an analysis to be really satisfactory, however, these two issues need to be shown to be connected, in that the constraints ought to follow from the specific properties of a partitive, as reflected in its internal structure.

The aim of this paper is to provide such an analysis. First, it will be argued that a distinction needs to be made between (at least) four types of partitive. These four types will be distinguished on the basis of two parameters: (1) the kind of entity denoted by the matrix NP (set or mass) and (ii) the relation between the heads of the matrix and embedded NP (co-denotational or not co-denotational). On the basis of data from BNC, COCA and the Internet, it will be demonstrated that any constraints on the embedded NP apply to only two of these subtypes (those with the feature +co-denotational); moreover it will be shown that these constraints follow directly from the specific properties of these partitives. Finally, it will be argued that FDG, with its different levels of analysis, allows us to capture all the relevant pragmatic, semantic and morphosyntactic properties of the various types of partitives in a systematic and insightful manner.

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**Václava KETTNEROVÁ** (Charles University in Prague)

### Syntactic Structure of Czech Light Verb Constructions

Czech, encoding surface syntactic relations via morphological cases, gives us an excellent opportunity to study the syntactic structure of light verb constructions (LVCs). We focus on the central type of LVCs

formed by a light verb (LV) and a predicative noun (PN) expressed as direct object (Butt, 2010). We primarily study the distribution of verbal and nominal valency complementations in the syntactic structure of LVCs. For the description of valency, we use the highly elaborated valency theory of the Functional Generative Description (Panovová, 1994).

(i) From the deep syntactic point of view, both the LV and the PN are characterized by their own valency potentials: (a) valency frames of the LVs are typically identical with the frames of their full verb counterparts, and (b) valency frames of the PNs correspond to the usage of nouns in nominal structures. E.g., within the LVC *dostat povolení* ‘to get permission’, the LV *dostat* ‘to get’ is characterized by the valency frame (1) and the PN *povolení* ‘permission’ by the frame (2).

- (1) ACTor(nom) CompoundPHRaseme(acc) ORIGin(*od+gen*)
- (2) ACTor(*gen,poss*) ADDRessee(dat) PATient(*k+dat,na+acc,inf*)

(ii) From the surface syntactic point of view, the surface structure of an LVC results from the interaction between the valency structure of the LV and that of the PN (Macháčková, 1994). The corpus evidence reveals that in the surface structure formation of LVCs, a crucial role is played by coreference of nominal and verbal valency complementations. E.g., in case of *dostat povolení* ‘to get permission’, the nominal ACT and the verbal ORIG and at the same time the nominal ADDR and the verbal ACT are coreferential. Two principles govern the surface form of an LVC: (a) from the valency frame of the LV, those valency complementations (except for CPHR corresponding to the PN) are expressed in the surface structure that corefer with some of the complementations of the PN, and (b) from the frame of the PN, those complementations are realized that do not corefer with any complementation of the LV. E.g., the surface structure of the LVC *dostat povolení* ‘to get permission’ consists of the verbal ACT in nominative, CPHR in accusative, the verbal ORIG expressed by the prepositional group, see (1), and the nominal PAT expressed by the morphemic forms listed in (2):

- (3) *Pilot<sub>V-ACT-nom</sub> dostal<sub>LV</sub> od řídící věže<sub>V-ORIG-od+gen</sub> povolení<sub>PN-V-CPHR-acc</sub> k přistání<sub>N-PAT-k+dat</sub>*  
The pilot received the landing clearance from the control tower.

Two exceptions from the above given principles are discussed: (i) causative types of LVCs where Causator (usually corresponding to verbal ACT) is expressed on the surface despite the fact that do not corefer with any complementation of the PN (4), and (ii) the conditions under which both verbal and nominal ACTors can be expressed in the surface structure of LVCs (5).

- (4) *Lidé<sub>Caus-V-ACT-nom</sub> dali<sub>LV</sub> přednost<sub>PN-V-CPHR-acc</sub> odpočinku<sub>V-ADDR-dat</sub> před prací<sub>N-PAT-před+instr</sub>*  
People gave preference to relaxation over work.
- (5) *Jan<sub>V-ACT-nom</sub> přednesl<sub>LV</sub> své<sub>N-ACT-poss</sub> námítky<sub>PN-V-CPHR-acc</sub>*  
John gave his objections.

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**Marta KHOUJA (UAB)**

### Dislocation in Catalan and Spanish. Syntactic configuration of the prepositional accusatives

Recent research in microparametric variation provides a wide panorama to examine certain morphological aspects such as the differential marking and the syntactic configurations in which it is displayed. The present study deals with dislocation constructions both in Catalan and Spanish in order to approach the syntactic behaviour of such peripheral structures, focusing on prepositional accusative constructions, i.e., Differential Object Marking (DOM). It is assumed that this phenomenon is a property of universal scope which is activated in cases where the constituents are interpreted as defined topics. When it is dislocated

with a clitic coreferent, called Clitic Dislocation structures, the prepositional accusative appears on the scene. We look closely at this kind of defined topics to go in depth into its particular characterization.

- |     |                         |                               |                              |
|-----|-------------------------|-------------------------------|------------------------------|
| (1) | a. [Spanish]            | A María ya la conozco         | (‘Mary, I already know her’) |
|     | b. [Standard Catalan]   | La Mariona, ja la coneix      |                              |
|     | c. [Colloquial Catalan] | A la Mariona, ja la coneix    |                              |
|     | d. [Balearic Catalan]   | (A) na Mariona, ja la coneix  |                              |
| (2) | a. [Spanish]            | Ya la conozco, a María        |                              |
|     | b. [Standard Catalan]   | Ja la coneix, la Mariona      |                              |
|     | c. [Colloquial Catalan] | Ja la coneix, a la Mariona    |                              |
|     | d. [Balearic Catalan]   | Ja la coneix, *(a) na Mariona |                              |

We take into consideration corpora data from varieties of current Catalan and Spanish, but we also draw up a historical approach. Syntactic operations in (1) Clitic Left Dislocation (CLLD) and (2) Clitic Right Dislocation (CLRD) are analyzed in each variety to show the differences and similarities in the use and extension of the preposition and to determine the particularities in the syntactic procedure for his activation. Therefore, the comparison of both Romance languages, where some differences regarding DOM arise, are taken into account to establish the relevant parameters of differential marking by determining the syntactic differences between a remathic object and a dislocated one, since they are distinct structures. \

We propose an analysis of DOM based mainly on constituents dislocated to the right periphery, in order to show to what extent the appearance of DOM is determined by the topicality value and the context of dislocation, especially in the Balearic Catalan. Indeed, it is argued that there is a correlation between dislocation and prepositional marking in some determined conditions related to the definiteness and specificity scale of the Direct Object.

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**Martin KOHLBERGER** (Leiden University)

#### **Between nouns and verbs: Nominalisations in Shiwiar (Chicham)**

Shiwiar is a Chicham (Jivaroan) language spoken by around 1,200 people in the lowlands of eastern Ecuador and northern Peru. It is a previously undescribed language and its documentation was begun in 2011. It is a highly synthetic language with rich verbal morphology. The latter is characterised by the indexing of multiple arguments on the verb, extensive tense-aspect-mood morphology and, crucially, widespread use of nominalisations. The structure and function of deverbal nominalisations will be the subject of this talk.

Shiwiar distinguishes between two major open word classes: nouns and verbs. They are clearly defined by the morphological categories that are marked on them (e.g. possession and case on nouns vs. object, aspect and valency on verbs) and the functional slots that they take on (e.g. fulfilling an argument role vs. heading a predicate). Deverbal nominalisations in Shiwiar can yield canonical nouns, as defined by such structural and functional criteria. However, very frequently, deverbal nominalisations in Shiwiar retain a number of verbal characteristics, while at the same time acquiring nominal ones.

To illustrate this, three common nominalisers will be discussed: *-inu*, *-tinu* and *-tā̄i*. These suffixes function as agent/subject, action/state, and non-agent/subject nominalisers respectively and can all derive a verb into a bona fide noun (1-3).

- (1) iákmijun wajngjáhaj.  
*iákma-inu=na*      *waina-ká-ha-i*  
 hunt-AG.NMLZ=ACC    see-PFV-1SG-DECL  
 'I've seen a hunter.'
- (2) píñgir puhústin  
*pinkir*      *puhu-sa-tinu*  
 good      live-PFV-NMLZ  
 '(a) good life'
- (3) níija kanútajtſiri  
*níi-na*      *kanú-tā̄i-utſi-ri*  
 3SG-GEN      sleep-NSA.NMLZ-DIM-3:POSS  
 'his small bedroom'

However, when combined with the copula, all three nominalisations stop functioning as a canonical noun and they act as complex predicates instead. These constructions can express a range of meanings, including habitual, deontic and normative semantics (4-6). By examining the different uses of each of the constructions, this talk will propose possible grammaticalisation pathways for each nominaliser.

Finally, where relevant, this talk will point out the striking similarity between Shiwiari nominalisations and those found in the neighbouring Quechuan languages. Given that most Shiwiari people are native speakers of Northern Pastaza Kichwa (a II-B Quechuan language) through exogamy practices, the role of language contact and will be addressed in the possible areal diffusion of these structures.

- (4) tſuú utſírhjáj nakúrin ármjaji. [Habitual]  
*tſuú*      *utſi-rī-hā̄i*      *nakúru-inu*      *á-ara-mia-ji-i*  
 woolly.monkey:GEN child-3:POSS-INST play-AG.NMLZ COP-PL-D.PST-3-DECL  
 'They used to play with the woolly monkey babies.'
- (5) jamájkja nungá puhústijuitm̄ [Deontic]  
*jamaj-ka*      *nunka*      *puhu-sa-tipu=it-m̄-i*  
 now-TOP      ground.LOC      live-PFV-SA.NMLZ=COP-2SG-DECL  
 '(From) now (on) you have to live on the ground.'
- (6) kutſí hukí ahánam witajndjaj [Normative]  
*[kutſi*      *huki-ri]*      *[aha-nama*      *wi- tā̄i=it-a-i]*  
 [machete take-1PL:SS] [garden-LOC go-NSA.NMLZ=COP-3-DECL]  
 'Having grabbed the machete, we normally go to the garden.'

**Björn KÖHNLEIN** (Ohio State University)  
 and **Marc VAN OOSTENDORP** (Meertens Instituut / LUCL)

### Why poetic rhyme is relevant for phonological theory

Phonological research on poetic language has a long tradition, but this has usually concentrated on metrics rather than rhyme. Based on an experiment on the judgment of imperfect feminine rhyme in Dutch, we demonstrate that a systematic study of poetic rhyme has the potential to reveal important insights about phonological constituency.

Phonological knowledge surfaces in many different ways, but never without being influenced by other factors. Although for a long time, a lot of phonological theory was successfully based on grammaticality judgments of scholars and informants, it has always been acknowledged that the intuitions underlying such judgments can surface, and hence be studied, in other ways as well. A classical source of such 'external' knowledge of phonological generalizations can be found in the study of poetry. The reason for this is an idea that has been made explicit by Fabb (1997, 2010): poetic traditions never seem to use sound patterns that are not known in one way or another in 'ordinary' phonologies of human language. While parallels between poetic metrics and linguistic stress are widely recognized, the phenomenon of poetic rhyme is less

well studied; yet several authors have pointed out the similarity to reduplication (Kiparsky, 1970, 1973; Holtman, 1996; Yip, 1999; Van Oostendorp 2014).

We observe that the Dutch imperfect feminine rhyme *kosmos – Lesbos* sounds better to native speakers than *kosten – drachmen*. This seems to correspond to the well-known generalization that schwa is the prototypical unstressed vowel in Dutch, while closed syllables with full vowels are commonly regarded to be strong attractors of word stress; open syllables with full vowels are located in between (e.g. Van der Hulst 1984, Kager & Zonneveld 1986, Kager 1989, Trommelen & Zonneveld 1989):

- (1) Stress attraction in Dutch (descending order): VC > V > ə(C)

We tested the influence of syllable structure on the wellformedness of imperfect feminine rhyme in an experiment with native speakers of Dutch. All rhyme pairs were disyllabic and presented auditorily and orthographically. We differentiated four syllable types in unstressed second syllables, deriving from two binary oppositions in the linguistic rime: one between full vowels (V) and schwa (ə), and one depending on whether or not syllables were closed by a consonant (C). The results indicate that syllable weight (heavy syllables >> light syllables) and vowel quality in unstressed syllables (full vowels >> schwa) determine the wellformedness of imperfect rhymes. We discuss how these results support and extend previous analyses of Dutch stress.

We argue that the listener tries to assign a plausible sound structure to words in a poem, making it fit with the template that the poem assigns to the word. The easier it is to modify the linguistic structure in order to fit the template, the better the rhyme is considered to be. The results of our experiment support a view of poetic rhyme in which prosodic constituency is crucial, which indicates that the study of poetic rhyme is a fascinating testing ground for phonological theory.

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**Maria KOPTJEVSKAJA-TAMM** (Stockholm University)  
 and **Hans IJZERMAN** (VU University Amsterdam)

#### **How our biology predisposes us to an “AFFECTION IS WARMTH” “metaphor”, and how our environment changes its anchor**

“AFFECTION IS WARMTH” is one of the most widely quoted “universal” conceptual metaphors. Cognitive linguists suggest these to be conceptual, based on frequently used English expressions as “warm words, feelings”. In this talk, we will reflect on their cross-disciplinary collaboration, using both the findings of a large-scale cross-linguistic study of the meanings and uses of the temperature terms in the world’s languages and the insights from (social) psychology. Our first question – inspired by Geeraerts and Grondelaers (1995) – was to explore whether these reflect universal patterns or whether they are based on specific cultural traditions. Their presence across languages indeed varies considerably: while some languages demonstrate elaborated systems of such uses, quite a few lack them altogether, and yet others vary as to which temperature term has predominantly positive associations in its extended uses (e.g. ‘cold’ rather than ‘warm’). This disconfirms the idea that this conceptual metaphor is universal, and further confirms suspicions from social psychology, which has falsified another basic assumption from conceptual metaphor theory – unidirectionality (IJzerman & Semin 2010). In the remainder, we first explore these patterns, and then provide first explorations for why they are likely to differ across languages.

Perhaps surprisingly, the edited volume by Koptjevskaja-Tamm (2015) clearly reveals a significant variance in using temperature metaphors. Australian languages, Hup (Nadahup), Mapudungun (Araucanian), and Ojibwe (Algonquian) basically lack any extended use of temperature terms, while the

Oceanic languages in Vanuatu and Nganasan (Uralic) have very few. This is in contrast both to some European and other Asian languages, but also to the African languages Ewe, Gbaya, Gurene, Likpe, Selée, Abui and Kamang (Timor-Alor-Pantar), and Yucatec Maya. These latter reveal a rich inventory of extended uses pertaining to their temperature terms, ranging from the more common ones, to the idiosyncratic ones. The actual cross-linguistic variation is both striking, thought-provoking, and calling for more research.

Insights from (social) psychology may provide us with further answers for why such cross-cultural variation exists among languages. The most important reason is likely that temperature metaphors reflect how people deal with the metabolic demands of the environment. Thermoregulation is one of the most metabolically expensive activities across the animal kingdom. Other animals (and thus also humans) help regulate the temperature environment when this gets too cold, making a comfortable warm touch seem to answer basic biological necessities in mammalian sociality (Harlow & Suomi 1970; IJzerman et al. 2015). The second part of this talk will discuss the *biological* mechanisms behind social thermoregulation, and point to how others keeping us warm can help us answer to basic metabolic needs (cf. Beckes & Coan 2011; Beckes et al. 2014). From that, humans have developed so-called “cultural complements” to deal with the demands of the environment, and we will speculate that different linguistic metaphors are reflective of different metabolic needs across cultures, which are implemented according to different cultural practices (e.g., differences in touch) and rely on different needs depending on the environment (e.g., different climates). Together, we discuss how language can facilitate culturally coordinated metabolism regulation, and thus point to the role of different attention-driving functions of linguistic – not conceptual – metaphors in cultural coordination.

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### Omar KORAT (Tel-Aviv University)

#### Groups Distribute Differently from Individuals: Partitives and Predicates

In the vast majority of the cases, quantifiers which quantify over parts of a singular term must form a partitive construction. Thus, (1) partitions the singular term, but (2) doesn't.

- (1) Dan ate some of the schnitzel.
- (2) Dan ate some schnitzel.

Interestingly, quantifiers interact differently with singular group compared to individual nouns. Individual nouns are partitioned into an atomless sum of material parts, as in (1), while group nouns are partitioned into a sum of atomic individuals, as in (3).

- (3) The director summoned all of the staff.

(1) is downward entailing: if A is part of B and B was eaten, then necessarily A was eaten. This is not the case in (3): if A is part of B and B was summoned by the manager, it is not the case that A was summoned. I derive the difference using semantic shifts on count terms. I propose a shift  $\downarrow_i$  of type  $\langle e, et \rangle$ , the *individual distributor*, based on Landman (1989)'s  $\downarrow$ . The shift turns a definite expression  $x$  into a predicate of a subset of the parts of  $x$ . This solves the type mismatch encountered in (1) and (3) between the definite expression and the quantifier.  $\downarrow_i$  returns different subsets for group and individual terms, to account for the difference between (1) and (3).

The fact that individual and groups distribute differently has implications about their respective entailment patterns when combined with predicates. Predicates can be divided into at least 4 classes (actually more),

listed below, with regard to the entailments they induce on individuals vs. groups. Classes 2, 3 and 4 correspond roughly to Winter (1998)'s atom, set and mixed predicates, respectively.

1. Mass Predicates: e.g. *be eaten*, *be burned off*, *be in Denmark*.

These predicates always apply to the mass parts of its argument, meaning they behave the same with groups and individuals. Consider:

2.

*The sheep were eaten.*

=

*The herd was eaten.*

(assuming the herd is the group of the sheep)

3. Individual Predicates: e.g. *be sitting*, *be tall*, *have blue eyes*.

These predicates are only defined for individuals. This means that they can apply to group partitives, but not to individual partitives. For group partitives, these predicates force a distributive reading.

Consider:

4.

✓ *Most of the crew is tall.*

vs.

# *Most of sailor is tall.*

5. Collection Predicates: e.g. *meet*, *gather*, *be separate*.

These predicates are only defined for groups/plurals. Consider:

✓ *The committee met.*

vs.

# *The director met.*

6. No-Mass Predicates: e.g. *invite*, *dine with*, *defeat*.

These predicates are defined for groups, plurals and individuals, but not for mass entities. Like Individual Predicates, they are undefined for individual partitives, but unlike Individual Predicates, they don't force a distributive reading for group partitives. Consider:

✓ *The mayor dined with all of the committee.*

(both distributive and collective possible)

vs.

# *The mayor dined with all of the director.*

7. Truly-Mixed Predicates: e.g. *build*, *reassemble*, *fill*.

These predicates allow both distributive and collective readings with mass entities, individuals, plurals and groups.

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**Jaklin KORNFILT** (Syracuse University)

#### DOM in Turkish: Not only dependent Case, but also dependent Agree

Current formal studies of Case assignment/licensing center around two main approaches: 1. Case assignment/valuation via Agree, or 2. Dependent Case, whereby a certain Case cannot be licensed, unless a different Case has been licensed first. Some studies have suggested a mixed approach: Case licensing via Agree for subjects, but via dependent Case for DOs (and other elements, e.g. IOs). However, even more recent work has suggested that a single approach is preferable to a mixed approach on conceptual grounds, proposing to re-analyze subject Case via a dependent Case approach, thus bringing subject Case into the fold of dependent Case as the only valid Case licensing mechanism in general (at least for structural Cases). This paper proposes a new version of a conciliatory approach to Case, which is mixed homogeneously: In all instances of structural Case, i.e. for subject as well as DOs, Agree with a functional head is necessary. (This addresses the conceptual issue of one unique type of licensing mechanism, rather than two.)

However, the functional licenser of the Case on DOs has to be itself licensed in this capacity (i.e. be activated). This is possible only when the subject Case has first been licensed via Agree. This results in the *appearance* of dependent Case, which is, this paper claims, an *indirect* symptom of dependent **Agree**. This approach is illustrated here via an interaction of DOM with DSM: The basic facts of DOM in Turkish are well known: Non-specific DOs can't be marked with the Accusative, specific DOs must be so marked. Turkish has no morphological agreement marking with the DO on the predicate; thus, Case and Agree appear to be dissociated. Here, I will argue that against appearances, they are associated; this becomes clear, when DSM is taken into account, as well.

The DSM facts in Turkish are less well-known: Non-specific subjects of nominalized clauses don't bear Genitive marking, and agreement on the predicate has default (3.sg.) shape; specific subjects of nominalized clauses must bear Genitive. The predicate agrees with such Genitive subjects, as well as with Nominative subjects in fully finite clauses. Even less known are the facts concerning co-occurrence of non-specific subjects and non-specific DOs: Neither one has case, and there is only default subject agreement on the predicate. The non-specific subject must precede the non-specific DO (although word order is free in general, and specific subjects and DOs can be scrambled).

Importantly for this talk, when the subject is non-specific (and non-Agree-ing) and precedes the DO, the DO can't bear Accusative marking. I propose that the best, most insightful (if not the only) account of these facts treats DSM and DOM in parallel fashion: Not only DSM, but also DOM depends on a Case — Agreement correlation; only when the subject bears Case (Nominative or Genitive) and Agrees with the predicate, can agreement with the DO (located on the vP) be “activated” by that higher agreement and can thus license Accusative case on the DO.

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Ana KOVACEVIC (Old Church Slavonic Institute)

### Negative concord varieties in early Slavic: The case of Croatian Church Slavonic

Whereas the phenomenon of negative concord (NC) is widely recognized in contemporary Slavic languages, the same is not the case with historical stages of particular Slavic idioms. In order to explore early Slavic NC, Croatian Church Slavonic (CCS) has been investigated. It is a language based on Old Church Slavonic (OCS) and created by strong influence of the Croatian vernacular, used as literary language from the end of XI. c. until 1561. Written in Glagolitic script, the CCS texts are mostly direct translations from Latin (less often Italian or Czech) or indirect translations (through OCS heritage) from Greek (Mihaljević, Reinhart 2005).

This investigation is carried out in the framework of the basic linguistic theory (Dryer 2006). The data were provided from the referential CCS corpus containing Latin and Greek source texts aligned to respective CCS translations and containing 62 CCS sources, both manuscripts and incunabula (Nazor 2000). The corpus has shown to be reliable basis for wide range of linguistic investigations (Vukoja 2012).

The aim of this paper is to detect the range of the NC phenomena in CCS. In the most familiar variety of NC, the *NC proper*, the presence of the negative marker *ne* is optional in CCS when n-words are placed before the verb, e.g., *nikomu (ne) sudiste* (Reinhart 1993, Kovačević 2013). In this respect CCS agrees with OCS, but differs from contemporary Croatian. However, it has turned out that NC proper is not the only NC variety in CCS. Owing to the fact that the vast majority of CCS texts were translated from Latin (which is a well-known non-NC language) or were adjusted to correspond to the Latin source texts, a whole range of different NC phenomena in CCS were detected through contrastive CCS and Latin analysis. This means

not only the combination of n-words with *ne*, but also with *ni* ('neither', 'nor'), *bez* ('without') and *neže* ('than'). Furthermore, the combination of two n-words without any sentential negative marker has been attested. That feature, known as *negative spread*, is generally absent from contemporary Slavic languages (Giannakidou 2000) with contemporary Croatian not only lacking that, but also *paratactic negation*, i.e. combination of n-words with *bez*, construction recognized in some other contemporary Slavic languages like Czech or Polish (Zeijlstra 2004). The paper will bring some new information about these diachronic NC differences among Slavic idioms.

Finally, the questions of language contact and syntactic borrowing are addressed. Some scholars who did not pay attention to the word-order rule have argued that the absence of the sentential negative marker in NC proper should be interpreted as Latin influence (Maretić 1910). But the thorough consideration of the NC phenomenon reveals the whole range of differences between Latin and Slavic and makes it improbable that any language can influence such a distinctive feature as negation in another language. In other words, it can only encourage some choices where choice is possible.

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**Milena KUEHNAST and Victoria BARTLITZ** (Centre for General Linguistics ZAS)

#### **Acquisition of contrast relations in child German, English and Bulgarian**

The acquisition of discourse coherence relations and their markers has developed into a vibrant topic in child language research (Evers-Vermeul & Sanders 2009, van Veen et al. 2009, Cain & Nash 2011), but the processes underlying the acquisition of adversative such as but, however, or nevertheless discourse connectives are still not well understood. Hence, our talk aims at providing new insights into the intricate developmental patterns of adversativity by discussing experimental data from children acquiring languages with differently shaped adversative systems – German, English and Bulgarian.

Additivity, polarity and conventional implicatures have been identified as constitutive meaning elements of adversative connectives (Louwes, 2001; Blakemore 2002). By conventional implicature, adversative connectives trigger the inference that the conjoined propositions should not hold together. Thus contrast relations imply negative polarity involving syntactically overt or covert negation. The present study investigates the impact of syntactic factors like co-ordination and expression of negation on the acquisition of adversative connectives in German (aber, sondern), English (but) and Bulgarian (a, no).

We present data from a sentence-continuation experiment with 3-, 4- and 6-year-old monolingual (N=428) and adult control groups (N=96) based on pictures depicting alternative actions. Production of adversative sentences was prompted through positive or negative first clauses, e.g. 'She wants / doesn't want to dive but...'. We analysed the syntactic complexity of the produced continuations and the realisation of overt negation. These properties allow inferences about the interpretation of an adversative utterance as a contrast relation situated on the content (Semantic Opposition), epistemic or pragmatic level (Denial of Expectation).

The pattern found in adult production indicated preferences for clausal coordination with Denial of Expectation reading for German aber, English but and Bulgarian no, and for Semantic Opposition with

Bulgarian a. These preferences were only slightly affected by the presence of negation in the prompt. However, children's interpretation of adversative connectives as Semantic Opposition markers was aided by the presence of negation. We also found a significant interaction of polarity and syntactic complexity. In all languages, three-year-olds often produced ill-formed adversative sentences by conjoining two positive sub-clausal elements, clausal co-ordinations being mostly well-formed. Older children produced significantly more negation markers in all co-ordination types. They used clausal co-ordinations to express inference driven Denial of Expectation with covert negation, e.g., She wants to dive, but she is afraid. We discuss these findings with respect to developmental steps in the intertwining of negative polarity and syntactic co-ordination in the construal of contrast relations.

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**Leonid KULIKOV** (Ghent University)

**Passive to anticausative, reflexive to passive and other evolutionary tracks and grammaticalization paths in the system of voices and valency-changing categories: A diachronic typological overview**

The present paper focuses on the evolutionary tracks and grammaticalization paths found within the system of voices and valency-changing categories and involving passive as their starting or final point. While grammaticalization paths from non-passive derived intransitives (in particular, from reflexives or anticausatives) to passives is well-known and repeatedly discussed in typological literature (e.g. Haspelmath 1990; Heine & Kuteva 2002, among many others), less attention was paid by typologists to the remarkable change of passives to anticausatives. This semantic development, well-known from many ancient and modern Indo-European languages such as Sanskrit or Latin. is attested, foremost, for passives of several verbs of perception and knowledge (knowledge transfer) such as 'X is seen' --> 'X is visible; appears', 'X is heard, is known, is famous'. Besides, passive-to-anticausative transfer is possible for some subgroups of verbs of caused motion.

Diachronic scenarios found in individual languages depend on several parameters and, particularly, on the semantic class of verbs involved, which may heavily influence the semantic nature of passives of individual verbs. Thus, while the well-attested reflexive-to-passive change is common for many canonical transitive verbs, the evolution from passives to anticausatives is foremost found with non-canonical transitives, such as verbs of perception and knowledge transfer. In this latter case the rise of anticausative usages is obviously based on diachronic scenarios of the type 'Y is seen (known etc.) by smb.' → 'Y is seen (known etc.) [by smb.]' → 'Y is seen (known etc.) [by generic passive agent]' → 'Y is visible (famous, etc.)', i.e. through the stage which is called 'impersonalization' in Siewierska 1984 and explained in terms of 'objectivization of knowledge', i.e. knowledge without a knowing subject. Due to this phenomenon, the agentive force can be entirely removed from the event, which results in a complete 'de-agentivization' of the original (agentless) passives and, subsequently, the evolution of such de-agentivized passives to anticausatives. A special variety of this development is instantiated by the passive of verbs of speech (e.g. for Vedic Sanskrit ucyáte 'Y is pronounced' --> 'Y [e.g. speech] sounds').

In case of verbs of (caused) motion, change from passive to anticausative is likely to be due to conceptualizing simple transitives as causatives of the type 'is thrown' → 'is made fall' → 'falls'.

**Pei-Jung KUO** (National Chiayi University)

### Topicality and Differential Object Marking in Mandarin Chinese

In this paper I show that differential object marking in Mandarin Chinese is strongly co-related with topicality, echoing the observations in García García 2005 for Spanish, Gustsetseg 2009 for Mongolian, Dalrymple and Nikolaeva 2011 for Tundra Nenets (Uralic) and Tigre. Differential object marking in Mandarin Chinese can be observed in the following constructions: the BA construction in (1) (i.e. Yang and van Bergen 2007), the verb copying construction in (2), and the transitive V-O compound verb construction in (3). The differential object marking for these three constructions are BA, the copied verb, and the preposition *dui* respectively. Unsurprisingly, the differential object marking in Chinese is both sensitive to [□specificity] and [□animacy] features of its following NPs. As shown in (1a), (2a) and (3a), differential object markings are optional when the following NPs are generic or definite/specific. On the other hand, in (1b), (2b) and (3b), we can see that differential object markings are obligatory with [+human]/[+animate] NPs. In addition, non-specific indefinite NPs are always prohibited with or without differential object marking.

- a. Zhangsan (ba) shu/zhe-ben shu/\*yi-ben shu shuai chuqu.  
Zhangsan (BA) book/this-CL book/\*one-CL book throw-out  
'Zhangsan threw the book/this book/\*a book away.'
- b. Zhangsan \*(ba) Lisi/\*yi-ge ren shuai chuqu.  
Zhangsan \*(BA) Lisi/\*one-CL person throw out  
'Zhangsan threw Lisi/\*a person away.'
- a. Zhangsan (fan) shu/zhe-ben shu/\*yi-ben shu fan-de hen yong-li.  
Zhangsan (flip) book/this-CL book-\*one-CL book flip-DE very hard  
'Zhangsan flipped the book/this book/\*a book very hard.'
- b. Zhangsan \*(ti) Lisi/\*yi-ge ren ti-de hen yong-li.  
Zhangsan \*(kick) Lisi/\*one-CL person kick-DE very hard  
'Zhangsan kicked Lisi/\*one person very hard.'
- a. Zhagnsan (dui) shi/zhe-jian shi/\*yi-jian shi hen guan-xin.  
Zhangsan (to) matter/this-CL matter/one-CL matter very care  
'Zhangsan cared about the matters/this matter/\*a matter a lot.'
- b. Zhangsan \*(dui) Lisi/\*yi-ge ren hen guan-xin.  
Zhangsan \*(to) Lisi/\*one-CL person very care  
'Zhangsan cared Lisi/\*a person a lot.'

Note that the NPs with optional/obligatory differential object markings from (1) to (3) are not in the typical object position, but are preposed to a preverbal and post-subject position. This position has been argued to be an internal topic position (see Tsao 1987a, 1987b, Paul 2002 and Hsu 2008). As shown in (4), the restrictions observed for internal topics in (1), (2) and (3) are exactly the same observed for external topics in Mandarin Chinese as well (i.e. Li and Thompson 1981). The external topics can be only generic or definite/specific. Non-specific indefinite NPs are not allowed.

- a. Shu/zhe-ben shu/\*yi-ben shu, Zhangsan kan-le hen-jiu.  
Book/this-CL book/one-CL book Zhangsan read-ASP very-long  
'Zhangsan read the book/this book/a book for a long time.'
- b. Lisi/\*Yi-ge ren, Zhangsan ma-le hen-jiu.  
Lisi/one-CL person Zhangsan scold-ASP very-long  
'Zhangsan scolded Lisi for a long time.'

While information structure does play an important role in deciding differential object marking in Mandarin Chinese, one major difference between the external topics and the internal topics lies in that fact

that differential object marking is only required for internal topics. As shown in (4b), even [+human]/[+animate] NPs can be external topic without the differential object marking at all.

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#### Preverbal negation in historical Dutch exceptive constructions

In most European languages, negation has developed according to Jespersen’s Cycle, a three-stage process in which a preverbal negative marker is joined, and eventually replaced by a postverbal marker of negation (Dahl, 1979; Jespersen, 1917; Willis et al., 2013). Dutch is no exception: in Old Dutch, negation was expressed by means of a preverbal marker *ni* (stage I of JC), which was in early Middle Dutch joined by a postverbal marker to create a bipartite construction *ne/en...niet* (stage II of JC). Eventually, the preverbal marker was dropped altogether, so that *niet* remained as the sole negative marker (stage III of JC). Interestingly, though, in a number of specific linguistic contexts, the preverbal negative marker *ne/en* could still be found on its own long after the standard marker of negation had become a bipartite construction, and later a single postverbal *niet* (Beheydt, 1998; Breitbarth, 2013; Postma, 2002; Stoett, 1923; van der Horst, 2008). This paper focuses on one of these contexts: exceptive constructions, i.e. ‘unless’-clauses. In the Middle Dutch period, these were formed by means of *ne/en* preceding a subjunctive verb, and an optional personal pronoun in clause-initial position. An example can be found below.

Hi ne soude ghene dod ontfaen. Hi **ne** soude xpristus sien.  
 He NEG will.SUBJ no death receive he NEG will.SUBJ Christ see  
 “He would not die unless he had seen Christ.”  
 Jacob van Maerlant, *Rijmbijbel* (513: 10)

The aim of this study is threefold; first, the development of the preverbal negative marker in exceptives will be mapped both diachronically and regionally. Preliminary results show that the Dutch exceptive construction takes until as late as the 18<sup>th</sup> century to fully grammaticalise into the conjunction *tenzij* (‘unless’), even though the form *tensy* (contracted from *het en sy*, ‘it NEG be.SUBJ’) is already attested in my corpus in the 15<sup>th</sup> century. The Dutch exceptive never loses its preverbal marker *en*, although it does not retain its negative meaning. Breitbarth (2014) argues that in Low German, the preverbal negative marker in exceptives is during the transition from Old to Middle Low German reanalysed from a negator to a marker of exception. A second aim of this study is, then, to examine if this hypothesis may be transferred onto the Dutch exceptive construction. Such a hypothesis, however, would only answer the question of what happened to the preverbal negative marker in Dutch exceptives; it cannot explain *why* this development took place. For this reason, this paper will, as its third and final aim, investigate language-external or sociolinguistic factors of linguistic change such as the effect of standardisation, language contact, social prestige and urbanisation, and processes such as dialect levelling and koineisation, in order to account for the development of the preverbal negative marker in historical Dutch exceptive constructions.

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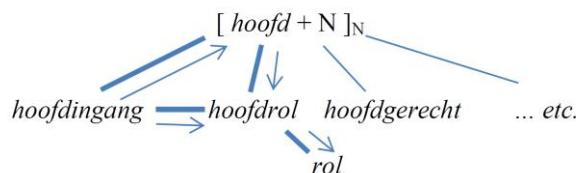
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## Constructional Priming

In Construction Grammar, the lexicon is conceived of as consisting of a hierarchically ordered network of constructions, where lower-level constructions are more specific and inherit the characteristics of higher-level constructions (Bybee, 2006; Goldberg, 2003). If this is a cognitively correct characterization, then it is expected that closely related constructions prime each other in much the same way that semantically or phonologically related words prime each other.

Booij (2010) describes groups of compounds that share a constituent, and where this constituent on its own has a different meaning from the one it acquires when used within this group of compounds. An example from Dutch is the set of compounds starting with ‘hoofd-’ ‘head’, as in ‘hoofdingang’ ‘main entrance’, ‘hoofdgerecht’ ‘main course’, and ‘hoofdrol’ ‘main character’. ‘Hoofd’ as a lexical item means ‘head’, but it takes on the meaning ‘main’ when it is part of this specific configuration. For this reason, it lends itself well to a constructional analysis. All members of this construction inherit the meaning of ‘hoofd’ from a higher-level, more abstract schema:



**Fig 1.** Constructional schema of [hoofd + N]<sub>N</sub>, with some of its members. Arrows indicate the expected direction of priming.

To test the cognitive possibility of such a schema, a word reading experiment was conducted to test whether a member of the construction would prime the head constituent of a related member. In other words: whether ‘hoofdingang’ primes ‘rol’, either via the schema [hoofd + N]<sub>N</sub>, or directly via another member, ‘hoofdrol’. Several studies have already shown that priming constituents of both transparent and opaque compounds is possible (Lensink, Verdonschot, & Schiller, 2014). Also, Balota & Lorch (1986) have shown that priming via an intermediated concept is possible. They found priming in a production experiment where ‘lion’ primed ‘stripes’, via the related concept ‘tiger’.

No constructional priming effects were found in this study. New experiments are currently underway, which will allow us to establish whether no priming was found due to methodological flaws, the actual absence of structures as illustrated in Figure 1, or whether it was due to wrong inferences regarding the predictions Construction Grammar makes. Diessel (2004) actually claims that higher-level schemas need not be activated by frequently used instantiations – rather, he predicts that schematic constructions will only be activated when novel expressions need to be evaluated.

The talk will focus on the theoretical assumptions mentioned above, the design of the experiments, the results, and the implications for theory.

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#### **Simulating the development of argument marking**

Using computer simulations, I will show how formal argument-marking strategies (i.e. word order, head marking, and dependent marking) can emerge by cultural evolution (Deacon 1997), and hence do not have to be stipulated as part of our language endowment.

The R-package WDWTW (for who does what to whom; designed by the author) is a cognitively motivated computational model designed to simulate language usage and change. Artificial agents are provided with a lexicon with referential terms for actions and objects, very basic cognitive principles (such as a desire for communicative success, shared attention, recognition of communicative intention, and desire for economic expressions; cf. Tomasello 2003), and an optional grammar. In the simulations discussed here, populations start out with protolanguages; i.e. languages without rules of grammar that have to resolve role ambiguity using general principles, for example interpreting the first argument as the more agentive participant (cf. Klein and Perdue 1997, Jackendoff 2002) or by the ad hoc addition of words highlighting the role of interest (e.g. “goat teacher pig teach”, using real-world concepts). Initially, all words are fully specified for a number of abstract meaning dimensions. Over time, however, words can desemanticize and erode as a result of frequent usage (Heine and Kuteva 2007). Desemanticization involves the progressive removal of the meaning dimension of a marker that corresponds to the dimension at which most variation is attested among the objects it combines with (using a concrete example again, if things that are read can have all sorts of color, color will be removed from the meaning representation of “readee”). As a result of erosion and desemanticization, some words end up as the equivalents of case and agreement markers (maximally short forms with maximally general meanings; Lestrade 2010). Also, as a result of generalization processes, semantic word order preferences may develop into hard word order constraints.

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#### **Syntactic doubling in Russian**

In the paper, I will analyze the phenomenon I call syntactic doubling in Russian. By this term I mean cases in which the marking of an embedded predicate cannot be explained by any structural requirements of its head, but can be accounted for if we say that the marking of a constituent repeats the marking of another

one. The strategy of doubling is not mentioned by Noonan (2007) among the strategies of marking the embedded verb in complement clauses. Below I show one instance of doubling.

A subclass of Russian verbs use the doubling strategy of sentential argument coding in constructions like (1) (this strategy is not mentioned by Noonan (2007)). The class includes (a) the phasal verb *načat'* / *načinat'* ‘begin’, (b) the verbs *dobit'sja* ‘reach, manage to’, *dostić'* ‘reach’ which presuppose an evaluation of the event as non-trivial, not easy and so on, (c) the verb *dodumat'sja* ‘think of’, virtually a verb of thinking, which, however, includes the negative evaluation (‘think of a stupid thing’):

- (1) Načni s togo čto priežžaj k nam  
begin.IMPER.2SG with that.GEN COMP come.IMPER.2SG to we.DAT  
'Begin with coming to us.'

In (1), an imperative form is found in the embedded clause, which is normally impossible for the imperative (proper use) are impossible outside the main clause (see, though, Ljutikova 2012 for exceptions). We can say that the form of the verb in the embedded verb repeats the main verb form. For instance, if the matrix verb is marked by infinitive, the embedded verb can have the same form:

- (2) Tak možno doj-ti do t-ojo čto sdela-t'  
so possible reach-INF to that-SG.GEN COMP make-INF  
forum-Ø premoderiruem-ym.  
forum-SG.ACC pre-moderated-M.SG.INS  
'In this way we can even make the forum pre-moderated' (lit. 'It is possible to reach that to make the forum pre-moderated').

The predicates which admit doubling has an important common semantic component: these verbs are implicative verbs in Karttunen's (1971) terms). This means that the event in the main clause is tightly connected to the main in the embedded clause. Moreover, the event in the main clause is, so to say, the same as in the embedded clause (the main verb interprets the situation denoted by the embedded verb in a particular way, for instance, as a strange one, as in (2), or as the beginning of a particular situation, as in (1)). This is why the verb form in the embedded clause often repeats the form in the main one. The phenomenon is virtually reminiscent of double verbs discussed by Daniel Weiss (2013), such as *sidi jest* ‘is sitting (and) is eating’ however, it is not really the case. In examples which are discussed by Weiss, it is not entirely clear which verb has the head properties in the construction. It can be well proposed that in examples like *sidi piši* ‘sit (and) write’ (imperative), we observe a coordination construction, where none of the predicates is embedded.

In contrast, the head status of *načat'* in examples like (1) and *djoti* in (2) is clear: for instance, (2) allows a question to the first part of the sentence, as in (3) which is usually impossible in coordinate constructions:

- (3) Do č-ego tak možno doj-ti?  
to what-GEN so possible reach-INF  
'What can we reach in this way?' ((2) can serve an answer to (3)).

Thus, it turns out that verbs like *načat'* in Russian employ a special strategy of syntactic doubling to mark the verb in the embedded clause. In the talk, I will show that the doubling strategy is also employed in a variety of other Russian constructions.

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### Mapping the causative continuum: a corpus-based approach to constructional typology

Languages of the world exhibit a variety of strategies for expressing causation: from lexical causatives (e.g. *kill*) to morphological (e.g. Finnish *tapa-tt-aa* “have smb. killed [by smb.]”), resultative (e.g. *make* *smb.*

*happy*) and analytic, or periphrastic causatives (e.g. *make smb. laugh*) (see Song 1996 for more types). Although there has been substantial research on causative constructions in particular languages and language families (e.g. Shibatani 1976; Comrie & Polinsky 1993), with several regularities in the form – meaning mapping having been proposed (e.g. Dixon 2000), we still do not know to what extent language-specific constructional types, such as morphological or analytic causatives, are comparable cross-linguistically. The study aims to fill in this gap and answer the question whether the similar constructional types in different languages tend to share similar semantic functions, or languages ‘carve up’ the conceptual space of causation in more or less arbitrary way, similar to the lexical fields of kinship terms or verbs of cooking (cf. Lehrer 1974; Evans 2010).

For this study, we use a sample of ten geographically and typologically diverse languages (Finnish, French, Hebrew, Indonesian, Japanese, Mandarin Chinese, Russian, Thai, Turkish, Vietnamese). One methodological difficulty for a cross-linguistic comparison of causatives is a lack of easily identifiable *tertia comparationis*. It is difficult to use a set of visual stimuli, as it is done in lexical typology (e.g. Majid et al. 2008), since many causative situations are abstract (e.g. *improve smth.* or *make smb. believe*). Many relevant distinctions suggested in the literature (e.g. direct vs. indirect causation) represent a continuum, rather than clear-cut categories, which makes it difficult to come up with an etic grid (cf. Evans 2010). We solve this methodological problem by using a bottom-up approach based on a parallel corpus of film subtitles and TED talks. We draw a sample of more than 300 causative situations from the English originals and identify their translation equivalents in the ten languages. The equivalents are coded for constructional types at different levels of granularity. Next, multidimensional scaling analyses at the level of tokens and multiple correspondence analyses at the level of types – which are defined as comparative concepts (Haspelmath 2010) – are performed in order to obtain probabilistic semantic maps of the constructions (cf. Wälchli & Cysouw 2012), which enable us to compare the mappings of different morphological and syntactic forms on these maps.

The results reveal a surprising similarity between similar constructional types across the languages. That is, one can speak about a ‘universal grammar’ of causative constructions, in a Cognitive/Construction Grammar sense. Notably, the most important dimension of variation of the conceptual space corresponds to the distinction between more tightly and more loosely integrated causing and caused events, which corroborates observations made in the literature (e.g. Haiman 1983).

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### Functions of Mandarin Chinese verb reduplication: a cross-linguistic perspective

Verb reduplication refers to repeating a verb to form a new verb. A verb is defined here as the head of predication that describes either a stative or a dynamic situation. Verb reduplication is common in Mandarin Chinese (Li & Thompson, 1981), as well as in many other languages (Rubino, 2005). Please consider example (1).

- (1) Mandarin Chinese (Hsu, 2002)  
*kàn~kan*  
 look~RED  
 'take a look'

This study examines the functions of Mandarin Chinese verb reduplication against my cross-linguistic survey of verb reduplications, which provides some empirical basis for positing Mandarin-specific function categories.

Previous studies propose the following meanings for Mandarin Chinese verb reduplication: delimitativeness (Li & Thompson, 1981; Xiao & McEnery, 2004), tentativeness (Tsao, 2001; Chappell, 1992), politeness (Xiao & McEnery, 2004; Smith, 1997) and mildness/casualness (Luke, 2000). Among them, Xiao & McEnery (2004) is the only corpus study of Mandarin Chinese verb reduplication. However, the corpus contains only 38 instances. Chappell (1992) is the only study that takes a cross-linguistic perspective. However, it does not examine the use of verb reduplication in detail and it compares Mandarin Chinese with mostly Australian languages.

This study examines 549 examples of verb reduplication in the Lancaster Corpus of Mandarin Chinese (McEnery & Xiao, 2004). The function labels for coding the examples come from my cross-linguistic survey, which collects examples of verb reduplication in 113 languages from 5 Ethnologue areas. Each example is coded for its form and function. Mandarin Chinese verb reduplications is found to express 4 out of the 43 functions by verb reduplication across languages. They are: attenuative of tone (i.e., politeness, mildness and casualness of tone), attenuative of extent (i.e., shorter duration than normal), iterative (i.e., repetition of an action without intervals) and continuative (i.e., on-going motion). The iterative and the continuative functions of Mandarin Chinese verb reduplication are rarely mentioned in literature, despite being common functions of verb reduplication across languages.

The iterative function is hypothesised to be the original function of verb reduplication across languages. This is because it is the most frequently attested function across languages and its reduplicative coding displays the highest level of iconicity (Haiman, 1980, 1986). However, I cannot find bridging examples between the iterative function and the attenuative functions in my Mandarin Chinese corpus data. I hypothesize that, unlike other languages, the iterative function may not have been the original meaning of verb reduplication in Mandarin Chinese. According to Pan (2008), the VV coding of the attenuative meanings of Mandarin Chinese verb reduplication is derived from the cognate object construction V yi N (yi 'one', e.g., *kàn yi kàn* (look<sub>v</sub>-one-look<sub>n</sub>), 'have a look'), through the loss of *yi* (Pan, 2008). Building on Pan's study, I argue that after the emergence of the VV form which initially expresses the attenuative meanings, speakers may then perceive the iconic potential of the reduplicative form in coding the iterative meaning. From iterative, verb reduplication is then extended to express the continuative meaning.

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## Obligatory Control as Logophoric Anchoring in FinP

This paper investigates the control structure of Kavalan, an Austronesian language in Taiwan. So-called object-control verbs in Kavalan can be divided into two types. Control verbs of the first type all denote an event where the agent obligates the theme to perform some action and their embedded verb must take the causative marker *pa-*, as illustrated by *pawRat* ‘force’ in (1a) (Chang & Tsai 2001; Lin 2013). In contrast, the embedded verb of the second type is not affixed with *pa-*, as illustrated by *tud* ‘teach’ in (1b) (Lin 2013).

- (1) a. pawRat-an-na ni buya<sub>i</sub> aiku<sub>k</sub> [\*<sup>(pa)-qibasi</sup>] \_i \_k tu qudus] force-PV-3ERG ERG Buya 1SG.ABS CAUS-wash OBL clothes  
     ‘Buya forces me to wash clothes.’ (lit. ‘Buya forces me, causing (me) to wash clothes.')

b. tud-an-na                ni        buya ya sunis-ku<sub>i</sub>                [s<m>udad \_i] teach-PV-3ERG     ERG     Buya ABS child-1SG.GEN <AV>write  
     ‘Buya teaches my child to write.’

According to Bianchi (2003), the Fin head in a complement clause can be linked to either an external Logophoric Center (LC), i.e., speech participants, or an internal LC, i.e., the participants of the matrix clause event. Adopting Bianchi's conception of logophoricity, the present paper argues that the causativization of the embedded verb in *pawRat*-type sentences can be attributed to an internal LC encoded in the complement FinP. In contrast, *tud*-type control does not involve a perspective shift to an internal LC. Firstly, when the complement of *pawRat* is negated, the imperative negator *naRin*, instead of the indicative negator *mai*, is used. Secondly, the complement of *pawRat* can be a direct quotation of imperative, whereas *tud* cannot take an imperative clause as its complement. Thirdly, the interpretation of a deictic like *tazian* 'here' in the complement of *pawRat*, but not *tud*, involves a shift of the deictic center to the matrix agent. These properties suggest that the complement clause of a *pawRat*-type predicate is linked to an internal LC, specifically the initiator whose point of view is reported. The referentially dependent [-R] person feature licensed by the complement Fin thus must be identified with the [+R] person feature of this initiator. In other words, the embedded event is reported from the initiator's viewpoint and *pa-* affixation reflects this perspective shift from an external LC to an internal LC.

Furthermore, *tud*-type predicates, which do not take a causativized verb complement, are restructuring predicates and are thus devoid of a Fin head in their complement that can be linked to an internal LC. *PawRat*-type predicates, on the other hand, do not involve restructuring in that the functional heads of their complement clause are still projected and active. For example, while no temporal adverbs and negators can appear in the complement of *tud*, the complement of *pawRat* can take a temporal adverb distinct from the matrix temporal adverb and can be negated.

In conclusion, the structure of obligatory control in Kavalan is conditioned by logophoric anchoring encoded in complement FinP instead of purely syntactic principles such as the Minimal Distance Principle.

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### Acquiring the non-*wh* function of *wh*-indeterminates in Mandarin Chinese: evidence for the nonveridical theory of polarity licensing

Mandarin Chinese exhibits a class of expressions identified as *Wh-indeterminates* (Kuroda 1965; Kratzer & Smimoyama 2002; Giannakidou & Cheng 2006), which are *wh*-words that allow - in addition to their *wh*-meaning – also non-interrogative interpretations. The non-interrogatively used *wh*-words in Chinese are categorized as polarity items due to their obligatory appearance in negative contexts, polar questions, non-factive predicates, etc. (Huang 1982; Cheng 1991, 1994; Li 1992; Lin 1996). Previous research on acquisition shows that Mandarin children are already able to distinguish the *wh*-meaning from the non-*wh*, polarity meaning of Mandarin *wh*-words such as *shenme* ‘what/any’, *shei* ‘who/anybody’ before age four (Zhou 2013; Huang 2014; Huang & Crain 2014). However the exact learning path of the non-*wh*, polarity function of Mandarin *wh*-words has attracted little attention.

By conducting an elicited imitation task to 47 three-year-olds and 44 four-year-olds of Mandarin Chinese, the paper explores the acquisition of the non-*wh*, polarity function of *shenme*. As to examine children’s knowledge on non-*wh* *shenme* in different nonveridical contexts, the task included four conditions: negative contexts introduced by a sentential negation, conditional clauses, modal contexts and polar questions. As to test whether children ‘know’ the distributional constraint of non-*wh* *shenme*, an unlicensed condition was added where *shenme* appeared in veridical contexts. Results of the experiment, namely the mean percentage of repetition responses, are presented in Figure 1. Since children only give a repetition response of a stimulus if it is in line with their own grammar acquired so far (Chomsky 1964; Lewis & Wilcox 1978; Keenan & Hawkins 1987), higher repetition ratios mean that children have acquired that *shenme* is allowed to appear in the relevant licensing contexts.

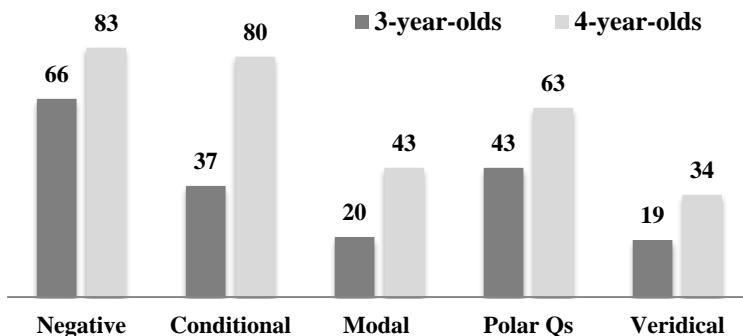


Figure 1: Ratio of imitation of three- and four-year-olds per test condition

The results show that the repetition performance of younger children in the condition introduced by a sentential negation is significantly better than their performance in all the other test conditions. This means that the non-*wh*, polarity use of *shenme* emerges first in the scope of a sentential negation. Since negative contexts introduced by sentential negation exhibit anti-veridicality (cf. Giannakidou 1997), the paper hypothesizes that the semantic property categorizing the distribution of non-*wh* *shenme* in early child Mandarin is anti-veridicality.

On the other hand, since the repetition performance of the four-year-olds is significantly better than their younger counterparts in all the other nonveridical contexts, the semantic property required by non-*wh* *shenme* for proper licensing is assumed to extend from anti-veridicality to nonveridicality. This extension of semantic properties in the acquisition of non-*wh* use of *shenme* provides evidence for the nonveridical theory of polarity licensing (Giannakidou 1997).

Since *wh*-questions are nonveridical environments as well, the paper moreover provides a unified approach to Mandarin *shenme*: it requires nonveridicality for proper licensing – independent of its functions. Given Zwarts’ typology on polarity items, this means that *shenme* is actually a polarity item of the weakest type, surviving in a variety of nonveridical environments only. Adopting Giannakidou’s approach to Greek existentials such as *tipota* and *kanenas*, the paper furthermore argues that *shenme* is an NPI of the weakest type due to its non-referentiality.

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### **Phonological properties of word class and directionality in conversion**

This paper deals with the word-formation process of conversion, where a word that instantiates a new syntactic category is derived without overt morphological marking. This process results in phonologically identical word pairs such as English *result* (noun) vs *result* (verb). An important issue in research on conversion is how to determine the directionality of the process, i.e., to decide which word represents the base and which represents the derived word. One possibility to inform that decision is to capitalize on word-class-specific phonological properties, a possibility that has received only limited attention in the literature (but see Kiparsky 1982, Balteiro 2007). This paper empirically investigates the suitability of using phonological cues to determine directionality in English noun-verb conversion by building on recent findings that show that these word classes differ on an unexpectedly large number of phonological dimensions (e.g. Monaghan et al. 2005). The rationale underlying this approach is that noun-verb pairs that are the result of noun-to-verb conversion should still be characterized by ‘nouny’ phonology, while verb-to-noun conversion should be identifiable through phonological characteristics typically found in verbs.

In order to empirically test this criterion, I proceeded in two steps. First, drawing on the noun-verb share of the English lexicon as represented in the WebCELEX database (Baayen et al. 2001), I investigated which phonological characteristics most reliably distinguish between the two word classes. In doing so, I tested sixteen phonological variables and their interactions using the methodological resource of conditional inference trees and random forests. While a large number of variables exhibit statistically significant differences between nouns and verbs, the cue strength of these phonological properties varies widely across different sub-samples in the data. Simplifying somewhat, it can be said that for monosyllabic words phonological cues are poor predictors of word class, while for longer words their accuracy is fairly high. The two variables that are the most important phonological cues to word class are word length in number of syllables and position of the main stressed syllable.

In a second step, I employed the phonological cues identified to predict directionality in the sample of 1,880 noun-verb conversion cases by Bram (2011). An indirect way of testing the accuracy of the classifications arrived in this way is to calculate to what extent they agree with other, more established criteria used to determine directionality. These are the historical criterion, the frequency criterion, semantic dependency, and semantic range (cf. Plag 2003, Bram 2011). This calculation yields high agreement rates of phonological cues with these criteria, which exceed the average agreement rate of the four aforementioned criteria among themselves. Agreement of phonological cues is especially high with the historical criterion and the frequency criterion.

Based on these results, I conclude that word-class specific phonological characteristics can be used as an additional criterion to determine directionality in noun-verb conversion. Given their high correlation with the historical and the frequency criterion, their use may be especially advantageous for cases in which these criteria are inapplicable.

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**Differential Marking in the DP**

In Spanish, theme arguments in nominalizations can exhibit DOM, as shown in (1):

- (1)        El        ataque    del        perro    a        Juan    fue sorprendente.  
             The     attack    GEN.DEF    dog     DOM    Juan    was surprising  
             'The dog's attack on Juan was surprising.'

There is no systematic treatment of this phenomenon in the literature beyond a few words in Torrego (1998:40-41) and it seems to be regarded as marginalia. However, DOM in the DP is widespread and systematic in Spanish and therefore part of the grammar of speakers of this language. Integrating DOM in the DP into our current theory of case will force us to reconsider our assumptions concerning DOM and our theories of case assignment.

Current generative analyses of Spanish DOM regard it as a variety of accusative or inherent case (Torrego 1998, Rodríguez-Mondoñedo 2006, López 2012) assigned by little *v* or a functional category within the v-VP complex. These analyses cannot be extended to (1) without some elaboration. It is unlikely that (1) includes a little *v* acting as an accusative case assigner. In Spanish nominalizations, theme arguments appear in genitive case, either alternating with DOM or as the only choice:

- (2)        a.        Koch descubrió la vacuna.  
                   'Koch discovered the vaccination.'  
       b.        El descubrimiento de la vacuna  
                   the discovery    GEN the vaccination  
                   'The discovery of the vaccination'  
       c.        \* El descubrimiento la vacuna  
                   the discovery    the vaccination

Torrego (1998) argues that some instances of DOM in Spanish involve inherent case and these are the instances that survive in nominalizations. This proposal is also insufficient. Dative case, the classic example of inherent case, is not available in nominals, as shown in (3). If DOM were a classic case of inherent case, (1) would be ungrammatical:

- (3)        a.        Juan le construyó una casa a su padre.  
                   Juan CL built    a house DAT his father  
                   'Juan built his father a house.'  
       b.        La construcción de la casa para su padre  
                   the construction GEN the house for his father  
       c.        \* La construcción de la casa a su padre  
                   the construction GEN the house DAT his father

Finally, one could try and import Borers' (2014) analysis of Hebrew DOM, which also appears in nominalizations. However, Hebrew nominalizations present a number of verbal properties that suggest that the noun phrase includes a verbal phrase. Spanish nominalizations, on the other hand, do not exhibit any verbal properties other than the appearance of DOM.

I will claim that these data lead to the conclusion that at least a subcategory of Spanish DOM is assigned by a functional category *f* that is independent of the categorization of the structure as vP or nP. It takes a category-less root as a complement, and is selected by a categorizing head. The category *f* can be identified with 'Aspect' or 'event', as used in many contemporary analyses:

- (4)        n/v        [<sub>fP</sub> *f* √R]

I will suggest that further development of the theory of case requires that instances of cross-categorial cases be explored in more detail.

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### Colloquialization, Democratization and Americanization of World Englishes

Some of the changes undergone by the English language in its recent history have been claimed to be a result of an ongoing colloquialization (e.g. Mair 1997), of the democratization of the language (Myhill 1995), and of a global Americanization of the English varieties (Leech *et al.* 2009: 252-259). Thus, colloquialization, which may be defined as “a shift to a more speechlike style” (Farrelly & Seoane 2012: 393) is considered responsible for the higher frequency of contractions and *get-passives* in written registers (Leech *et al.* 2009: 158). Democratization, in turn, which implies “the removal of inequalities and asymmetries in the discursive and linguistic rights, obligations and prestige of groups of people” (Fairclough 1992: 201), has been less systematically alluded by authors such as Myhill (1995) on the decrease of modal verbs of strong obligation such as *must* in favour of less threatening forms such as the semi-modals *have to*, *need to* or *want to* (see also Leech 2003, Smith 2003). Finally, Americanization, or the global influence of the American variety on other Englishes has been used to explain, among other changes, the decreasing use of tag questions in conversation (Leech *et al.* 2009: 243). The processes of colloquialization and democratization are considered to overlap to a certain extent (Farrelly & Seoane 2012: 393), and the same has been said for Americanization and colloquialization (Leech *et al.* 2009: 256). Nevertheless, it is not unfitting to consider that there may be highly colloquial undemocratic conversations, very democratic and formal interactions, and very colloquial non-Americanized speeches. With the aim of shedding some light on the borders between these three phenomena, this paper focuses on the frequency and use of modal *must* and their corresponding “democratic” alternatives, *have to*, *need to* and *want to* in four varieties of English, namely those used in Great Britain, India, Hong Kong and Singapore, and examines whether the differences observed among them can be claimed to be the result of different degrees of democratization, colloquialization or Americanization of the varieties involved. The framework used combines general works on modality and grammaticalization (Sweetser 1990, Talmy 2000, Hopper & Traugott 2003, etc.), as the degree of replacement of *must* by the semi-modals has to be accounted for in semantic and morphosyntactic terms, and the dynamic model of Postcolonial Englishes proposed by Schneider (2007), since the different varieties studied are claimed to be at a different stage of development of their independence from British English. The data are taken from the spoken component of the *International Corpus of English* project (ICE-GB, ICE-IND, ICE-HK and ICE-SIN). Some preliminary results show that Indian English is the most conservative variety in terms of modal usage, democratization and colloquialization (see also Xiao 2009, Collins 2013), British English is in the opposite end of the scale, and Hong Kong English and Singapore English are in between. Further findings on the Americanization of these varieties will allow us to contribute to the debate on these inter-related processes.

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**Ekaterina LYUTIKOVA and Sergei TATEVOSOV** (Lomonosov Moscow State University)  
**Focus semantics for split ‘only’**

In this paper, we propose a focus semantics for the split only construction found in a few Daghestanian (North-Caucasian) languages, as illustrated in (1) from Bagwalal:

- (1) maHammad-č'i                  w-a:-č'i.  
           Mohammed-NEG              M-come-NEG  
           'Only Mohammed came.'

Morphosyntactically, there are two negative markers: one on the verb, and the other the focused DP. Leaving out the “nominal negation” leads to the plain assertion that the individual did not come, (2a). Without the “verbal negation”, the construction is ungrammatical, (2b).

- (2) a. maHammad                  w-a:-č'i.                  b. \*maHammad-č'i                  w-a:  
           Mohammed                M-come-NEG              Mohammed-NEG              M-come  
           'Mohammed did not come.'

How do we derive the meaning of ‘only’ from the ingredients in (1)? Cross-linguistically, ‘only’ comes with the assertive and presuppositional content (Horn 1969 and much further literature):

- (3) Only p asserts that any (contextually relevant) alternative to p is false and presupposes that p is true (e.g. Beaver and Clark 2008 and literature therein)

(1) shares (3) with garden-variety only constructions. Specifically, (1) presupposes that Mohammed came, as evidenced by (4), where the presupposition projects out of a question. What is questioned, then, is whether ‘Mohammed came’ is the only true proposition in the contextually relevant set of propositions of the form ‘X came’

- (4) maHammad-č'i                  w-a:-č'i-jšt?  
           Mohammed-NEG              M-come-NEG-Q  
           'Did only Mohammed come?'

Therefore, the sentence in (1) conveys that those who are not Mohammed did not come (assertion) but Mohammed did (presupposition). To provide a compositional analysis of this construction we need, therefore, to figure out how alternatives are generated and how the presuppositional component is computed.

Assertive content. (1) looks like an instance of the NEG + EXCEPTIVE variant of only discussed extensively by von Fintel and Iatridou 2007. (Unlike in the languages examined by von Fintel and Iatridou, which have a composed ‘only’ in addition to split ‘only’, in Bagwalal (1) is the only way of rendering the ‘only’-semantics.) For von Fintel and Iatridou, who analyze the exceptive part as an existential generalized quantifier  $\lambda P.x[x \neq \|DP\| \& P(x)]$ , split ‘only’ turns out to be unlike the ordinary ‘only’ in being focus-insensitive.

We build on this proposal but introduce one innovation to account for the ungrammaticality of (2b) and other peculiarities of split only in Bagwalal (association with focus-sensitive expressions other than negation, association with superordinate negation, focused constituents other than DPs, to be discussed in the full version of the paper). Coupling our analysis in terms of focus theory of Rooth (1985 and elsewhere), we propose that the DP-č'i constituent lacks an ordinary semantic value. Its focus semantic value are the usual (Hamblin) alternatives (of type e, in the case at hand), to the exclusion of the denotation of DP itself:

- (5) DP-č'i denotation (for type e DPs)  
   a.  $\|DP\|_O = 0$   
   b.  $\|DP\|_F = \{x \mid x \in De \& x \neq \|DP\|\}$

Projecting alternatives up to the sentential level in the usual way yields the following denotation of TP in (1) before the application of sentential negation:

- (6) TP denotation

- a.  $\| [\text{TP} \text{ maHammerd } -\check{c}'i \text{ w-a: }] \|_O = 0$
- b.  $\| [\text{TP} \text{ maHammerd } -\check{c}'i \text{ w-a: }] \|_F = \{ p \mid p = \lambda w. \exists x[\text{come}(x)(w) \& x \neq \text{Ali in } w] \}$

According to (6a), (1) lacks an ordinary semantic value, which accounts straightforwardly for the ungrammaticality in (2b). To rescue the derivation, negation is introduced. We propose the following semantics for sentential negation in Bagwalal:

- (7)      $\| \check{c}'i\text{-NEG} \| \text{TP} \| \|_O = \lambda Q << s, t >, t >. \lambda w. \forall q \in Q. q(w) = 0$   
           where  $Q \in pQ \| \text{TP} \| O$  if  $\| \text{TP} \| O$  is non-empty, and  $Q \in \| \text{TP} \| F$  otherwise.

The basic idea is that the negation is a universal quantifier that takes a non-empty set of propositions and makes sure that every proposition from this set is false. Furthermore, we allow the negation to associate with focus, if the sentence lacks an ordinary semantic value. Applying (7) to (6b) yields (8). (8) is the set of worlds where any proposition saying that an individual other than Ali came is false, which captures the truth-conditional part of the meaning of (1):

- (8)      $\| \check{c}'i\text{-NEG} \| [\text{TP} \text{ maHammerd } -\check{c}'i \text{ w-a: }] \| \|_O$   
            $= \lambda w. \forall q \in \{ p \mid p = \lambda w'. \exists x[\text{come}(x)(w') \& x \neq \text{maHammerd in } w'] \}. q(w) = 0$

For sentences like (2a), where the denotation of TP is a proposition, we assume the proto-question operator  $pQ$  that lifts the  $\| \text{TP} \|$  denotation to the type  $<< s, t >, t >$  required by  $\check{c}'i\text{-NEG}$ .

- (9)      $\| pQ [\text{maHammerd } w-a:] \| = \{ p \mid p = \lambda w'. \text{come}(\text{Mohammed})(w') \}$   
 (10)     $\| \check{c}'i\text{-NEG } pQ [\text{maHammerd } w-a:] \| = \lambda w. \forall q \in \{ p \mid p = \lambda w'. \text{come}(\text{Mohammed})(w') \}. q(w) = 0$

Presuppositional content. The trickiest thing is to account for the presuppositional part of the meaning of (1). Von Fintel and Iatridou have to assume that the exceptive part of the construction enters the derivation with the existential presupposition:

- (11)     $\exists x P(x) = 1$ , where  $P$  is a predicate.

For Bagwalal, however, it is not immediately obvious why such a presupposition should be part of the meaning of the constituent negation in (1), which, moreover, creates a constituent that fails to have a denotation. We believe that a focus semantic analysis can derive the desired presupposition rather than stipulate it. We propose that the existential presupposition is the outcome of the mere fact that (1) involves a focus structure. Schwarzschild (1999) argues that the non-focused part is given, or presupposed. Any such presupposition is derived by replacing a focused element with a variable and existentially binding this variable. In (1), the non-focused part is VP, which yields exactly the existential presupposition we need:  $\exists x. \text{come}(x)$ . This presupposition and (8), which says that nobody but Mohammed came, together entail that Mohammed came, as required.

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#### DOM and goal datives

In Indo-European languages, animate and/or definite objects (DOM) have the same externalization as goals – whether by a dative inflection, e.g. Vafsi -i (Iranian) in (1), or by a dative adposition, e.g. Hindi -ko in (2) or Romance a in (3); (a) examples are goals, (b) examples are DOM.

- (1) a. ye yædri púl=es        æ-da        in        tojjár-i  
           one a.bit money=3sg.f.dir prev-gave this merchant-obl  
           ‘She gave some money to the merchant’

- b. tæ in xær-i næ-ruš-I  
 you.dir this donkey-obl neg-sell-2sg  
 ‘Won’t you sell this donkey?’ Vafsi (Stilo 2004:243; 2010:273)
- (2) a. anjum-ne saddaf-ko ciTThii dii  
 Anjum.fsg-erg Saddaf.fsg-KO letter.fsg give.perf.fsg  
 ‘Anjum gave the letter to Saddaf.’
- b. anjum-ne saddaf-ko dekhaa  
 Anjum.fsg-erg Saddaf.fsg-KO see.perf.msg  
 ‘Anjum saw Saddaf.’ Hindi (Ahmed 2006:3-4)
- (3) a. kwillə mə lə da a mme  
 he to.me it gives to me
- b. a camatə a mme/a nnu  
 he.has called to me/to us  
 Colledimacine (Manzini & Savoia 2005:§4.9)

If we apply Chomsky’s (2001, 2008) unification of case and agreement to datives, we could say that dative is the reflex of phi-feature agreement against an Appl head. This is without PF reflexes, however, since in Romance and in Indo-Iranian datives do not display any agreement with the verb. We will therefore correlate goal/DOM properties directly with the relevant dative exponents, i.e. -i in (1), -ko in (2) and a in (3). For present purposes, morphological case is paramount and reference to abstract case unnecessary. We propose that dative exponents introduce an elementary part-whole predicate. As in the Appl literature, goals correspond to a relation between the argument they embed and the theme of a ditransitive sentence, cf. the logical form for (3a) (rendered in English) provided in (4).

- (4) He gives it to me  
 [he gives [it [PART OF/IN POSSESSION OF me]]]

The essence of DOM of the type in (1)-(3) is that highly ranked referents can only be embedded in the event with highly ranked roles, including possessor/DOM – but not theme/accusative. Sentence (3a) is therefore construed as ‘He gave me a call’, where dative ‘a’ establishes a relation between the animate/specific argument and a VP event, essentially in the way of a high Appl, as in (5).

- (5) He called me  
 [he CAUSE [call PART OF/IN POSSESSION me]]

On the basis of (4)-(5) we conclude that the superficial identity of DOM internal arguments and of goal dative involves no accidental homophony or syncretism, but rather an underlying identical structure of embedding. Note that Southern Italian dialects document 1st/2nd vs. 3rd person splits in DOM, compare (3b) with (6) – contra Coon and Preminger (2013).

- (6) a camatə (\*a) kwillə  
 he.has called him

In fact the Person split has both an ‘animacy’ construal and a referential one (pure deixis vs. possible anaphora), potentially bridging the notions of animacy and definiteness relevant for DOM in many languages (e.g. Spanish). Definiteness and animacy seem to correspond to two different pragmatic scales, one defined in terms of contextual salience (deixis, definiteness specificity), the other in terms of contextual control (potential discourse participants, i.e. animates, vs. inanimates).

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### Romanian DOM-marker is not a Case assigner

According to *Kayne's generalization* (1991), a (Romance) language that has DOM would necessarily have Cl-doubling. In such constructions, the clitic absorbs the Case from the verb, so a preposition is needed to assign Case to the noun in DO position. Hence the latter's status as *Case assigner*.

This is indeed the case of Modern Romanian, but as a default rule which has exceptions (sometimes DOM occurs without Cl-doubling – (1) below), and the generalization is valid only in synchrony (Dobrovie-Sorin 1994, Hill & Tasmowski 2008, Tigău 2010). Crucially, the rule does not apply to all the Romanian dialects (Hill 2013), and most importantly, it is inadequate for Old Romanian, where Cl-doubling and DOM may occur independently (Hill & Tasmowski 2008, Antonov & Mardale 2014).

We will provide here a critical examination of the *Case assigner* hypothesis for the Romanian DOM-marker (*p(r)e* < Lat. *per*), and we will propose a different line of investigation in terms of Topic marker.

The most significant counterarguments are the following.

First, *p(r)e* as DO marker was first attested with personal (stressed) pronouns (Dimitrescu 1960, von Heusinger & Onea 2008, Stark 2011), which have distinct Case morphology (Nominative: *eu, tu, el...* vs. Accusative: *mine, tine, sine/el...*) (see (1)). In such contexts, there is no room for structural ambiguity (between the subject and the DO) or absence of Case marking:

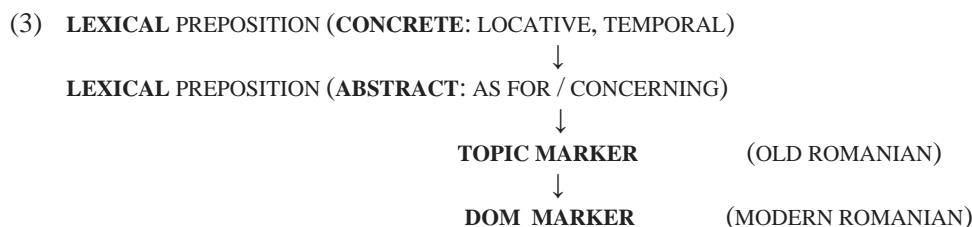
- (1) *ca să poată hrăni pre sine și oamenii lui.*  
       that SUBJ can.3SG feed.INF DOM him and people.the his  
       ‘so that it can feed him and his people.’ (1593)

Second, *Kayne's generalization* is also countered by data where the DO marked by *p(r)e* may not be doubled by a clitic – (1) above. Accordingly, we find ourselves in a situation of double case assignment, one from the V, the other from *p(r)e*. The reversed situation has also been identified in rare occurrences, namely examples where the DO is expressed without *p(r)e*-marking, but it may show Cl-doubling:

- (2) *omulu lu bate Domnulu* (Drăganu 1943)  
       man.the him.CL.M.SG beats God.the  
       Either ‘The man, God punishes him’ or ‘The man punishes God’

Therefore, this indicates that the previous analysis of DOM do not provide an adequate coverage for the data complexity. The latter suggest the need for a different approach, in which the triggers are independent of Case requirements.

The key for understanding DOM in Romanian lies in the understanding of the origin and status of *p(r)e*, which ensures DOM. The new proposal is that *p(r)e* suffered a gradual attrition, by which its concrete semantics (the one of a lexical preposition (ON, AT, ACROSS, DURING)) becomes abstract (ABOUT / CONCERNING); then the abstract meaning is reanalyzed as a topicalization property under discourse triggers; the last step is the complete desemanticization, by which the Topic marker *p(r)e* becomes a grammatical tool for marking the syntactic argumental position (Iemmo 2010, Dalrymple & Nikolaeva 2011):



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### **Effective control in political discourse: A cross-linguistic study of text-related variation**

This paper explores one key domain of speakers' striving for control in the discourse: effective control and the legitimisation of actions and plans by means of effective stance resources. Effective stance pertains to the ways in which the speaker/writer strives to exert control or influence on the course of reality itself through their evaluative positioning towards the realization of events: deonticity, directivity, and expressions of desirability, intentionality, normativity, and such others.

The paper explores the following research questions (a) the degree to which there will be similarities or differences in the presence and pattern of distribution of expressions of effective stance in texts relating to distinct issues (war vs. Home affairs) and (b) whether these similarities or differences are also present across languages (English vs. Spanish).

It is hypothesized that striving for effective control in political discourse will be more visible in those contexts where there is more at stake, and where there is a greater perceived need for legitimising plans of action. Variation will also be found across languages due to possible intercultural differences in discourse practices in the argumentative and persuasive styles.

The approach is based on a model for the analysis of stancetaking which posits two macro categories of stance, the effective and the epistemic (Marín Arrese 2011), and which draws on Langacker's (2009; 2013) distinction between the effective and the epistemic level in language, and the systematic opposition thereof between striving for control of relations at the level of reality and control of conceptions of reality.

It will be argued that the joint deployment of epistemic and effective stance acts is aimed at controlling hearers/readers' acceptance of events and action plans, more directly by claiming the righteousness of the proposed plans of action (Chilton 2004), and indirectly by providing epistemic justification and epistemic support (Boye 2012) of knowledge and information crucial to those plans of actions (Marín-Arrese 2011; in press). Legitimisation strategies such as the use of epistemic and effective stance resources thus involves claiming true knowledge of events and claiming to be morally right in the proposed realization of actions (Chilton 2004; Hart 2011).

The paper presents a case study on the use of effective stance strategies by British and Spanish politicians, in texts related to the Iraq war and in texts involving home affairs (education, economy, etc.).

Expected results will point to significant differences in the deployment of effective stance strategies in relation to text and topic variation (war vs. home affairs), and also in intercultural terms due to differences in preferred ways of striving for control in discourse (effective vs. epistemic). Thus preferred patterns of legitimising strategies will mainly relate to speakers' perceived political involvement and interests, and their rhetorical goals in the discourse.

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### On-line processing of bi-aspectual verbs in Czech

All Czech verbs obligatorily express either perfective or imperfective aspect. Moreover, there is also a special subclass of verbs called bi-aspectual verbs. These verbs can be classified as both perfective and imperfective (they can occur in contexts in which either perfective or imperfective verbs can be used). Based on our knowledge, there is no experimental research dealing with on-line processing of bi-aspectual verbs in any Slavic language. Similarly, the interpretation of bi-aspectual verbs has been studied minimally so far. In Czech, Chromý (2014) carried out a questionnaire-based research dealing with this question. The results indicate that interpretation of Czech bi-aspectual verbs is strongly influenced by their tense. The bi-aspectual verbs in the present tense form tend to be interpreted as imperfectives, while the same verbs in the simple past form as perfectives. In addition, semantics of bi-aspectual verbs (i.e. the difference durative vs. instantaneous) and subject number also seem to affect the interpretation. Nevertheless, there still remains the question if these factors play any role in on-line processing.

In order to shed light on this question, we conducted research using self-paced reading (SPR) task. The aim of the research is to examine whether speakers process these verbs as bi-aspectual (both imperfective and perfective interpretation are activated in parallel), or they process them either perfectly or imperfectively in a given context. We used this SPR task (using Ibex software) in our pilot experiment including 107 subjects (approached via Facebook), and tested the influence of simple past form on the processing of Czech bi-aspectual verbs. We expected a garden-path effect on a conjunction *dokud* [until] in sentences like:

<i>Spojeneck-á</i>	<i>armáda</i>	<i>transportova-l-a</i>	<i>sv-é</i>	<i>voják-y</i> ,
Allied -F.NOM.SG	army[f]	transport-PST-3SG.F	own-ACC.PL	soldier[m]-ACC.PL,
<i>dokud</i>	<i>nepřítel</i>	<i>připravova-l-Ø</i>	<i>nov-ý</i>	<i>útok-Ø</i> .
until	enemy[m]	prepare-PST-3SG.M	new-M.ACC.SG	attack[m]-ACC.SG.

“An allied army was transporting / transported its soldiers, until the enemy was preparing a new assault.”

If the verb *transportovala* [was transporting / transported] is processed as perfective (as is presumed based on Chromý), this effect may arise because the conjunction *dokud* blocks a perfective processing. On the other hand, there shouldn't be any garden-path effect when the conjunction *dokud* is substituted by a conjunction *protože* [because] in the same sentence as *protože* allows perfective processing. Linear mixed model showed an effect of subjects' age and their reading experience. Older subjects showed a stronger garden-path effect than younger ones and the same was true for subjects with a richer reading experience. In our presentation, we will report the results of two experiments which further develop the pilot study. The first experiment examined the influence of the simple past tense on processing of bi-aspectual verbs, the second experiment focused on the influence of the simple past form and present tense. Beside that we also varied the number of direct object. In both experiments, difference between durative and instantaneous verbs was also taken into account. Contrary to the pilot study, the data were collected in controlled laboratory settings.

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### Total reduplication in Sinitic languages and beyond

Total reduplication (TR) is a cross-linguistically widespread morphological technique (see Stolz, Stroh & Urdze 2011); although it is not universal, its cross-linguistic attestation has been captured in terms of an implicational universal. It has been claimed indeed that partial reduplication (PR) implies TR, i.e. any language making use of PR also has TR (Moravcsik 1978, Rubino 2013). Both TR and PR are a common sight in East Asian languages, and reduplication has attracted much attention in the literature on Sinitic (see e.g. Tang 1988, Zhu 2003, Tsao 2004, and the articles in Wang & Xie 2009 and Xu 2012, a.o.). However, studies adopting a comparative and areal perspective are still lacking.

This paper aims at identifying and analysing the correlations between form and function in reduplicating constructions in a sample of twenty Chinese dialects, representing eight branches of Sinitic, comparing them to a set of fourteen non-Sinitic languages of the East- and Southeast Asian area.

Starting from a quite detailed analysis of Standard Mandarin, on which a considerable amount of empirical and theoretical research is available, we aim at highlighting some interesting correlations between structure and meaning in reduplication which cross-cut lexical classes. In particular, in SM the ‘default’ function of verbal TR is marking delimitative aspect, adding a boundary to the predicate; however, increasing TR is also possible for a subset of verbs, namely coordinate compound verbs, and the pattern of reduplication for those items (AABB) is the same as that for compound adjectives and some nouns (Hu 2006, Ding 2010). The overall objective of the research is to highlight the common patterns and diversities among Sinitic languages and non Sinitic languages of the Southeast Asian area.

The study of TR in other Sinitic and non Sinitic languages will be carried with the aids of grammar descriptions and data collected from the literature. Original sources (often available in Chinese only) together with the list of online-corpora we consulted will be given in detail in the presentation. When possible, native speakers have been consulted for interpretive and grammaticality judgements, especially in the case of dubious data in Mandarin.

Results are:

1. Reduplicated monosyllabic verbs express more variation in meaning than disyllabic ones (as different as delimitative aspect, tentativeness, rapid completion, suddenness, greater intensity, etc.);
2. These various semantic nuances could be argued to derive from the core (iconic) meaning of verbal reduplication as iteration of an event over an undefined time-span;
3. TR mostly expresses iconic/increasing semantics;
4. On the structural level, a pervasive feature of reduplication lies in its compliance to strict requirements on the morphological makeup of the base. This holds especially in the case of reduplication of disyllabic and bimorphemic verbs with increasing semantics, a consistent pattern across the languages we considered.

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### Preferred Argument Structure in Danish

The Preferred Argument Structure hypothesis was originally proposed by Du Bois (1987) as a set of four constraints and has been shown to be relevant in several languages. This paper investigates Preferred Argument Structure in a corpus of Danish spoken language consisting of 1189 clauses from nine sociolinguistic interviews. Core arguments are coded for role, material, information status and semantics and correlations are examined to determine to which extent the data displays Preferred Argument Structure. Core arguments are coded for role, material, information status and semantics and correlations are examined to determine to which extent the data displays Preferred Argument Structure. Results based on this analysis show that data complies with the proposed constraints when standard criteria for categorising core arguments are used: both lexical and new arguments are most often found in the O-role, less frequently in the S-role and rarely in the A-role.

The paper further discusses the cross-linguistic criteria for classification of core arguments and argues that it is necessary to distinguish between content and expression when making such classifications. When content and expression is distinguished in the classification, it becomes clear that only the content side of Danish syntax can be said to comply with some of the constraints of the Preferred Argument Structure hypothesis, while the expression side does not appear to comply with the constraints: all new arguments appear in a similar position regardless of argument role (S, A or O). Danish employs a very specific construction (the so-called *der*-construction) to introduce many new human referents. This construction is used either in its simple form or as a cleft construction when the new referent is either an A-role argument or an S-role argument, and in this construction the S/A-role has a position that corresponds to the O-role's position in a standard transitive clause.

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### Language Shift and Emblematicity in 5<sup>th</sup>-century Armenia

The Classical Armenian lexicon has been influenced heavily by contact with Western Middle Iranian languages (Parthian, Middle Persian), as has been evident since the seminal work of HÜBSCHMANN (1877). Further research by, *inter alia*, BENVENISTE (1957–8), BOLOGNESI (1960) and SCHMITT (1983) indicates that the contact situation may be classified as moderate/heavy borrowing (cf. THOMASON & KAUFMAN 1988:50), the likely result of bilingual code-switching for linguistic enrichment (cf. HEINE & KUTEVA 2003:530). In view of the fact that Armenia was ruled by Parthians for centuries, and had extensive cultural contact with Parthian and Middle Persian speakers, this is unsurprising.

Recent work on aspects of pattern replication between Armenian and Western Middle Iranian (cf. MEYER 2013; *forthcoming*) suggests, however, that *syntactic* changes in Classical Armenian based on Iranian models are more likely to be due to language shift, which more commonly affects syntax on a long-term basis (cf. MATRAS & SAKEL 2007:849; HEINE & KUTEVA 2008:77). The most prominent contact-induced features include the replication of reflexive and anaphoric constructions, as well as the unusual alignment of the periphrastic perfect, based on an Iranian split-ergative construction that underwent changes in Armenian (partial de-ergativisation, cf. SCHMIDT 1980:165; for a Kurmanci parallel, cf. DORLEIJN 1996). These elements raise the question under what circumstances and when the Parthian ruling class may have chosen Armenian as its primary language, resulting in the adoption of elements from their language variant as the standard language (cf. THOMASON 2008:48). Since it remains unclear whether the Parthians spoke

Armenian as an L2 or in a bilingual context, it is yet to be determined whether Iranian features in Armenian are due to acquisition errors or bilingual mixing.

Based on a study of pattern replication in 5<sup>th</sup>-century Armenian texts in comparison with Iranian literary and epigraphic witnesses, and informed by historiographical and literary evidence, this paper suggests that the circumstances of this language shift were effected by multiple socio-political and linguistic factors: political quarrels between the Parthian rulers of Armenia and their Sasanian overlords, resulting in the abolishment of the Parthian Arsacid dynasty in 428 CE (cf. e.g. LP §§12–14); the adoption of Christianity in Armenia in c. 301 CE, which led to tensions with the Sasanian state religion; and the already existing Iranian influence on the Armenian lexicon. It is argued that the emblematicity, or symbolic value, of Armenian was one of the decisive factors in the development of this language shift (cf. ROSS 2007:130–1). In deliberate dissociation from other Iranian speakers, the Parthians identified more closely with the Armenians in political and religious terms, and thus shifted their language loyalty to Armenian, resulting in the adoption of a different linguistic identity and securing their current societal position (MATTHEIER 1985:146; cf. TAEDEMAN 2010).

Constrained by the paucity of extralinguistic information concerning the composition of Partho-Armenian society, this paper can only strive to explain (but not measure) language shift and emblematicity on the basis of linguistic developments within Armenian and extant literary evidence.

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#### Re-assessing the absolute quantification restriction in existential constructions

In this paper we re-assess Milsark’s (1977) claim that canonical existential clauses are subject to a restriction on the determiners of the existent NPs in that they should convey absolute quantification, i.e. a “direct description of magnitude” on either a cardinal (e.g. one, two, ten) or a less specific scale of magnitude (e.g. (a) few, many) (Langacker 1991). Although subject to criticism (e.g. Hannay 1985,

McNally 1997), we argue that this restriction can be upheld and, in fact, supports Author 2's (1999) view that canonical existentials indicate the size of the instantiation of the type conveyed by the existent NP. This quantifying component is paradigmatically illustrated by the "Ten Little Indians" rhyme: successive existentials count the progressively smaller sets of remaining 'little Indians':

- (1) and then there were nine/eight/ ... / none.

Our argumentation is twofold. Firstly, we propose to modify the absolute quantification restriction as follows. We exclude enumerative (2) and state-of-affairs existentials (3) from canonical existentials and, hence, from the scope of the restriction.

- (2) There are a lot of elephants in the world. There is yours. There is Brewster's. But then there are all the others. (WB)
- (3) There was somebody shot in a car. (Collins 1992: 431)

Also, contra Milsark (1977), we argue that lexically absolute quantifiers do not necessarily acquire a relative reading when followed by "of" + NP. Whereas a partitive example such as (4) conveys relative quantification, i.e. compares the size of the actually designated set ("a few of them") to a reference set, while implying contrast with another subset ("most of them"), an example such as (5) designates the absolute size of a set 'of a specific type', viz. "blacks".

- (4) these aren't our regulars. A few of them are; but most of them came on the first two tours (WB)
- (5) he used the opportunity to evaluate the blacks present and was a little disappointed: there were few of them (WB)

Secondly, through corpus study, we verify the absolute quantification restriction in existential clauses whose rhetorical motivation and structural features are "cleft-like" (Quirk et al. 1985: 1406-1407): an informationally focal constituent designates the number of instances corresponding to the criteria described by a relative clause in a way analogous to the value – variable relation of it-clefts, as illustrated by the prosodically transcribed examples (6)-(7). As in it-clefts, negation can be used in either part, e.g. (8), often "as a means of emphasizing a negative" (Quirk et al 1985: 1407).

- (6) there are only about THR\EE people who are sort of teenagers (LLC)
- (7) it's only a chosen F\EW that can underST\AND him (COLT)
- (8) there are absolutely no offchances at all that the cab-driver wouldn't have wanted to talk about it (WB)

Using the Wordbanks corpus, a dataset of about 1000 constructions like (6)-(7) will be compiled in which we will systematically analyse the quantifier type (absolute vs. relative) and modifiers (e.g. focus marker (6-7), compromisers (6), maximizers (8)) of the focal NP. In doing so we will also develop a semantic analysis of these hitherto neglected existentials which focus on quantity.

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### Datasources

- The Bergen Corpus of London Teenage Language (COLT)  
 London Lund Corpus (LLC)  
 WordbanksOnline (WB)

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### Negation in non-verbal sentences in Bashkir

The present paper deals with specifics of negation in non-verbal sentences in Bashkir. The analysis is based on the data collected during the author's fieldwork in Rahmetovo, a village in Abzellilovsky region, the Republic of Bashkortostan.

There are several negative markers in Bashkir. Besides the marker of standard negation, verbal suffix -ma, the main means include 2 negative copulas, juq and tügel, and a negative particle tügel homonymous to the latter. The question arises, which of these means are used for negation in non-verbal sentences? How does the choice of a negative marker depend on the semantic and formal type of a particular sentence and on the specific meaning expressed in it? Finally, can non-verbal negative sentences use the verbal strategy of negation?

In order to answer these questions, it was necessary in the first place to determine the inventory of semantic and formal types of non-verbal sentences in Bashkir, since no detailed description of non-verbal predication of this language existed for the moment. To start with, I compiled a list of meanings for which it is typologically usual to be expressed by means of non-verbal sentences. This list was chiefly based on the inventory mentioned in [Testelets 2001: 249–250]. It was completed with some additional meanings such as “age” or “localization in time” typical for the Bashkir non-verbal predication. For all meanings, sentential examples referring to the past, present and future were registered. In addition, all these sentences were examined in the evidential context. This procedure allowed to group particular constructions into the formal types depending on the formal means used in them. After that, negative equivalents of all the sentences were registered.

The main rules of the use of negative markers in non-verbal sentences in Bashkir can be summed up in the following way. The negative copula juq corresponds to the affirmative copula bar and is therefore used in the negative equivalents of all affirmative sentences with bar, such as existential or possessive sentences. In addition, it is used in negative sentences of localization and age, whose affirmative counterparts involve a null copula. So, the copula juq expresses the negation of the existence. In all other non-verbal sentences in the present, the copula tügel, is used, so that its meaning can be defined as the negation of a characteristic. When referring to the past, along with the main strategy, a verbal strategy with a negative form of the verb buləw ‘to be’ can be used nearly always. In the sentences referring to the future, the verbal strategy is the only possible means. It turned out that evidentiality doesn't influence the choice of the negative marker in non-verbal sentences.

It is interesting that in some contexts, variability is registered. It demonstrates that within one type of sentences, several subtypes with a different shade of meaning should be distinguished. For example, in negative sentences of localization referring to the present, both negative copulas can be used. But while tügel helps to draw attention to the object under discussion, juq allows to focus attention on the space. In the latter case, a sentence of localization is functionally similar to the existential sentence for which copula juq is typical.

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### Everything is a matter of point of view: Pseudo-connectives, viewpoint markers and the German prefield

German assertive sentences are subject to a V2 constraint, stating that there must be one and only one constituent before the finite verb, in the so-called prefield.

- (1) Dieser Meinung ist jedenfalls auch Bundespräsident Norbert Lammert.  
‘This is at least also the opinion Norbert Lammert, the president of the Bundestag.’
- (2) Jedenfalls ist auch Bundespräsident Norbert Lammert dieser Meinung.

Yet, a small set of items often dubbed as connectives seem to make an exception and can fill a slot called the post-prefield:

(3) Dieser Meinung jedenfalls ist auch Bundestagspräsident Norbert Lammert. (personal corpus)

Breindl (2008, 2011) has shown that this pattern concerns only contrastive topics and rules out interpretations of these ‘connectives’ as focus particles (Altmann 1978, discussion in Métrich & Courdier 1995). As a consequence, Breindl (2011) and Pasch et al. (2004) distinguish between two syntactic classes of connectives, depending on whether they are licit in the post-prefield or not, without any consequences in their semantic classification. The contribution presents a comparison between ‘trotzdem’ (“nevertheless”, “in spite of that”) and ‘allerdings’ (“yet”). Both items have a neighboring sense, but only ‘allerdings’ can fill the post-prefield. The study reveals further differences concerning scope, polarity and the contexts of uses. Following a proposal by Pérennec (2002), I give a unified semantic account to ‘allerdings’ as an instructional operator marking the utterance as maximally relevant and immune to counter-arguments. I then turn to other adverbials licit in the post-prefield, and I list many of them which are not mentioned by Pasch et al. (2004) and are no connectives, such as ‘leider’ (“unfortunately”).

(2) Wir haben immer pünktlich unsere Leistungen am letzten Werktag im Monat Morgens spätestens um 9 gehabt. Gestern leider ist nichts gekommen.  
 ‘We have always had our benefit on the last working day of the month, no later than 9:00. But yesterday, unfortunately, nothing has come.’ (internet)

Others are sometimes classed as connectives, but on the basis of very broad definitions. They have also been called ‘pseudo-connectives’ (Dalmas 2010).

My claim is that adverbials licit in the post-prefield are no connectives, but ‘viewpoint markers’ (VMs), following their definition by Paillard (2009). Utterances, for Paillard, are attempts at depicting a certain matter of fact, but they are always partial, both in the sense of “uncomplete” and “biased”. For every utterance, there is a plurality of other viewpoints over the same domain. VMs are discourse markers or discourse adverbials situating the utterance in this plurality of alternative viewpoints. Using Charolle’s (1997) theory of ‘frames of discourse’ and Büring’s (2003) similar analysis of contrastive topics, I suggest that contrastive topics always be treated as marking the choice of one partial viewpoint in contrast to other ones.

This leads me to the proposal that the German prefield should be treated as a ‘viewpoint anchoring’ place, signalling the speaker’s choice of a subdomain of reference inside the universe of discourse or a special stance.

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### A Journey from sentence to discourse: The case of Persian -ra

Persian objects are morphologically discriminated by -ra for some semantic/pragmatic reasons. This phenomenon is referred to as Differential Object Marking (DOM) (see Aikhenvald, Dixon and Onishi 2001; Iemmolo and Klumpp 2014; among others). -Ra has been the focus of several studies; however, there is rarely a consensus among the linguists and grammarians on the function(s) of this enigmatic particle. Definiteness (Sadeghi 1970), Specificity (Brown 1970), Topicality (Dabir-Moghaddam 1992) have been considered to be related to DOM in Persian. Crucially, some linguists claim that DOM can be accounted for in terms of an amalgamation of two or three parameters. Karimi (1989), under a generative account, associates DOM with specificity and obliqueness, where the latter is characterized by an NP bearing non-nominative cases. Or, Dalrymple and Nikolaev (2011) advance a LFG-based proposal that relates DOM to definiteness and topicality. Ghomeshi (1997) favors a transitivity-based account of DOM in such a way that, the more definite, animate and thematic/topical an object is, the more probable to take the postposition -ra.

The paper embarks on three specific lines of inquiry. Firstly, the inadequacies concerning the uni- or multi-functionality of the former accounts of -ra are highlighted. I strongly object against a popular account presented by Dabir-Moghaddam (*ibid*), which makes an intimate relationship between DOM and secondary topicality. Secondly, based on data from Colloquial Persian, I discuss that DOM, in line with the topicality hierarchy (Siewierska 2004) (see (1)), has lost sensitivity to topicality and topic-worthy features such as definiteness, animacy, such that the referent of a ra-marked object has met the end of the person, animacy and referential hierarchies. What is interesting is the fact that all co-occurrences of this particle with objects can be subsumed under the cognitive conception of identifiability presupposition (akin to (Shokouhi and Kipka 2003)) , where -ra signals the existence of a mental representation for the referent of the object in the mind of the addressee (Lambrecht 2000). Moreover, what has been sidelined in the literature is the parallel investigation of DOM and Differential Object Indexation (DOI). While DOM is totally irresponsible to the information-structural categories of topic, focus, DOI is sensitive to the topicality of the object referent, in the sense that the referent of the object is only coded by a pro-indexing clitic when it satisfies sequentially the two cognitive parameters of consciousness and relevance presuppositions, which are the pre-requirements for a discourse referent to be construed as a topic at a sentential level. Thirdly, the identifiability account of -ra with objects is corroborated by the appearance of it on non-object, left-peripheral NPs, where its presence serves information-structurally a primary topic-marking, secondary-topic-marking or focus/contrast-marking function, while from a discourse point of view, all these information-structural roles are categorized under a unified account, which is the identifiability of the ra-marked non-objects at the left periphery.

- (1) a. The person hierarchy:  
1st > 2nd > 3rd
- b. The nominal hierarchy:  
Pronoun > noun
- c. The animacy hierarchy:  
Human > animate > inanimate > abstract
- d. The referential hierarchy:  
Definite > indefinite specific > non-specific

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### Multiple Second Positions: Wackernagel Clitics and Accented Second Position Constituents in Hittite

Second position constraint is one of the best explored in the syntactic theory. However, there are several aspects of the vast field that have not received sufficient treatment. One of them is multiple second positions. It is a well known fact that there are several different groups of second position constituents: (a) Wackernagel clitics, (b) second position verbs (Vikner 1995, Holmberg 2013), (c) (rare) other second position constituents, such as relative pronouns and subordinators in Kashmiri (Munshi, Bhatt 2009). Although there has been some work done to the effect (Anderson 2000, Bošković 2001, Legendre 2001), different second positions are very seldom correlated with each other.

In our talk we propose to explore how two distinct second positions interact in Hittite, an extinct Indo-European language, Anatolian group, attested on numerous clay tablets cc. 18-12 cc.BC. The study will be carried out within the minimalist program.

The first of the two second positions is targeted by conventional Wackernagel enclitics which cliticize to the first word in the clause (Luraghi 1990, Garrett 1990, 1996, Luraghi 2012, to appear), both stressed (1):

OH-MH/MS (CTH 262) IBoT 1.36				
(1) i 5	[I]GI <sup>HI.A</sup> =ŠU=ma=at=kan	parā	nei[ānt]-eš	
eyes=their=but=they=LOC forward tu[rn]ed-NOM.PL.C				
'Their [e]yes are tu[rn]ed forwards.'				

The other second position is occupied by a very curious set of constituents. It includes topicalizing/contrastive enclitic *-ma* (2), as well as several accented words: relative pronouns in determinate relative clauses, subordinators *kuit* “as”, *mahhan* “as, when” and indefinite pronouns. Several second position words of type 2 can co-occur in the same clause:

(2) i 57	<i>mān=wa=[ka]n šarā=ma</i>	<i>kui-š</i>	<i>antūwahha-š</i>	<i>handāi-zzi</i>
	if=QUOT=LOC up=but	who-NOM.SG.C	man-NOM.SG.C	manage-3SG.PRS
	'if some man manages (to go) up'			

Here both *=ma* and *kui-š* are attested in the second position. What is more, (2) also attests type1 2P (*=wa=[ka]n*). The difference between the two second positions is clearly seen here: Wackernagel enclitics cliticize to the first word whereas *-ma* and *kui-š* are delayed to the second word. The delaying conditions are well known – it is a limited group of words (Kloekhorst 2014).

In our talk we propose to deal with several problems: (a) the nature of the delaying group. We will argue that it has nothing to do with lack of accent contra (Kloekhorst 2014); (b) the nature of the second position of type 2. Recently, it has been suggested that second position of at least indefinite pronouns is connected with lack of lexical stress (Huggard 2014). We will argue that this second position is not connected with lack of lexical stress.

The expected results include: type2 second position is determined structurally: *-ma* satiates +contrast/topic feature on Force<sup>0</sup> (following (Samuels 2005)) whereas all other type2 second position constituents target the specifier of the highest topic projection (assuming a highly articulated left periphery along the lines of (Poletto 2002) or (Haegeman, Hill 2014)). The Wackernagel clitics behave along the lines of (Bošković 2001).

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### New developments of the borrowed Arabic transfixation patterns in Persian

In the Islamic Period, hundreds of Arabic loanwords along with some of the morphological patterns associated with them, found their way into New Persian. Among these, one can name TRANSFIXATION patterns originally employed in formation of the so-called BROKEN PLURALS in the borrowed vocabulary strata. In some new usages in the recipient language, these patterns demonstrate some deviations from their original function. In this connection, two different deviations, or new developments, of transfixation patterns are investigated in this article. The first development is almost the neutralization of plurality function/meaning of the borrowed patterns which resulted in the double-plural-marking of the related forms by native suffixation possibilities. This kind of HYPERCHARACTERISATION can be ascribed to the foreign nature of transfixation which unlike its native counterpart, namely suffixation, is only learned late in life by formal education. After hundreds of years since broken plural were introduced into Persian, there are still many speakers who seem to be indeterminate in considering the transfixed forms as REAL plural nouns. This has made them to double-mark the transfixed nouns with a native/borrowed plural suffixes to ensure the plurality of the nouns under question. The second new development in transfixation patterns relates to their DEINFLECTIONALIZATION where inflectional affixes change into derivational ones. Unlike the original transfixed forms, or broken plurals, there are some instances in which transfixation functions as a derivational affix forming new word with singular meaning. Both hypercharacterization and deinflectionalization indicate that borrowing transfixation patterns from Arabic is not a matter of pure pattern replication.

Some examples :

#### 1. Hypercharacterisation:

- amr ‘affair’, omur ‘affairs’, ‘, omurât ‘affairs’
- ša’n ‘dignity’, šo’un ‘dignities’, ‘šo’unât ‘dignities’
- kasr ‘deduction’ , kosur ‘deductions’, kosurât ‘deductions’
- hâdese ‘happening’, havâdes ‘happenings’, havâdeshâ ‘happenings’
- harf ‘letter’, horuf ‘letters’, horufhâ ‘letters’

#### 2. Deinflectionalization:

- haG ‘right’ , hoGuG salary, hoGuGhâ ‘salaries’
- rabb ‘God’, arbâb ‘master’. arbâbha ‘masters’

âmel ‘doer, agent’, amale ‘construction worker’, amalehâ ‘construction workers’

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### Serial Verb Construction in Danish

The paper presents an analysis of serial verb construction (SVC) in Danish and outlines a description of four distinct SVC types in Danish based on the semantics associated with systematic distinctions in the syntactic structure of different SVC's (cf. Nielsen 2011). The framework is the structural-functional approach of Danish Functional Linguistics (Engberg-Pedersen et al. 1996, 2005; Hansen & Heltoft 2011), and the data is from Modern Standard Danish and examined with the method of the commutation test (Harder 1996: 200-201) and corpus-based hypothesis corroboration.

In Danish, the SVC consists of two verbs – V1 and V2 – in strict tense and mood agreement combined with the conjunction *og* ‘and’, thereby forming one complex predicate that serves as the syntactic core of one clause (cf. Hansen & Heltoft 2011: 979-1009). A central type has as its V1 a verb expressing the position of the subject as in (1) (cf. Newman 2002).

- (1) æblerne ligg-er og rådn-er  
 the.apples lie-PRES.IND and rot-PRES.IND  
 ‘the apples are rotting’

Although Aikhenvald (2006: 1) defines the SVC typologically as having no overt marker of coordination, there are good structural and functional reasons for identifying the Danish construction with its *og* ‘and’ as a SVC.

The essential constitutive feature of the SVC is the verb agreement (Nielsen 2010). Among the other distinguishing features are the possibility of fronting a V2 complement that is not governed by the valency of V1 (2), and the organisation of relations between syntactic constituents and semantic arguments vis-à-vis the verbs (the *coefficient* and *orientation*, cf. Bech 1983), in particular *Double Relation*: when one syntactic constituent has double argument status, i.e. acts as the semantic or logical argument of two different predicates, cf. (3).

- (2) maden ring-edē han og bestil-te  
 the.food call-PAST.IND he and order-PAST.IND  
 ‘he called and ordered the food’
- (3) jeg køb-te et blad og kigg-edē i  
 I buy-PAST.IND a magazine and look-PAST.IND in  
 ‘I bought a magazine and looked at (it)’

The paper argues that the overall content of the construction is *possibilification*: the SoA designated by V1 makes it possible for the subject of the SVC clause to realise the SoA designated by V2. The different SVC types are organised in a hierarchy of semantic features that further specify the possibilification: a primary distinction between *non-intentional* constructions (e.g. (1)) and *intentional* constructions, a secondary distinction within the latter group between absence and presence of *contact* with an explicitly expressed

entity, and a tertiary distinction among the contact constructions between contact with a *locative* entity (a place, e.g. (4)) and contact with an object over which the subject gains *control* by virtue of the action expressed by V1 (e.g. (3)).

- (4) jeg kør-er til byen og køb-er sko  
 I drive-PRES.IND to the.town and buy-PRES.IND shoes  
 'I'll drive to town and buy some shoes'

The semantic feature hierarchy yields four distinct SVC types that are directly associated with different syntactic properties, first of all excluded, optional or mandatory Double Relation, which will be demonstrated in the paper.

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**Masako NISHIKAWA-VAN EESTER** (Nishogakusha University)

#### Difference in socio-cultural background of English learners in Japan and Flanders (Belgium)

This study explores if there is any difference between the Japanese English-learners in a highly monolingual environment and the English learners from a multilingual society in the way they perceive English in each society and themselves as learners.

Witnessing that Flemish business people (and academics for that) are much better than their Japanese equivalents in using English as a Lingua Franca, it is hypothesized that this fact is due to more than just the difference in language distance between the pairs Dutch-English and Japanese-English. In order to investigate if wider socio-cultural difference might be involved, a questionnaire was administered to verify whether there is any clear difference between Japanese and Flemish junior high students in the way they feel about learning English and the way they perceive the English language and its function and value in their respective societies.

As target population two junior high schools were chosen, one in the suburbs of Tokyo (Japan), the other in the suburbs of Antwerp (Flanders, Belgium). As novice learners of English were targeted, the questionnaire was administered in the official school language of each school, being Dutch in Antwerp and Japanese in Tokyo. A questionnaire with 29 questions was originally drawn up in English, translated into the respective school languages and then back-translated for verification.

When creating the questionnaire, it was done with several fields of concern in mind. All questions were presented in table form with the question to the left and a 4-point Likert scale answer section on the right.

When the answers were collected, they were analyzed in a quantitative method. First questionnaires with missing elements were either discarded (in case of 2 or more missing answers) or the single missing answer was supplied by averaging within the language group of the respondent. Then the number of items under analysis was reduced from the 29 questions to 5 factors, found by applying factor analysis over the complete dataset. Review of the factor loading of the questions led to labeling them "Self-efficacy", "Environment", "Anxiety", "Beliefs" and "Importance".

Further analysis was done on these 5 factors rather than on the 29 question answers. As it was the intention of deciding whether the two groups (Flemish students vs. Japanese students) differed in the way they answered some type of analysis of variance was called for. As the 5 factors are clearly not unrelated, a

MANOVA (multivariate analysis of variance) was executed. The results of this analysis show a very significant difference between the two groups.

These results indicate that there is indeed more at play than just language distance and therefore it could be suggested that teachers of English in Japan consciously incorporate elements in their classes that are designed to improve the reaction of their students to the socio-cultural background.

**Anna NOVOKHATKO** (Universität Freiburg)

### **Pragmatic reading of comic fragments: Tension in dramatic dialogue**

- 1) research questions: *exploring tension in fragmentary texts via discourse and pragmatic markers*
- 2) data: *fragments of Sicilian and Old Attic comedy of the 5th century BCE*
- 3) approach and method: *sociolinguistic and pragmatically oriented approach, corpus-based analysis*
- 4) (expected) results: *discourse and pragmatic markers are a necessary tool in evaluating and interpreting fragments*

Although a pragmatically oriented approach is of primary importance for a study of dramatic fragments, it has been to a considerable extent neglected in the analysis of fragmentary corpus (Willi 2014, 181-182; cf. Kloss 2001, 16-33). In fragmentary texts the lexical and syntactic value of an utterance is not sufficient to comprehend its broken, inevitably understood out of context meaning. The primary meaning has then to be conveyed through further linguistic and extra-linguistic parameters such as discourse indicators, the generic peculiarities of stage performance, social and cultural context, and quotation context.

In the present paper, which is a part of a larger research project on the Old Attic and Sicilian comic fragmentary corpus, five fragments of Sicilian and Old Attic comedy of the 5th century BCE will be discussed: Epicharmus fr. 147 PCG (four-verses fragment) and Aristophanes frs. 205 (nine verses), 206 (two verses), 232 (two verses), 233 (six verses) PCG. These fragments reflect contemporary debates on language and tensions in the educational paradigm in Sicily and Athens; they can be discussed together, because they maintain thematic unity.

Dialogue markers as discourse cohesion markers have recently been explored in Greek drama (see various contributions in Rijksbaron 1997 and Bakker and Wakker 2009; see also López Eire 1996, 184-186). However, the linguistic study of comic dramatic fragments has received little attention until now, and the fact that this analysis is crucial for our understanding and interpretation of fragmentary texts remains underestimated by scholars. Debates and tensions between interlocutors are the first focus of my research: they can be perceived in the tough dramatic dialogue through dialogue indicators: the 2<sup>nd</sup> person singular indicative or subjunctive; imperative; vocative; turn-taking, affirmative and emphatic particle; interjection; devices denoting intensity, and personal, temporal and spatial deictic expressions, politeness-markers (Thesleff 1954; Biraud 2010, 7-22; on the pragmatic approach to morphological, syntactical and semantical dialogue markers, see the detailed study by Denizot 2011). Such indicators help reconstructing and interpreting the hypothetical situation context of the fragment. Comparable text samples from extant Aristophanic comedies such as *Knights* (1235-1242) and *Clouds* (814-865) are drawn upon in order to evaluate dialogue markers in surviving contemporary texts. These dialogues reveal similarities in discourse structure, social and cultural context and comic dramatic genre to the fragments examined (on the use of the sociolinguistic method towards an understanding of dramatic dialogue, see Colvin 1999, 14-15).

The second focus of my study is the quotation context, which has to be treated in detail as an element contributing to our understanding coming prior to the fragment itself. Questions such as who quoted the fragment, when is it quoted, what is the aim of quoting, in which context is it quoted, how often is it quoted are crucial for understanding the fragment itself.

Such a pragmatic approach reveals that discourse and pragmatic markers are significant and necessary tools in evaluating and interpreting fragmentary text.

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### Ane ODRIA (UPV/EHU)

#### Dative case in Basque DOM objects: a configurational approach

This talk analyzes the nature of Case assignment in southwestern non-standard Basque varieties displaying Differential Object Marking (DOM). In these varieties, instead of the canonical absolutive (1), human and definite objects bear dative case and trigger dative markers in the auxiliary verb (2) [2] [3]:

- (1) Ni-k zu ikusi z-a-it-u-t  
I-E you.A see 2A-VOW-plA-root-1sgE  
*'I have seen you.'*
- (2) Ni-k zu-ri ikusi d-i-zu-t  
I-E you-D see TM-(root)-DF-2D-1sgE  
*'I have seen you.'*

Considering that canonical absolutive objects check Case structurally against the little *v* head [4], I propose that DOM objects are assigned Case twice throughout their syntactic derivation: (i) first structural absolutive by entering into an Agree relation with the *v* head, (ii) and then configurational dative by avoiding a Distinctness effect in the *vP* phase. DOM objects thus pattern like canonical objects in the first but not second step of their Case assignment process.

The *v*-Agree relation hold by these non-canonical objects is supported by (i) the absolutive case and agreement marking of human and definite objects in ditransitive and causative constructions bearing an inherent dative, and (ii) the Person Case Constraint effects linked to the *v* head, which affect DOM objects inasmuch as they do canonical absolutive objects.

The dative marking in DOM objects arises as a consequence of the Distinctness Condition [5], which bans the linearization of identical elements that are too close to each other. Crucially, instead of assuming that Distinctness effects are only visible at the last step of the syntactic derivation –i.e., when the complement of a given phase is transferred to Spell Out–, I argue that syntax is aware of the Distinctness Condition from the very beginning of the derivation. Hence, in DOM varieties, when the subject is merged in [Spec, *vP*], the problematic <DP, DP> linearization statement turns out to be avoided by adding a *K<sub>DAT</sub>* head to the human and definite object, turning <DP, DP> into <DP, KP>. Moreover, assuming that –in line with the rest of inherent datives– the *K<sub>DAT</sub>* head involves an adjoined *K<sub>DAT</sub><sup>0</sup>(+D<sup>0</sup>)* defective head, I claim that cliticization with the *v* head is triggered by the deficiency of such a head, accounting thereby not only for the dative case but also auxiliary marking of DOM objects.

The fact that the Distinctness Condition is applied derivationally –rather than exclusively at the PF interface– is hold by three main pieces of evidence: (i) the ergative KP syntactic category of the subject in [Spec, TP] [4] –which would not cause a Distinctness effect if the object carried out object shift and was linearized in the TP Spell Out domain, (ii) the possibility to have DOM in wh-questions where the subject and object are spelled out in separate Spell Out domains, and (iii) the impossibility to have DOM with derived transitive predicates like \**edun* ‘have’ [1], where the argument agreeing with *v* finds itself alone in the *vP* phase because the KP subject that ends up in [Spec, TP] is generated within an *ApplP* holding the intransitive predicate *izan* ‘be’.

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**Fuyo OSAWA** (Hosei University)

### **Transitivity and Passivity: A diachronic study of passives**

In this paper, I claim that the origin of passive constructions may have little to do with ‘transitivity’. In so doing, I try to clarify the nature of the passives, examining the diachronic development of the English passives.

There is a tradition of describing voice alternation in terms of relations within transitive structures. (cf. Klaiman 1991). Although details are different, non-generative approaches (Perlmutter and Postal 1977, Perlmutter 1978, Langacker and Munro 1975, Givón 1979, 1981, Shibatani 1985) are divided into two groups; either imposing more emphasis on the object promotion, or imposing more emphasis on the agent defocusing/deletion/demotion.

Within the generative analysis, there is no derived relation between active and passive sentences (Chomsky 1995, 2005). They are generated independently of each other. However, transitivity or the argument structure of a predicate verb is a key notion to passive formation. The presence of passives assumes the empty subject position (Burzio 1986).

However, Japanese adversative passives are formed on either transitive or intransitive verbs and as (1) shows, one more NP, *Mary*, which is not in the original argument structure of *korosu* ‘kill’ is added:

- (1) Mary-wa      titi-ni      haha-o      korosa-re-ta  
       Mary-TOP     father-by     mother-ACC    kill-PASS-PAST  
       ‘Mary was adversely affected by her father’s killing her mother.’

So, the passivization is not always a valence-decreasing process.

My proposal is different from the previous ones in that there are neither functional nor grammatical changes involved in the derivation in earlier English and in some current languages (Modern Japanese). Over time, Old English passives developed into a different construction; as a result English has developed new constructions like prepositional passives like ‘John was counted on for this work by his colleagues’ and indirect passives like ‘Mary was given an expensive watch’, which were not attested in Old English. Instead, English lost impersonal constructions.

The principle concerning my proposal is lexical-thematicity (cf. Radford 1990); this means that only arguments which are required by the meaning of the predicate have to be syntactically realized. In lexical thematic languages only lexical categories like N, V, and A, i.e. content words, are deployed and the functional categories which are not thematic inherently are not present or limitedly developed. Without a functional category TP, there is no EPP (Extended Projection Principle), the subject requirement. If an argument which should carry the agentive theta role is not required, the subject which should appear in the nominative case need not be realized. The passive construction is one instance of this situation. It has no argument which should have an agentive theta-role. If the speaker wants to express Agent, he should use active constructions, not passive ones. Then, passive sentences in earlier English lacked an Agent-argument from the beginning. If this discussion is on the right track, it follows that the origin of passive constructions has little to do with transitivity.

Later in Middle English, thanks to the emergent TP (Gelderken 1993, 2004) syntactic passives like prepositional passives and indirect passives which depend on TP have appeared, while earlier passives like impersonal passives disappeared.

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### Balkız ÖZTÜRK (Boğaziçi University)

#### Higher Applicatives in Pazar Laz

Pylkkänen (2008) proposes the structure in (1a) for high applicatives. In this study, we will show that Pazar Laz (PL), an endangered Caucasian language spoken in Turkey, also has a higher applicative construction as shown in (1b). Such applicatives are introduced above the vP layer, which hosts the initiator in its Spec bound by the applied dative argument.

- (1) a. ApplHighP  
       /\  
       DP ApplHigh'  
       /\  
       ApplHigh VP  
       /\  
       Obj V
- b. ApplHigherP  
       /\  
       DP-i ApplHigherP'  
       /\  
       ApplHigher EventP  
       /\  
       vP Event  
       /\  
       Initiator-i v'  
       \/  
       VP v

Benefactives in PL qualify as high applicatives according to Pylkkänen’s criteria, as they are compatible with unergatives (2a) and statives (2b). Note that applied arguments bear dative case and require applicative morphology on the verb in PL:

- (2) a. Ali-k Ayse-s u-çalış-u.  
     Ali-erg Ayse-dat appl-work-past.3p  
     Ali worked for Ayse.
- b. Ma Ayse-s çanta do-v-u-k’ç-i.  
     I Ayse-dat bag PV-1subj-appl-hold-past.1p  
     I held Ayse the bag/I held the bag for Ayse.

There are two patterns of applicatives in PL, which we classify as higher applicatives: (i) the experiential perfect construction (EP) in (3), (ii) the unintended causation/dynamic modality construction (UC/DM) in (4). We classify these constructions as higher applicatives for three reasons: First, datives in these constructions can co-occur with benefactives (3-4), and bind into them (3), implying that they are introduced above benefactives.

- (3) Ayşe-s ti-muşi-s u-çalış-ap-u-n.  
 Ayşe-dat head-3ps-dat appl-work-caus-TS-pres.3p  
 Ayşe has worked for herself before.
- (4) Ma Ayşe-s cami m-a-t'ax-u.  
 I Ayşe-dat glass 1obj-appl-break-past.3p  
 I could break the glass for Ayşe.

Second, EP and UC/DM applicatives exhibit different postverbal agreement patterns than benefactives, which is the morphological reflection of the phi-checking relation between T and vP internal constituents (Demirok 2013). While benefactives do not block agreement between vP internal DPs (5a), the presence of EP and UC/DM applicatives blocks phi-checking with T, leading to third person default agreement (5b). This again implies they intervene between TP and vP internal arguments:

- (5) a. Ma si ce-g-a-ç-er  
 I you PV-2obj-appl-beat-caus-TS.pres.1p  
 I get beaten for you.
- b. Ma si ce-m-a-ç'-e-n.  
 I you PV-1obj-appl-beat-TS-pres.3ps  
 I can beat you.

Finally, while benefactives can occur with any of the three thematic suffixes (TS) denoting verb classes in PL, namely -am, -e(r) and -u(r), which head EventP in the sense of Ramchand and Svenonius (2013) as shown in (6), EP and UC/DM applicatives are only compatible with -u(r) and -e(r), respectively. This implies that they are introduced above the EventP selecting specific TSs as illustrated in (1b) above.

- (6) a. Ali-k Ayşe-s u-çalış-am-s.  
 Ali-erg Ayşe-dat 3appl-work-TS-pres.3ps  
 Ali is working for Ayşe.
- b. Ayşe-s i-çalış-in-e-n.  
 Ayşe-dat val-work-TS-3ps  
 People work for Ayşe (impersonal passive)
- c. Tzari Ayşe-s u-nçx-u-n.  
 water Ayşe-dat 3appl-heat.up-TS-pres.3ps  
 The water is heating up for Ayşe.
- (7) a. Ali-s u-çalış-ap-u-n.  
 Ali-dat appl-work-caus-TS-pres.3ps  
 Ali has worked before.
- b. Ayşe-s a-çalış-e-n.  
 Ayşe-dat appl-work-TS-pres.3ps  
 Ayşe can work.

To conclude, in addition to the high applicative constructions defined by Pylkkänen (2008), PL presents evidence for a third type, i.e. higher applicatives introduced above vPs, and thus significantly contribute to the cross-linguistic inventory of applicatives.

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**Sara PACCHIAROTTI** (University of Oregon)**Noun incorporation in Bribri**

This paper investigates productive Noun Incorporation (NI) in Bribri (Chibchan, Costa Rica), to determine how Bribri NI fits with proposed typologies (Mithun 1984) and whether Bribri NI phenomena can be best analyzed as lexical (like compounding), versus syntactic (Sapir 1911, Mithun 1984, Anderson 2000).

The data consists of 200 active voice verbs from Margery (2005). The analysis, limited to cases where noun (N) and verb (V) stems are synchronically identifiable, has been conducted with a native consultant. All the V roots take the transitive imperfective suffix when appearing as simple V stems not involving NI.

In terms of Mithun's classification (1984), two major NI constructions occur in Bribri: type I results in an intransitive predication; and type II results in a transitive predication. In both, Incorporated Nouns (IN) usually correspond to the P arguments of the simple V roots. Some NI stems, such as *ulábatsök* 'marry', can occur both in type I and in type II (cf. 1, 2), with a change in meaning and argument structure.

In Bribri type I, intransitivity is shown by: (i) the intransitive imperfective suffix; (ii) the IN cannot refer to a specific entity; (iii) the IN loses object properties; and (iv) no ergative phrase is allowed:

- (1) *Ie' ulá-bats-ó-ke aláköl tā*  
 3SG hand-paste-IPFV.INTR-NFUT woman COM  
 'He is going to get married with the woman'

Contrary to typological predictions, many type I instances do not describe institutionalized cultural activities, but mundane actions such as *kákök* 'deambulate' and *chálkuök* 'urinate'. Others necessarily add a directional to the NI stem as in *alá-kök-kā* 'have children' (lit: 'child-touch-up').

In Bribri type II, transitivity is shown by: (i) the transitive imperfective suffix; (ii) the IN loses syntactic status as a core argument, (iii) an erstwhile oblique participant occupies the absolute role vacated by the IN; and (iv) an ergative phrase occurs:

- (2) *Ie' tö aláköl ulá-bats-é-ke*  
 3SG ERG woman hand-paste-IPFV.TR-NFUT  
 'He is going to marry the woman (to someone else)'

Some type II instances show typologically uncommon features: (i) the IN is sometimes marked for definiteness; (ii) the IN can be accompanied by a modifier (also see Massam 2001); (iii) the IN can be followed by a phonologically reduced pronoun; and (iv) the derived V sometimes contains two N stems which together vacate only one absolute syntactic role.

In Bribri there is also a third NI type, not described in Mithun (1984). All instances involve psychological processes ('like', 'blame', 'respect'). In this third type there is a mismatch between morphological and syntactic transitivity: (i) the derived V retains its formal transitivity as shown by the imperfective transitive suffix; but (ii) the P of the basic V root is demoted to an oblique; and (iii) no ergative phrase is allowed:

- (3) *Ie' wö-bats-é aláköl wa*  
 3SG face-paste-IPFV.TR woman INSTR  
 'He likes the woman' (lit: 'he pastes face with the woman')

The variability in syntactic structures in which identical NI stems like *batsök* occur suggests that Bribri NI cannot be analyzed solely on a lexical level.

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**Abbreviations**

- 3SG=third person singular; COM=comitative; ERG= ergative; INSTR=instrumental; INTR= intransitive; IPFV=imperfective; NFUT=near future; PFV=perfective; TR= transitive.

**Matthias Benjamin PASSER** (University of Amsterdam)

### Verb Classifiers – On the Verge of Canonicity?

Verb classifiers constitute a small areal phenomenon in Papua New Guinea; beyond that, they occur as isolated systems in the Americas and Australia (cf. Aikhenvald 2000: 170). Verb classifiers are a peculiar type of classifier system as compared to other means of nominal classification, since they differ from the commonly acknowledged definition of classifier systems with respect to both their function and formal properties:

1. The morphosyntactic **host**, the predicate, is located outside of the NP borders; other classifiers occur NP-internally.
2. They are mainly marked by **affixes**; other classifiers occur usually as clitic or independent elements.
3. They **do not cooccur with a nominal** that they classify, while other classifiers do.
4. They **do not primarily classify a nominal referent** with respect to its inherent characteristics like other classifiers.

In systematically differing from the ‘canonical’ ideal, verb classifiers raise the question to what degree they may be analysed as a common device of nominal classification. In my paper, I investigate 15 verb classifier systems and show that their main function differs from the typically assumed function of classifiers (i.e. the individuation of nominal referents by their classification with respect to inherent characteristics). Instead, verb classifiers serve as overt means for the mediation of selectional restrictions within the verbal domain (cf. example 1, where not an overt nominal (or its referent) is classified, but the classificatory markers introduce an argument of the verb).

(1) A (Terêna; cf. Ekdahl/Butler 1979: 185, cited in Aikhenvald 2000: 152)

<i>oye</i>	<i>-pu'i</i>	<i>-co</i>	<i>-ti.</i>
cook	CL:ROUND	THEME	PROGR
“He is cooking (round things).”			

B (Tlingit; cf. Boas 1917: 29)

<i>h-</i>	<i>uš</i>
CL:ROUND	wash
“to wash (a rope/ribbon/round object)”	

C (Koyukon; cf. Thompson et al. 1983: 100)

<i>N-</i>	<i>eeggudza.</i>
CL:ROUND	be.short
“It (ne-class object) is short.”	

This function is also found in a variety of other systems of nominal classification that allow for marking on the verb, e.g. the fairly intermediate system of Miraña (Witotoan, South America; cf. example 2 A) and even the gender system of Mawng (Iwaidjan, Australia; cf. Singer 2010, 2012 and example 2 B).

(1) A (Miraña; cf. Seifart 2007: 424)

<i>Ká:tújβe</i>	<i>-hi.</i>	<i>Ká:tújβ -gʷa.</i>
fall.down	CL:DISC	fall.down CL:PLANK

“(The disc-like object,) It fell down. (The plank-like object,) It fell down.”

B (Mawng; cf. Singer 2012: 968)

<i>Ani-</i>	<i>wa</i>	<i>-ny.</i>	<i>Ati-</i>	<i>wa</i>	<i>-ny.</i>
3M/3LIQUID	consume	PST.PUNCTUAL	3M/3EDIBLE	consume	PST.PUNCTUAL
“He drank it. He ate it (plant food).”					

The main focus of this paper lies in the description and illustration of the functional principle of selectional restriction by classificatory marking on the verb. The phenomenon occurs in a variety of morphosyntactic types of nominal classification systems and thus demands an account based on the function that they have in common rather than a side note in descriptions of the individual morphosyntactic types, which will be provided in the extended framework of theory on nominal classification.

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**Andrea PEŠKOVÁ** (University of Colonia)

**Semantic Predictability, Ambiguities, and Interpretation of References**

The present paper discusses, by means of different linguistic phenomena, how semantic predictability can meaningfully influence the interpretation of references in ambiguous contexts.

The first example is taken from the study on the use of pronominal subjects (PS) in spoken Spanish. Spanish is a language, which permits the omission of PS. Besides focus and contrastive topics, verbal syncretism is a traditional, though not unproblematic, explanation for the use of overt PS (e.g. Luján 1999, RAE 2009–2011). There is a vigorous debate whether the ambiguous verbal morphology leads to a significantly higher use of PS in Spanish or not (see e.g. Hochberg 1986; Balasch 2008). Differing and often contradictory results by previous empirical research can be explained by the fact that these studies did not consider the semantic predictability, which involves "grammatical, pragmatic or semantic input" (Givón 1983:59). Based on 10,748 sentences of free interviews, the present investigation argues that verbal ambiguity is not relevant in the expression of PSs in Spanish, if these are found in semantically predictable contexts (example 1). However, there are cases where PS must be overtly realized, as the reference would not be accessible to the listener (example 2):

- (1)      $\emptyset_i$      *Pensé que*      $\emptyset_k$      *tenía cara más linda.*  
          thought-1SG    that                   had-1/3SG    face more nice

'I thought she had a nicer face.'

- (2)     *Mi marido<sub>k</sub> quiso mudarse...*     \*( $\emptyset$ )<sub>i</sub>     *no tenía problemas.*  
      my husband    wanted-3SG    to move                   I    not had-1/3SG    problems

'My husband wanted to move... I had no objections.'

The second example focuses on ambiguities as well: It is taken from grammaticality judgment experiments on the anaphoric behavior of pronouns and so-called *Position of Antecedent Strategy*. This theory states that omitted subjects in languages like Spanish and Italian prefer an antecedent in the subject position (Carminati 2002, Alonso-Ovalle et al. 2002). Nevertheless, this syntactical explanation cannot be sufficient in many contexts where the entirety of the information might be important for interpreting the reference (see 3):

- (3)     a.     *Natalia dijo a María que*      $\emptyset$      *estaba cansada.*  
          'Natalia told María that (she) was tired.'
- b.      $\_\_$       $\emptyset$      *era tonta.*  
           $\_\_$      (she)   was stupid.'

Most of us would intuitively say that the omitted subject in Spanish (likewise the English pronoun *she*) in (3a) is referred to *Natalia*, and in (3b) to *María*. However, the inverse interpretation could also be possible and hence correct. It means that we do not decide not only according to the position of the antecedent, but also according to the entirety of the semantic information, our own experience and/or world-knowledge (cf. Fedele/Kaiser 2014). The results based on examples like (3) would not say much about the grammar, but about what is more common and expected. Studies, which rely on speakers' intuitive understanding of the

sentence, should take into account also semantic, contextual or prosodic effects, otherwise their generalizations could be misleading when describing linguistic structures and establishing grammatical rules. This paper will outline these issues surrounding semantic predictability, ambiguities, interpretation of references, as well as, methodology.

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### Light Verb Constructions. An interlinguistic analysis to explain systemic irregularity

Our proposal aims at driving a comparative analysis of Portuguese, Spanish, French, Italian and Romanian Light Verb Constructions (LVCs). Although many previous studies have already focused on the syntactic and semantic features of Romance languages' LVCs (among others, on French M. Gross 1996, G. Gross 1993, G. Gross - Pontonx 2004, Pontonx 2004; on Italian, Elia *et al.*, 1985, Simone 1997, Mastrolini 2004, Ježek 2004; as for Spanish, Alonso 1991, 1997, Blanco 2000, De Miguel 2008; on Portuguese, Baptista 1999, Hundt 1994, Ranchod 1988; on Romanian, Dimitrescu 1958, Ciocanea 2011), the comparative perspective proves to be helpful in showing and explaining idiosyncrasies and irregularities.

From a comparative point of view, for instance, the apparent idiosyncrasy such as Italian *fare una scelta* ('to make a choice') vs. *prendere una decisione* ('to take a decision') – where two nouns very similar in meaning select different verbs – proves to be 'regular' if compared with other Romance languages:

(1) 'to make a choice'	'to take a decision'
FR: <i>faire un choix</i>	<i>prendre une décision</i>
SP: <i>hacer una elección</i>	<i>tomar una decisión</i>
PT: <i>fazer uma escolha</i>	<i>tomar uma decisão</i>
RM: <i>a face o alegare</i>	<i>a lua o decizie</i>

On the other hand, a comparative perspective points out interlinguistic irregularities in the selection of light verbs for LVCs equivalent in meaning:

(2) 'to be in the mood to/for'	'to have a shower'	'to move to pity'
IT: <i>avere voglia</i>	<i>fare(-si) una doccia</i>	<i>fare compassione</i>
FR: <i>avoir envie</i>	<i>prendre une douche</i>	<i>faire pitié</i>
SP: <i>tener ganas</i>	<i>tomar una ducha (ducharse)</i>	<i>dar lástima</i>
PT: <i>ter o desejo</i>	<i>tomar um douche</i>	<i>dar pena</i>
RO: <i>a avea chef</i>	<i>a face un duș --- (a compătimi)</i>	

Our aim is twofold. Firstly, this investigation intends to undertake a corpus-based analysis collecting data from different Romance languages, in order to identify regularities and irregularities in equivalent LVCs. Secondly, this analysis aims at evaluating whether irregularities are due to lexical constraints, or if diachronic and synchronic explanations are also possible. For instance, the apparent idiosyncrasy of (1) is already attested in Latin (*dilectum facere* 'to make a choice' vs. *consilium capere* 'to take a decision') (Baños Baños, in press; Marini 2000). Synchronously speaking, constraints mainly concern verb features

(e.g. causativity, such as in *dar lástima / pena*) and noun semantics (e.g. event or result noun, such as in *prendre une douche*, vs. physical or psychological state, such as in *avoir envie*, etc.) Furthermore, verb selection frequently overlaps Romance languages' Western vs. Eastern subdivision (e.g. *prendre une douche / tomar una ducha / tomar um douche* vs. *fare(-si) una doccia / a face un duş*), or shows the peculiar behavior of Iberian languages (e.g. *avere voglia / avoir envie / a avea chef* vs. *tener ganas / ter o desejo*).

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**Dan PONSFORD** (Lancaster University)

### From putting to staking: How *lay* becomes a mental act

Bets between individuals occur in competitive situations or when controversy arises in conversation. In these circumstances, the issue that is bet on relates either to the situation or to prior discourse. When a speaker proposes to bet with an addressee, he takes a stance both in relation to the addressee and in relation to one of two opposite propositions that make up the issue. At some point, either when proposing the bet or subsequently, the proposer also commits to risking something (e.g. money) in the bet, a stake. Potentially, then, the proposer takes part in three relations: bettor-bettor (interpersonal), bettor-proposition (mental), and bettor-stake (manipulative). In (1) the proposer (bettor, speaker) is *I*, the person proposed to (bettor, addressee) is *thee*, the proposition is *thou canst not say the Lord's Prayer*, and the stake is *a Guinea*.

- (1) I will lay thee a Guinea thou canst not say the Lord's Prayer (1754)

The predicate in (1) is *lay*, which was used in bet-making in Britain from the 14th century to the 20th. Its use owes something to the practice of putting down stakes (e.g. on a table) as part of the arranging of a bet (2), which was done to demonstrate commitment. The stake is expressed as the direct object of *lay*.

- (2) They derided me, and Mr. Harrison said, I will lay you ten Shillings to Six-Pence: **I laid down my**

### Six-Pence; and he his ten Shillings (1691)

However, *lay* is also motivated in part by a more abstract semantics, to do with establishing a state. In betting, this is the state of obligation that is established between the bettors.

Given that *lay* is motivated in part by the expression of a physical act, the question arises as to how it comes to also express the (mental) relation between bettor and proposition. This is what the talk seeks to answer.

In many early examples, the proposition is expressed anaphorically. In (3) the underlined proposition is referred to with *that*. Such propositions are active (Chafe 1994, Lambrecht 1994), having just been expressed, and therefore wholly non-new.

- (3) SIMPLICITY. Why, you cannot mend it, can ye?  
WIT. What will you lay **on that?** (1590)

Eventually it becomes possible to express a proposition clausally, as in (1). Expressed in this form, propositions may include new information. A further stage is reached when *lay* can be used without a direct object (4). Here it is clearly the bettor-proposition relation that is in focus. In cases like this, the utterance is open to a purely stance-marking (i.e. non-betting) interpretation (e.g. Thompson 2002).

- (4) “Nonsense!” said that gentleman, sharply, “I’ll lay **I’ll find him.**” (1911)

Using data from historical corpora spanning six centuries, I trace the development of the expression of the bettor-proposition relation in *lay* constructions, considering the information status (accessibility; Ariel 1990) of propositions and the shift in profile (Langacker 2009) from the bettor-stake relation to the bettor-proposition relation.

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### Pekka POSIO (University of Cologne)

#### ‘You’ and ‘we’ in Spanish: Age and gender differences in the use of referential devices in sociolinguistic interviews

The present study examines the use of impersonal second-person singulars (2SG; see example 1) and other referential devices used for generic or speaker-oriented reference in a sociolinguistic interview corpus of Peninsular Spanish.

- (1) Answering the interviewer’s question ‘Do you think Economics is a difficult major?’

*Depende del sitio donde lo hagas [...] tenías que tener una nota media muy alta. Te hacían aparte un examen. Además necesitabas conocer gente [...]*

‘It depends on where **you do** it. [...] **you had to have** a very high average grade. They had **you do** a special exam. Also, **you needed to know** people [...] (female, 33)

The corpus (Fernández 2005) contains interviews of 14 informants aged 30–72 years, totaling 74,000 words and 660 occurrences of 2SG. The main discourse topics of the interviews are the university studies and work of the informants. The study combines quantitative analysis of correlations between sociolinguistic factors (age, sex, and familiarity between the speakers) and the use of referential devices (2SG, first-person singular and plural, *uno* ‘one’ and impersonal *se*-constructions) with qualitative scrutiny of the interview contents.

As the use of 2SG is increasing in some varieties of Spanish (Hurtado 2009) and other languages (Coveney 2003, Jensen 2009), younger speakers were expected to score high rates of 2SG usage while older

informants were expected to use more *uno*, *se*-impersonals and first person singulars. As expected, there is a significant negative correlation between age and 2SG frequency in the data. However, as for the other referential devices, a positive correlation with age was detected only for first-person plural (1PL). Female informants use all referential devices under discussion except *se*-constructions more frequently than males, who in turn use more third-person forms. Partially similar gender differences have been found in previous research (e.g. Newman et al. 2008, Aijón Oliva & Serrano 2013).

Qualitative analysis reveals that the informants use 1PL and 2SG in similar contexts, in particular when referring to their studies. While young informants often talk about their own experiences using 2SG, suggesting that they could have concerned any other individual, including the addressee, older informants frequently use 1PL forms referring to their own group, e.g. fellow students or family members. Although the use of 1PL extends the perspective from the speaker's own experience to other people, unlike 2SG, it does not imply generalizability. Thus the two forms create different kinds of intersubjectivities in the discourse.

I suggest that the age-related differences observed are connected with societal developments such as individualization (Beck 1994) and intimization (Nielsen, Fogtmann & Jensen 2009). In the present data, the use of 2SG may also reflect the democratization of access to universities in Spain: studying at the university is construed as a matter of choice available to 'anyone' as opposed to a priority reserved to 'us'. Rather than representing a mere switch from one referential device to another, the increasing use of 2SG is intertwined with wide-ranging cultural and societal developments.

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**Carlos PRADO ALONSO** (University of Valencia)

### **On verbal anaphora in fictional and non-fictional English: the case of Do so**

Do so constructions, as in 'I ate an Apple yesterday in the park, and Peter did so last week', are verbal anaphors that have been extensively studied from a theoretical perspective. Research on do so anaphora has mainly focused on the categorical factors —i.e. semantic, syntactic, and grammatical— that determine the use of the construction. It has been argued, for instance, that the extent of application of do so anaphora depends principally on factors such as: (a) non-stativity of the antecedent (Guimier 1981); (b) antecedent not headed by be (Levin 1986); (c) coreferentiality of subjects in the antecedent and do so clauses (Souesme 1987), (d) adjunct status of any "orphan" in the do so clause (Culicover & Jackendoff (2005); and/or (e) non-contrastive status of any adjunct in the do so clause (Stirling & Huddleston 2002), among others.

Very little research, however, deals with the analysis of do so anaphora in naturally occurring discourse. Overall, scholars have devoted little attention to the examination of the textual factors affecting the distribution and use of do so constructions in Present-day English, apart from a few isolated hints here and there (cf. Houser 2010). In order to bridge this gap, this paper presents an in-depth corpus-based analysis of the factors that determine the use and distribution of do so constructions in different contemporary written fictional and non-fictional English texts. The data for the study are taken from six computerised corpora of British and American Present-day English, namely the LOB, FLOB, FLOB, FROWN, BE06, and AmE06 corpora (for details see Hofland et al. 1999 and Baker 2009).

As a rule, do so has been regarded typical of formal registers, with the elliptical alternative omitting so being preferred in informal contexts (cf. Stirling and Huddleston 2002: 1531). Beyond that, however, the analysis of the data retrieved from the corpora will show that the frequency and distribution of do so constructions in written English is not only dependent on the degree of formality but also on the narrative, endophoric and abstract nature of the texts in which it occurs.

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#### **Differential Object Marking in dialects of the Western Desert in Australia**

This paper looks at Differential Object Marking (DOM) in three dialects of Australia's Western Desert, Pitjantjatjara, Yankunytjatjara and Ngaanyatjarra. These dialects have mixed ergative-accusative nominal systems and freedom of word order with the unmarked being SOV (Bowe 1990: 37; Glass 2006: 28). We analyse DOM using a Role and Reference Grammar framework, using the layered structure of the clause and bidirectional linking system to understand the mapping of semantics to syntax (Van Valin 2005).

In these dialects pronominals have nominative-accusative case marking, while nominals have ergative-absolutive. This differential marking agrees broadly with the Silverstein (1976) animacy hierarchy, where person is more likely to be accusative. With common nouns, single argument S and patient O share the unmarked absolute case. Names, proper nouns and question words regarding people ('who') have a marked absolute case. Nominative and accusative pronominals may be clitics, being attached to the first clausal phrase in strict order. Second and third person dual and plural clitics are distinguished by having zero case marking for object while subjects are non-zero case marked.

In the antipassive the purpose peripheral case may be used to mark the target of an emotion, with the experiencer in the absolute case; the predicate is syntactically intransitive while semantically transitive. With ditransitive verbs the beneficiary and the patient can be in absolute case, with obligatory direct object or patient being closest to the verb. Alternatively, the indirect object or addressee can get the locative case. Van Lier (2012) discusses the distinction between the DOM of a single referent and co-argument conditioning while Malchukov et al (2010) look at differential aligning and these studies are of relevance here.

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### Phonology-morphology interaction and the emergence of /VVCC/-rhymes in the English lexicon

This paper addresses the question when, how, and why super-heavy VVCC rhymes came to emerge and remain historically stable in the lexical phonotactics of English. Such rhymes count as highly marked, but do occur in words like *gold* [gəʊld], *false* [fɔ:l̩s], or *\_bind\_* [baɪnd].

Empirically, we trace their history by two methods. On the one hand, we establish first attestations of lexical VVCC-rhymes that occur in Received Pronunciation of Present Day English (Wells 2008). We do this on the basis of the OED and by considering the best current accounts of the sound changes involved in the emergence of the relevant rhymes (Minkova 2014). On the other hand, we establish the frequencies of lexical VVCC-items in Old, Middle and Early Modern sections of the Helsinki Corpus of English Texts.

In terms of theory, we discuss two hypotheses. The first (Hogg/McCully 1987) is that lexical VVCC rhymes owe their existence to the fact that similar structures are produced routinely in verbal past tenses and 3rd person singular present tense forms (*fail+s*, *fin+ed*), and in nominal plurals (*goal+s*, *sign+s*). The other is based on the theory (Dressler & Dziubalska-Kołaczyk 2006) that languages tend to avoid homophonies between lexical and morphotactically produced structures. We hold both hypotheses against our set of OED and corpus data, reconstruct the phases in which the lexical VVCC rhymes that are still attested in Present Day English emerged, and relate them to the phases in which inflectional rules came to produce rhymes of the same type.

We show that the emergence of morphotactic models is indeed likely to have played a role in establishing VVCC rhymes in the English lexicon, since VVCC rhymes of the types VV[sonorant]/d/ began to establish themselves in lexical phonotactics at the same period in which they started to be produced in inflection, and clearly before similar types without inflectional analogues (i.e. VV[sonorant]/t/ as in *fault* or *mount*).

Furthermore, we show that this does not necessarily contradict the hypothesis that homophonies between lexical and morphotactic rhymes are dispreferred. Instead we argue that morphotactic VVC+C models supported the establishment of lexical VVCC counterparts because two special conditions obtained. On the one hand, rhythmically motivated processes such as Homorganic Lengthening (*b[i]nd* > *b[i:]nd*, *ch[i]ld* > *ch[i:]ld*) produced word forms that were phonetically equivalent – in terms of rhyme duration – to morphotactic counterparts such as *moan+ed* or *seal+ed*, and on the other hand, obvious ways of eliminating the resulting ambiguities failed to be available.

Finally, we show that once phonotactically and semiotically dispreferred VV[sonorant]/d/ rhymes had been established, the emergence of morphotactically unambiguous rhymes of the types VV[sonorant]/t|s/ was to be expected, since they filled what was an accidental rather than natural gap in English phonotactics (cf. Hayes & White 2013): they were phonologically less marked, and at the same time not involved in the same ambiguities as the VV[sonorant]/d/ rhymes, which had paved the way for them.

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**Towards an understanding on the ideological effects  
of contact-induced phenomena in the Basque Country**

The outcomes of contact-induced phenomena have been studied from a wide array of perspectives (Thomason, 2001; Corrigan, 2010; Backus, 2013), but the study of language attitudes and ideologies behind contact-induced phenomena have scarcely been studied as an integrated part of contact linguistics (Cornips, 2014). Given the long history of ethno-linguistic contact between Basque and Spanish in the Basque Autonomous Community (BAC) (Edwards, 2009), this study explores how ideological representations of Basque *Differential Object Marking* (DOM) as a contact phenomenon can determine its use according to social categorizations connected to an ‘authentic’ Basque identity.

The revitalization process of the Basque language began in the late 70s when a new standardized variety (*Euskara Batua* ‘Unified Basque’) was implemented in schools. The abundant increase of L2 learners in the (BAC) in Spain is thought to be a characterization of its successful revitalization (Eusko Jaurlaritza, 2011; Azkarate, 2012), although language-promotion efforts are also regarded as ‘not so successful’ (Maia, 2012) due to the unguaranteed systematic use of the language. In language contact situations where strong connections between language and identity are the result of political and ethnic status disparities, social meanings of different features, languages and its users are intensified (Urla, 1987; Jaffe, 1999; Azurmendi, et. al., 2008; Montaruli et. al., 2011; Edwards, 2009). Therefore, the main aim of this paper is to show how ideological representations of contact-phenomena (such as DOM) affect the way different bilinguals use it, shape social identity, and how social categorization or grouping can affect the use of Basque at a larger scale.

Sixty Basque-Spanish bilinguals (native and L2 speakers of Basque) participated in 3 experiments: (a) spontaneous data were gathered by means of oral interviews; (b) attitudinal data were gathered through a matched guise experiment (MGE) in which the voice of a female speaker was rated according to DOM (Basque DOM vs. canonical) and dialect (regional vs. standard); (c) a post-MGE debriefing interview was used to discuss overt-attitudes towards Basque DOM. Results show that native bilinguals predominantly use Basque DOM in which a complexification process of *replica grammaticalization* (Heine & Kuteva, 2010) from Spanish DOM is involved. MGE results show that Basque DOM is regarded as ‘bad’ Basque but signals ‘authentic’ Basque identity; L2 speakers *like* when dialect speakers use Basque DOM. These results are corroborated in the post-MGE interview, in which four types of Basque identities are discussed pertaining to Basque DOM.

The present analysis builds upon theoretical and methodological implications: first, following models of linguistic ideology and identity (Bucholtz & Hall, 2005), it is argued that *Basque identity* has been reshaped into a *linguistic Basque identity* in which Basque DOM becomes an important feature of social characterization; L2 speakers of Basque avoid using Basque in order not to produce ‘bad Basque’ (i.e. Basque DOM). Second, it argues that studying language attitudes as an integrated part of contact linguistics can advance on the success of language promotion efforts.

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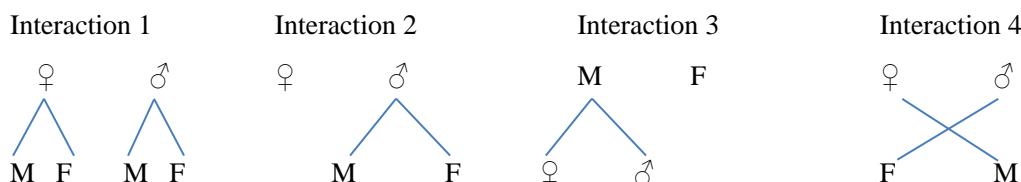
**Françoise ROSE** (CNRS, Université Lyon 2)

## The interaction of genderlects with grammatical gender

Grammatical gender is a well-known common category (Corbett 1999). A much rarer and less studied phenomenon is that of indexical gender, whereby the gender of the speaker and/or the hearer is indexed in utterances that do not necessarily refer to the speech act participants (Bodine 1975, Fleming 2012, Dunn 2014). Gender can be indexicalized at several levels in the genderlects: phonological (1), morphological (2), lexical (3). [The gender of the speaker is represented in the glosses and translations with ♂ and ♀, not to be confused with M and F for grammatical gender.]

(1)	<i>otso</i> '(s)he went away ♂	/ <i>oso</i> / (s)he went away ♀'	<i>Guarayo</i> (Höller 1932: 2)
(2)	<i>-oʔre</i> 'indicative (hearer♂ )	/ - <i>oʔs</i> / indicative (hearer♀ )'	<i>Mandan</i> (Mithun 1999)
(3)	<i>würinauga /gúnaru</i> 'yesterday♀'	/ yesterday♂ ,	<i>Garifuna</i> (de Pury 2003)

Gender indexicality at the morphological level most often occurs within the domain of (pro)nominal reference (Rose 2013a, 2015). Gender indexicality may interact with grammatical gender in complex ways. This paper aims at presenting the four types of interactions attested in our cross-linguistic survey of gender indexicality (Rose and Bakker 2015), based on first- and second-hand data.



In the first situation, each genderlect (male/female speech) has different markers for masculine and feminine. This can be illustrated with a selection of Kayabí pronouns (Dobson 1997): *kiã* 3SG.M♀, ‘*gã*’ 3SG.M♂, *kyna* 3SG.F♀, *ẽẽ* 3SG.F♂.

In the second situation, grammatical gender is restricted to the speech of only one gender of speaker. This is the case in bésiro/chiquitano (Sans, fieldnotes), where only male speakers have a special marker =*tí* for masculine agreement (feminine is unmarked and corresponds to the gender-neutral form always used by female speakers).

In the third situation, only one grammatical gender is distinct for male and female speakers. This is the case in Mojeño (Rose 2013b), where only the masculine (in pronouns, articles, possessive prefixes, agreement prefixes) is distinct for males and females : *ñi* 3SG M $\circlearrowleft$  *ma* 3SG M $\nearrow$  *su* 3SG F $\circlearrowleft/\nearrow$

The fourth situation is the most unexpected : in the same context, male and female speakers use a different gender. For instance, Garifuna males use feminine agreement with abstract nouns, where females use male agreement (dePury 2003, Munro 2013).

The paper ends on a discussion of the cross-linguistic distribution of these four (rare) types of interaction of genderlects with grammatical gender, and some generalizations that can be made regarding the (as)symmetry of the systems, the identity of the marked form and the issue of innovation in general.

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**The effects of Old English verbal prefixes on transitivity:  
the case of labile morphological causatives**

The present study is part of an ongoing project on the valency of -jan causative pairs in Old English. This Proto-Germanic suffix was added to some strong verbs to form a derived causative. In this study, I focus on 13 -jan pairs, including bugan-bigan or meltan-myltan which undergo the process known as syntactic merger (García García 2012). With this term this author refers to cases in which one or both members of the inchoative-causative pair take on a further valency value that originally belonged only to its counterpart. This process results in a labile verb, i.e., a verb that can function both as intransitive or causative with no formal marking. As is common with many Old English verbs, the verbs under study frequently occur preceded by prefixes. The main objective of this paper is to analyze how these prefixes affect or interact with the notion of transitivity and causativity. On the one hand, the extent to which prefixes function as causative markers, reinforcing or even cancelling the meaning of the -jan suffix, has been assessed. On the other, the degree of transitivity of causative clauses with and without prefix has been evaluated. The main methodological tool I used while assessing the transitivity of a clause are the parameters that conform what Hopper and Thompson (1980: 252) call cardinal transitivity. Results support the idea that there exist two main groups of prefixes according to the effects they have on the transitivity of the clause. On the one hand, the first group does not seem to make the transitivity of the clause higher, namely a- and ge-. Even if it has been argued (see Bosworth and Toller 1898 and Hiltunen 1983: 48-50) that these prefixes present some shades of meaning such as perfective or transitivity, my data do not support this view. Additionally, as mentioned in Hiltunen’s work, the variation between the unprefix forms and forms with a- or ge- is higher than in the case of the second group of prefixes, something which could point to the semantic emptiness of these prefixes. On the other hand, the second group of prefixes, represented in my data mainly by be- and for- do show certain effects what transitivity is concerned. More precisely they seem to increase the transitivity of the clause by adding certain parameters such as marking the affectedness of the object, a telic aspect and the consistent inclusion of a second participant in cases where it would not be historically expected, namely in the non-causative member of the causative pair. Moreover, they contribute to a high degree of lexicalization in some of the verbs to which they are added, as is the case of bugan. Not only does the meaning of the verb change, this process also contributes to the collapse of the morphological causative construction since in the case of highly lexicalized verbs only one of the members of the causative pair is regularly attested.

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### The right periphery in Ancient Greek

In the recent literature on Ancient Greek, extra-clausal constituents (ECC) in the right periphery (examples 1-2) – constructions at the right edge of the clause after its formal completion –, called Tails by S. Dik (1997), have received almost no attention in comparison with extra-clausal constituents in the left periphery, called Themes and Settings by S. Dik (cf. H. Dik 2007, Matié 2003, Allan 2012, 2013).

(1)	<i>Xántiphos</i>	<i>dè</i>	...	<i>mét'</i>	<i>ou</i>	<i>polýn</i>	<i>chrónon</i>
	NOM	PART	...	PREP	NEG	ADJ	ACC
	Xanthippus	but	...	after	not	long	time
	<i>apépleusen</i>	<i>pálin,</i>	<i>fronímōs</i>	<i>kai</i>	<i>sunepōs</i>	<i>bouleusámenos</i>	
	3 PST sail	ADV	ADV	CONJ	ADV	PTCP	
	sailed	again,	prudently	and	sensibly	deciding	(Plb.1.36.2)

"But Xanthippus (...) after a little time sailed again for home, **deciding prudently and sensibly**"

I will present a study of ECC based on Polybius' historical narrative. The first issue is the identification of extra-clausal elements (Spevak 2013, 2014). Main difficulties result from the following issues: (i) there is not reliable punctuation marking a prosodic pause (Allan 2013), (ii) word order allows constituents dislocated to the right end of the sentence, and (iii) Ancient Greek is a null subject and object language. On the other hand, redundancy from a syntactic and semantic point of view – but not from a pragmatic point of view – is a relevant criterion. It applies to some types of appositions, especially free appositions and sentence appositions (example 1). Epitactic structures (example 2) (Rosén 2008) are also clearly ECC. Epitactic structures are patterns brought about by asymmetrical coordination which add relevant elements to a phrase that is complete from a semantic point of view, frequently introduced by *kai toûto* "and this", *kai málista* "and particularly".

(2)	<i>hoy</i>	<i>dè</i>	<i>Rōmaioi</i>	<i>prosedéxanto,</i>	<i>kai</i>	<i>málista</i>	<i>dià</i>	<i>tás</i>
	ART	PART	NOM	3pl PAST	CONJ	ADV	PREP	ART
	the	but	Romans	accepted,	and	particularly	for the sake of	the
	<i>chorēgías</i>							
	ACC							
	suppliers							(Plb.1.16.6)

"But the Romans accepted, **and particularly for the sake of their suppliers**"

The second issue addressed in my paper will be an analysis of syntactic forms and pragmatic functions of ECC in the right periphery. The most relevant results are: 1) in Polybius' historical narrative, elements in the right periphery are used only in few cases and in particular circumstances as pure correction devices, providing clarification of given topics by restricting or correcting them. This can be due to the text-type (which is not an unplanned spoken conversation, cf. Dik 1997). 2) In my corpus, extra-clausal constituents in the right periphery tend to introduce some additional information, especially prominent for the following discourse. 3) They can introduce an additional focus in epitactic structures (example 2). 3) Sometimes they express author's comments (example 1), including restriction, correction, weakening or strengthening of epistemic value. 4) This Comment-function can be characterised as lack of thematic progression and as introduction of a polyphonic splitting (Fuentes 2012).

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**Case marking variation with german two-way prepositions:  
A corpus-based case study of collision verbs.**

The variable case marking with German two-way prepositions, which can govern both accusative (ACC) and dative (DAT) (an, auf, in, hinter, neben, über, unter, vor, zwischen) is traditionally assumed to coincide with an oppositional semantic difference between a directional movement (ACC) and a non-directional movement confined to one location (DAT). However, with a group of “intransparent” verbs, the function of the case marking variation is much less clear-cut, e.g. aufschlagen

- (1) Der 52-Jährige fiel daraufhin nach hinten und schlug mit dem Hinterkopf auf dem DAT Asphalt auf.  
 ‘Thereupon, the 52-year-old fell backward and hit his head on the asphalt’
- (2) Der Reiter schlägt hart auf den ACC Asphalt auf.  
 ‘The horse rider hits the asphalt violently’

Several proposals have been made to account for this phenomenon (e.g. Smith 1995, Olsen 1996, Willems 2011). However, due to a lack of systematic corpus-based studies, several questions remain unanswered: 1) Do all these verbs share specific semantic properties that cause the “intransparence” of the function of ACC and DAT? 2) Do verbs or subgroups of verbs show a preference for ACC or DAT marking, and can this preference be linked to semantic differences between verbs? (cf. Duden 2007; Willems 2011; Rys et al. 2014; Willems et al. to appear)? 3) Are there any other linguistic factors associated with the case marking variation (e.g. diathesis, perfectivity)?

The present paper discusses the results of a corpus-based case study which aims to contribute to answering these questions, focussing on five semantically related intransparent verbs of collision, i.e. aufprallen, aufschlagen, auftreffen, auffahren and aufsetzen. In the first part of the study, a quantitative analysis was conducted in order to check for possible semantic and morphosyntactic influences on case marking variation. For each verb, 300 sentences were extracted from the German Reference Corpus . All sentences were annotated for verb, case, preposition, perfect tense, diathesis, transitivity, verb sense (e.g. aufsetzen: ‘X lands on Y’ vs. ‘X is based on Y’) and some verb-specific lexical factors (e.g. the presence of a comitative, as in (1): mit dem Hinterkopf) . The association of these variables with case marking was evaluated by means of classification tree analysis.

Consequently, a survey was conducted among native speakers to compare the results the quantitative analysis with individual acceptability judgments. Using a likert-type scale of 5 points, speakers were asked to compare the acceptability of either ACC or DAT in each sentence, while allowing the ‘neutral’ option that both case markings were equally acceptable. Answers were analysed using chi square and fisher exact tests.

Overall, the results of this case study indicate that although case marking in prepositional complements of intransparent verbs is highly motivated, the variation cannot be attributed to a single functional opposition. On the contrary, a diverse range of different lexical-semantic factors seem to be in play, which suggests that with these verbs, the ACC-DAT opposition might only serve a ‘local’, verb-specific function, which differs widely on a verb-by-verb basis. The complexity and subtlety of these functions could explain why there seems to be considerable disagreement among native speakers with regards to the most acceptable case marking in a given context

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### **Tree, firewood and fire in the languages of Sahul**

Defined as encompassing present-day Australia, New Guinea and surrounding islands, Sahul was first settled with certainty around 45,000 years ago. The languages of Sahul number several hundred and form many apparently unrelated families. They are typically characterised as either Papuan or Australian languages: Papuan languages are found in and around the island of New Guinea and are divided into the Trans-New Guinea Phylum with more than 300 languages and around 60 small non-TNG families including a few language isolates; Australian languages are found on the Australian continent and divide into the Pama-Nyungan (PN) family with about 180 languages and 27 small non-PN families.

This paper examines colexification patterns in the lexical expressions encoding the concepts for 'tree', 'firewood' and 'fire' in the languages of Sahul. Colexification of these expressions in the Sahul area have been known in the literature for some time, but remain unexplored in any detail. Preliminary observations are made about their colexification in Papuan languages by Laycock (1986: 4):

The main conflation to look for here is that of 'tree' and 'fire' – via the intervening concept 'firewood'. It is found in Foe, and is reported to be common in [Trans-New Guinea Phylum] languages.

Similar preliminary observations are made for Australian languages by Dixon (1980: 103):

Some – but by no means all – Australian languages take the principle of having a single term to describe some natural object, and also something that can be made from it, to the extreme of having a single lexeme covering both 'tree, wood' and 'fire'.

In each of these works, only a handful of languages displaying the colexification pattern are named; there has been no systematic study of the distribution of this pattern across Sahul. The aim of this paper is to test how accurate these early observations are by extensively surveying the patterns of (non-)colexification of 'tree', 'firewood' and 'fire' terms in both Papuan and Australian languages, classifying the observed patterns, and mapping their geographic distribution. We further explore the make-up of complex terms for these concepts and examine the possibility of both areal- and lineage-specific trends in the coding of 'tree' 'firewood' and 'fire', and how the terms within this semantic domain evolve.

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### **The Latin enclitic interrogative particle *-ne*: Why is it used at all?**

The Latin enclitic particle *-ne* is an interrogative particle indicating polar questions. It can occur in direct and indirect questions, as well as in simple and disjunctive questions. The particle, however, also occurs in a small number of affirmative sentences.

It has not yet been thoroughly investigated: there is only the overview of all Latin interrogative particles by Morris (1890 a and b), in Latin grammar books (most recently Pinkster, in print), and dictionaries (most extensively and recently TLL, where the lemma *-ne* was published in 2014). My proposal represents a first systematic study of the particle *-ne*.

In this paper I will concentrate on the following aspects of *-ne*:

- What is the pragmatic function of interrogative sentences with *-ne* as compared to ones without any particle?
- How can we describe the function of *-ne*? How can the use in affirmative sentences be related to its occurrence in interrogative sentences? Or are these homonyms?

- Etymology: there are two main interpretations for its origin, which in turn influence the interpretation of the semantics and pragmatics of the particle:
  - o negative
  - o affirmative.

As for the first point: I differentiate four types of interrogative sentences, inspired on Freed (1994):

- 1) 'real' questions for information
- 2) questions that are related to the situation of the speech
- 3) questions with directive force (cf. Risselada 1993)
- 4) questions with expressive force: exclamations, rhetorical questions.

My corpus consists of all occurrences of *-ne* from the earliest instances till the time of Apuleius (mid second century A.D.): 4246 tokens in total. I will focus on simple direct questions in dialogical texts, as these seem to provide the best environment to determine the function of particles and interrogative sentences. To compare interrogative sentences with *-ne* with those without *-ne*, I have taken simple direct questions with and without *-ne* from Plautus' and Terence's comedies, which provide the majority of its instances, absolutely and relatively, and are highly dialogical.

This study is complicated by the problem of punctuation, which has been added to the Latin texts in recent times: to what extent can the punctuation be relied on? For my comparison I have relied on the modern editions, although this may influence the results.

Results of the comparison:

- Questions without a particle belong more often to my second type than questions with *-ne*.
- I have observed no difference in the expected outcome of the question (yes/ no), as is sometimes supposed for *-ne*.
- *-ne* seems to be preferred in combination with certain host words, as has often been observed; however, the same words also often occur in the first position of interrogative sentences without *-ne*.

The main function of *-ne* turns to be focalization of a host word, it is an optional focus marker of interrogative sentences.

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#### **Direct and indirect affix borrowing**

According to a widespread assumption (e.g. Paul 1891:469–470, Weinreich 1953:31–32), affixes are hardly if ever borrowed directly, but (almost) always indirectly, i.e. as part of complex loanwords such as French *-able* in *honourable* in English. From such complex loanwords, affixes may later spread to native stems, creating hybrid formation, e.g. *speakable*. This paper investigates whether direct borrowing, i.e. the extraction of an affix based on knowledge of the donor language, without the mediation of complex loanwords within the recipient language, can also be the primary, if not the only process leading to productive loan affixes.

I investigate historical and contemporary corpora to assess the likelihood for indirect borrowing, i.e. that an affix becomes productive on native stems only based on complex loanwords within the language. Three criteria are developed from recent findings on morphological productivity (Bybee 1995; Hay 2001; Plag 2003; Hay and Baayen 2005; Baayen 2008): 1) A relatively large number of complex loanwords types

including the borrowed affix; 2) the existence of pairs of complex loanwords and corresponding simplex loanwords without the affix, e.g. *honour* and *honourable*; and 3) relatively low token frequency of complex loanwords vs. corresponding simplex loanwords. These criteria facilitate the identification of a morphological pattern from complex loanwords alone and thus indirect borrowing. To the extent that they are not met, I hypothesize an increasing influence of direct borrowing.

These criteria are applied to loan affixes in corpora (15,000 to 2,500,000 words) of Albanian, Even, Chavacano, Resígaro, Quechua, and Middle English. For instance, did Resígaro *-ga* (plank-shape classifier, borrowed from Bora, now used productively with native stems) enter Resígaro from Bora directly or indirectly through complex loanwords? It is attested in only few complex loanwords (criterion 1), none of which have attested corresponding simplex loanwords (criterion 2). The complex loanwords are therefore also more frequent than the (absent) corresponding simplex loanwords (criterion 3). All this indicates a relatively high probability that *-ga* was not only extracted from complex loanwords within Resígaro, but that direct borrowing through Resígaro speakers' knowledge of Bora played an important role in the borrowing process. This is consistent with the reduced semantic range in complex loanwords when compared to Resígaro hybrid formations and Bora words, and with ethnohistorical information on widespread bilingualism.

Based on quantitative results for eight loan affixes, a scale of directness of affix borrowing is proposed, which reflects the extent to which recipient language speakers rely on 1) their knowledge of the donor language (direct borrowing) and 2) complex loanwords within their native language (indirect borrowing). This scalar approach acknowledges that most cases of affixes borrowing probably involve both direct and indirect processes, and, crucially, it allows objectively assessing probabilities of the relative contribution of these two processes. Additionally, it provides strong indications that in some cases, direct borrowing was the primary, if not the only process involved, in particular in cases where no complex loanwords that include the loan affix are attested, which would be required for indirect borrowing.

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#### No EPP for Turkish Subjects

Turkish is well known for the extensive flexibility in its word order, which has motivated its classification as a ‘scrambling language’ since Kural (1992), although it has also been noted that word order variation in Turkish has discourse-pragmatics effects (cf. Erguvanlı 1985, a.o.). In light of Ross’ (1967) use of the term ‘scrambling’ to describe the unmotivated variation in the order of constituents, an obvious question arises as to whether movement operations with discourse-pragmatic effects co-exist with ‘scrambling’ in Turkish? Should one of them be eliminated in favor of the other? Or, are they mutually exclusive? Other important questions arise based on one’s answer to the questions above such as whether subjects must undergo EPP-driven movement in Turkish.

After demonstrating that word order flexibility in Turkish is fully governed by discourse considerations where Focus [C(ontrastive)/P(resential)] is non-peripheral (always in-situ, to be exact) while Topic [C(ontrastive)/A(boutness)] and D(iscourse) A(naphoric) constituents are left peripheral, and that ‘scrambling’ should be eliminated from the inventory of syntactic operations in Turkish, this paper further argues that Turkish lacks English-style movement of subjects to Spec,IP; i.e., subjects in Turkish stay in-situ unless driven by certain discourse features. This is tantamount to saying that Turkish does not have the EPP requirement in more traditional terms. Support for this claim comes from a number of domains,

including the position of temporal adverbs in all-focus sentences. The absence of EPP-driven movement is further supported by variable binding facts attested in matrix contexts. The availability/lack of variable binding in matrix clauses, particularly when constituents are manipulated by the concepts of discourse, demonstrates that moving objects obligatorily stop at the Spec,vP on their way to higher discourse projections. When combined with the in-situ character of C/P-Focus subjects in Turkish, this observation makes it possible to account for the availability/lack of variable binding by laying out possible alternatives of reconstruction in Turkish. Given the lack of reconstruction of Topic-moved copies to the base, the intermediate Spec,vP position gains importance as the only licit copy of the object NP with the variable inside that the subject QP can c-command is the one in Spec,vP. The systematic behavior attested in the availability/lack of variable binding readings cannot be accounted for in a system that allows free movement operations such as ‘scrambling.’ Further support for the claim that subjects only undergo discourse-driven movement operations in Turkish will be presented through a discussion of the Accusative subjects of finite complement clauses selected by attitude verbs. Evidence from the embedded domain bolsters the argument from root clauses that only those subjects that must move for reasons of discourse moves to higher positions in the structure to the exclusion of both EPP-driven movement of subjects and ‘scrambling’ of constituents in general.

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#### **The first Americans: a problem of reference**

Consider the following three sentences:

- (1)     a. The first Americans crossed the Bering Strait some 15,000 years ago.  
 b. The first Americans landed on the moon in July 1969.  
 c. The last guests departed at midnight.

Both (1a) and (1b) are (probably) true but the NP the first Americans refers to different entities in the two sentences (which blocks their conjunction under the same subject). (1c) implies that no guests stayed after midnight. How does the structure-dependent reference (SDR) in (1b,c) come about? Prima facie one thinks of some sort of predicate anaphora: ‘the first Americans <to do so> landed on the moon in July 1969’. To make this idea more precise, I suggest (2a,b) as preliminary semantic definitions for the adjectival predicates ‘first’ and ‘last’, regardless of whether or not they actually involve SDR. (2a,b) will be improved by adding a presuppositional component. In (2a,b), N is the predicate modified by first/last (e.g. ‘American’ in (1a)); M is defined below; underscoring means ‘the fact/event that...’; “<t“ stands for the predicate ‘precede in time’:

- (2)     a.  $[[\text{first}]] = \{ x \mid Nx \wedge Mx \wedge \neg \exists y(y \neq x \wedge Ny \wedge My \wedge <t(My, Mx)) \}$   
 b.  $[[\text{last}]] = \{ x \mid Nx \wedge Mx \wedge \forall y((y \neq x \wedge Ny) \rightarrow (My \wedge <t(My, Mx))) \}$

SDR is now accounted for by defining the range of the predicate variable M. For non-SDR readings,  $M = N$ . For SDR-readings, M is the predicate  $\lambda x(P \dots x \dots)$ , where P is the predicate of the minimal (nuclear) proposition  $\Pi$  such that x is an argument term under P. This excludes all higher operators over  $\Pi$ , such as negation, modals, tenses or high adverbials. Indeed, SDR is not possible in higher scope elements, as in (3), where ‘first’ has nothing to do with Ann’s feeling uneasy:

- (3)     For the first day Ann felt uneasy.

(4a) is three-ways ambiguous: (i) no SDR, (ii) with SDR (a) ‘it was to George in 2008 that she sold the first painting she sold’, (b) ‘it was in 2008 that she sold George the first painting she sold him’. That the SDR

reading in (4a) allows for two variants is due to the ambiguous status of the external dative, which is either a scope-inducing operator or an argument term. (4b), where George can only be an argument term, lacks the (iia) reading:

- (4)     a. She sold her first painting to George in 2008.  
       b. She sold George her first painting in 2008.

Cases like like (5a) are not covered by this analysis. Yet there is an obvious relation with (5b):

- (5)     a. After the departure of the last guests, John poured himself a whisky.  
       b. After the last guests had departed, John poured himself a whisky.

This problem can be solved in principle by allowing for programmatical nominalizations in the lexicon. A language-specific ‘programmar’ before the grammar proper is necessary anyway to fill the gap between (cognitive) propositional and (grammatical) linguistic semantic analyses. (Slobin 1987, Levelt 1989). This programmar will then allow for lexical nominalizations like departure in (5a). Possible objections and improvements will be discussed and the notion of programmar will be further commented on.

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#### A Dedicated Quantifier Projection in Hittite?

The talk deals with aberrant position of existential quantifiers (ExQu’s) like *kuiški* “someone” in Hittite (Indo-European, Anatolian group). It is well known (Luraghi 1990; Sideltsev 2002; Goedegebuure 2014; Huggard 2014; Sideltsev 2014; Luraghi forthcoming) that they are preverbal, following even preverbal contrastive focus (Goedegebuure 2014). In the minimalist program it means that they stay lower than all other verbal arguments. The problem I will address concerns the exact position they occupy in the Hittite clause.

A solution is to follow (Huggard 2014): ExQu’s are *in situ* whereas all other verbal arguments raise. Thus Hittite ExQu’s will be just a subset of indefinite non-specific NPs which stay *in situ* in many languages, see (Kim 1988; Diesing 1992; Vikner 1995; Massam 2001; Kumar 2006; Muravyova 2008; Gračanin-Yüksek, İşsiver 2011; Serdobolskaya 2014).

However, the solution is untenable. It ignores the fact that in Hittite it is not indefinite NPs, but rather bare ExQu’s and DPs quantified by ExQu’s that stay lower than all the rest of verbal arguments, both DPs and indefinite NPs. If a bare ExQu and an indefinite NP are present in a clause, the order is consistently *NP-ExQu-verb*, not *\*ExQu-NP-verb*, as follows from the Hittite Laws:

KBo 6.2 iv 19				
[t]akku	ŠAH	arnuand-an	<i>kuiški</i>	taye-zzi
if	sow	pregnant-ACC.SG.C	anyone.NOM.SG.C	steal-3SG.PRS
“If <b>anyone</b> steals a <u>pregnant sow</u> ”				

This brings about non-canonical word order OSV if subject is a bare ExQu/QP. If both subject and object are instantiated by equally indefinite NPs, or by two bare ExQu’s, the word order is canonical SOV. So the feature bringing about the position of ExQu’s is quantification, and not indefiniteness. It seems unexpected as indefinite NPs and DPs quantified by ExQu’s possess identical semantics (Haspelmath 1997).

However, the languages adduced as parallels for Hittite where NPs stay lower than DPs provide evidence that QPs and bare ExQu’s pattern with DPs and not with NPs: indefinite pronouns in Mari are unacceptable with unmarked preverbal DOs (Serdobolskaya 2014). Germanic languages where it is indefinite semantics and not DP/NP structure that determines syntactic behavior stay even further as a parallel for Hittite.

A closer parallel is Hungarian with a dedicated quantifier projection (Kiss 2004). To capture the Hittite facts, I propose that ExQu’s target the specifier of a dedicated quantifier projection which is located within TP layer, above vP. That Hittite bare ExQu’s/QPs are *ex situ* follows pace (Huggard 2014) from rare cases when verbal arguments stay *in situ* whereas ExQu’s and QPs are higher, as in

KUB 5.24+ ii 13-14

<i>kī=wa</i>	<sup>D</sup> <u>UTU</u>	<sup>URU</sup> <u>PÚ-na</u>	<u>ŠA</u>	<sup>m</sup> <u>Kur</u>	<u>kuwatqa</u>
this=QUOT	sungoddess	Arinna	of	Kur	somehow
<i>uttar</i>	EGIR-pa	SUD-at			
matter.ACC.SG.N	back	draw-3SG.PST			

“The Sungoddess of Arinna prolonged this matter of Kur somehow”.

and from behavior of negative PPs which is easier to understand if remnant PP and NPI (= ExQu) both raise to different projections, as in

KUB 50.6+ i 15'-16'

<i>namma=za</i>	<u>GIDIM</u>	<u>damēdani</u>	<u>memin-i</u>	<u>šer</u>	<b>UL</b>
then=REFL	deceased	other.DAT.SG	matter-DAT.SG	up	NEG
<b><i>kuedanikki</i></b>	TUKU.TUKU-wanza				
something.DAT.SG	angry.NOM.SG.C				

“But then, o deceased, because of some other matter you (are) not angry”.

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### Engagement in Research Writing: the Modals of Obligation and Necessity in a Cross-linguistic and Cross-disciplinary Perspective

The last several decades have witnessed a keen scholarly interest in research writing: numerous studies have shared valuable insights on how disciplines and cultures shape and influence academic rhetoric (see Berkenkotter & Huckin 1995, Fløttum *et al.* 2006, Hyland & Bondi 2006, Hyland & Sancho Guinda 2012, *inter alia*). The key words in many of these studies are *author voice* or *author stance* that are inevitably linked to the concept of metadiscourse and its linguistic realization. Significant cross-linguistic and cross-disciplinary research has been carried out on such metadiscourse elements as hedges, boosters, self mention and attitude markers; however, some of metadiscourse markers are less investigated, especially cross-linguistically. A case in point is engagement markers, which include reader pronouns, interjections,

questions, directives and obligation modals in Hyland's (2005) metadiscourse model. These markers are important to research writing as they enable the author to focus the attention of the reader, call for an action, emphasize a point or strengthen the community sense, i.e. „explicitly build relationship with reader” (Hyland 2005: 49).

The aim of the present paper is to investigate the semantic-pragmatic usage patterns of one type of engagement markers – obligation and necessity modals, in three science fields (humanities, medicine, technology) and two languages (English and Lithuanian). The paper analyzes the pragmatic patterns of engagement between the author and the reader created by the markers under study from both the ‘big culture’ (i.e. national culture) and the ‘small culture’ (i.e. disciplinary culture) (cf. Atkinson 2004) perspectives. Quantitative and qualitative approaches are employed alongside contrastive analysis to reveal the ways in which the two languages and three science fields overlap or differ with regard to the use of obligation and necessity modals as stance markers. The English language data is taken from the Academic language subcorpus of COCA, while the Lithuanian language data comes from Corpus Academicum Lithuaniae ([www.coralit.lt](http://www.coralit.lt)), a specialized synchronic corpus of written academic Lithuanian (roughly 9 million words). The first part of the paper looks at the distribution and frequency patterns of the obligation and necessity modals under study investigating disciplinary and language specific variation in their use. The second part focuses on the semantic-pragmatic differences in the ways engagement is created in different disciplines and research cultures. Set within the context of other cross-linguistic and cross-disciplinary studies on author stance, this research contributes to a better understanding of how academic rhetoric is influenced by both the disciplinary convention and cultural tradition.

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**Do musicians develop brain ‘modules’ that enhance structure-processing performance in  
multiple domains – including language?**

The experiment reported here follows up on a study by Sluming et al. (2007), in which it was found that orchestral musicians had developed certain special abilities and neurological processing patterns. In a classic three-dimensional mental rotation task, musicians exhibited a performance level normally only attained after significant practice, and furthermore showed significantly increased activation in Broca’s area. The interpretation was that musicians showed a preferential recruitment of Broca’s area in carrying out the mental rotation task. What motivated this recruitment was thought to be a shared element of “hierarchical organization of behaviour by controlling the selection and nesting of action segments” (Sluming et al. (2007:3799)).

In the study, informants were also tested for ‘verbal intelligence’, and no correlation was found with the special profile of musicians where visual rotation was concerned. This could be due to the fact that the test of verbal intelligence was based on items in which a choice was required between ‘true’ and ‘false’ in response to sentences like ‘prime ministers are made in factories’ and ‘prime ministers are people’. It would appear that this task type does not involve structural control of action, but rather utterance understanding plus common knowledge.

We therefore developed a battery of linguistic tasks (devised so as to be comparable to the rotation task) where the ability to process structural differences would be crucial. The study consisted of 120 matching tasks, in which participants had to compare active declarative baseline sentences to four types of sentences which deviated structurally from the baseline sentences, in order to decide whether the baseline and target sentences were congruent.

The group of musically trained participants consisted of 16 students and graduates from an elite Academy of Music. Their performances in syntactic rotation (SRT) and mental rotation (MRT, test from Peters et al. 1995) were compared to those of a control group of 16 non-musically trained university students and graduates from Political Science. Reaction times and number of correct answers were measured in the expectation of showing that the musicians' enhanced performance shown for mental rotation tasks would also be found in relation to linguistic structure-matching tasks.

In the SRT, the musicians answered significantly faster than the control group ( $p < 0.0001$ ). However, there was no significant difference in number of correct answers between the two groups in the MRT or in the SRT. Finally, there was no correlation between performance in the SRT and the MRT.

Even though results from earlier studies regarding musicians' enhanced performance in MRT were not confirmed, musicians were faster in the SRT – suggesting a new spin-off effect from musical training. The musicians performed equally well in the MRT as the musical students in e.g. Pietsch & Jansen (2012), however the control group performed better than theirs. Due to small group sizes, the study is worth replicating on a larger scale. This might present a strong case for *function-based structure*, i.e. for positing that neurological and cognitive structure, rather than being essentially innate and compartmentalized, depends on functionally driven processes.

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#### **Abstract and morphological case in nominative – accusative systems with differential case marking**

This paper addresses the issue of the relationship between abstract and morphological case based on data from differential case marking in languages with nominative – accusative case systems. Differential case marking in Turkish (Enç 1991, Kornfilt 2008, a.o.) and in Asia Minor Greek (Dawkins 1916, Janse 2004, Spyropoulos & Kakarikos 2009, Karatsareas 2011) is examined; in these languages specificity/definiteness affects the case marking of the argument either by forcing it to appear in a default case or by marking definiteness by means of a certain (morphological) case:

(1) *Turkish DOM and DSM*

- a. Zeynep-∅ adam-1 / **bir** **adam-∅** gör-dü  
Zeynep-NOM man-ACC / a man see-PST  
'Zeynep saw the man / a man'
- b. ari-nin çocuğ-u sok-tuğ-un-u duy-du-m  
bee-GEN child-ACC sting-NM.EM-3SG-ACC hear-PAST-1SG  
'I heard that the bee stung the child'
- b'. çocuğ-u **bir** **ari-∅** sok-tuğ-un-u duy-du-m  
child-ACC a bee sting-NM.EM-3SG-ACC hear-PAST-1SG  
'I heard that a bee stung the child'

(2) a. *Pontic Greek DSM*

- |               |                             |   |      |                             |
|---------------|-----------------------------|---|------|-----------------------------|
| <b>o</b>      | <b>rđakon</b>               | / | enas | rđakos                      |
| the           | dragon <sub>M</sub> -SG.ACC | / | a    | dragon <sub>M</sub> -SG.NOM |
| eskotosen     | aton                        |   |      |                             |
| kill-PAST.3SG | CL3-M.SG.ACC                |   |      |                             |

- b. ‘The dragon / a dragon killed him...’  
*Cappadocian Greek DOM*  
 ðeke            ena            layos            /            to            layo  
 hit-PST.3SG    a            hare-SG.NOM    /            the            hare-SG.ACC  
 ‘He hit a hare / the hare’

Significantly, evidence that abstract case is licensed on arguments even in differential case marking comes from situations in which (i) differential case marking is blocked although the relevant requirements are met (in Turkish, differential case marking does not happen when the relevant non-specific argument is marked with lexical case (3) or when it has an internal agreement formative; Kornfilt 2008), and (ii) traces of the expected abstract case are attested (in Pontic Greek DSM, the N-head of the DP-subject appears in the differentiated accusative case, whereas its determiner and predicative modifiers appear in the expected nominative (4)):

- (3) Hasan at-a                biner  
 Hasan horse-DAT            ride-HAB  
 ‘Hasan rides the horse / horses’
- (4) autos                    o                    ðeskalon  
 this-M.SG.NOM            the<sub>M</sub>-SG.NOM            teacher<sub>M</sub>-SG.ACC  
 kalos                      aθropos                en  
 good-M.SG.NOM            man<sub>M</sub>-SG.NOM            be-3SG  
 ‘This teacher is a good man’

Based on this evidence, I claim that differential case marking in such systems is the effect of the morphological processing of syntactic structure and, thus, it is conditioned by both modules. More specifically, I put forward the hypothesis that case should be decomposed into syntactic and morphological properties, expressed by means of specific case features (Halle & Vaux 1998, McFadden 2004 a.o.; also Jakobson 1936), which are licensed in and conditioned by the relevant modules. Abstract case is related to the licensing of the syntactic properties, whereas morphological case is the result of the morphological processing of both the syntactic and the morphological properties. Differential case marking emerges when certain conditions / operations of morphological processing (e.g. impoverishment) affect the morphological exponence of the relevant case node. Thus, differential case marking in nominative – accusative systems such as the ones discussed in this paper presents evidence against a purely syntactic or purely morphological approach to case.

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**“She come all the way from Hanover to here”: Grammatical innovations  
and competing variants in Jamaican English**

The expression of the perfect meaning in varieties of English around the world has been a very fruitful topic of investigation in recent research (Yao & Collins 2012; Seoane & Suárez-Gómez 2013; Werner 2013, 2014). One of the most relevant recent findings is that the present perfect is progressively losing ground, especially in informal spoken texts, following a trend started in American English. Of special relevance in this respect are the conclusions in Werner (2013) based on a hierarchical cluster analysis which reveals unexpected phylogenetic networks between the varieties and allows him to distinguish between ‘perfect-’ and ‘preterite-friendly varieties’. The present paper studies Jamaican English, a ‘preterite-friendly variety’ (Werner 2013) in which the synthetic preterite outnumbers the periphrastic *have* + past participle to express perfect actions. In addition, Jamaican English is exceptional in the frequent occurrence of other forms such as the so-called *be*-perfect, both with the explicit auxiliary (*Jesse is gone away my dear, gone to Kingston to stay with her Aunt Irene*<ICE-JA:W2F>) or with it elided (*So thirty-two minutes gone and it's one one*<ICE-JA:S2B>), yielding instances that look like copula-deletion examples. The fact that *be*-perfects occur mainly with *go* is reminiscent of the combination of *be* with mutative intransitive verbs in earlier English. Other persistent pattern is represented by the use of an undeclined form (*You ever see gun before*<ICE-JA:S1B>), initially associated with a tendency to drop the *-ed* morpheme of regular verbs in word-final consonant clusters in this variety (Mair 2002: 49), but also occurring in irregular verbs.

Following a corpus-based approach with material retrieved from the Jamaican component of the *International Corpus of English* (ICE-JAM), this study will provide a detailed analysis of all the different forms used in this variety for the expression of perfect meaning in a selection of ten high-frequency lexical verbs. It combines a quantitative and qualitative methodology which will include both spoken and written language in formal and informal contexts and will reveal that Jamaican English displays a wide repertoire of nativized features placing the local English norm as an independent variety in comparison with the inherited British standard. Through this analysis I intend to determine whether the morphosyntactic creativity shown by Jamaican English in the expression of the perfect is motivated by (i) the most likely prestige dialectal influence, represented by American English today (Deuber 2014); (ii) the colonial input and the founding fathers effect, inherited from the colonization period; (iii) the role of Jamaican creole, the substrate language used by the local population in everyday conversation; (iii) the role played by learner effects, commonly a source of variation in second-language varieties; and (iv) principles of language change, often claimed to account for parallel morphosyntactic developments in different ungeographically related varieties and therefore justify these common structures as vernacular universals. Examination of these factors should yield a clear picture of the determinants of the expression of perfect meaning in creole-related Jamaican English.

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**Where does class agreement happen? (evidence of Dargwa)**

Dargwa belongs to a few languages of the Nakh-Daghestanian language group that have both noun class (gender) and person agreement. This paper is based on the field data of the Tanty dialect of Dargwa. My basic goal is to formulate the rules of class agreement in Tanty and, hence, to determine its syntactic

domain.

In most cases, class agreement is controlled by the absolute noun phrase of the same clause:

- (1) murad-li t'ant'i-b qali b-arq'-ib  
 Murad-ERG Tanty-N(ESS) house(ABS) N-make:PF-PRET  
 'Murad built a house in Tanty'.

A more detailed study of different agreement configurations results in a list of rules.

- Referential phrases are controlled by their own referent (since most nouns and pronouns bear no agreement markers, this rule refers to a small class of lexemes, i.e. the reflexive pronoun sa-j 'self', the quantifier li-<b>il 'all' and a couple of nouns like w-e<sup>Q</sup> 'possessor').
- Within a verbal predication or an adjective phrase, the agreement controller is the absolute argument of the verb/adjective, cf. (1) and (2):

- (2) [xes d-uqen-se] rurs:i  
 hair(ABS) NPL-long-ATR girl  
 'long-haired girl'

With some matrix verbs, the absolute position is taken by a clause, which, potentially, also controls class agreement (triggering the non-human singular marker):

- (3) neš-li rurs:i-li-c:e [q'a<sup>s</sup>mk'uc'ul d-irc-aq-iž] qar-b-arq'-ib  
 mother-ERG girl-OBL-INTER dishes NPL-wash:IPF-CAUS-INF <order>LS-N-LV:PF-PRET  
 'The mother ordered the girl to wash dishes'.

- Within a phrase headed by the copula, the primary controller is the absolute predicate:

- (4) dila berk:ala [[χ:ink'-e]=sa-d]  
 I:GEN food khinkal-PL(ABS)=COP-NPL  
 'I only eat khinkal'. [lit. 'My food is khinkal only']

If the predicate is not an absolute NP, the controller is the absolute subject:

- (5) rasul [aquš:a-w]=sa-j  
 Rasul(ABS) Aqusha-M(ESS)=COP-M  
 'Rasul is in Aqusha'.

All basic cases of class agreement are summarized in (6):

- (6) Class agreement is controlled by the structurally closest potential controller (where potential controllers are absolute noun phrases and some clause types – infinitive clauses, clauses headed by deverbal nouns, etc.).

Statement (6) is not sufficient for biclausal constructions: in many of them, there is more than one potential controller, and the factors determining the choice of the actual controller are not always clear. In some cases we even observe non-local agreement across a clause boundary, cf. (3) and (7):

- (7) neš-li rurs:i-li-c:e [d-irc-aq-iž q'a<sup>s</sup>mk'uc'ul] qar-d-arq'-ib  
 mother-ERG girl-OBL-INTER NPL-wash:IPF-CAUS-INF dishes <order>LS-NPL-LV:PF-PRET  
 'The mother ordered the girl to wash dishes'.

In Tanty, the agreement in noun class is "as local as possible": like most cases of agreement, it is only possible within certain syntactic boundaries, but these boundaries are not always the same.

**Linlin SUN and Walter BISANG (JGU Mainz)**

### **Basic word order and precategoriality in classical Chinese—new evidence for SVO**

Basic word order and the question of the relevance of SVO vs. SOV in Chinese has been the subject of controversial debates since the seventies and eighties of the last century (e.g. Li & Thompson 1975, Sun & Givón 1985). In more recent times, basic word order is discussed from the perspective of historical linguistics. Many scholars of Sino-Tibetan argue that the common proto-language must have been SOV (e.g. Matisoff 2003). Dryer (2003) supports this conclusion from his typological perspective for Sino-

Tibetan as a whole but argues that proto-Chinese might have been VO. A look at the earliest written records in the oracle-bone inscriptions (14th–11th centuries BC) confirms the status of Chinese as an SVO language (e.g. Djamouri 2001; SVO 93.8% vs. SOV 6.2%).

This paper offers new evidence for SVO in classical Chinese spoken between 500 and 200 BC from the perspective of parts of speech and precategoriality. Precategoriality is roughly defined as the absence of the noun-verb distinction in the lexicon. The nominal or verbal status of a lexical item can only be seen from its syntactic position in the N-slot or the V-slot. Thus, classical Chinese is characterized by the high flexibility of its lexical items in terms of Rijkhoff & van Lier (2013). One of the consequences of precategoriality is that the verbal function of object-denoting lexemes can be regularly derived (Bisang 2008). In (1), the object-denoting lexeme ‘King of Wu’ is regularly interpreted in the causative sense of ‘to treat NP like the King of Wu’:

- (1) 爾 欲 吳王 我 幸? — (ZZ, Ding 10)  
 ēr yù wú wáng wǒ hū  
 you want Wu King:V I Q

‘Do you want to treat me like the King of Wu?’  
 [i.e. Do you want to kill me? Context: King Wu was murdered.]

In (1), word order is SVO. As is well-known (Pulleyblank 1995, Xu 2006), classical Chinese also has constructions with SOV. The two most prominent cases of preverbal objects are (i) wh-words in the function of objects, and (ii) object pronouns in negated clauses.

A look at the frequency with which object-denoting lexemes occur in the V-slot of SVO vs. SOV constructions in our corpus consisting of six classical Chinese texts shows that some 3500 examples occur in the SVO construction (cf. (1)), while only 10 examples (or 0.3%) are attested in an SOV construction. This can be explained as follows: The use of object-denoting lexemes in the V-slot was much less common in periods preceding classical Chinese. With the loss of derivational morphology (Xu 2006), word order became the only indicator of word class and strongly supported the omission of strict verb-noun distinctions in the lexicon. The word order that was selected for determining word class was the most frequent word order available in the language, i.e. SVO.

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### On the Structure of Nominal Constructions in West Caucasian

(The work has been supportet by the Russian Science Foundation, grant # 14-18-03270)

We address the structure of the nominal phrasal categories in the West Caucasian languages, mainly of the Circassian branch, and especially the relationship between the morphological features (case, number, definiteness) and syntax.

In both Circassian languages, Adyghe and Kabardian, nominal constituents may lack the case endings *-r* (Absolutive) and *-m* (Oblique) (on the basics of Circassian morphosyntax see Kumakhov & Vamling

2009). The alternation of case-marked and unmarked forms occurs almost in all syntactic contexts; normally, non-specific or indefinite NPs are unmarked, and specific or definite NP are case-marked. Cf. the subject of an intransitive verb in (1), the direct object in (2), both marked with the Absolutive case, and the subject of a transitive verb in (3), which is marked with the Oblique (=ergative) case:

## (1) Temirgoy Adyghe:

- |    |                      |               |    |                    |               |
|----|----------------------|---------------|----|--------------------|---------------|
| a. | <i>pšas̥e-r</i>      | <i>ma-kʷe</i> | b. | <i>pšas̥e</i>      | <i>ma-kʷe</i> |
|    | girl-ABS             | DYN-go        |    | girl               | DYN-go        |
|    | 'The girl is going.' |               |    | 'A girl is going.' |               |

## (2) Besleney Kabardian:

- |    |                                    |                         |                |
|----|------------------------------------|-------------------------|----------------|
| a. | <i>ž'ema-r</i>                     | <i>qe-s-š'exʷ-a</i>     |                |
|    | cow-ABS                            | DIR-1SG.ERG-buy-PST     |                |
|    | 'I bought the cow.'                |                         |                |
| b. | <i>ž'em</i>                        | <i>qe-s-š'exʷə-ne-w</i> | <i>s-o-kʷe</i> |
|    | cow                                | DIR-1SG.ERG-buy-FUT-ADV | 1SG.ABS-DYN-go |
|    | 'I'm going in order to buy a cow.' |                         |                |

## (3) Temirgoy Adyghe:

- |    |   |                                  |
|----|---|----------------------------------|
| a. | <i>ɻaze-deṛʷə</i>                           | <i>w-jə-ke-χʷəž'ə-š't</i>        |
|    | doctor-good                                 | 2SG.ABS-3SG.ERG-CAUS-recover-FUT |
|    | 'A good doctor will [be able to] cure you.' |                                  |
| b. | <i>ɻaze-deṛʷə-m</i>                         | <i>w-jə-ke-χʷəž'ə-š't</i>        |
|    | doctor-good-OBL                             | 2SG.ABS-3SG.ERG-CAUS-recover-FUT |
|    | 'The good doctor will cure you.'            |                                  |

Unmarked nominals in Circassian display number neutrality, scope inertness (4), and cannot be modified by demonstratives or substituted by pronouns. However, contrary to what is further expected from Pseudo-Incorporation (Massam 2001 and subsequent work), they need not be adjacent to the verb, may antecede pronouns and are not accompanied by valency reduction. Finally, a Circassian clause may contain several unmarked nominals in different grammatical roles (5).

## (4) Temirgoy Adyghe:

- |    |  |             |                     |                |
|----|--|-------------|---------------------|----------------|
| a. | <i>tjetrad</i>   | <i>pepč</i> | <i>wəs-ja-tʷ</i>    | <i>de-tə-κ</i> |
|    | notebook   | every       | poem-LNK-two        | LOC-stand-PST  |
|    | 'In every notebook, there were two poems.' (different in every notebook) |             |                     |                |
| b. | <i>tjetrad</i>   | <i>pepč</i> | <i>wəs-ja-tʷə-r</i> | <i>de-tə-κ</i> |
|    | notebook   | every       | poem-LNK-two-ABS    | LOC-stand-PST  |
|    | 'In every notebook, there were <b>the</b> two poems.' (same)             |             |                     |                |

## (5) Besleney Kabardian:

- |   |               |                                 |             |
|---|---------------|---------------------------------|-------------|
| <i>p̥eše=keſa</i>   | <i>qəvəke</i> | <i>jə-r-jə-tə-n-wə</i>          | <i>xʷje</i> |
| girl=well.mannered  | flower        | 3SG.IO-DAT-3SG.ERG-give-POT-ADV | want        |
| 'He wants to present flowers to (some) well-mannered girl.' |               |                                 |             |

We assume that the case and number features in Circassian characterize the full nominal construction – DP, but not the “small nominal” (Pereltsvaig 2006), i. e. a bare NP. What is uncommon, assuming that the NP vs. DP model is adequate for many languages, is that the distribution of NPs and DPs in Circassian is close to identical.

The Circassian two-layered structure of nominal constructions can be also extended to the languages of the Abkhaz-Abaza branch of the same family, which morphologically encode definiteness and number, but not case. Here, like in Circassian, only DPs can take number marking, cf. (6). However, bare NPs are more restricted than in Circassian, being able to denote e.g. non-specific arguments under sentential negation (Hewitt 1979: 154), cf. (7).

## (6) Abaza:

- |    |                |                |                   |       |                |    |               |
|----|----------------|----------------|-------------------|-------|----------------|----|---------------|
| a. | <i>a-č-kʷa</i> | b.             | <i>č-kʷa-k</i>    | c.    | <i>čə</i>      | d. | <i>*č-kʷa</i> |
|    | DEF-horse-PL   | horse-PL-INDEF |                   | horse |                |    | horse-PL      |
|    | 'the horses'   |                | 'horses (indef.)' |       | 'horse/horses' |    |               |

(7) Abkhaz:

չ տ sə-m-ba-jt  
cow 1SG.ABS-NEG-see-FIN  
'I didn't see a cow (any cows).'

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#### Expressing necessity in Spanish: the case of *deber* ‘must’ and *tener que* ‘have to’

Modality undoubtedly constitutes an important field within linguistic research; in particular epistemic modality has received a considerable amount of attention during the last decades. And while it is true that several studies focused on expressions of so-called ‘root modality’ in English have been published recently (cf. Depraetere & Verhulst 2008, van Linden 2012 and Verhulst *et al* 2013), there is still a need for further research within non-epistemic modality, especially in languages other than English, which in most cases lack nuanced descriptions of the non-epistemic categories.

The aim of this study is to account for and discuss the non-epistemic readings of the Spanish modal verbs *deber* and *tener que*. In the literature on these verbs, there is a tendency to focus mainly on *force*, that is, the degree of necessity, when reporting on their semantic differences, usually concluding that *tener que* expresses a stronger necessity than *deber* (Sirbu-Dumitrescu 1988, Gómez Torrego 1988, Müller 2001). Another tendency is to consider non-epistemic necessity as one single category, labelled as deontic necessity (Müller 2001) or root necessity (Sirbu-Dumitrescu 1988, Sirva-Corvalán 1995). This paper aims to revise these previous accounts and provide new data in order to answer the following questions:

Is *force* a suitable parameter when trying to differentiate between *deber* and *tener que*? Is root modality a proper label when describing the necessity expressed by *deber* and *tener que* or is there a need for further classifications?

The data used for this research consists of 613 plenary debates from the European Parliament, conducted by 28 Spanish MEPs between 2010 and 2011. The verbs in question were classified according to variables such as tense, grammatical person and source of obligation.

The results indicate that one important difference between *deber* and *tener que* is the presence or absence of *volitivity*, an aspect of modality described in Narrog (2005). Volitivity can also be related to *attitude*, presented as a crucial factor in Nuys (2005, 2006) when distinguishing between deontic and dynamic modality. *Tener que* appears frequently in contexts where there is a lack of volition, expressing dynamic modality, as presented in (1), but is also common in cases of deontic modality, where there is an element of will. In contrast, *deber* appears almost exclusively in deontic contexts, as presented in (2), which seems to indicate that dynamic necessity is exceptionally rare with this verb.

- (1) Los ciudadanos europeos **tienen que** soportar un exceso de burocracia.  
 'The European citizens **have to** deal with excessive bureaucracy.'
- (2) Es preciso dejar muy claro que quien contamina **debe** pagar.  
 'We need to make it very clear that those who pollute **must** pay.'

Revisions of previous studies confirm that researchers tend to compare examples of dynamic *tener que* with examples of deontic *deber* concluding (erroneously) that one fundamental difference between the verbs lies in the force. The results presented in this paper show that it is crucial to make a distinction between the categories of deontic and dynamic necessity when comparing and describing *deber* and *tener que*.

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**Stefan THIM** (University of Vienna)

### Directionality in morphological change and the stories of verbal prefixation in medieval English

Historical accounts of English word formation tend to present neat unidirectional paths of development of derivational affixation in the language. Thus Old English is presented as the period where native prefixation thrives and the subsequent periods are said to be characterised by a dramatic decrease in native word formation, both with regard to the inventory of native affixes and with regard to their role in forming new words. By the Middle English period the fate of the native prefixes is commonly presented as sealed (Kastovsky 1992, Sauer 2010). For the loss of these prefixes in Middle English different phonetic, prosodic and semantic explanations have been put forward (Lutz 1997, Dietz 2004, Molineaux 2012) but there is general agreement that many of the prefixes are considerably weakened already towards the end of the Old English period. And although most of the borrowed Romance prefixes can clearly be shown to belong to different functional domains (Adamson 1999) the subsequent ‘depletion’ of the language of native prefixes is traditionally seen as connected to the influx of borrowed prefixes from French and Latin (Burnley 1992, Sauer 2013), whilst more recently it has been discussed as an instance of analytic drift in the domain of the lexicon (Haselow 2011).

This paper will show that such accounts are by no means satisfactory. Although it is well known that the Old English verbal prefixes ultimately derive from free spatial particles (Los et al. 2012, Thim 2012) it has been widely ignored that the Middle English period also witnesses the rise of a number of new native verbal prefixes, in particular down-, out-, up-. In Marchand (1969) and later accounts these are treated as verbal compounds, but their phonological, morphological and semantic properties clearly show that at least some of them become prefixes in post-Conquest English. Using data from OED3, the MED, the Penn-Helsinki Parsed Corpus of Middle English and additional evidence from Middle English poetry the paper will show the development to be the result of the interaction of various linguistic subsystems (Noel Aziz Hanna 2013) and discuss implications for the typological and long-term diachronic perception of English word formation.

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### 3-Way Systems Do Not Exist

*Claim:* We argue that argument encoding systems that seem to involve three syntactic core cases (nom/abs-erg-acc; Woolford (1997)) are common ergative or accusative systems with overt case markers for the two cases that disappear in intransitive contexts. Based on evidence from Kham (Watters (2002)), Djapu (Dixon & Blake (1983)), Nez Perce (Rude (1985)), Chilliwack Halkomelem (Galloway (1977)), and Dyirbal (Dixon (1972)), we show that a purely morphological approach to differential marking in terms of scale-driven optimization via harmonic alignment and local conjunction (Keine & Müller (2011), based on Aissen (2003)) can derive these systems straightforwardly if a transitivity scale is postulated in addition to the standard definiteness, animacy, and person scales (Hale (1972), Silverstein (1976)).

*Evidence:* There is evidence against genuine three-way systems, where the external argument of the transitive verb bears an overt ergative marker, the single argument of the intransitive verb is unmarked, and the internal argument of the transitive verb bears accusative marking. First, such systems are cross-linguistically quite rare, and they qualify as non-canonical (Corbett & Fedden (2014)). Second, assuming a minimalist approach comprising two case-assigning functional heads (T,v), and universal availability of an unmarked case, ergative and accusative are expected to be in complementary distribution (either erg=nom=case(T), as in Bobaljik (1993); or erg=acc=case(v), as in Müller (2009)). In contrast, relational approaches to case that predict three-way systems either as an option (Bittner & Hale (1996)), or as the unmarked case (Kiparsky (1999)) raise problems for strict locality. Third, apparent three-way systems usually also involve differential marking sensitive to Hale/Silverstein scales; to avoid redundancies in accounting for zero exponence, a conservative extension to (in)transitivity suggests itself. Fourth, many syntactic operations treat what we analyze as allomorphs of absolute case in exactly the same way; this is unexpected if there are two different syntactic cases (acc,abs).

*Deletion:* Scale-driven optimization is preferable to standard impoverishment rules. (i) Impoverishment \*stipulates\* the contexts in which deletion can take place, whereas scale-driven optimization \*derives\* implicational generalizations in this domain. (ii) In contrast to scale-driven optimization, impoverishment cannot treat the observable deletion contexts (e.g., "intransitive v" and "indefinite DP") as natural classes.

*Derivation:* The variations of the case markers in transitive and intransitive contexts are analyzed as instances of differential encoding which are derived in the same way as standard cases of differential argument encoding. To implement this, we pursue an optimality theoretic approach at the morpho-syntax interface. Abstract case is assumed to be assigned in the syntax as in Müller (2009). Subsequently, the output of the syntax is subject to an optimization. The constraints are derived by harmonic alignment of scales, local conjunction of the resulting constraint alignments and another local conjunction step with MAX( $\pm$ gov) which preserves the marked or unmarked case respectively. Finally,  $\pm$ gov which deletes case features is interspersed. This eventually leads to zero-marking for all arguments with the feature-combinations ranked below  $\pm$ gov.

*Outlook:* We show that syntactic processes in the languages of our sample refer to the abstract cases that our analysis predicts. Furthermore, we address the few pieces of potential counter-evidence suggesting that what we treat as allomorphic variation involves two separate syntactic cases (Legate (2008), Deal (2014)).

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**Nil TONYALI** (Boğaziçi University)

### An Analysis of Non-structural Datives in Turkish

Based on Pykkänen's (2002) high vs. low applicative typology, Cuervo (2003) has proposed that datives in Spanish are introduced by specialized applicative heads because similar to external arguments, datives have structural meanings which can be predicted by their configurations. Tonyali (2015) challenges the low applicative analysis, arguing that while non-core, additional dative benefactives can receive a high applicative analysis in Turkish, DOCs with an accusative theme and a dative goal/recipient argument are to be analyzed as postpositional ditransitives.

This research, which is the first comprehensive study of non-structural Turkish datives in the literature, investigates how the distinct meanings of dative arguments are realized in different morphosyntactic frames. In the light of recent research couched within theories of argument structure and event structure, I propose an analysis for datives which shows how their semantic interpretations correlate with their syntactic realizations. I argue that we cannot propose a uniform high applicative analysis for all datives in Turkish, contra Özkan (2013).

The main claim presented and defended in this research is that datives exhibit distinct semantic and syntactic properties with respect to the construction in which they appear (1-6); thus, their semantic interpretation is contingent on whether they appear in (i) postpositional ditransitive constructions (ii) high applicative constructions or (iii) are lexically licensed by the verbal root as the sole complement DP/PP.

- (1) Adam-lar hükümet-e çalış-iyor.  
man-Pl government-Dat work-Prog  
'The men are working for the government.'
- (2) Nazlı arkadaş-ın-a koş-tu.  
Nazlı friend-3Sg.Poss-Dat run-Past  
'Nazlı ran towards/to her friend.'
- (3) Anne-m Cem Yılmaz-a çok gül-er.  
mother-1Sg.Poss Cem Yılmaz-Dat very laugh-Aor  
'My mother laughs a lot about Cem Yılmaz.'
- (4) Çamur-lu kedi kadın-a deg-di.  
mud-Adj cat woman-Dat touch-Past  
'The muddy cat touched the woman.'

(5) Daha başka şey-ler var-sa bana email yaz.  
 more different thing-Pl exist-Cond. I.Dat email write.Imper.  
 'If there is anything else, write me an email.'

(6) Tarif-i bana (kağıt-a) yaz-ar mı-sın?  
 Recipe-Acc I.Dat paper-Dat write-Aor Int-2Sg.  
 'Could you write the recipe for me (on a piece of paper)?'

(1-3) illustrate a sole dative object combined with an unergative verb; however, only in the high applicative structure in (1) is the dative interpreted as semantically related to the unergative event as a benefactive participant. In (2-3) the relation denoted between the dative and unergative is not compatible with the semantics of a high applicative i.e. the agent does not 'run' or 'laugh' for the dative participant; the dative encodes a spatial goal (2) and conceptual target (3) denoting a directional sense of its allative meaning. In (4), the dative object is semantically licensed by the root of the 'Non-core transitive verb' (Levin 1999). The interpretational difference of the dative participant *bana* in (5-6) stems from the different syntactic configurations. In (5) the dative appears in a ditransitive encoding the recipient/addressee of the theme argument 'email' hence is related to the theme. In contrast, the applied benefactive in the high applicative structure in (6) is not interpreted as the addressee or necessarily the recipient of the theme, but is externally related to the event VP.

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#### The epistemic uses of modal verbs in contrast: a corpus-based study of French *devoir* and Estonian *pidama*

This paper examines a pair of core modal verbs of necessity in French and in Estonian: *devoir* and *pidama* ('must'). According to the descriptions proposed by different linguists (e.g. Erelt 2001, 2013 for Estonian and Kronning 2001, Vettors 2004, 2012 for French), these verbs convey a similar set of modal meanings: they are used to express dynamic and deontic as well as epistemic modality. Differences arise in the "postmodal" uses (van der Auwera and Plungian 1998). However, despite their general similarity, these verbs act differently also on their common ground of essential modal categories. The present study focuses on the uses of *devoir* and *pidama* labelled as epistemic.

The data used for this study was drawn from a parallel corpus (online: <http://corpus.estfra.ee/>) including Estonian and French literary and non-literary texts and their translations (ca 9 million words in these text types). Two separate corpora were formed for *devoir* and *pidama*, both including examples from original texts and from translations. It appears that there are rather significant differences between these corpora. In the corpus of *pidama*, in 62% of all the examples the verb *devoir* occurs as its counterpart in French texts (both in originals and translations). In the corpus of *devoir*, *pidama* appears as its correspondent in Estonian texts in only 25% of all the cases. Correlatively, the corpus of *pidama* presents 7% of adverbial equivalents, while in the corpus of *devoir* the proportion of adverbs rises to 44%. The differences between the directions of translation within the two corpora are not considerable.

The findings of the corpus suggest that variations in translation are not merely due to the preferences of translators but that they reveal also differences in the epistemic meaning of these two verbs. The French modal *devoir* seems to offer a wider range of epistemic uses than its Estonian counterpart: it allows

expressing different degrees of likelihood of a state of affairs on the scale from high to rather low probability, while Estonian *pidama* seems to stay closer to the pole of (very) high probability. French *devoir* may thus offer a verbal parallel for strong epistemic adverbs which tend to develop weaker epistemic values, as different authors have pointed out (see e.g. Byloo, Kastein, Nuyts 2006, Küngas 2013). This paper will take a closer look at the examples of the corpus and compare the cases of non-correspondence of *devoir* and *pidama* to the cases where their uses overlap. Different aspects will be taken into account in order to assess the specific epistemic values of the two verbs: the nature of epistemic adverbs and other equivalents used in translation; grammatical categories of the modal verb (tense, mood, polarity, person); the source and its subjective/objective nature of epistemic evaluation.

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#### Grammaticalization, pragmaticalization, interjectionalization? The case of Latin *em*

This paper aims at presenting an interesting case of grammaticalization. The Latin particle *em* –mainly attested in archaic Latin, but also in the works of later authors, such as Cicero (106-43 BC) or Apuleius (c. 124-c. 170 AD)– is a shortened form of *eme*, the imperative of the verb *emere* ‘to take, acquire, purchase’. The traditional understanding of this element has been that of a secondary interjection (as in Hofmann 2003/1926). This interpretation, however, presents a number of problems that ultimately derive from the lack of a pragmatic perspective.

In the Plautine comedies (*ca.* 254-184 BC), the original conceptual meaning of *em* is still attested in uses that can be paraphrased as ‘take this’, also in a metaphoric sense, when hitting someone. But apart from these occurrences, very limited in number, in a corpus as old as the abovementioned, this particle seems completely grammaticalized (as evidenced by the truncated form) and paired with procedural meanings. Therefore, the various discursive and pragmatic functions that emerge out of the contextual readings of *em*, mainly addressee oriented and regulatory of the communicative exchange, as well as their degree of conventionalization deserve a deeper analysis from a pragmatic point of view. Along these lines, the present work aims at offering an encompassing overview of the procedural meanings developed by the unit from the standpoint of grammaticalization and subjectification research (as presented by Traugott) and of pragmaticalization research (Dostie 2004; Ghezzi 2014, which presents a recent state-of-the-art based on Latin and Romance data).

I will analyze the totality of occurrences of *em* (around 150 in archaic, classical and postclassical literature), taking into account the linguistic and the situational context in which they appear, i.e. social relationship of the interlocutors, relative hierarchy, communicative intention, etc. I will also discuss the status of *em* as an interjection, since a description of the category focusing on functional rather than phonomorphological features (as presented in Unceta Gómez 2012) does not situate *em* within the development of subjective and expressive meanings that do emerge in other Latin lexemes, such as *hercle*, originally an oath, ‘by Hercules!', *malum* ‘damn!' or *obsecro* ‘please!', among others, and that allow them to be fully considered as interjections.

In this way, this work will help us not only to obtain a better understanding of the procedural meanings of this particular unit (and consequently a better understanding of the texts where *em* appears), but it will also provide us with a diachronic perspective of grammaticalization and pragmaticalization phenomena, amply

cyclical, that enriches the study of this kind of processes in the Romance languages, since several units of these languages, such as Spanish *toma* (imperative of *tomar*, literally ‘take’, but with different procedural meanings) or French *tiens* (imperative of the verb *tenir*, ‘take, grip, grasp’), find in Latin *em* an interesting term of comparison.

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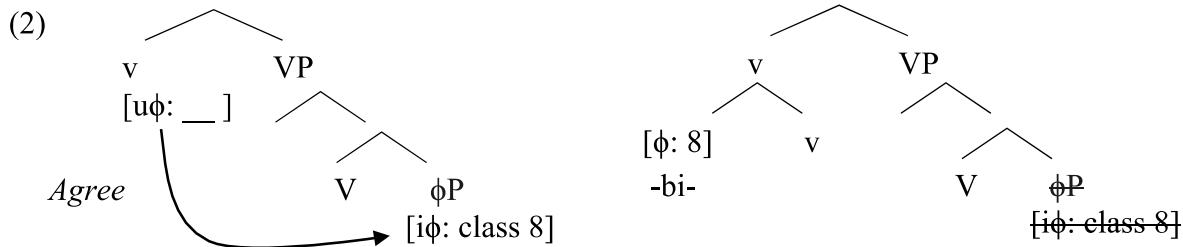
Jenneke VAN DER WAL (University of Cambridge)

## A featural account of variation in Bantu object marking

Bantu languages can mark objects on the verb by a prefix, such as *-bi-* in (1). There is a long-standing debate regarding the syntactic status of these **object markers (OM)** as **agreement or incorporated pronouns**, for particular languages as well as for linguistic theory in general.

- (1) Baana b-a-**bi**-kol-a. [Bembe, Iorio 2014]  
 2children 2SM-T-8OM-buy-FV  
 “The children have bought them.” [class 8, the books]

Roberts (2010) provides a **hybrid approach** to clitics: in an Agree relation, the Goal can be defective in the sense of having a subset of the features on the Goal. This relation is indistinguishable from a movement chain, where only the highest copy is spelled out. Concretely, if v agrees with a defective object pronoun (a  $\emptyset P$ ), the resulting spell-out looks like pronominal incorporation:



Iorio (2014) shows that Roberts' approach works for the Bantu language Bembe: all and only  $\phi P$  objects have object marking on the verb, local DPs are never object-marked, and DPs co-occurring with an OM are dislocated.

A first challenge addressed in this talk is how to analyse Bantu languages that allow object marking of a non-dislocated DP, so-called '**doubling**': the object in (2) is neither defective nor dislocated and yet it is object-marked.

- (2) U-\*(mw)-ene ndayi? [Sambaa, Riedel 2009: 155]  
 SM2SG-OM1-see.PERF.CJ who  
 ‘Who did you see?’

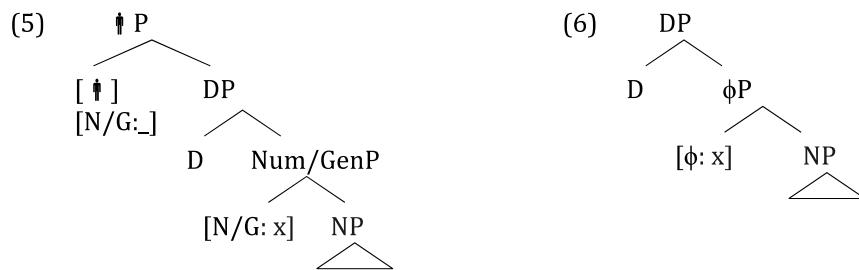
This is accounted for if objects in doubling languages can have an extra layer to form a ‘big DP’ (Uriagereka 1995, Cechetto 1999 among others; Bax & Diercks 2012 for Manyika). The same Agree operation finds the  $\phi$  features in the extra layer of the Goal, which is a subset and hence spells out as an object marker, while the DP is also spelled out.

A second challenge is the **differential nature** of Bantu object marking, where only objects that are high on

the hierarchies of animacy, definiteness or givenness are doubled (3).

- (3) a. N-a-**mo**-onaa                  mwalimu.                  [Nyaturu, Hualde 1989: 182]  
       1SG.SM-PAST1-1OM-see      1teacher  
       'I saw *the* teacher.'  
     b. N-a-onaa                  mwalimu.  
       1SG.SM-PAST1-see      1teacher  
       'I saw *a* teacher.'

Following Richards (2008), I suggest that this is due to the presence of a **[Person] feature** on these objects. Varying across languages, [Person] on non-participants is associated with animacy, definiteness, or givenness. Combining this with the bigDP analysis, I propose that doubled objects have [Person] as a separate layer (5), whereas non-doubled objects do not and are DPs (6).



This keeps Agree constant while varying the features of the Goal, resulting in a **typology of Bantu object marking** in featural terms:

**Type 1:** no object marker

Analysis: never uφ on v

Languages: Basaa, Eton, Nen etc.

**Type 2:** object marker is argument

Analysis: uφ on v, [Person] never in separate projection

Languages: Bembe, Zulu, Herero etc.

**Type 3:** object marker doubles

Analysis: uφ on v, [Person] can be in separate projection

Subtypes: [Person] associates with animacy, definiteness, givenness

Languages: Sambaa, Manyika, Makhuwa etc.

The approach is thus in line with the Borer-Chomsky Conjecture (Baker 2008) and a hierarchical organisation of these parameters (Roberts 2012) makes further predictions for typology.

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**Etcetera reduplication in Bengali: the strange case of consonant clusters**

Like several other languages, Bengali has a process of reduplication where a word is repeated but a fixed segment is inserted in initial position. The meaning of the combination is associative. Examples are:

- (1) a. alu 'potato' alu-ṭalu 'potatoes and similar things/etc.'  
     b. paka 'ripe' paka-ṭaka 'ripe and so; ripe etc.'  
     c. bɔja 'sit' bɔja -ṭɔja 'sit and so; sit etc.'

- d. khawa ‘eat’ khawa-dawa ‘eat and so; eat etc.’
- e. ṭupi ‘hat’ ṭupi-ṭhupi/ṭupi-ṣupi ‘hats and so; hats etc.’

The literature on this process (e.g. Trivedi 1990, Fitzpatrick-Cole 1996, Khan 2006) makes clear it is productive across bases belonging to different word classes. The fixed segment is normally /t/, (1a-c), though there are some lexical exceptions, (1d), and another consonants has to appear whenever the base word itself has initial /t/, (1e).

An analysis of these facts is presented in Mukherji (2014), who proposes that the reduplicated element (RED) in effect has no underlying phonological shape but consists of the following set of OT-type constraints, ranked here from lowest to highest:

- C = /t/
- RED = base
- Onset
- \*[base C1-] [RED C1-]

To account for reduplication of words starting with a consonant cluster, Mukherji adds a constraint \*CC-, reflecting the pattern that RED in such words starts with a single C, as in prem-ṭem ‘love etc.’, bristi-ṭisti ‘rain etc.’.

However, as shown in Thompson (2012: 313), there is another pattern, where the second C of a CC-initial word remains and the first one is replaced by /t/, yielding the forms prem-ṭrem and bristi-ṭristi. Some speakers allowing this second pattern (which appears to be prevalent especially in Eastern Bengali) apply it even when the result fails to observe the usual phonotactics of the language. In particular, they produce forms like klanto-ṭlanto ‘tired etc.’, plabon-ṭlabon, ‘flood etc.’, glani-ṭlani ‘weariness etc.’, violating the ban on syllable-initial ṭl found across the language. Kar (2010: 52ff) attributes this ban to a constraint \*CorLat and it would be possible to analyse the strange case of klanto-ṭlanto ‘tired etc.’ as showing deranking, of both the \*CC and \*CorLat constraints. However, questions then arise about why there is such deranking of \*CC and \*CorLat in etcetera reduplication and what the exact difference is between cluster-reducing and cluster-preserving speakers.

To answer these questions, I will first present native-speaker judgment and production data for reduplication of several types of cluster-initial words and then proceed to use these for an account where, firstly, the operation leading to the RED form can take as its input either the citation form of the base or its colloquial realisation and, secondly, the identity of the initial C in RED is radically underspecified. In doing so, I hope to show that accounting for the facts of etcetera reduplication in Bengali can be more than an exercise in ranking the constraints playing a role in this process; instead, it can help shed light on the nature of possible operations in the language.

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### A Cross-Linguistic Survey of Dative Shift in West-Germanic: Pragmatically Influenced Undergoer Selection in Dutch?

Dative shift is a well-known linguistic phenomenon that has been studied extensively in the literature (Larson 1988, Pinker 1989, Jackendoff 1990, Rappaport Hovav & Levin 2008 amongst others). Dative shift involves a ditransitive verb whose two non-subject arguments undergo a change in syntactic status relative to each other: The prepositional phrase expressing the direct object becomes a noun phrase in order to form a double-object construction. Consider the following Dutch sentences:

(1) Peter gaf [het boek] [aan Jan]

DO IO

(2) Peter gaf [Jan] [het boek]

O O

This phenomenon has been found to be limited to certain classes of verbs (Rappaport Hovav & Levin 2008): Several ditransitive verbs like *give* or *hand* allow it, whereas verbs like *donate* or *expose* do not. Many analyses of dative shift are generative in nature or take a neo-Davidsonian approach. Groefsema (2001) turns to verb-specific contextual information coupled with one general constraint whereas Colleman (2009) analyzes the Dutch dative shift from a corpus-based perspective. I will present an account of the

Dutch dative shift using the Role and Reference Grammar framework (Van Valin & LaPolla 1997, Van Valin 2005) and highlight cross-linguistic differences between English, German and Dutch.

Role and Reference Grammar (or: *RRG*) is a monostratal grammatical framework with a semantic component based on Dowty's concept of lexical decomposition. RRG couples such lexical decompositions, which are ultimately rooted in Vendler-type *aktsionsart* classes, with the two generalized semantic roles (*macroroles*) *actor* and *undergoer*. These generalized semantic roles are assigned to the arguments in the semantic representation on the basis of a hierarchy: The highest-ranked argument becomes actor, the lowest-ranked argument becomes undergoer. In terms of decomposed structures this means that the left-most argument becomes actor and the right-most becomes the undergoer. In the case of a ditransitive verb, the third argument does not receive a macrorole, rather it becomes the *non-macrorole argument*. While actor selection is absolute (i.e. always the highest argument), undergoer selection is not. Dative shift is analyzed in terms of *variable* undergoer selection. In the sentence in (1) *het boek* is selected as undergoer, whereas in (2) *Jan* is selected as undergoer. Pragmatics (*information structure*) permeates RRG and can influence all parts of the grammar, including argument linking.

Based on a small exploratory data set with English, German and Dutch data, I argue that dative shift is most productive in Dutch, whereas German allows for it least. For example, the Dutch equivalents of *give*, *hand*, *donate*, *expose* and *explain* all allow dative shift. By contrast, German only allows dative shift with *give* (even then it is highly marked). I will present data that show that Dutch undergoer selection with ditransitive verbs is primarily driven by pragmatics, rather than by semantics alone. Information structure patterns directly influence undergoer selection. In summary: In Dutch pragmatic information is directly reflected in the morphosyntax of core participants, contrary to German and English where semantics and syntax are of primary importance.

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### Grammar and politics

In the analysis of political discourse, relatively sparse attention is paid to grammatical phenomena and their rhetorical effects (cf. Fausey & Boroditsky, 2010). As far as grammatical phenomena are studied, the focus is generally on linguistic devices that can be used to hide agency, like nominalization and passivization (cf. Dirven et al. 2007: 1230), or on transitivity analysis. This paper is a plea to pay more systematic attention to *other* grammatical phenomena in political discourse as well.

The way the Dutch radical populist Geert Wilders uses so called 'complementation constructions' serves as an example. Complementation constructions are constructions like '*I think that we will be in time for the football match*', i.e. sentences in which a so-called 'matrix clause' (*I think that...*) expresses the speaker's stance towards a standpoint that is mentioned in a 'complement clause' (*we will be in time for the football match*). Complementation effects the degree of certainty by which a speaker presents his ideas (Verhagen 2005: 105–107): By explicitly presenting his stance towards a standpoint, the speaker leaves room for *other* perspectives on the same situation – which leaves more room for negotiation and discussion than when a speaker presents his opinions without complementation, i.e. directly, 'as a matter of fact' (cf. *We will be in time for the football match*).

In Dutch media it has been observed that Geert Wilders' language use has become more 'radical' and 'certain' between 2004 and 2009. Is this development reflected in Wilders' use of complementation constructions? Did Wilders' use of complementation constructions decrease? To answer this question, a corpus of 47 parliamentary speeches held by Wilders between 2004 and 2009 was analyzed (approximately

8000 words per year). By using Atlas.ti (a computer program for qualitative data analysis), the speeches were formally coded for different types of complementation (e.g. ‘personal’ and ‘impersonal’ complementation constructions (Verhagen 2005)) and functionally classified to whose perspective is presented in the matrix clause (cf. *I believe that...* vs. *the minister believes that...*).

We found that Wilders’ use of complementation constructions in which Wilders’ stance is expressed in the matrix clause, indeed decreases significantly between 2004 and 2009. This decrease is not a gradual transition, however: a strong break occurs between 2006 and 2007. This is an indication that Wilders offers less room for discussion from this period onwards. It is striking that this change coincides with the moment that Wilders’ political *ideas* became more radical (cf. Vossen 2009).

The case study not only shows the importance of paying more systematic attention to grammatical phenomena in stylistic analysis of political discourse; also the significance of combining quantitative and qualitative methods of stylistic analysis will be stressed.

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**Daniel VAN OLMEN (Lancaster University)**

#### **A corpus-based study of the evolution of Dutch “zo’n” ‘so a’**

Dutch “zo’n” in “zo’n man” ‘such a man’, unlike its paradigmatic counterpart for plural and mass nouns “zulk” in “zulke mannen” ‘such men’ and “zulk hout” ‘such wood’ respectively (at least in the standard, Northern variety), has not been studied from a diachronic perspective in much detail (cf. Ghesquière & Van de Velde 2011). This similiative marker (see Umbach & Gust 2014 for a comparable term) has been said to be a 17th-century innovation, to have univerbated in the 18th century and to have risen to prominence in the 19th century (Van der Horst 2008). It has also been suggested that it has followed Bolinger’s (1972) well-known path identification→intensification, causing a decrease in frequency of the older form “zulk”, particularly of its intensifying use (Ghesquière & Van de Velde 2011: 789-791). This paper will trace the formal and functional development of “zo’n” and its variants in a corpus of 16th- to 20th-century texts taken from the DBNL (Maatschappij der Nederlandse Letterkunde 2012) complemented with data from the CGN (Nederlandse Taalunie 2004). The goal is to verify the diachrony sketched above and compare the two markers. The functional evolution of “zo’n” will also be discussed in relation to the (inter)subjectification literature.

The preliminary results suggest that, generally, the aforementioned claims are borne out. Like “zulk”, “zo’n” exhibits a growing proportion of intensifying uses over time, which seems to go hand in hand with an overall increase in frequency. The initial rate of intensifying uses, however, is already remarkably high and most instances actually involve a modifier in-between similiative marker and noun. In this respect, “zo’n” differs from “zulk”, whose shift to intensification has been shown to start in noun phrases without modifiers (Ghesquière & Van de Velde 2011: 784). This dissimilarity may be explained by the earlier existence of the patterns ‘so’+Mod+’a’+N and ‘a’+’so’+Mod+N (Van der Horst & Van de Velde 2003) and by analogy with the patterns “zulk” was found in at that time. Another way in which “zo’n” appears to map onto “zulk” is rightward movement within the noun phrase, as evidenced by, inter alia, the occasional attestation of “geen zo’n” ‘no so a’ instead of “niet zo’n” ‘not so a’ later on. The tentative Det-to-Adj movement of “zo’n” may be argued to meet the leftward Adj-to-Det movement of “zulk” (Van de Velde 2009: 267-271) halfway and to point to paradigmaticization. A final preliminary finding concerns the development unique to “zo’n” of a recognitional use (cf. Himmelmann 2001: 833), in which S introduces something as a typical instance of a type assumed to be known by A and in general. A case will be made that it has evolved out of the identifying use and the bridging contexts are expected to be found on closer examination of the data. It will also be argued that Ghesquière et al.’s (2012) typology of intersubjectivity does not capture the change in a satisfactory way, as both uses are arguably textually intersubjective, and that it is better analyzed as a shift from immediate (S+A) to extended (S+A+third party, of an unspecified

nature in this particular case) intersubjectivity, a distinction based on Theory of Mind and made by Tantucci (2013).

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#### **English categorizing copular clauses: construing ascription and specification**

This paper aims at developing a comprehensive cognitive-functional description of categorizing copular clauses in English, i.e. clauses in which be links a typically definite NP and an adjective or noun phrase. We argue, firstly, for a semantic analysis not in terms of the logical notion of ‘class inclusion’, but in terms of a correspondence relation between instance and schema, which can naturally accommodate a graded assessment of the instance (subject) vis-à-vis the schema (complement), as in (1a), (2a) (Langacker 1991, Author2 1992). Secondly, we propose that the relation between instance and schema can be construed

- (i) ascriptively (1-2): the complement realizes type-attribution to the subject (Langacker 1991: 67),
- (ii) specificationally (3), with one or more instances (‘values’) being specified as satisfying the criteria of the schema (‘variable’) (non-exhaustive specification, Lambrecht 2001).

Treating the latter as categorizing copulars reveals generalizations that are lost in the tradition that views them as identifying (e.g. Halliday 1994).

- (1a) My mother is very POOR [ascr. compl.]. (WB)
- (1b) ... the SITUATION is difficult [ascr. compl.], not me (Google)
- (2a) Ezekiel is very much a VISIONARY[ascr. compl.]. (WB)
- (2b) PETS [ascr. compl.] they may be, but ... they dig up the soil... (WB)
- (3a) [on spelling of ‘Jahweh’] Another version [variable] was YESHUA or JESHUA [value]. (WB)
- (3b) ... Nick’s. His [value] was another name that had become a CURSE [variable] (WB)

We ground our semantic analysis in the distinct syntactic behaviour and typical information structures of the two categorizing clauses, and in the different referential statuses of their NPs. We will offer a qualitative and quantitative analysis of a random sample ( $n = 5,000$ ) of categorizing clauses, as well as of datasets extracted on particular features of the subtypes from WordbanksOnline (WB).

In support of the specifical analysis of clauses like (3) we will verify their reversibility, i.e. subject-complement switch (Huddleston 1984) as reflected in differing agreement and case, and to be distinguished from fronting of the complement found with ascriptive clauses (2b). Regarding information structure, we discuss the typical information foci (indicated in capitals), viz. on the ascriptive complement (1a)-(2a) and on the value specified for the variable (3a), while also studying marked cases like contrastive focus on the subject (1b) and anaphoric, given values like his in (3b), which show that the contrast ascriptive – specifical does not reduce to a contrast between information structures.

Different referential statuses are crucial to the contrast between nominal ascriptive complements, assumed to be non-referential and variables, which are indefinite non-specific NPs to which a presupposition of existence attaches (Declerck 1988). To arrive at a fuller characterization, we will inventory the indefiniteness and quantity markers which the ascriptive complement (e.g. a, some, zero) and the variable (e.g. another, one) can take. We will also systematically investigate the discursive embedding of the ascriptive complement and the variable: we predict that the type specifications (Langacker 1991) of the former are typically discourse new, while those of the latter are partly discourse-given (cf. Mikkelsen 2005).

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#### **Repair and exemplification in Plato's Republic: a conversational strategy at the service of persuasion**

Plato's imitation of learned conversation is probably one of the most interesting labs where the contributions of Pragmatics and Discourse Studies may be tested in ancient Greek. At the same time, the achievements in the field of discourse structure (Kroon 1998; 2009), discourse markers (Schiffrin 1986; Fischer 2006; Loureda & Acín 2010) and talk-in-interaction (specially in Conversation Analysis: Sacks, Schegloff & Jefferson 1974; Schegloff 2007) may shed light —as never before— on the linguistic architecture of Platonic dialogues. In addition, these dialogues hoard problems that challenge modern Linguistics, such as the status of corpus-languages or the representation of orality in written texts. Within this framework, my proposal consists of identification and analysis of some conversational strategies that become recurring patterns in Plato's dialogues, in order to understand their actual meaning and value in discourse. Specifically, I will focus in passages such as (1):

- (1) Context: Socrates asks Glaucon: "Do you think then, when it comes to guarding, that there is any difference in nature between a well-bred dog and a young man of good family?"

Glaucon:  
 To poion legeis;  
 ART-ACC which-ACC say-PRS.2.SG  
 "What do you mean?"

Socrates:  
 Hoion  
 such-NT.SG  
 "For example,

(both of them must be keen sighted and nimble at pursuing their prey when they have spotted it, and again strong when they need to fight it out when they have captured their quarry.") (Plato, Republic 375a)

This sort of exchange occurs —with very few variations— at least 15 times in Plato's Republic. Two different operations are displayed: (i) other-initiated repair [To poion legeis;] (Sacks, Schegloff & Jefferson 1974); (ii) exemplification [introduced by oion]. Exemplification makes part of the so-called reformulative operations, for which see Pons Bordería (2013). Both are easily found in everyday conversation, and therefore may be considered a good sample of the accuracy of Plato's literary technique; but an attentive analysis of these contexts reveals that the use of this combination is far from being merely stylistic. The results of my study reveal that, by conjoining repair and exemplification, Plato creates a complete persuasive strategy, in order to skip some argumentative problems. Linguistic analysis becomes, therefore, a very helpful tool to approach Plato's philosophy through its imitation of natural talk.

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### **Modeling language change: An algorithmic interpretation of paradigmatic irregularities in Old English s-stems**

As many evolutionary phenomena, such as biological evolution or geomorphological changes, language change is diachronically dynamic, but to a synchronic observer, language is ostensibly stable. This fact raises two compelling questions about the nature of language. How can language be a functional means of communication when constantly changing? And how can a coherent system change without being restored to its equilibrium position? We believe that the answers to these questions can only be found if language is conceived of as an instantiation of the so-called Complex Adaptive System (Beckner et al. 2009), where the language user is primarily a probabilistic learner.

The present study aims at illustrating the validity of some of the general assumptions made in the dynamic system approach by testing a concrete case from the history of English. The paper applies a stochastic model which is based on the following factors: random spontaneous variation, non-random variation caused by articulatory ease of speech, non-random variation caused by analogical pressure, as well as the language user's pursuit of effective communication and the inclination to comply with other people's way of speaking. In this framework, grammar is not the product of an inborn blueprint, but a system that emerges from the process of self-organisation of linguistic signs (e.g. Versloot 2008, Bloem, Versloot & Weerman 2014).

A computational model employing these factors is applied to investigate the developments in the Old English declensional class of neuter s-stems. With a single exception of the fossilised plural form children (OE *cildru*), this inflectional type was completely lost in English, in marked contrast to other West Germanic languages (e.g. German *Kälber*, *Kinder*, Dutch *kinderen*). In the transition from Proto-Germanic to Old English, nouns in the s-stem declension developed various paradigmatic irregularities. Some of them have been commonly ascribed to regular phonological development, while others are explained in terms of analogical levelling. No explanation has been offered with regard to the question why the working of analogy in the paradigms of s-stems was so selective, applying only to a subset of nouns.

The model used in the present study employs a recursive and repetitive algorithm that simulates the developments in the paradigm of s-stems. The model itself is not teleological. It is the interaction of all the factors in the model, combined with the different input values (especially frequency distributions), that leads to different outcomes (i.e. the different shape of paradigms for individual s-stems).

The analysis reveals that the historically observable changes and the lexical sub-variation found in the development of this declensional class can be predicted by a model that is built on the aforementioned factors and speaker's communicative goals. It shows that all attested paradigms developed, in fact, according to sound laws, provided that these sound laws operate in the context of language as a complex adaptive system that is sensitive to lemma-specific differences in frequency distributions across various cells in the paradigm.

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**Contrast and Convergence. A comparison of original and translated English and Swedish texts containing verbs meaning SIT, STAND and LIE.**

The verbs of sitting, standing and lying have been extensively studied both from a typological (Newman 2002), contrastive (Kortteinen 2008, Viberg 2013) and L2 (Lemmens & Perrez 2012) perspective. This study combines corpus-based contrastive studies (Johansson 2007) with certain aspects of translation studies (Halverson 2010, Malmkjær & Windle 2011, Munday 2008) and crosslinguistic influence (Jarvis & Pavlenko 2008) in bilingualism and language contact. Data are taken from the English Swedish Parallel Corpus (ESPC) compiled by Altenberg & Aijmer (2000). The ESPC contains original printed texts in Swedish and English together with their translations (total 3 million words). This makes it possible to prepare a contrastive study based on comparable originals in both languages. Translation effects can be studied by comparing originals and translations in each language. Both lexical and structural translation shifts were studied. The texts are divided into two broad genres: Fiction and Non-fiction, which makes it possible to study register-based variation across languages. In both languages, postural verbs have a much higher frequency in fiction than in non-fiction. Figurative uses are dominant in non-fiction. At a global level (by comparing the total frequencies of each verb in different sub-corpora), the two language differ widely: In original texts, the Swedish postural verbs are significantly much more frequent, than their English direct correspondents in spite of the fact that all verbs are cognates which are transparently related in form (Sw: *sitta, stå, ligga*) and share the core meanings. In translated texts, the English verbs are significantly over-represented (in comparison to original texts), whereas the Swedish verbs are significantly under-represented. The bulk of the study is devoted to a more fine-grained analysis of different uses (senses) of the verbs. In particular, uses with different types of subjects (and their subtypes) are compared (human, physical objects, buildings, places, writing, abstract). The translation effect is stronger for human than for inanimate subjects. Use of the latter type of subjects with postural verbs is more marked in English. Usage-based differences (when a shared sense is more frequently used in original texts in one of the languages) tend to be strongly affected and show convergence, whereas contrasts at the level of the system tend to be intact when there are absolute differences (no semantic overlap). The results concern professional translators translating into their L1. Crosslinguistic influence is often more radical in production by L2 learners.

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**Marine VUILLERMET** (Radboud University, Nijmegen)**A tentative typology of apprehensives**

As pointed out by Plank (2013), one may wonder what apprehensive exactly is. Indeed, apprehensive morphemes – or what I call, for more transparency, “fear”-morphemes – have been very little described yet – besides Lichtenberk’s (1995) (little known) seminal paper. Majid (2012) even considers the grammatical encoding of fear as being cross-linguistically uncommon. But “fear”-morphemes may have only suffered from a very heterogeneous terminology (admonitive, adversative, evitatives, objurgative, timitive, to name only a few), from their frequent polyfunctionality (reflected in the terminology), from their low frequency (especially in narratives), and maybe also from a Eurocentric bias.

Having scrutinized 40 languages which display “fear”-morphemes, I will argue that the apprehensional domain (term probably coined by Dixon (1977, 350)) divides into 3 functions:

1. APPREHENSIVES, which have scope over the main clause;
2. PRECAUTIONING morphemes, which usually have scope over a subordinate clause (but sometimes also on a syntactically independent, coordinated clause) and may subdivide into the PREVENTIVE and the IN-CASE sub-functions;
3. AVERSIVES, which have scope over an NP.

Each function is illustrated in turn:

- (1) ?ám-än tih g’ëç!  
2SG-OBJ 3SG bite.APPR  
(‘watch out,) he’ll bite you.’ (Hup, Makú, in Epps (2008, 631))
- (2) Alifii-laa ada wela ka ada.  
be\_noisy-NOMI PREC child SEQ wake\_up  
(‘Quiet, (or) the child will wake up (lit. being noisy, the child will wake up).’ (South Lau, Austronesian, in Lichtenberk (1995, 303)))
- (3) E-sho’i dokuei’ai=yajaho towaa-’io-nahe ena=wasije.  
NPF-child stag=AVERSIVE jump-TEL-PAS water=ALL  
(‘The child jumped into the water out of fear of the stag.’ (Ese’aja, Takana, in Vuillermet (2012, 587))

I will also demonstrate the semantic coherence of each function, point to a few interesting semantic variants, and finally discuss a fourth potential candidate.

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**Dunja WACKERS and Henrike JANSEN** (Leiden University)**Strategic uses of the ‘Dat zegt X’ construction in Dutch**

Getting across an argument in a sound yet effective way requires choosing one’s words carefully. From this perspective, we will examine the ‘Dat zegt X’ construction when used in an argumentative context. The ‘Dat zegt X’ construction encompasses expressions like ‘Dat zegt alles’ (‘That says everything’ or ‘That says it all’), ‘Dat zegt veel’ (‘That says a lot’), and ‘Dat zegt (wel) iets’ (‘That says something’). Using the extended theory of Pragma-Dialectics as a theoretical framework, in this paper it is shown how in everyday Dutch communication the ‘Dat zegt X’ (‘That says X’) construction is used as a means to get one’s argument accepted by manoeuvring strategically between the dialectical aim of appearing a reasonable discussant and the rhetorical aim of deciding the dispute in one’s favour. More specifically, it will be

argued that each instantiation of the ‘Dat zegt X’ construction functions as the inference license of an argument, explicating the justificatory power of an argument saying that if one accepts a given premise, one should also accept the conclusion that is drawn from it. In ordinary discourse, this element of an argument most often remains implicit.

This paper starts with a linguistic analysis of the construction, demonstrating how ‘Dat zegt X’ functions as an idiomatic expression in Dutch. It is shown how this expression can either stand on itself as an independent main clause or as a juxtaposed sentence, or can be split into a subject clause and predicate. Subsequently, the meaning and function of different forms of the construction are looked at in more detail, providing the starting point for an argumentative analysis that accounts for the construction’s rhetorical strength. Examples from our corpus study will be used to highlight how linguistic aspects of using a ‘Dat zegt alles’ construction bring along a number of rhetorical advantages but make a discussant run the risk of committing a number of fallacies as well. For instance, most evidently, by giving an argument an air of self-evidentness or obviousness (to a greater or lesser extent, depending on the specific instance of the construction), the ‘Dat zegt X’ construction can be used as a means to avoid having to back up the underlying relationship between a premise and the conclusion that is being linked to it. Two fallacies that can be committed in this respect are the fallacies of evading the burden of proof and misusing uncleanness or ambiguity. Other fallacies may be committed, however, dependent on the specific instance of the ‘Dat zegt X’ construction that is used. These fallacies concern the (specific) underlying inference license expressed by ‘Dat zegt X’ and can be detected by a set of critical questions we will propose in our paper. The unique combination of linguistic and argumentative insights in this paper aims to provide a more systematic account and deeper understanding of the rhetorical aspects of language use.

**Max WAHLSTRÖM and Kaius SINNEMÄKI** (University of Helsinki)

### **Loss of case inflection, rise of the definite article—Evidence for a typological tendency?**

As it is well known, in a large number of Indo-European languages spoken in Europe, case inflection has been lost and a definite article has meanwhile emerged as, for example, in the South Slavic varieties spoken in the Balkans, most notably Bulgarian and Macedonian:

- (1) Old Church Slavonic. Codex Marianus, 11th Century (John 1:50).  
 viděhъ тѣ подъ смоковъnic-ejо<sup>q</sup>  
 I-saw you.ACC PREP fig\_tree-INS  
 ‘I saw you under the fig tree’
- (2) (Early) Modern Balkan Slavic. Tihonravov Damascene, 17th Century (Dëmina 1985, 245).  
 si починете под дрѣво-to  
 REFL rest.IMP.2PL PREP tree-DEF  
 ‘rest under the tree!’

In this paper, we study on the basis of synchronic typological data whether case inflection and the definite article might be interconnected in this way across languages.

Our hypothesis is that languages with no case marking or with a smallish case system (four cases or fewer) would tend to have a definite article more likely than those with a large case system (five cases or more). The data for definite article comes from Dryer (2013) and the data for case marking from Iggesen (2013); altogether the sample contains data for 176 languages.

We tested the hypothesis using generalized mixed effects modeling (cf. Bentz & Winter 2013). The definite article was modeled as the dependent and the number of cases as the predictor, while genealogical affiliation at the genus-level was modeled as a random intercept and areality as a random slope (using the WALS six-way areal classification). Each variable’s effect was evaluated using likelihood ratio test.

The results suggest that there is a negative relationship between definite article and case marking independent of areality. However, it is difficult to conclude whether this relationship is really independent of areality, as this may depend on the way the case variable is coded. We further discuss what the causal connection between definite article and case marking might be, arguing that the potential linguistic domain that connects these features can be found in the marking of the information structure of a sentence.

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**Song WANG and Changyuan LIU** (Harbin Institute of Technology)

**Understanding Chinese Graduate Students' Intercultural Communication Anxieties and Their English Literacy Problems**

As China is getting more and more involved in the globalised world, Chinese students are more ready to go abroad to further their study. When international graduate students communicate with their foreign advisors in educational settings, both parties have different feelings, thoughts, worries and expectations in terms of the effectiveness of their interaction. This kind of intercultural communication anxiety has become a very important variable influencing the instructional effectiveness of international education.

This paper focuses on the intercultural and interpersonal aspects of the communication between Chinese graduate students and American advisors in the U.S institutions of higher education. It attempts to identify the intercultural communication anxieties expressed by Chinese graduate students and their American advisors in educational contexts and to compare differences in their communication anxieties. To achieve that, a questionnaire was developed and a follow-up interview was conducted. Altogether, one hundred and seven Chinese graduate students and forty-nine American advisors participated in the questionnaire survey. Among them, ten Chinese graduate students and six American professors participated the follow-up interview. The results showed that both Chinese graduate students and American advisors expressed a higher level of anxiety about students' language proficiency and communication in classroom settings. Culture-related behaviors appeared to be less a barrier than English language to Chinese graduate students' academic communication. Besides, this paper describes three potential English literacy problem areas for Chinese graduate students. The three areas are: (1) the influence of cultural and personal prior knowledge, (2) the processes of education that students learned from their schools, and (3) the linguistic characteristics of Chinese EFL students. Some instructional ideas are provided which can be useful in addressing these potential problem areas.

**Fred WEERMAN, Jing LIN** (University of Amsterdam)  
and **Hedde ZEIJLSTRA** (University of Göttingen)

**On the licensee question of NPIs from the perspective of language acquisition:  
the case of Dutch *hoeven* 'need'**

Negative polarity items (NPIs) are lexical items that only survive in negative contexts. Dutch modal verb *hoeven* 'need' is an NPI (Zwarts 1981; Van der Wouden 1997; Hoeksema 2000), which is only grammatical in the scope of a sentential negation, a negative indefinite, etc. (see (1)).

The restricted distribution of NPIs such as *hoeven* to negative environments only, gives rise to a question as of why NPIs can only survive in negative contexts only, which is known as the *licensee* question in studies on NPIs (cf. Ladusaw 1996). In order to answer this question, we chose to investigate acquisition. The reasoning here is as follows. If we assume that the target analysis of an NPI emerges as a result of language acquisition, then an exploration of the learning path of this NPI can shed light on the properties underlying its NPI-hood in the target grammar.

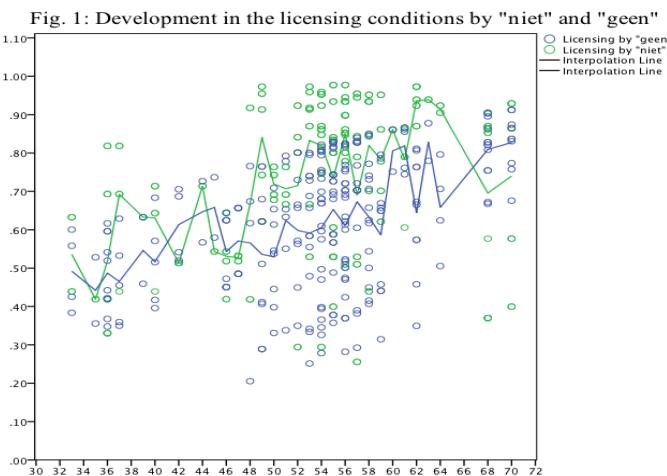
We therefore administrated a sentence repetition task to 132 monolingual Dutch children between age three and five (age range: 33-70 months; mean=52 months; SD=9.3 months). As to examine children's knowledge on *hoeven*-licensing, we manipulated five licensing conditions introduced by *niet* 'not', *geen* 'no(ne)', *niemand* 'nobody', *weinig* 'few' and *alleen* 'only'. Based on the children's repetition performance, we employed a mixed-effect logistic regression analysis in R to model the development of *hoeven* in each test condition. The regression results are presented below. Each graph represents a test condition, in which the x-axis shows the ages, the y-axis stands for the predicted repetition probabilities, and the interpolation line indicates the mean values of the repetition probabilities per age.

We interpret these regression results as representing an acquisitional path of the Dutch NPI in which children start with a specific analysis of the NPI that it can only appear in the scope of either *niet* or *geen* but switch to a more general grammar that generates *hoeven*'s appearance in the scope of *niemand*, *weinig* or *alleen* as well. We assume that the “specific analysis” of *hoeven* in early child Dutch involves two lexical frames, i.e., [HOEF NIET] and [HOEVEN GEEN], established based on the massive (near-)adjacent co-occurrence of *hoeven* with *niet* and *geen* in the input (cf. Lin et al. 2015). As for the “more general grammar”, we adopt the decomposable analysis of Dutch negative indefinites (e.g. *niemand*) as having an abstract negation NEG and an existential quantifier (Jacobs 1980; Rullmann 1995). Since NEG is also incorporated in DE operators like *weinig* (Iatridou & Zeijlstra 2013), we propose that *hoeven* bears a lexical dependency with the abstract negation as [HOEF NEG] in late child Dutch.

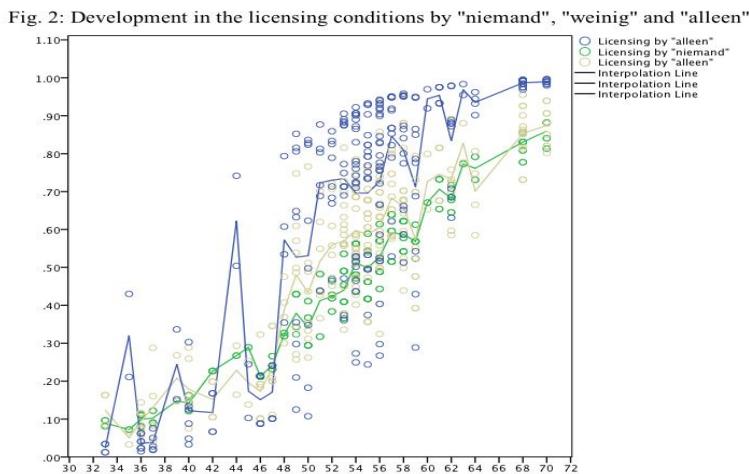
NEG can be either phonologically realized as *niet* or incorporated in *geen*. [HOEF NEG] thus renders the two frames in early stages as “redundant”. We therefore conclude that the acquisition of the NPI proceeds from two lexical frames [HOEF NIET] and [HOEF GEEN] to an abstract analysis [HOEF NEG]. Based on this learning path, we explain *hoeven*'s NPI-hood as a result of its lexical dependency with the abstract negation NEG (cf. Postal 2000).

- (1) a. *Jan hoeft\*(niet) te werken.* b. *Jan hoeft niets/\*iets te kopen.*  
 John needs not to work John needs nothing/something to buy  
 ‘John does not need to work.’ ‘John does not need to buy anything.’

(2)



(3)



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### **Phonological profile of early Polish-English bilinguals**

Existing research on phonological development of bilingual children provides conflicting results. Some studies suggest that these children distinguish between two phonological systems (Johnson and Wilson 2002) and that their phonological development is similar to that of monolinguals (Holm and Dodd 1999), while others show considerable differences between bilingual and monolingual children when it comes to the acquisition of phonology. For instance, Mandarin-English bilingual children were found to score lower on the English Diagnostic Evaluation of Articulation and Phonology than English monolinguals (En et al. 2014). Another study demonstrated that English-Welsh bilinguals display more problems producing consonant clusters than their monolingual peers (Mayr et al. 2015).

Mayr's data suggest that the language with the minority status in the community seems to be less developed in bilinguals. It is also possible that such a language would be more susceptible to crosslinguistic influence (CLI) from the language dominant in the community. To test this hypothesis, we analysed Polish speech samples of 60 Polish-English bilingual children (mean age 5;9) of Polish immigrants to the UK and compared with speech samples of 24 Polish monolingual children raised in Poland, matched for age and socio-economic status. The research questions posed in the study were whether the overall phonological performance measure shows differences in the speech of Polish-English bilingual and Polish monolinguals children and if so, what the common phonological CLI areas exhibited by the bilinguals in Polish are.

Speech sample recordings came from a database collected by the Bi-SLI-Poland project within the European COST Action IS0804 with the use of the Polish *Sentence Repetition Task* (Banasik, Haman and Smoczyńska 2011). In the test, the participants repeated 68 sentences that they heard through the headphones. For our phonological analysis we chose 14 sentences from the set that provided a wide range of phonetic contexts. For each child, the selected sentences were analysed auditorily by three phonetically trained raters, who used earlier-prepared transcription cards and filled in a diagnostic grid with a list of twelve possible problem areas, i.e. features and processes potentially susceptible to transfer from English. The general level of children's phonological performance was measured, including: (1) the number of errors for each of the twelve problem areas, (2) the assessment of CLI for each of these problem areas on a three-point scale (3) the overall phonological performance, which was the sum of all the assessment points for CLI.

A t-test analysis for the overall phonological performance measure demonstrated statistically significant differences between the phonological performance of Polish-English bilinguals vs. Polish monolingual controls. The speech of Polish-English bilinguals was characterised by significant CLI from English, especially in terms of vowel quality, vowel reductions, palatalisation, production of sibilant consonants and of consonantal clusters. As predicted, the phonology of the migrant Polish language in Polish-English bilingual children was found susceptible to the influence from English, the community language. The implications of this project will be used as a basis for language intervention and training programs for Polish migrant children.

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**Nurenzia YANNUAR** (LUCL, Leiden University)

### **Basa Walikan Malangan among other Reversed Languages**

Reversing speech is a common strategy to instantly distort speech signal and disguise messages (cf. Blust 2013). This paper aims to chart the development and characteristics of Basa Walikan Malangan (/bəsə wali?an malajan/, BWM), a “reversed” youth language spoken in East Java, as well as processes of deliberate language change more generally. BWM is used in a multilingual context (i.e. Javanese and Indonesian) in the city of Malang, East Java, Indonesia. Its speakers draw from a variety of patterns of lexical reversal to encode specific words and messages in their conversation. In addition, they used BWM to highlight their identity as part of the *Arema* (*Arek Malang*, ‘Kids of Malang’) community. By one of these processes of word-reversal, the community has also become known as *Kera Ngalam*.

The lexicon of BWM can be traced to different sources, among which are Indonesian (*nakam* < *makan* ‘to eat’), the local dialect of Javanese (*mate?* < *ketam* ‘to die’), and a small set of foreign languages like Tamil (*sari?* ‘beautiful’ – not reversed), Dutch (*kampes* < *zwempak* ‘men’s underwear’), Arabic (*nes* < *zen* ‘good’), and more recently English (*woləs* < *slow* ‘slow’). Based on its substantial repertoire of inverted and borrowed words uncommon in either Indonesian or Javanese, BWM originated as an in-group code meant to be inaccessible to outsiders.

This paper explores the phenomenon of word-reversal in order to create “secret” languages. I compare BWM to similar varieties; firstly by focusing on known backwards languages within the Austronesian language family: Tagalog speech disguise, Malay back-slang, Basa Walikan Yogyakarta, and Jakartan’s Prokem (Blust 2013; Espree-Conaway 2013; Hoogervorst 2013; Dreyfuss 1983); and secondly by relating Basa Walikan to other secret languages further afield, including Pig Latin and Verlan (France). I will do so by comparing and contrasting the “rules” in these varieties, as doing so can clarify the extent to which the formation of “secret” vocabulary differs from better known processes of language change as documented in synchronic grammars (cf. Blust 2013). More generally, these processes of word reversal contain unique clues on the phonology and phonotactics of the investigated languages.

The data on BWM have been collected during fieldwork in Malang from May to August 2015 through recordings of natural conversations, language elicitations, and in-depth interviews with BWM speakers of different gender and age. The data and information of other backwards languages are gathered from existing studies.

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**Il-Il YATZIV-MALIBERT** (Inalco, Paris, France) and **Zohar LIVNAT** (Bar-Ilan University)

### **Impersonal 2nd person singular in spoken Hebrew**

As in a range of other languages, such as Germanic, Romance and Slavonic languages and many more (Siewerska 2004: 212), 2nd person singular pronouns are used in Hebrew not only to refer to a specific addressee but also as generic or impersonal forms that invite the addressee to imagine him-/herself in the situation or event expressed by the speaker (Siewerska, ibid.). The present study focuses on this latter use, aiming to find the regularities, or at least some tendencies underlying it. The corpus is composed of 39 monologue-like texts of 21 women and 18 men, freely produced by interviewees in face-to-face context designed to allow a speaker develop his/her discourse without interruptions.

Our search for regularity in the use of impersonal 2nd person singular pronouns takes two paths:

- a) Identifying the conditions for grammatical gender selection. Characteristic of Hebrew 2nd person pronouns is a distinction between masculine and feminine forms, which exists in independent and compound pronouns of all categories – nominative, accusative, reflexive and attributive. The use of masculine 2nd person singular when addressing a woman is widespread in spoken Hebrew (Tobin 2001, Sa'ar 2007, Muchnik 2015: 218). In our corpus it was found in all combinations of speaker-addressee gender. When a man talked to a woman the masculine was selected almost exclusively. When the two participants in the interaction were women, the speaker selected either gender, consistently or inconsistently.
- b) Identifying the conditions for selecting tense when using the 2nd person impersonally. The question of tense selection is connected to the broader phenomenon of tense-shifting that has been documented in a range of older and modern languages (Fleischman 1990: 201). Tense-sifting occurred at points of a break in the narrative line and can serve to partition a narrative into subunits. (Schiffrin 1981, Silva-Corvalán 1983, Fleischman 1990, Henkin 2002). This practice has been documented for Hebrew as well (Berman & Neeman 1994). Examples from our corpus also demonstrate such shifts; however, the interesting finding is that when the predicate is in the past tense, impersonal 2nd person pronouns rarely occur, namely they tend to occur when the predicate is in a simple or compound present form, or is modal (including future forms interpreted as modal (Yatziv-Malibert 2009) and verbs forms in conditionals). The following is an example:

ve=gam hitxal-nu joter mukdam  
 and=also start\PAST-1PL more early  
 'and we also started earlier'

ʃam hitxal-nu ſeva ve=mafəhu tfila  
 there start\PAST-1PL seven and=something pray  
 'there we started the prayer at seven something'

ve=jef le-xa hasaa  
 and=EXS to-2SG.M shuttle  
 'and you have a shuttle'

ata kam be=jef ve=mafəhu  
 2SG.M wake\_up\PTCP.ACT [SG.M] at=six and=something  
 'you (2SG.M) wake up at six something'  
 (YLC-4\_26-29)

This example demonstrates a simultaneous shift between 1st person/past tense and 2nd person/present. This co-occurrence of tense-person shift is common in our corpus, and its discursive functions will be demonstrated and analyzed.

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**Carryn YONG** (University of Oxford)

### Post-nominal Object-Oriented Floating Quantifiers – Who gives an FQ?

This paper sheds new light on one of the key issues in the syntactic analysis of post-nominal object-oriented quantifiers, i.e., in the sentence I saw the boys all dead, the quantifier all is analyzed as object-oriented floating quantifiers (FQobj). This paper proposes that what is conventionally interpreted as a post-nominal FQobj with full nominal object DPs, is to be reanalyzed as the base-generated subject DP of a small clause (SC). As such, this analysis (a) argues against the existence of the FQobj as a meaningful syntactic category in English and (b) is supported by new empirical evidence from native Southern British English speakers' acceptability judgments on (i) simple, double and prepositional, object constructions, and (ii) the prosody surrounding FQobj, the object DP, and the secondary predicate. Further, this SC analysis provides an explanation for the syntactic and semantic differences between subject-oriented floating quantifiers (FQsubj) and FQobj. These differences are unaccounted for by the current extant analysis, which treat FQsubj and FQobj as the same phenomenon. The implications of this revised SC analysis include possible effects on the sub-extraction of objects given the new distinction between full nominal and pronominal object DPs and the syntax-phonology interface.

The current extant analysis - the adverbial SC analysis – proposes that the SC contains an empty category PRO to which the FQobj is adjoined, is the current extant analysis used to account for the distribution of FQobj (Doetjes, 1992 & 1997; Hoekstra, 1988 & 2004) (1). However, this adverbial analysis is unable to account for the asymmetry between the full object DP and the pronominal DP, where only the pronominal object DP can form a constituent with the FQobj (2). As such, this paper proposes that, instead of an adverbial adjunction of an FQobj with a full nominal object DP, this type of FQobj is to be analyzed as the subject DP of the SC where the SC pro is controlled by the object DP (3). This new SC analysis adopts an SC architecture (4), where the subject DP is base-generated in spec-VP and raised to spec-TP, i.e., the sentence Ben saw the spiders all dead is derived in (5), and the quantifier all is reanalyzed as the subject DP of the SC (Aarts, 1992, *inter alia*).

- (1) Ben saw the spidersi [VP alli [VP PROi dead].
- (2) a. Ben believes [them all] to have left. b. \*Ben believes [[the boys] all] to have left.
- (3) [DP all pro]
- (4) [TP Spec [T' T [VP Spec [V' [V BE XP]]]]]
- (5) [TP Beni [T' T [VP [VP ti [V saw [DP the spiders]]]] [TP [DP all PROj [T' T [VP tj [V' BE [AdjP dead]]]]]]]]]

The results from acceptability judgments tests on the test sentences showed that for sentences like (6a), where the quantifier is construed with the full nominal DP, the sentence is deemed unacceptable. However, when a prosodic break is added between the nominal DP and the quantifier (6b), the sentence is judged perfectly acceptable.

- (6) a. \*Ben gave the biscuits all to the children.
- b. Ben gave the biscuits, all to the children.

Adapting Selkirk's Match Clause form - "syntactic constituency is mirrored in phonological representation in the form of prosodic constituency" (Selkirk, 2011: 17) – the native speaker judgments indicated that the full nominal DP and the post-nominal quantifier do not form a constituent. In addition, the quantifier actually forms a constituent with the following XP, thus supporting the SC analysis empirically.

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**Eva ZEHENTNER** (University of Vienna)  
**On competition in Middle English ditransitives**

The present paper aims to discuss the development of ditransitive constructions in the history of English, based on a quantitative study of their occurrences in the *Penn-Helsinki Parsed Corpus of Middle English* (PPCME2). More specifically, it addresses the question of cause and effect regarding two phenomena in their diachronic development, namely the erosion of the morphological case system at the transition from Old to Middle English on the one hand, and the concomitant “increase in the use of prepositions to mark grammatical relations” (Allen 1995) on the other hand. Concerning ditransitives, these changes are reflected in the rise of the ‘dative alternation’, i.e. the availability of two different patterns for verbs such as *give* (cf. 1-2).

- (1) (c1350 Early Ps.) *3if me<sub>IO</sub> vnderstandyngē<sub>DO</sub>* ‘give me understanding’  
(2) (a1470 Malory) *They gaff the godis<sub>DO</sub> to theire knyghtes<sub>IO</sub>* ‘They gave the goods to their knights’

The paper now challenges the assumption that there is a simple temporal sequence and causal relation between the loss of case-marking and the rise of PPs, i.e. the assumption that the loss of inflections created ambiguity/ a functional gap which had to be filled by the prepositional competitors (cf. e.g. Fischer 1992; Lundskær-Nielsen 1993). The argument here rests on a number of points:

First, it has been shown that prepositional paraphrases were, although limited to a certain extent, already present in Old English (Cuypere 2015). Second, presuming a functional gap that needed to be closed is unwarranted if not misleading, as especially in the case of ditransitives, disambiguating between the objects would usually have been relatively easy based on animacy asymmetries and context (Fischer 1992; Gast 2007). That PPs should nevertheless, despite the inflectional system still being intact, have been able to spread successfully can be readily explained taking an evolutionary approach (cf. e.g. Croft 2000; Ritt 2004), i.e. considering the advantages or benefits the use of PPs could have had over morphological case-markers. The most striking of these would have been their greater flexibility, since they could “be found in virtually any position in the clause” in Old English (Lundskær-Nielsen 1993) and were at the same time presumably not only equally, but even more explicit than their competitors. In other words, it is assumed that the object participant role(s) of verbs in general, and ditransitive verbs in particular, were increasingly associated with adjunct syntax from eME onwards, thus blurring the boundaries between (prepositional) objects, complements, and adjuncts (cf. e.g. Hoffmann 2007).

The rise of competition between the more synthetic and the more analytic ditransitive construction, as well as the further development of ditransitives in Middle English and beyond is finally discussed as a sequence of grammaticalisation/constructionalisation processes (Traugott & Trousdale 2013) on various levels, which ultimately led to the establishment of the dative alternation as it is found in Present Day English.

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## Problems and solutions for The Final-over-Final Constraint

Biberauer et al. (2014) argue that languages universally rule out disharmonic structures as in (1a) (where a head-final projection embeds a head-initial one), but allow structures in (1b) (where a head-initial projection embeds a head-final one), provided that H and G belong to the same extended projection. They refer to this ban as the Final-over-Final Constraint (FOFC).

- (1) a.  ${}^*_{[GP]} [H \ X P] G$  b.  $[G \ {}_{[HP]} X P H]$

Synchronic evidence for (1) comes from, for instance, from the universal ban on inflected head-final auxiliaries in VO languages, the absence of clause-final complementizers in VO languages. But also diachronic evidence is provided by Biberauer et al. FOFC predicts that on diachronic word order change, change from head-final to head-initial should start at the top of an extended projection; for example, change from OV to VO is preceded by change from VP-T to T-VP, which is preceded by change from TP-C to C-TP. Biberauer et al. discuss several cases that confirm this diachronic pattern.

Biberauer et al.'s proposal has received a fair amount of criticism. Empirically, the biggest problem seems to be that many languages allow all kinds of particles (negative particles, interrogative particles and TAM particles) to appear at the end of VO clauses (cf. Biberauer et al 2014, Sheehan 2014). To maintain the explanatory power of FOFC to account for the diachronic facts, FOFC requires modification and re-explanation.

In this paper we argue that the existence of certain FOFC-patterns as well as their apparent counterexamples are actually predicted once Abels & Neeleman (2012)'s account of linearization is generalized. Abels & Neeleman argue that complements can either be linearized before or after the head, but that movement outside a particular phrase must always be leftward. FOFC-violating word orders as in (1a) are then grammatical, *unless G is a potential movement target*). Being a potential movement target means that G may contain material that is raised into this position, but that it does not always have to. Only in languages where no material at all can move into G, is (1a) a possible linearization pattern. The presented evidence in favour of FOFC, such as the ban on V-O-Aux<sub>infl</sub> and the absence of V-O-C orders follow directly; the ban on V-O-Aux<sub>infl</sub> follows straightforwardly from the standard assumption that inflectional elements are required to be adjacent to their host at PF. In V-O-Aux<sub>infl</sub> constructions, this can only be derived by rightward movement of the auxiliary into the position where the agreement is realized, and therefore these constructions must be ruled out. The counterexamples of FOFC are predicted as well: particles, by definition, are independent elements that do not trigger any verbal or other element to attach to them. Consequently, they can occupy head positions that are never the target of any instance of head movement, and are thus not subject to FOFC. Finally, the restriction of FOFC to extended projections immediately follows, as heads never raise out of them.

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# The emergence of passives in early L1 German

Verbal passives are argued to be acquired late in life (after the age of 5) in languages such as English, because they are infrequent in child-directed speech (Usage-based approaches, e.g. Demuth et al. 2010; Tomasello 2004). In this paper, we challenge this view: we provide evidence that children manage to acquire verbal passives in German (built on the basis of the auxiliary *werden* and a participle, example 1) early in life (2;5) in the near absence of input. We then address the question how this is possible.

We studied four longitudinal L1 German corpora: the Leo (aged 1;11-4;11) and Caroline corpus (aged 0;10-4;3 ) from CHILDES (MacWhinney 2000), and our own ones, the Henri (aged 3;7-4;3) and Noah (aged 4;7-5;3) corpus. In all but the Leo corpus, where *werden*-passives occur more frequently, they are hardly existent in the child-directed input.

Additionally, Leo is reported to acquire *werden*-passives by 2;5 (Abbot-Smith and Behrens 2006) and, we found Caroline producing passives by 2;7. However, although *werden*-passives are acquired at the same age, Leo's and Caroline's input differ significantly: 171 versus 37 passive sentences (in tokens) are found until the age of children's first passives respectively. In Henri's and Noah's speech, *werden*-passives are found at 3;7 and 4;7 respectively, though infrequent. In Henri's and Noah's input *werden*-passives are also of low frequency (approx. 15-25 sentences in approx. 18.000 words per corpus). To this end, L1 German children acquire *werden*-passives rather early in life and, at the same age (2;5-2;7), despite structural complexity, near absence of input and input differences.

To explain these findings, we appeal to Hirsch & Wexler's (2006) resultative analysis of verbal passives. In German, resultative constructions can be formed via the verb *werden* in combination with an adjective (2). Structures in (1) and (2) are structurally as well as aspectually very similar: a. *werden*+past participle/adjective and, b. patient subject. However, (1) involves syntactically and semantically more complex mechanisms than (2) because of the alternation with the corresponding active voice sentence. Structures such as (2) are acquired earlier and easier in life; they are also more frequent in both child-directed and child speech, a fact that enables (2) to operate as the predecessor of (1) (cf. examples 3-4 from Leo corpus; cf. Abbot-Smith and Behrens 2006). Our analysis supports the operation of gradual learning mechanisms based on the maturation of grammatical rules (Maturation approach, e.g. Borer and Wexler 1987, 1992): structurally complex structures are acquired step by step on the base of structurally less complex structures.

- (1) Der Brief wird von Hans geschrieben.  
the letter.sg.nom werden.aux by Hans write.pp  
'The letter is written by Hans.' (werden-passive)

(2) Locker werden 'become looser', krank werden 'become sick' (werden- predecessor)

(3) Dann zieh mal hier, dass es (ei)n bisschen **lockerer wird**.  
then pull.imp once here so-that it a little-bit losser werden.aux  
'Then pull here so that it becomes looser.' (adult; werden- predecessor)

(4) Muss pusten (.) denn **wird er kühler** der Tee  
'You must blow, then the tee becomes cooler.' (2;4; werden- predecessor)

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# GENERAL SESSION PAPERS

## POSTER PRESENTATIONS

**Itziar ARAGUES** (Public University of Navarre)

### **Study of the semantic behaviour of the Spanish particle *pues***

This paper aims to present firstly the situation of the typically Spanish particle *pues*, from its origins in the Latin expression “post hoc propter hoc”, to its current usage in Spanish Grammar (considering them from different linguistic points of view) and its morphological and syntactic status, and secondly to study, with comparisons, the different values of the occurrences of the particle *pues* both in some samples of the colloquial spoken format and way of speaking in Navarre, collected in The Archive of Inmaterial Heritage of Navarre, and some written texts, extracted from different modern novels and that have undergone a certain elaboration by the author. This study will be done according to the principles of Text Linguistics and Grammar. It also attempts to establish a clear contrast in the use of the particle *pues* in oral and in written discourse, so that *pues* in the transcriptions of the colloquial oral samples tends to appear at the beginning of the discourse, it is de-grammaticized, and has to be considered as a text/discourse marker where it is a mark, a trace, of the speaker (who establishes, (by the means of the marker *pues*), a relationship between his/her oral discourse and him/herself); on the contrary, in the written samples *pues* recovers its more syntactic meaning and appears to be, more than anything, a subordinating conjunction. In any case, all the diverse values of *pues* within the linguistic discourse have always had a semantic reason, that is to say, *pues* means ‘being after’ without any reference to reality (all along the History of the Spanish language, “post”, that meant ‘what is after or next’, in a way *pues* has lost this meaning of space and time, ‘til the most abstract notion of ‘just being after’, no matter if this ‘after’ is referring to a sample of speech or a feeling, for instance), which has allowed this particle to come to the textual and pragmatic linguistics context from the realm of things.

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### **Compounding in Pharasiot Greek: The Effects of Language Contact on Morphological Structure**

*Language Setting:* Pharasiot Greek (PhG) is spoken by around 25 speakers in Western and Central Macedonia and Epirus in Northern Greece, their ages ranging between 65 and 102 (as of September 2014, author, in preparation). The speakers belong to or are descendants of the 1100 Orthodox Greeks (Xen 1896, 1905–1910, Dawkins 1916) who were relocated from a few south-western villages of present-day Kayseri in Central Turkey in 1923.

*Introduction:* The few available manuscripts and fables (e.g. Dawkins (1916)) in PhG contain no examples of compounding of the MG type, which are phonologically one-word structures as juxtapositions of two stems (or of a stem and a word) with a compound marker (CM) interpolating in between, and inflectional ending (usually different than that of the second constituent in isolation) occurring at the right edge of the juxtaposition (Ralli (2013)) ((1a) vs. (1b)). Concatenations that can be semantically categorized as compounds in these texts are coordination of two inflected nouns in which each constituent preserves its own stress (2).

*Aim:* This study presents the preliminary findings of a questionnaire about compounding which we have distributed to three surviving speakers of PhG. Specifically, it addresses (a) how compound words (existing and neologisms) are formed in PhG, (b) whether the constituents preserve their stress in compounding, and (c) whether and how the constituents are linked to each other, i.e. whether they show MG style compounding (where constituents are stems (1a)) or Turkic style compounding (where constituents are words (3)).

*Findings:* The questionnaire reveals that subordinative/attributive compounds in PhG are formed by the juxtaposition of two fully inflected, phonological word forms with their own stress, whereby the non-head, i.e. the left hand constituent, is marked by the genitive –u or –s depending on the gender of the word it is

attached to (4). The CM function in these compounds is assumed by the genitive functional head. Thus, the presence of a medial ‘linker’ may evoke a MG pattern, but the fact that this linker is the genitive morpheme can be explained by the effects of an Altaic style structure where similar compounds are syntactic formations (cf. (5)). The stem allomorphy in masculine nouns, i.e. the use of different stems of the same lexeme in compounding and in isolation, albeit both inflected in the genitive ((6a) vs. (6b), is explained by the case syncretism between accusative and genitive in masculine nouns.

**General Results:** This study reveals that compound formation is a syntactic phenomenon in PhG as opposed to MG where it is a morphological phenomenon, and it is most possibly developed due to long-term contact with Turkish. What is borrowed from Turkish is the word status of the constituents, but the presence of a medial linker is a Greek feature. This latter rules out a CM at the edge as is the case in Turkish, thereby displaying, probably by default, a pattern similar to the compounds in other Altaic languages.

Examples:

- (1) a. xion-ó-vrox-o  
snow-CM-rain-INF  
'rain with snow flakes' [MG] vs.

b. xióni, vroxí  
snow.INF rain.INF  
'snow' 'rain' [MG]

(2) ándra néka  
husband.INF wife.INF  
'couple' [PhG]

(3) karın ağrı-sı  
stomach ache-CM  
'stomach ache' [Turkish]

(4) a. yaidur-ú mamútsa  
donkey-CM fly  
'horse fly' [PhG]

b. maθráka-s prádi  
frog-CM feet  
'frog legs' [PhG]

(5) a. buu-nii noxoi  
gun-GEN dog  
'spy' [Khalka]

b. abka-i juí  
heaven-ATTR son  
'emperor' [Manchu]

(6) a. yíjmað-ú koftéða vs.  
ground.meat-GEN.MASC.SG meatba  
'small meatballs' [PhG]

b. yíjmá-∅  
ground.meat.GEN/ACC.MASC.SG  
'(of) (the) ground meat' [PhG]

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**A contrastive study between a Japanese EFL learner's  
and a native-English speaker's academic writing**

Contrastive studies between the languages of English and Japanese make up a field of research that has offered substantial contributions to our understanding of L2 writing (see Achiba & Kuromiya, 1983; Hinds, 1983, 1990; Hirose & Sasaki, 1994; Kobayashi, 1984; Kobayashi & Rinnert, 2001; Kubota, 1998; Miyake, 2007; Takagaki, 2001, 2003). Nevertheless, while these studies have offered insight into certain areas of L2 writing, none thus far have been extensive enough to offer more than suggestive implications. The majority of these studies range from the objective, quantifiable measurements of sentence-level features, to the more interpretive observations of discourse analysis (Clements, 2011), yet none really provide empirical, quantifiable evidence that could be used to practically address the needs of Japanese EFL learners in the writing classroom. We must then ask ourselves: What conventions are slipping through—not being addressed or focused on enough—in English education in Japan? In other words, in addition to identifying differences, it is vital to pinpoint the specific conventions Japanese EFL learners need explicated. What needs to be done, therefore, is research that combines quantifiable measurements with interpretive observations. This contrastive study is a first step towards such an investigation.

This pilot study will explore what features of one Japanese EFL learner's writing differ from those found in one native-English speaker's writing. Through a quantitatively oriented rhetorical analysis, features in the Japanese EFL learner's English writing are identified that are different from the native speaker's writing and that could possibly account for why the Japanese writing is considered less "good." Paragraphs are then annotated within the Rhetorical Structure Theory framework (Mann & Thompson, 1989). The frequency of relations are then tabulated and compared to reveal different features in Japanese EFL learner's English writing and native English speaker's writing. Therefore, this study will have a methodological result—it will show to what extent this approach is feasible and effective at investigating and assessing these kinds of issues.

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**Gender-mediated language change in Bohemia: the case of prothetic /v/**

In vernacular Czech, prothetic /v/ is used before word-initial or stem-initial /o/ (e.g. Standard Czech /okno/, meaning 'window' could be realized as /vokno/ in the vernacular). The usage of /v/ varies, i.e. it is common to find both instances of /vo-/ and /o-/ in the same speech and even in the same sentence. In his quantitative analysis of the use of prothetic /v/ in Prague, Chromý (2015) identified the following intralinguistic factors

to determine the variation: token length (longer tokens tend not to accept /v/), prefixation (words with prefixes, e.g. *ode-jít* ‘go away’, tend to accept /v/ more than words without prefixes), word class (adjectives, nouns and numerals tend to accept /v/ less than other word classes) and borrowedness (lately borrowed words tend not to accept /v/).

Present research is concerned with the use of prothetic /v/ in the city České Budějovice (ČB; about 150 km south of Prague with 93 000 inhabitants). The use of /v/ in this city is interesting since it is situated on the dialectological border with the Doudleby area which is characteristic for its complete absence of prothetic /v/ (Bělič, 1972; Balhar et al., 2005). In addition, prothetic /v/ historically spread to Southern Bohemia later, after its use was fully established in Northern and Central Bohemia (Utěšený, 1955). Based on these reasons we may predict that prothetic /v/ is used less in ČB than in Prague. This hypothesis has not been tested yet – previous dialectological descriptions of Czech do not distinguish the rate of use and they merely state that a certain feature is or is not used in a given area.

The analysis is based on linguistic interviews (each approximately 1 hour long) with 37 native ČB speakers (10 women and 10 men aged 20–30 years, 9 women and 8 men aged 60–70 years). Altogether, the data comprise 7894 instances of prothetic v- variable. Based on a generalized linear mixed model, it has been found that the use of /v/ in ČB is influenced by the same intralinguistic factors as in Prague but there are two major differences. First, the use of prothetic /v/ is lower for the corresponding generations (e.g. whereas the younger generation in Prague uses prothetic /v/ in approximately 68 % of possible occurrences, the same generation in ČB uses it only in 39 %). Second, the use of prothetic /v/ in ČB is clearly differentiated by gender: women use prothetic /v/ less than men in their generation (e.g. ČB women use prothetic /v/ in approximately 30 % of cases whereas ČB men use it in 49 %). The model shows a small random effect of the speaker so the gender and age effects should not be caused by outliers.

Based on the apparent-time hypothesis (Bailey et al. 1991) it seems that there is a language change going on in ČB. Prothetic /v/ is on a decline in ČB and this decline seems to be mediated by gender.

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#### The discourse and pragmatic functions of the vocative in Latin

It is generally accepted that a speaker using a vocative can perform (i) a call/summon or (ii) an address (e. g. LEVINSON 1983 and SERBAT 1986 for Latin). In Latin texts, however, there are hundreds of vocative utterances which do not fall in either of these categories, namely in extant letters and speeches (longer monologues). Nor can we consider these vocatives a kind of expressive form of “address” (term of affection, insult, etc.). The most detailed work on vocative in Latin so far (DICKEY 2002) is written rather from a socio-linguistic point of view and does not give satisfying answers as to the functions of those vocatives. Dickey just remarks that those vocatives are from a merely practical point of view superfluous and she regards them in some cases as means of emphasis or of positive politeness (DICKEY 2002: 250).

In order to fill in the gap, I read through a corpus of 13 Cicero’s speeches and 5 books of Cicero’s and Seneca’s letters, excerpted the vocatives and then I tried to determine their functions taking into consideration the context and pragmatic and discursive aspects.

On the ground of this research I propose two other functions of the vocative in Latin: cohesive and assuring.

**Cohesive function of vocative** covers two categories:

1. Vocative as a signal of a new section (new paragraph, beginning of an embedded narrative).
2. Vocative as an indication of the communicative dynamism: the vocative tends to stand next to a highly contextually dependent (and therefore thematic) expression; when it stands next to the rheme (quite rarely), the effect is that of emphasis.

**Assuring function of vocative** is suggested by its frequent occurrence with speech acts like assertion, expression of emotions, evaluation, advice and with performative verbs (*I swear, Peter, that* etc.): the

speaker seeks to increase the truthfulness of his speech act which is itself hard or even impossible to verify. Something similar was suggested for English by BROWN & LEVINSON (1987: 183) who claim that vocatives indicate a sincere assurance.

Moreover, the assuring vocative frequently occurs in two argumentative patterns: “*X + assuring vocative... but Y*” (*I really realize that X, judges, but still Y.*) and “*negation + X + assuring vocative... but Y*” (*The real problem is not X, senators, but in fact Y.*).

I will test my proposition – cohesive and assuring functions of vocatives – on other types of Latin texts, especially comedies, and I will also introduce new examples of vocatives motivated by discourse cohesion and pragmatics from other languages.

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#### **On the lexical representation of the Dutch word *zelf*.**

A study of the examples of the Corpus Gesproken Nederlands ('Corpus Spoken Dutch'), henceforth CGN, containing the word *zelf*, shows that in its non-reflexive use, *zelf* can occur in several positions of the Dutch sentence. This is illustrated by sentence (1).

- (1) Mieke (*zelf*) lost (*zelf*) het probleem niet (*zelf*) op.  
 'Mieke (herself) does (herself) not solve the problem (herself/by herself).'

Given the fact that these are several instances of one word *zelf*, the question raises how the lexical representation of *zelf* looks. Attempts to answer this question for cognates of *zelf* in other Germanic languages are given and discussed in the literature (Siemund 2000, Eckardt 2001, Gast 2006).

We represent the lexical meaning of *zelf* in terms of components of meaning (Levin and Rappaport 2011). A first component of meaning is reference. *Zelf* refers through association with a DP. In example (1), all instances of *zelf* are associated with the same DP, *Mieke*.

One can make the following binary distinctions for the Dutch non-reflexive *zelf*. *Zelf* forms one constituent with its associated DP or not, Siemund speaks here from adnominal *zelf* and adverbial *zelf*, and adverbial *zelf* is within the scope of scope bearing elements or not.

There is a further twofold distinction between all instances of adverbial *zelf* within the scope of scope bearing elements. This is illustrated by the CGN example in (2). *Zelf* can mean here *persoonlijk* ('personally') or *zelfstandig* ('independently'). In the former case, negation has large scope over the focus of the sentence, *zelf* is part of this focus. The sentence implies that these young people do not come. In the latter case, negation has small scope, *zelf* is the focus. The sentence means that these young people come, but that they are eventually sent by someone else.

- (2) Die jongeren komen niet zelf?  
 'These young people do not come (by) themselves?'

The distinction of adverbial *zelf* within or out of the scope of scope bearing elements, can also be described in terms of a difference in information structure. In the CGN example in (3), *zelf* is out of the scope of *ook* ('too').

- (3) Die ruimte laat ik natuurlijk zelf ook open.  
 'That room I leave myself too.'

I describe this distinction in terms of topic and focus. *Zelf* means in (3) something like *in mijn hoedanigheid van* ('in my capacity as'), it is a stage topic. In example (2), *zelf* is within the scope of a scope bearing element, it is (part of) the focus.

In my lecture, I generalize these results to the semantics of adnominal *zelf*. My conclusion is that the lexical representation of *zelf* has two components: reference and accent. These two components lead to a

description of the semantics of *zelf* in terms of involvement of the associated referent, showing the influence of the use of *zelf* on the cohesion of the discourse.

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#### Bias in Polar Questions

The current taxonomy of PolQs includes: positive polar questions (PosQ), positive questions with *really* (*really*-PosQ), questions with low negation (LowNQ), and questions with high negation, that are ambiguous [3] between a inner (InnerHiNQ) and a outer (OuterHiNQ) reading.

- (1a) POSQ: Is Jane coming?
- (1b) *REALLY*-POSQ: Is Jane really coming?
- (1b) LOWNQ: Is Jane not coming?
- (1c) INNERHINQ: Isn’t Jane coming? [double check  $\neg p$ ?]
- (1d) OUTERHINQ: Isn’t Jane coming? [double check  $p$ ?]

To characterize the pragmatic import of different PolQ types, two kinds of bias have been discussed in the literature: first, the impact of newly-acquired **evidence bias (EB)** [1]: (i) a PosQ  $p$ ? is incompatible with evidence bias against  $p$ , (ii) a LowNQ requires evidence against  $p$ , and (iii) an OuterHiNQ is incompatible with evidence for  $p$ . Second, the **original epistemic bias (OB)** [5]: (i) PosQs and LowNQs are compatible with there being no original bias, (ii) *really*-PosQs require original bias for  $\neg p$  and are used to double-check  $p$ ; (iii) HiNQs require original bias for  $p$  and, following [3], are ambiguous between an inner negation reading double-checking  $\neg p$  and an outer negation reading double-checking  $p$ .

Currently, there is blatant disagreement as to what PolQ types need to be distinguished: (1c,d,e) have been treated as one single type [6], (1c,d) have been merged [2] and (1d,e) have been argued to be one single grammatical category [0]. Furthermore, it is not clear how the two types of bias interact, since most theoretical models consider only a proper subset of the data and analyse them as arising from one single bias kind [2, 6].

The goal of the present experiment is to establish the typology and empirical pragmatic characterization of PolQs using experimental methodology, in order to determine:

which linguistic forms of PolQs are selected depending on the combination between OB/EB;  
whether specific intonational contours are associated with each type of PolQs.

The experiment had an English version and German one with 60 students each. For each language, there were six experimental lists, rotating OB and EB in trials. Participants read two captions attached to two pictures, which presented short fictional scenarios, afterwards, they selected and pronounced (to analyse prosody) from a list of five PolQs the one that sounded most natural. The captions were the same across conditions but the pictures varied to generate three different OB in the first case (i.e.  $p$ , neutral,  $\neg p$ ), and three different EB in the second case (i.e.  $p$ , neutral,  $\neg p$ ):

Data collected support three main results:

- (i) Each combination of OB/EB has impacted significantly on the choice of the question type, both in English and in German. Hence, both factors seem to play a crucial role.
- (ii) LowNQs and HiNQs are truly different types of PQs.
- (iii) Interestingly, the preferred choices are very similar in both languages. Only one cross-linguistic difference is observed: in condition  $p/\neg p$ , in English, HiNQs was the only choice, in German, LowNQs has been selected as second alternative.

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**Noun incorporation and transitivity in Soninke (Mande)**

Noun incorporation is a morphological operation combining a nominal lexeme and a verbal lexeme into a compound verbal lexeme (Mithun, 1984 & 1986). In most African languages, incorporation is very marginal or even nonexistent, but Soninke (a West Mande language spoken by approximately 2 million speakers in Mali, Mauritania, Senegal, and The Gambia) is an exception, with several productive types of incorporation.

Soninke (like all other Mande languages) has a rigid S Aux O V X constituent order in verbal predication, and incorporated nouns precede the verbal lexeme with which they form a compound, which raises the question of the criteria distinguishing incorporated nouns from nouns heading an object NP. However, the recognition of incorporation is facilitated by the fact that most nouns have a non-autonomous form distinct from their free form both segmentally and tonally, and this form is used whenever nouns occurs as non-final formatives in compound or derived lexemes. For example, the non-autonomous form of yàxàré ‘woman’ is yàxàri. An additional criterion is provided by tonal changes in verb inflection: in some conditions (for example, in combination with some negative markers) the inherent tonal melody of the verb is replaced by an entirely low melody, and this tonal change affects incorporated nouns as part of a compound verb stem, but not object NPs.

(1)	Ì wá túuhàn kátúnú. they are brick making	vs.	Ì ntá túuhàn kàtùnù. they are_not brick making
	Ì wá túuhá-kátíni. they are brick-making	vs.	Ì ntá tūuhákàtìnì. they are_not brick-making

In this paper, based on Diagana (1994), Diagana (1995), and our own data, we analyse the relationship between various subtypes of incorporation and transitivity in Soninke, and we compare the Soninke situation with that of Mandinka, another West Mande language in which incorporation is relatively productive (Creissels & Sambou 2013: 303-310). The analysis is facilitated by various mechanisms contributing to transitivity marking.

Three subtypes of incorporation can be distinguished in Soninke: possessive incorporation, object incorporation, and oblique incorporation. In possessive incorporation and oblique incorporation, a linking n occurs between the two formatives of the compound verb.

Possessive incorporation is observed with intransitive verbs, it does not affect the formal transitivity but modifies the semantic role assigned to the subject, which could be encoded as a possessor in a construction with the incorporated noun in subject function.

(2)	À bùttēn búyí. his/her liver burnt	→	À búttí-n-búyí. (s)he liver-N-burnt (S)he got furious.'
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In object incorporation as illustrated in (1), all the mechanisms sensitive to transitivity (for example, the choice of an overtly detransitivized form of the verb, like kátí < kátú in (1)) unambiguously show that object incorporation yields intransitive compound verbs.

Oblique incorporation is particularly productive with simulative adjuncts and temporal adjuncts. It operates on transitive and intransitive verbs without affecting their (in)transitivity properties.

- (3) À wùrú xóò yàxàrê. → À yàxàrì-n-ñjùrú.  
he ran like woman he woman-ran  
'He ran like a woman.'
- (4) À dàgá sùxúbà. → À sùxùbà-n-dàgá.  
(s)he left morning (s)he morning-left  
'(S)he left in the morning.'

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#### On the extent of aspirated stops in Basque

Researches in the field of Basque linguistics have been struggling to identify a unifying explanatory framework to the analysis of voiceless aspirated stops data (Lafon 1948, Mitxelena 2011 [1961], Hualde 1991). However, to date we have not been able to agree on the explanatory value of various approaches, descriptions and accounts of a limited number of data sets collected from individuals and groups during the 20th century in Zuberoan Basque, where it appears to be especially well preserved. This paper attempts to identify and compare them from a functional and explanatory point of view (Stampe 1979), in light of present-day Zuberoan Basque speech. The purpose of the study is three-fold:

1. To demonstrate that a view of aspirated stops as allophones of the unaspirate ones is not satisfactory;
2. To identify the loss of aspirated stops as a change-in-progress among L1 Basque adult bilinguals of multitude of backgrounds and social variables in Zuberoa, eventually the only area where they are preserved; and
3. To discuss dialect convergence and early bilingualism as possible tools for explaining phonemic change.

The acoustic analysis is based on NORANTZ, an audible database which aims to study phonological and grammatical variation in the Basque Country of France. The questionnaire contains 178 phonetic and 568 morphosyntactic questions, and aspirated stops are covered in a set of 14 questions. As 60 informants participated in the project, we obtained 840 items containing contexts where aspirated stops can occur. We analysed these productions acoustically using Praat.

The main results of the analysis show that one of the primary social factor of difference in productivity is age. When some minor variant in the speech of the oldest generation (the loss of aspirated stops, in this case) occurs with greater frequency in the middle generation and with still greater frequency in the youngest generation, the incoming variant could truly represent a linguistic change (Labov 1994), as opposed to an ephemeral innovation. The study of this phenomenon could help to a better understanding of the mechanisms which underlie and condition phonemic variation and change as part of ongoing research for the following years.

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### How much like Guaraní does Paraguayan Spanish sound?

It is traditionally assumed that Guaraní has considerably influenced Paraguayan Spanish due to the long-lasting contact of the two languages and the diglossic bilingualism that characterizes the linguistic situation in Paraguay. There are several phonological features in Paraguayan Spanish commonly attributed to Guaraní interference, such as vowel nasalization and insertion of glottal stops as well as the realization of the phoneme /j/ (orthographically <y>) as a prepalatal affricate [dʒ], and the articulation of the voiced labiodental fricative [v] (Malmberg 1947, Cassano 1971, Klee/Lynch 2009, Hualde 2013). Based on Spanish and Guaraní data (recordings: Paraguay, March 2014), the present paper investigates the two latter phenomena and concludes that some widespread assumptions about Paraguayan Spanish need to be revised.

The Spanish data comprise the production of three groups of speakers, i.e. (1) eleven Spanish-dominant bilinguals, (2) eight Guaraní-dominant bilinguals, (3) two Spanish monolinguals, and include read, semi-spontaneous as well as spontaneous speech (reading of the *North Wind* fable, Prieto/Roseano's 2010 intonation survey, free interviews). The Guaraní data stem from each five speakers from groups (1) and (2) and include both read and spontaneous speech.

Regarding the pronunciation of <y> in Paraguayan Spanish ( $N=686$ ), the prevailing realization was [j]/[j] (39%) and [jj]/[j] (45%), with the latter detected mostly after nasals, liquids or a pause. The expected “Guaraní” affricate [dʒ] was detected in only 16% of the bilingual’s production, but not found at all in monolingual speech. As for the Guaraní data, the phonetic realizations of the Guaraní affricate phoneme correspond to the sound repertoire produced in Spanish by the same speakers ( $N=202$ ): [jj]/[j] (68%), [j]/[j] (24%), [dʒ] (8%). We thus assume that the affricate allophone [dʒ] of the prepalatal voiced obstruent (Walker 1999:68) gradually disappears from the Guaraní sound system due to contact with Spanish. Interestingly enough, the digraph <ll> is also predominantly produced as [j] in the Spanish data (80%;  $N=505$ ), which entails the disappearance of the so-called *lleísmo*, i.e. the phonemic contrast /ʎ:/[j]/(<ll>:<y>), similarly as in other Spanish varieties. Paraguayan *lleísmo* is primarily preserved in older speakers, independently of their dominant language, and mainly occurs in read speech (60% of the occurrences of <ll> were produced as [ʎ] ( $N=42$ )). This might be explained by the fact that many Paraguayans learn Spanish only at school, where the traditional Castilian distinction /ʎ:/[j]/ is taught as the standard pronunciation. In addition, the use of Spanish is largely limited to formal contexts, whereas most speakers prefer to communicate in the Guaraní-Spanish mixed variety *jopará* in informal situations, what might explain their strong attempt to achieve a “normative” pronunciation in Spanish. However, this hardly elucidates the realization of Spanish <b, v> as the voiced labiodental [v] which is homorganic to the Guaraní labiodental approximant /v/ and, according to Granda (1988), consistently occurs in Paraguayan Spanish. First analyses performed on our data confirm this. Based on analyses of recently collected Spanish/Guaraní data, our contribution will discuss mutual transfer on the phonological level in situations of linguistic contact.

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### Diagnostics for Core and Nuclear types of SVCs in Mandarin Chinese

This study identifies two syntactically distinguishable types of Serial Verb Construction (SVC) in the Mandarin Chinese (MC), corresponding to the nuclear and core distinction made in Role and Reference Grammar (Foley and Van Valin 1984, Foley and Olson 1985, Van Valin and LaPolla 1997). An array of diagnostics are adopted in this study to establish the distinction; these go beyond the range covered in

previous studies (Olson 1981, Foley and Olson 1985, Crowley 2002, Chang 2003, Matthews 2006, Bril 2007, Chang 2007, Hwang 2008, Bisang 2009, Foley 2010).

In the first part of this study, five diagnostics are considered as the threshold where the behaviours of bi-clausal structures and SVCs split. These five diagnostics include clausal negation, passivisation of the rightmost object argument, adverbial modification, aspectual specification, and tone sandhi. In the second part, three diagnostics are adopted to make the distinction between nuclear and core SVCs, which include coordination within the SVC, insertion of the degree adverb ‘too’ before V2, and passivisation of each explicit object argument. In addition, passivisation of O1 is discussed to reveal the different object statuses between O1 and O2 in non-contiguous core SVCs. Moreover, it is argued that obligatory topicalisation of a pivot argument should be regarded as a syntactic correlate of the core SVC, which is a characteristic in the Excessive SVC in MC. Of particular interest is that the same string of verbs may occur in superficially similar but structurally different SVCs, such as the Cause-Effect SVC and the Excessive SVC.

The diagnostics employed in this study are proposed as a novel methodology to make distinction between SVC and bi-clausal structures, and more importantly, core and nuclear types of SVC. I restrict myself to data of MC in discussing the rationale of the methodology. While one would expect these diagnostics to be cross-linguistically consistent, they will not be applicable to all languages. Tone sandhi, for example, is a language-specific criterion which may correspond to diagnostics such as intonation pattern (Olson 1981) and pause probabilities (Givón 1991) in other languages.

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#### Re-establishing Aboutness As the Licensing Condition of Gapless Relatives

One central issue in understanding the nature of gapless structures is Kuno’s (1973) Condition, proposing that an aboutness relation commonly licenses all types of gapless structures. However, this is challenged by data from gapless relatives. Zhang (2008) and Huang et al. (2009) contend that what looks like the head of a gapless relative (*e.g.* in example 1) is actually a relational noun, which takes the clausal part (preceding the relativizer *de*) as its second argument (Barker, 1995). [Chinese data are used throughout]

- (1) [Ta zuo-e] de houguo (Tang, 1979)  
 he do-evil REL consequence  
 ‘The consequence of his doing evil’

In other words, they claim there is no aboutness licensing in gapless relatives. In this paper, I provide new data arguing that NOT ALL gapless relatives can be analyzed as relational nouns:

- (2) [Ta zai liutong-chu gongzuo] de nei-ge tushuguan  
 he LOC circulation-desk work REL DEM-CLF library  
 ‘The library that he works at the circulation desk’
- (3) [Ta xuan-le yi-shou tangshi] de nei-ci langsong  
 he choose-ASP one-CLF Tang.poem REL DEM-CLF reciting  
 ‘The reciting that he chose a Tang-era (an ancient Chinese dynasty) poem’
- (4) [Ta shou weituo wancheng yi-fu xiaxianghua] de nei-ci chuangzuo  
 he receive commision finish one-CLF portrait REL DEM-CLF composition

'The composition that he finished a portrait by commision'

Relational nouns receive an obligatory bound reading in quantificational contexts (Asudeh, 2005). One can test that (1) involves a real relational noun (5a): the indefinite, *a consequence*, must scope under the universal quantifier in subject position: the only natural reading is that every evil-doing leads to its own consequence (*i.e.* the quantifier binds the relational noun). By contrast, the head noun in (2) readily allow a non-bound reading (5b).

- (5)     a. *Every evil-doing has a consequence.* ( $\forall > \exists$ )  
       b. *Every reader has been to a library.* ( $\exists > \forall$ )

The same non-bound reading is available for the head nouns in (3) an (4). Thus, (2-4) are genuine gapless relatives. I propose that (2-4) form a natural class, in terms of Pustejovsky's (1995) sublexical qualia roles. The relative heads in (2-4) denote, respectively, a CONSTITUTIVE (denoting the larger unit of which the nominal is a part), TELIC (expressing a nominal's purpose/functions) and AGENTIVE (denoting a nominal's origin/'bringing about') qualia rule.

To derive the proper reading in the clause of (2) (*He works at the circulation desk [as a section/part of a library]*), the meronymy relation of a predicate's nominal argument needs to be specified within the selectional requirement of that predicate.

In (3), the main verb takes an unrealized complement denoting the event of the poem being recited, which is filled out at the interpretational level (*Bill chose [to recite] a poem*). Following Pustejovsky-style compositional rule, the main verb syntactically subcategorizes with the nominal argument but semantically composes with the nominal's TELIC role (4 is similar):

- (6)     *choose*<sup>?</sup>:  $\lambda e_1 \lambda e_2 \lambda x [choose (e_1, x, e_2)]$ ;  
       *poem*<sup>?</sup>:  $\lambda y \exists x [poem (y) \wedge \dots \text{Telic} = [\lambda e_2 [recite (e_2, x, y)]] \dots]$

As a relative clause's predicate selects for a qualia role or takes a qualia role as a semantic argument, the clause constitutes relevant information ABOUT such qualia role. Thereby, this formal characterization accords with Kuno's informal notion of aboutness relation, reestablishing aboutness as a licensing condition of gapless relatives.

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#### When grammar meets semantics: How to examine metatextual units opening one valency slot for undefined expressions?

The aim of the paper is to present language units that can be described with the three following characteristics: i) they do not constitute an autonomous linguistic utterance understood as an act of communication that indicates the topic of the utterance and what is being said about it; ii) these units are not required by any of the elements of a base utterance and, at the same time, they require no element of the base utterance, however, they co-occur with the base utterance; iii) they open one valency slot for expressions that can be predicted on the basis of their semantic and grammatical characteristics.

Here belong such units as: *od \_* (young being: *od dziecka, pacholęcia / since x was a child*, *lad vs od przedszkola, czasu kiedy się spotkaliśmy / since kindergarten, time we met*); *inna \_ że \_* / *to już inna\_* (*sprawa, rzecz, historia/ p is a different story, matter, thing etc.*); *\_ mówiąc / speaking* (*np. ogólnie,*

*szczerze / generally, frankly etc.); jedynie – (słuszny, prawdziwy, możliwy / the only rightful, true, possible); gdzie nie – / wherever one (spojrzał, spojrzyś / spojrzeć, patrzeć / looked, looks).*

In the paper we would like to give an overview of the problem, including specifying a) what units fulfill the given criteria, b1) what methods should be applied onto the analysis of units for delimitation of which prosody plays important role (Bolinger 1989, Cruttenden 1997) and b2) how a specific methodology (reductionist componential semantics, methods of information structure analysis (Bogusławski 1977, Hajičová et al. 1998), Natural Semantic Metalanguage as a way to construct definitions (Wierzbicka 1996 et seq.) can be applied to examining metatext. The linguistic data for the analysis will be excerpted from the text corpora (Przepiórkowski et al. 2012, Sinclair 1991), mostly Polish, including Spokes – the browser for conversational data.

Different classes of metatextual comments were given consideration in linguistic research, for instance Dehe & Kavalova 2007, Grochowski et al. 2014, König 1991, Wiemer 2006. However the aforementioned group of units has not yet been analysed as a class.

The analysis allows for elaborating on many linguistic problems, however here we would like to address only one: how boundaries of language units are delineated in case of no clear instruction whether an expression is a product of grammar that underwent certain restrictions or a unit with unspecified semantical requirements? Have certain expressions undergone the process of lexicalisation and gave rise to new metatextual units, or the opposite occurred – delexicalisation, in which a multi-segment language unit became a motivation for users to construct analogical sequences?

In the paper we will address the aforementioned questions on the case study of expressions including Polish sequence *jak na*, for instance: (1) *Krzyczeli jak na meczu piłkarskim. shout<sub>3pl past</sub> how on game<sub>Loc</sub> futbol // They shouted as if on a football game.* vs (2) *Jak na głupiego królika zna zaskakującą dużo sztuczek. How on stupid<sub>Acc</sub> rabbit<sub>Acc</sub> know<sub>3sg pres</sub> surprisingly many<sub>Acc</sub> tricks<sub>Acc</sub> // For a stupid rabbit he is he knows surprisingly many tricks.*

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**Design, structure, and preliminary analyses of a speech corpus of infant directed speech (IDS) and adult directed speech (ADS)**

Infant-directed speech (IDS) is reported to differ significantly from adult-directed speech (ADS) in its acoustic-phonetic and prosodic properties. In IDS, phonetic features of individual speech sounds tend to be intensified (Kuhl, Andruski, Chistovich et al., 1997; De Boer and Kuhl, 2003; Soderstrom, 2007). For example, vowel hyperarticulation was documented for IDS in several languages (Werker et al., 2007). Consequently, the formant frequency values (F1, F2) as well as timing and intensity patterns vary in those two speaking registers. Other modifications can be observed in pitch levels (cf. e.g., Cooper and Aslin, 1990; Kitamura et al., 2001). Due to infants' preference towards IDS (Cooper and Aslin, 1990), laboratory-

elicited IDS recordings are often used as stimuli for the needs of infant speech perception studies, aiming e.g., at the investigation of the effects of short-term exposure to foreign-language stimuli in early infancy and their role in the development of language learning skills (e.g., Kuhl, 2003). Laboratory-elicited IDS is expected to be closer to spontaneous IDS than to ADS.

This paper describes the design and structure of a corpus of IDS and ADS, and reports on the results of selected analyses of the corpus contents. The corpus consists of laboratory-elicited speech data from the following languages: French, Hungarian, Spanish, Korean, and Polish (2 to 5 native speakers per language). The assumption underlying the structure of the recording scenarios was to create sets of stimuli including various phoneme contrasts. The contrasts reflect either the phoneme quality (e.g., French vowel contrast for /e/, /ɛ/, /ø/) or quantity (e.g., Hungarian pairs of long vs. short vowels /u/, /u:/ or /ɑ/, /a:/). The realizations of the target phonemes were recorded using two types of lists designed for each contrast: a syllable list, and a nonsense-word list. The syllable and word structures were designed to elicit realizations of the target sounds for each contrast in the same preceding and following contexts. In the nonsense-words, they were always located in word-initial syllables but preferably not as the word initial sounds. First, the speakers read each list using ADS register, then - IDS. At the latter stage, the speakers were requested to speak in a manner as if they were addressing an infant, and were additionally primed with a picture of an infant. Apart from the laboratory-elicited speech data, the corpus includes recordings of Polish authentic motherese speech (4 speakers) produced in interaction with their babies.

The corpus analysis results involve: (1) a comparison of segmental durations, formant frequencies, and pitch variability between laboratory-elicited IDS and ADS, (2) an examination of perceptual differentiation of selected types of stimuli by adult listeners, (3) a preliminary assessment of selected properties of mothers' authentic speech as compared to laboratory-elicited IDS utterances.

Apart from providing data for fundamental acoustic-phonetic and perception-based analyses of IDS and ADS (indicating i.a., higher formant and pitch values in IDS), the present corpus currently serves as a source of stimuli for electroencephalography and eyetracking-based studies of the development of the phonemic hearing and working memory in infants.

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#### **The Use of Emoticons in Twitter Communication**

Emoticons are widely spread on the whole Internet. Although Western emoticons (e. g. :) and :( have been used since the 80's, they have been scientifically studied mainly since the last decade. The main attention has been paid to their functions. Although emoticons are said to express primarily emotions, (e. g. Wolf, 2000), they may have other additional functions as well, e. g. highlight the most important word in the text,

detect irony, or substitute punctuation. (e. g. Dresner – Herring, 2010) This paper focuses on several aspects of the use of emoticons in Czech and English-written communication on Twitter.

Emoticons can be divided into several different groups. The main classification was made up according to their positivity, or negativity. This rough classification cannot be applied to all emoticons, even not to the ten most frequent Western emoticons. (Schnoebelen, 2012) The winky emoticon ;), tongue sticking emoticon :-P and wondering emoticon :-O show rather facial expressions, not emotions. Their meaning is therefore more context-dependent than that of always positive emoticons :). The use of positive and negative emoticons was studied in four different contexts (greeting, apology, thanks and swearing), which are frequently represented in both languages on Twitter. Our assumptions about the use of emoticons were based on the facial expressions expectable for these situations in face to face communication. Our expectation, that positive emoticons occur mainly in the context of welcome greetings and thanks, was correct. Negative emoticons were surprisingly more frequent in the context of apologies than in that of swearing. The co-occurrence of two emoticons with opposite meanings, e. g. damn :( :) is more typical of the context of swearing. In this type of co-occurrence the second emoticon is used for weakening the first one. On the other hand, the co-occurrence of a positive emoticon followed by a negative one is very rare. The total frequencies of emoticons show that positive emoticons have been incorporated in all chosen contexts in both languages.

Apart from the use of positive and negative emoticons, we focused on their function of substitution punctuation. We verified the assumption (Markman – Oshima, 2007) that emoticons substitute mainly full stop and comma, whereas exclamation and question marks are kept. Our data also show that typographic (e. g. :) and Western emoticons are mixed with Eastern (e. g. ^\_^) and graphic (e. g. ☺) emoticons within tweet. Our data include, however, mostly typographic Western emoticons.

The results show that emoticons accompany phrases of greeting, apology, thanks and swearing very often both in Czech and English. The positive or negative implications of emoticons used in these contexts are in most cases in agreement with the expected meaning of chosen phrases. Further, we have not found any gender differences in the use of emoticons.

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#### **Basque subordinate clauses: a diachronic study**

The subordination marker *bait-* is one of very few grammatical prefixes found in Basque, a predominantly suffixing language. While its functions are well understood, its diachrony has not been studied in detail. The goal of this paper is thus to (1) analyze diachronic changes in the use of the prefix, (2) establish diachronic relations between its functions, and, (3) revise the traditional hypothesis on its source and grammaticalization. The study is based on a corpus of 16<sup>th</sup>-20<sup>th</sup> cent. texts.

The marker, which attaches to the finite verb, is found in a wide array of subordinate constructions (Oyarzabal 1987, 2003). Firstly, it is employed together with several clause-initial conjunctions in adverbial clauses or with a pronoun in relative clauses. Secondly, it can be used on its own (i.e. without any conjunction) in reason and relative clauses, and in complements of a rather limited class of verbs. Here, the clause type is not marked overtly and the sentence can be ambiguous. *bait-* also occasionally appears in independent clauses (e.g. in exclamatives or to express contrast).

The corpus data show that important changes in the use of the marker have taken place since the 16<sup>th</sup> century. With regards to clauses with conjunctions and relative pronouns, their use has decreased significantly. Their high frequency in old texts, however, could be explained through influence of the Romance subordination strategies. As for the constructions with *bait-* only, in modern texts the marker is

mostly found in reason clauses, whereas in the 16<sup>th</sup> century relative clauses predominated and complement and reason were infrequent.

Lafon (1966) argued that *bait-* developed from the affirmative particle *bai* ‘yes’ through an emphasis marker. This hypothesis is problematic, though. It is unclear how an emphasis marker could end up marking subordination. Also, the only evidence Lafon provides is questionable. According to him, independent clauses with *bait-* are relicts of the old emphasis marker. A closer look at such clauses reveals that they are better seen as innovations rather than archaisms: in some cases insubordination seems likely; in others, a confusion with *ba-* affirmation/emphasis marker could explain the use of *bait-*. Even though *bai* ‘yes’ and *bait-* could be related, it is unlikely that the subordination marker developed from the affirmative particle. I will propose instead that *bait-* was initially a relative clause marker, which later spread to other types of subordinate constructions. The extension from relative clause to complement clause is cross-linguistically well attested. Similarly, it is common for a relative clause marker to become a general purpose subordination marker. The only change that is not typologically usual and would require more explanation is the specialization of *bait-* as reason marker. I will propose that the reason interpretation of *bait-* clauses originated in contexts that were ambiguous between relative or reason reading.

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#### **Discovering Archaic Portuguese rhythm from the relationship between musical and linguistic prominences**

This poster aims to analyze the relationship between musical and linguistic prominences in Portuguese, focusing on a possible interface Music-Linguistics, investigating the ways the relation established by music and lyrics can contribute to elucidate questions concerning linguistic prosody. This research aims to test the viability of considering the connection between Music and Linguistics in the development of a methodology for studying the prosody of ancient periods of living or dead languages (as Massini-Cagliari, 2008, 2010, 2011 and Costa, 2010, had suggested for Archaic Portuguese, 13th-14th centuries).

This proposal is based mainly in the premise that musical prominences preferentially match linguistic prominences. In spite of this fact, there is the possibility of musical prominences to be occupied by syllables which do not correspond to linguistic prominences (or, at least, to main prominences). Although there is the possibility of musical and textual prominences to mismatch, this is restricted to marginal usages, which can also reveal important clues concerning the rhythm of the language in which the song was composed.

Focusing Archaic Portuguese prosody, this poster aims to exemplify the methodology we propose, evaluating the contributions that an interface with the music of the *cantigas* can bring to the determination of the rhythm of that language, by comparing the musical notation of a few Alfonso X’s (1221-1284) *Cantigas de Santa Maria*, a collection of 420 *cantigas* with musical notation (Anglés, 1943), with ancient Galician-Portuguese “lyrics”. The main objective is to extract elements from musical notation that can constitute arguments for linguistic explanations of syllable structure and linguistic rhythm. The musical structure can also provide clues for the analysis of specific phonological processes from the observation of mismatches between the quantity of notes and syllables to be sung, such as sandhi and paragoge. The observation of matches and mismatches of linguistic and musical prominences can be evidence also for primary and secondary stresses location.

Analysing the examples collected from Alfonso X’s *Cantigas de Santa Maria* (1979, 1989-91, 2003), it is possible to show that a Music-Linguistics interface can make a valuable contribution to the linguistic analysis of the prosody of ancient languages, from which oral registers do not exist. Examples focus on the possibility of extracting elements from the musical notation that can constitute arguments supporting the phonetic actualization of the *cantigas*, concerning syllable structure and linguistic rhythm (occurrence of secondary stresses, identification of the prosodic pattern of specific words, delimitation of higher prosodic constituents, etc.). In this way, musical notation can be considered a secondary source of information

concerning the prosody of dead languages or past periods of living languages - an auxiliary instrument that can be used to evaluate and to confirm hypothesis formulated from the consideration of primary sources (written registers).

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#### Grammaticalization and lexicalization of TIME in Estonian: two parallel development paths

Nouns denoting time are typical sources from which grammaticalized means of expressing temporal relations may develop; markers of temporal relations, in their turn, develop into markers of different kinds of abstract relations (Heine, Kuteva 2001). Our presentation examines the development of the Estonian particles *aga* ‘but’ and *ikka* ‘still, anyway’, which have emerged through shifts in the functions of case forms of the ‘time’ nouns *\*aika* and *\*ikä*. We seek to answer the question of what path of development these forms have undergone in comparison to each other and to the developments known from other languages. Our study is usage-based, drawing on language corpora from the University of Tartu, specifically the 17<sup>th</sup>– 21<sup>st</sup>-century written language corpora, the spoken language corpus, and the dialect corpus.

Both particles trace their historical origins to local case forms of the corresponding nouns indicating temporal location. These noun forms developed into adverbs of time with different temporal meanings: *AGA* indicated the temporal concurrence of two propositions, while *IKKA* denoted the proposition’s genericity, iterativity, habituality and/or continuance.

Later, the development of these two words diverged. In the case of *AGA*, the temporal concurrence relation was interpreted as an adversative relation, while for *IKKA*, the genericity of a situation was interpreted as an implicit concession, intended to refute a potential counterargument. *IKKA* developed in another direction as well; from the meaning of temporal continuation, it came to denote large degree of a property. The developments have analogues in German: *während* denotes both temporal concurrence and adversativity, *immer* both temporal continuance and the degree of a property.

In the next phase, a number of new developments took place from *AGA* as an adversative particle: adversativity was re-interpreted as a greater-than-expected quantity or degree; exclusivity (‘only’), and a question marker (Metslang et al. 2015). *AGA* also began to function as an adversative conjunction. The concessive *IKKA* developed use as a particle confirming an affirmative answer. A new, explicitly concessive particle, *ikkagi*, emerged by joining the particle *ikka* and the intensifying clitic *-gi*.

Thus, originally similar forms have grown progressively further apart. In modern Estonian, both particles are multifunctional. *AGA* carries no temporal meaning, instead indicating adversativity and appearing in other uses which have developed from that meaning. *IKKA*, by contrast, has a temporal function as well as

all the other functions that have developed from that (Pajusalu, Pajusalu 2011). Interestingly, through their different development paths, these two words have arrived at a new common function, serving as large degree markers.

The semantic development of *AGA* and *IKKA* includes shifts observed in other languages as well (e.g. TIME>TEMPORAL, TEMPORAL>ADVERSATIVE, TEMPORAL>CONCESSIVE, TEMPORAL>REINFORCING, see Heine, Kuteva 2002, Rudolph 1996), but also shifts in the opposite direction, for instance ADVERSATIVE>EXCLUSIVE (cf. Inoue 2013). At the same time, the different development paths of *AGA* and *IKKA*, both relative to each other and in comparison with other languages, serve once again to illustrate that language change does not always follow one fixed path; rather, the shifts observed represent branches in a conceptual network that may offer several choices (Ziegeler 2003).

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**Amina METTOUCHI and Valentina SCHIATTARELLA (EPHE and CNRS LLACAN)**

#### **The influence of state-marking on word order and information structure in Kabyle and Siwi (Berber)**

Berber languages are pronominal-argument languages, in the sense of Jelinek (1984): their verbs bear subject bound pronouns with argumental (as opposed to agreement) status. Other pronominal forms cliticized to verbs code patient and indirect object. Noun phrases are not obligatory, and their ordering is not fixed. Additionally, some Berber languages (e.g. Kabyle (Northern Berber, Algeria)) have inflectional marking on nouns, called state, while others (e.g. Siwi (Eastern Berber, Egypt)) don't.

As the state opposition has been shown to allow discrimination between postverbal lexical subject and object in Kabyle (Chaker 1988, Mettouchi 2008), the first question is how does a Berber language that has lost the state distinction, such as Siwi, discriminate between grammatical roles when those are expressed by nouns ? And since the ordering of NPs has been shown to code information structure (IS) functions (Mettouchi 2008 for Kabyle), do Information Structure (IS) constructions differ in the two languages, and how ?

Investigation of spontaneous speech corpora in both languages shows that while both languages have clauses without nominal arguments, there are differences between them in the ordering of NPs when nominal arguments appear: Kabyle transitive clauses are fully flexible (VAO, VOA, AVO, OVA), while Siwi transitive clauses strongly favor AVO (Schiattarella 2015).

- (1) t-s<sup>fa</sup>                    tajazi<sup>t</sup>                    jømma                    Nuža /  
     SBJ3SG.F-possess:PFV hen:ABS.SG.F mother:ANN.F.SG     Nuža /  
     ‘Mother Nuja has a hen’ (Kabyle)
- (2) talti                    t-taraw                    yer                    ikub<sup>b</sup>wan  
     woman:SG SBJ3SG.F-give\_birth.IPFV only     boy:PL  
     ‘The woman gave birth to boys only’ (Siwi)

In both languages intransitive clauses can be SV or VS (but in Siwi, relative clauses are necessarily SV while in Kabyle they are necessarily VS, which implies that identity of linear orders does not imply identity of functions).

A corpus-driven investigation on Kabyle and Siwi word order, prosodic boundaries and boundary-tones, shows that the various configurations have different IS values in discourse. Kabyle displays V and VO for topic continuation, VAO/VOA and VS for topicalization of event or situation (ex1), AVO/OVA and SV for event/situation recapitulation for backgrounding, as well as other configurations with nouns before the left prosodic boundary and after the right prosodic boundary of the core of the clause, for topic shift, contrastive comment, and reactivation of a referent. Siwi also uses V and VO for topic continuation, but since its word order is more rigid for transitive clauses (ex2), due to the lack of noun-inflection, constructions similar to the ones found in Kabyle do not carry the same IS value. The presentation will compare Siwi and Kabyle in terms of the structures and functions involved, in order to propose hypotheses on the influence of the existence of the state distinction on the types and forms of IS constructions encountered.

The presentation will also discuss the importance of the pronominal argument nature of the languages under study for the general profile of IS constructions. Indeed, the overall rarity of nominal arguments is a direct consequence of the argumental status of obligatory bound pronouns, and this in turn has effects on the markedness of configurations containing A or S nominal subjects.

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**David OGREN** (University of Tartu)

#### **Construction-specific object case variation in Estonian**

The presentation focuses on object case variation in Estonian *da*-infinitive constructions, examining the ways in which these constructions (or particular groups thereof) differ from finite clauses and/or other infinitival constructions with respect to object marking. The analysis is based on data collected from various newspaper corpora (Eesti Päevaleht, Postimees and Õhtuleht), as well as the Estonian web corpus etTenTen.

As a result of the fact that the *da*-infinitive lacks any clear aspectual content (Erelt et al. 2007: 218-220), the criterion of temporal boundedness, which plays a crucial role in object case variation in finite clauses in Estonian (as well as in other Finnic languages), cannot be straightforwardly applied to these constructions. Under these circumstances, various other parameters, which are rendered irrelevant in finite clauses due to the supremacy of the boundedness criterion, emerge as important factors influencing object case. Most prominent among these factors is word order: in several different *da*-infinitive constructions, objects preceding the infinitive they modify appear overwhelmingly in the partitive, while objects following the infinitive typically appear in the total object case (either nominative or genitive, depending on the construction). Also, in the *da*-infinitive assessment construction, where the predicate adjective expresses the speaker's assessment of the action described in the *da*-infinitive phrase, the semantics of the predicate adjective influence the case of the object; for instance, adjectives with negative meaning such as *võimatu* 'impossible' or *raske* 'difficult' strongly favor the use of the partial object, while their opposites *võimalik* 'possible' and *lihtne* 'easy' favor the total object (Ogren 2014).

There are also two related constructions, expressing referred/reported commands, recommendations, obligations and other similar meanings, in which the case of the total object varies, i.e. both nominative and genitive total objects appear. Crucially, these constructions show semantic and structural parallels to both the indicative and imperative moods (the former featuring genitive total objects, the latter nominative). As such, the criterion of imperativity emerges as an important factor influencing total object case in these constructions: generally, the more imperative-like a sentence (semantically and/or syntactically), the more likely it is that the nominative total object will be used. However, total object case usage in these constructions is extremely inconsistent.

The example of Estonian *da*-infinitive constructions also raises interesting questions for Differential Object Marking theory. Iemmolo (2013: 380) observes that, cross-linguistically, symmetric DOM alternations (featuring two or more distinct forms of overt object coding) tend to perform different functions than do asymmetric alternations (in which some objects receive overt coding and others do not). Estonian, however, exhibits both symmetric and asymmetric DOM alternations, expressing the very same differences in meaning. Furthermore, according to de Hoop and Malchukov (2008), the functions performed by DOM can be divided into two categories, namely 1) distinguishing the object from the subject and 2) encoding semantic/pragmatic information about the object. Some of the variation in object case observed in Estonian *da*-infinitive constructions, however, does not fall neatly into either of these functional categories, and may be better explained by appealing to the notions of prototype and analogy: when faced with relatively uncommon, peripheral constructions such as those examined here, language users may (unconsciously) draw on comparisons with more standard, i.e. prototypical constructions in order to choose the appropriate object case.

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**Maarja-Liisa PILVIK** (University of Tartu)  
**-mine nominalizations in Estonian dialects**

The aim of the present paper is to demonstrate the functional distribution of deverbal *-mine* nominalizations (e.g. *laul-mine* ‘sing-ing’) in the Corpus of Estonian Dialects (CED 2015) and examine, how the different functions are related to and affected by numerous morphological, syntactic and semantic factors, such as case and syntactic position of the deverbal noun, realization of the underlying verb’s arguments and other modifiers, verb semantics, clause type, clause adverbials as well as the dialect and the speaker, which help capture also lectal variation.

Suffix *-mine* is the most productive and regular means for nominalization in Estonian (Erelt et al. 1993: 269; Kasik 2006a: 122) as well as in other Finnic languages. For Estonian written language, *-mine* nominalizations and their phrase structure have quite thoroughly been described (e.g. Kasik 1975, 2006; Kerge 2001, 2003), but the focus has mostly been on their nominal properties from a derivational and morphological point of view, focusing on the internal structure of the nominalized NP’s, or on nominalizations as a characteristic of newspaper texts. Little research has been done on constructions that do not behave like ordinary NPs (Sahkai 2011), but have a fixed structure and non-compositional meaning, and the functions they acquire when combined with other elements of the clause. Even less is known about the functional behaviour of nominalizations in non-standard language (Neetar 1988).

I will be analyzing the dialect corpus data quantitatively, using exploratory classification methods (e.g. multiple correspondence analysis) as well as non-parametric methods suitable for natural language modeling (conditional inference trees and tree ensembles) to show how one can benefit from using quantitative methods on empirical, non-standard language data in language description.

The outcome of these initial analyses should yield groups of *-mine* suffixed deverbal nouns that tend to be more associated with certain features and properties, which in turn helps to proceed towards establishing a continuum between the contexts, in which certain groups of deverbal nouns can be considered to have more nominal properties, and others are more closely related to the verbal domain to the extent of being a part of the complex (semantically non-compositional) predicate itself. Such constructions (e.g. modal construction 1 and progressive construction 2) are fairly widespread in all Finnic languages with different degrees of grammaticalization.

- (1) *minu-l eij olõ enämp tõnõ+gõrt sinu-gä ss `kän'g-mis-t* (CED 2015)  
 I-ADE NEG be.NEG anymore other+time you-COM then put.shoes.on-NMLZ-PAR  
 ‘Then some other time I don’t have to put you your shoes on anymore.’

- (2) *maq olō jo surō-m 'isō-l*  
 I be.1SG already die-NMLZ-ADE  
 'I am dying already.'

(CED 2015)

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**Krzysztof STROŃSKI** (Adam Mickiewicz University), **Joanna TOKAJ** (Adam Mickiewicz University) and **Saartje VERBEKE** (Ghent University)

**Towards a diachronic typology of non-finites in Indo-Aryan**

In Indo-Aryan scholarship the notion of converb occupies a special place since it is one of the elements defining a so called 'linguistic area' (cf. Masica 1976, Subbarao 2012). The form itself has been analysed at various stages of IA and in a number of dialects (e.g. Dwarikesh 1971; Schumacher 1977; Davison 1981; Kachru 1981; Tikkanen 1987; Peterson 2002; Yadav 2004; Lohar 2012). This study will outline the basic trends in semantic and pragmatic behaviour of converbs, from a diachronic and typological perspectives, based on empirical evidence from a number of selected Indo-Aryan vernaculars.

We adopt two complementary methodologies which have so far strong synchronic and typological bias, namely the RRG approach (Van Valin & LaPolla 1997; Van Valin 2004; 2007) and the 'multivariate analysis' (Bickel 2010) and we apply them to diachronic analysis. We inspect various types of junctures: nuclear, clausal and sentential, mainly focusing on the last type. We utilize a set of variables chosen from the list proposed by Bickel (2010), i.e.

- a) Scope of the IF operator : conjunct, disjunct, local, extensible, constraint-free
- b) Tense Scope: conjunct, local, extensible
- c) Who-questions in dependent clauses: banned, allowed
- d) Focus marking in dependent clauses: banned, allowed.

We will demonstrate how the system works for the converbal chain construction in a text corpus consisting of early Rajasthani prose texts from the 15th to 17th centuries (Bhānāvat and Kamal 1997-1998). The early Rajasthani data will be compared with other early NIA dialects such as Braj (Vājpeyī 2009) and Awadhi (Gautam 1954). The corpora have been tagged by means of the 'IA tagger' – a programme designed for tagging early NIA texts at 5 different levels, namely – morphological, parts of speech, syntactic, semantic, pragmatic (IA Tagger 2014). Optical recognition of Rajasthani texts was supported by a Hindi OCR programme (HindiOCR 2013).

Preliminary research shows that the scope of illocutionary operators can be local (limited to the main clause) or conjunct. This seems to be continued in contemporary NIA, cf. Davison (1981), Bickel (2010)). However, tense operators in early NIA had predominantly conjunct scope, although this is not always the case in the contemporary IA (cf. Peterson 2002). Question operators in early NIA had basically local scope, although in contemporary NIA they can have conjunct scope as well (cf. Davison 1981; Bickel 2010). The same pertains to negation. It seems that the scope should be dependent on the position of the question or negation markers, but this still requires more detailed cross-linguistic verification. Our general hypothesis is that the features of converbs have been rather stable throughout the centuries, but the corpora inspected by us may show minor differences as regards extension of the scope of selected operators.

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**Aina URDZE and Benjamin SAADE** (Universität Bremen)

**Holding with obligation without having: A unique grammaticalization path in Balto-Finnic?**

The development of lexical units meaning HOLD towards expressions of POSSESSION represents a well-known and established grammaticalization path in the languages of the world. One such case is the development of Catalan tener ‘hold, keep’ > tener ‘have’ (Heine & Kuteva, 2002; Steinkrüger, 1997). A further development from expressions of predicative POSSESSION to means of coding OBLIGATION is also well-established in grammaticalization studies (e.g. English: I have a car vs. I have to work). Balto-Finnic languages, such as Estonian, code the starting point of the first grammaticalization path HOLD (1) and the endpoint of the second path OBLIGATION (2) with the same verb. However, the linking stage of the grammaticalization chain, POSSESSION (3), is expressed with the locative schema.

- (1) HOLD  
 Ta suuda-b veel mõõka peo-s pida-da. [Estonian]  
 3SG can-3SG still sword:PARTV palm-INNESS hold-INF2  
 ‘He/she can still hold the sword in his/her hand.’  
 (Eesti keele seletav sõnaraamat)
- (2) OBLIGATION  
 Ma pea-n nüüd mõtle-ma. [Estonian]  
 1SG must-1SG now think-INF1  
 ‘I have to think now.’  
 (Corpus of Written Estonian, Eesti\_Ekspress\_1996)
- (3) POSSESSION  
 Mu-1 on tütar ja poeg. [Estonian]  
 1SG-ADESS be.3SG.PRS daughter and son  
 ‘I have a daughter and a son.’  
 (Corpus of Written Estonian, AJAE1990)

A direct grammaticalization from HOLD to OBLIGATION is not attested the world’s languages, with the possible exception of Alur, a Western Nilotic language (Bavin, 1995). In our poster we discuss three

scenarios which might explain the seemingly rare development of verbal expressions of OBLIGATION in the Balto-Finnic languages:

#### I. GRAMMATICALIZATION CHAIN

The development is a case of the full grammaticalization chain, albeit the linking stage (POSSESSION) has been lost without trace in a proto-variety of Balto-Finnic.

#### II. DIRECT GRAMMATICALIZATION

Although rarely attested, a direct grammaticalization HOLD > OBLIGATION might explain the superficial gap in the grammaticalization chain. No linking stage is necessary.

#### III. POLYSEMY COPYING

The unusual polysemy (HOLD = OBLIGATION) in Balto-Finnic is a result of language contact in the Circum-Baltic area. A polysemy pattern was partially copied (Gast & Van der Auwera, 2012; Heine, 2012) from contact languages of Proto-Balto-Finnic. A prime suspect for this influence would be a variety of Proto-Baltic, since modern Lithuanian still displays a polysemy pattern covering the whole grammaticalization chain (Lithuanian: turēti 'HOLD, POSSESSION, OBLIGATION').

#### Abbreviations

ADESS	adessive	PARTV	partitive
INESS	inessive	PRS	present
INF	infinitive	SG	singular

#### Sources

Reference corpus of Estonian: <http://www.cl.ut.ee/korpused/segakorpus/>  
The corpus of old literary Estonian: <http://www.murre.ut.ee/vakkur/>  
Eesti keele seletav sõnaraamat: <http://www.eki.ee/dict/ekss/index.cgi>

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**Albert WALL** (University of Zurich)

#### The role of variation in the processing of Spanish Differential Object Marking

In the psycholinguistic literature, it is implicitly assumed that the presence or absence of Spanish Differential Object Marking (DOM) is a categorical syntactic reflex of the grammar related to (in)animacy (e.g. Nieuwland et al. 2013). In this poster, I challenge this view and propose a different interpretation of the reported effects based on a variational approach to DOM. As additional evidence, I present an Acceptability Judgment Task (AJT), in which I compare the behavior of the presumably “categorical” mismatches discussed in the literature with cases of variation.

In an EEG study, Nieuwland et al. (2013) explore the contrasts in (1) and (2) in order to shed light on the association between neurophysiological components and syntactic and semantic violations. In line with the traditional view, they expect both, an N400 and a P600 effect for the mismatch in (1) since the lack of DOM leads to a conflict regarding the assignment of thematic roles, followed by some sort of case reanalysis. For the contrast in (2), they expect only a P600 because there is no potential conflict with respect to thematic roles.

- (1) El papa besó al / \*el obispo.  
the pope kissed DOM+the / the bishop
- (2) El papa besó el / \*al suelo.  
the pope kissed the / DOM+the floor

While their prediction for (2) is borne out, Nieuwland et al. (2013: 153) only report an N400 effect for (1). They interpret this unexpected “syntactic” N400 as a “mirror image” of the “semantic” P600s reported in the previous literature and discuss a number of possible explanations for it. Crucially, these explanations take the mismatch condition in (2) as the result of some sort of syntactic violation. However, the fact that Spanish does allow DOM to occur with inanimate objects in certain cases (Balasch 2011, García García 2014) casts doubt on taking the reported P600 as an indicator of syntactic violation here:

- (3) El papa besó la / a la imagen (del santo).  
 the pope kissed the / DOM the image of+the saint

I suggest that late positive effects, such as the one reported for (2), should rather be interpreted as “irresolvable sentence-level interpretation conflicts” (Frenzel et al. 2011): While DOM with inanimate objects allows for different animacy-related reinterpretations in (3), this is not possible for (2). On a more general level, I argue that this view predicts that the conflict in (1) is less “irresolvable” than (2). This is supported by the results of the AJT (66 participants, 3X2 Latin square design according to (1)-(3), implemented with OnExp), in which judgments for the ungrammatical condition in (1) are significantly lower than those for the ungrammatical condition in (2). Additionally, the results of this AJT, in which I compare the contrasts in (1) and (2) with the one in (3), also provide further insights into the range of variability of DOM that need to be taken into account for a better understanding of the processing of Spanish DOM.

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## WORKSHOP PRESENTATIONS

### WORKSHOP

#### (Semi-)independent subordinate constructions

*Convenors*

**Karin Beijering** (University of Antwerp), **Sarah D'Hertefelt** (University of Leuven), **Gunther Kaltenböck** (University of Vienna) and **María Sol Sansiñena** (University of Leuven)

*Description*

The focus of this workshop is on types and degrees of (semi-)independence available for constructions formally marked as subordinate. Between the traditional ‘dependent’ use of a subordinate clause, i.e. as part of a complex sentence, and the completely ‘independent’ use of a formally subordinate clause, there seem to be different intermediate degrees of (in)dependence which a construction that is formally marked as subordinate may display. Furthermore, there are also different levels upon which a structure might be dependent (e.g. functional, syntactic or dyadic). The questions we want to address in this workshop include the following:

- Which different levels of (in)dependence should be distinguished (e.g. syntactic, semantic/pragmatic, dyadic) in order to adequately describe different types of (semi-)independent constructions? Can (in)dependence on these different levels always be considered a cline?
- What is the grammatical status of these (semi-)independent constructions and how can they be accounted for in a grammatical model?
- Different diachronic paths and mechanisms of change have been suggested for the development of these different constructions, e.g. ellipsis of the main clause (Evans 2007), extension of dependency (Mithun 2008), dependency shift (D'Hertefelt & Verstraete 2014), cooptation (Heine, Kaltenböck & Kuteva fc.) and hypoanalysis (Van Linden & Van de Velde 2014). Are these different diachronic hypotheses mutually exclusive? What are the motivations for proposing different hypotheses and, perhaps most importantly, how should we proceed to falsify any of these through actual diachronic corpus research? Is it possible for any of these constructions to have multiple sources?
- Can structures with different degrees of (in)dependence fulfill similar functions? Can Evans' (2007) typology of functions of insubordination be refined by distinguishing between different degrees of (in)dependence?
- The importance of taking a more dyadic approach to the study of (semi-)independent constructions formally marked as subordinate clauses has been suggested by Gras & Sansiñena (2015), among others. What can the contribution of Interactional Linguistics and Conversation Analysis be to the discussion of the development and function of these constructions?
- Can the study of the prosody of these constructions help us understand more about their (in)dependent status? What kind of prosodic analysis is more appropriate when approaching this issue?

The aim of this workshop is to bring together linguists working on different types of (semi-) independent constructions in a range of languages, to understand how these different types of structures relate to each other, and whether they can all be considered instances of the same phenomenon.

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**Pedro GRAS** (Universiteit Antwerpen)

**The role of interactional factors in the quotative interpretation  
of complement insubordinate constructions in Spanish**

The description of the meaning-function of insubordinate constructions –main clause use of formally subordinate constructions (Evans, 2007)— is probably one of the biggest challenges insubordination poses for linguistic analysis. On the one hand, insubordinate constructions do not generally fit into well-established linguistic categories such as modality or clause combining. They tend to represent non prototypical instances of these categories without a clear status within the system. On the other hand, insubordinate constructions are often highly polyfunctional, so that a single surface form can express multiple and (apparently) non related meanings/functions. The purpose of this paper is to explore the role of interactional factors in the meaning description of insubordinate constructions through the analysis of a particular case: the quotative interpretation of complement insubordination in Spanish, as in examples in (1-3):

- (1) - Voy a cenar.  
I'm coming to dinner  
- ¿Que vienes a cenar?  
That you are coming to dinner?
- (2) - Voy a cenar.  
I'm coming to dinner.  
- ¿Qué?  
What?  
- Que voy a cenar.  
That I'm coming to dinner.
- (3) Ha llamado tu hijo. Que viene a cenar.  
Your son called. That he's coming to dinner.

The literature has identified several meanings/functions for complement insubordinate constructions in Spanish, such as third person imperatives, optatives, evaluative modality, signalling relevant information, and quotative evidentiality, among others. Focusing on quotative interpretations, recent generative approaches (Etxepare, 2008; Rodríguez Ramalle, 2008; Demonte and Fernández Soriano, 2009) have related quotative meanings with the specific position that the initial complementizer occupies in the left periphery of the sentence. However, as I will argue, quotative interpretations only arise in specific interactional contexts. Therefore, the goal of this paper is to identify the relevant interactional and grammatical features that give rise to quotative interpretations of complement insubordinate constructions in Spanish.

This study is based on the analysis of manually extracted examples (aprox. 130 tokens) from the Val.Es.Co. corpus (*Corpus de conversaciones coloquiales*, Briz & Val.Es.Co., 2002), containing spontaneous conversations among adults from Valencia (Spain). Each occurrence is analysed taking into account grammatical (TAM, person and number, sentence modality), semantic-pragmatic (modal values, illocutionary force, connective value) and conversational factors (initial vs. mid position in the intervention, initiative vs. reactive intervention, preferred vs. dispreferred response). Theoretically this paper is in line with constructional-interactional approaches to grammar (Fillmore, 1989; Linell, 2009; Gras, 2011, 2012).

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**Marianne MITHUN** (University of California at Santa Barbara)

### Fleshing out the Process

The availability of conversational corpora has heightened awareness of constructions consisting of formally subordinate complement clauses used as independent sentences. Evans (2007) provides an extensive list of uses of such constructions, including requests, exclamations, evaluations, modal distinctions, and more. He proposes that they arise from complement constructions by ellipsis of the matrix clause, a process he terms insubordination. This ellipsis may not be instantaneous, however. Here some mechanisms which might be involved are fleshed out. Examples are drawn from conversation in Mohawk, an Iroquoian language indigenous to Northeastern North America.

An oft-cited distinction between main and subordinate clauses is assertiveness. In 'I know [I'm old]', the fact that the speaker is old is presupposed, and his recognition of this fact is asserted. The distribution of information between main and complement clauses does not always match expectations, however, particularly with certain types of matrix predicates. With 'I heard [that Joe arrived]', my purpose may be to announce his arrival, not my hearing. This distribution of information is often mirrored in Mohawk prosodically. While sentences like 'I know [I'm old]' show a steady declination in pitch to a terminal fall, sentences like 'I heard [that Joe arrived]' often show lower pitch and intensity on the matrix than the complement. Constructions with such prosodic structure often serve just the kinds of functions listed by Evans: requests, modal distinctions, evidentials, exclamations, evaluation, etc. The non-assertiveness of subordinate clauses is often exploited by speakers in interaction, as in mitigating requests: 'Would it be possible [for you to give your name]?'. This prosodic structuring can be an early step in the development of insubordination constructions.

Mohawk contains various constructions consisting of an initial particle followed by a clause that begins with the complementizer *tsi*. Van linden and Van de Velde (2014) describe similar constructions, termed semi-insubordinate, in Flemish. They propose a mechanism of hypoanalysis behind their development: speakers reinterpret the meaning contributed by the original matrix as a property of the whole construction. Many of the initial particles in the Mohawk constructions are descended from matrix verbs conveying modal and intensifying meanings ('it is hoped', 'I believe', 'one says', 'it is certain', 'it is amazing', 'it is much', etc.). Over time, such forms lose not only substance but also their categoriality, their status as higher verbs, and are reanalyzed as adverbs within the complement clause. Sets of such expressions can be reanalyzed as a construction: a slot for a general type of particle followed by the complementizer *tsi* and a clause: (Á:ke) *tsi niion'wé:sen* 'Oh, how beautiful it is!'

The development may continue with the omission of the particle. The remainder of the construction still carries the meaning of the whole, as in Mohawk exclamatives: *Tsi niion'wé:sen!*.

None of these developments is obligatory, but they recur cross-linguistically: managing interpersonal relations with complement constructions, prosodic structuring to match pragmatic structuring, erosion of form and decategorialization, transfer of meaning from matrix clauses to the construction as a whole, and the ultimate loss of the remnant of the matrix.

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**Karin BEIJERING** (University of Antwerp) and **Muriel NORDE** (Humboldt-Universität zu Berlin)

**Semi-independent subordination: a case of degrammaticalization at the clausal level?**

Semi-independent subordination constructions, whereby an adverb (examples in (1)), or an adjective (examples in (2)) is followed by a subordinate clause, are a common phenomenon in Swedish:

- (1) a. *Kanske att hon ser ut som fan och tror/ljuger om att hon fått modelljobb.*  
Maybe (that) she looks like shit and thinks / lies that she got a modelling job.  
[existenz.se/?p=komment&id=43155]
- b. *Möjligen att hon har kommit på ett sätt att tjäna pen[g]ar på.*  
Possibly (that) she has thought of a way to make money.  
[blogg.aftonbladet.se/.../kissie-och-barnmatsdieten]
- (2) a. *Trevligt att hon verkar ihåg mig!*  
(It is) nice (that) she seems to remember me!  
[www.gate81.se/category/allmant/]
- b. *Kul att hon äntligen blivit färdig med den =).*  
(It is) cool (that) she finally finished it!  
[www.youtube.com/all\_comments?v=YiPwvjTwPlk]

These constructions are potentially problematic for claims about unidirectionality in the domain of clause combining (Van linden & Van de Velde 2014: 247). In most theorizing on changes in clausal structure (e.g. Hopper & Traugott 2003: 175ff.) it is assumed that paratactic structures may give rise to hypotactic structures, but not vice versa. In the examples in (1) and (2) however, there is no full-blown matrix (on the assumption that a matrix should at least contain a subject and a tensed verb). This would indeed be the result of a counterdirectional development if the constructions have arisen from hypotactic constructions. In order to assess the implications of these constructions for unidirectionality issues, it is therefore necessary to trace their histories.

In this talk, we will review earlier studies of and hypotheses about the rise of (subtypes of) semi-independent subordination against our own empirical study. For instance, semi-independent subordination constructions have been argued to be the result of ellipsis (Ramat & Ricca 1998, Aelbrecht 2006), dependency shift (D'Hertefelt & Verstraete 2014), hypoanalysis (Van linden & Van de Velde 2014), interactional strategies (Wide 2014) or reduction of epistemic VPs (Norde, Rawoens & Beijering ms.). Using both synchronic and diachronic data from the *Språkbanken* corpora (<http://spraakbanken.gu.se/>), we will outline the history and current usage of semi-independent subordination in Swedish. We hypothesize that the constructions exemplified in (1) and (2) have different origins, but that their individual developments may have fed each other, possibly giving rise to a more general semi-independent subordination schema. In particular, we will address the question, raised in Van linden & Van de Velde 2014, of whether the emergence of semi-independent subordination should indeed be considered an instance of degrammaticalization, and if so, whether Norde's (2009) classification of degrammaticalization changes should be expanded to accommodate changes at the clause level.

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**Giulia BOSSAGLIA, Tommaso RASO and Heliana MELLO** (Universidade Federal de Minas Gerais)

**Insubordination and the syntax/prosody interface  
in spoken Brazilian Portuguese: a corpus-based study**

This study focuses on spoken Brazilian Portuguese syntax, and it is based on the Language into Act Theory (L-AcT: Cresti, 2000), which analyses speech emphasizing its prosodic dimension. Through prosodic criteria, L-AcT identifies the unit of reference for spoken language as the utterance, which is understood as the smallest unit in the speech flow (prosodically/) pragmatically autonomous due to its illocutionary force, therefore corresponding to a speech act. The utterances can be segmented in tonal sub-units carrying specific information values conveyed by specific prosodic profiles: besides the Comment unit (the fundamental one for it carries the illocutionary force of the utterance), L-AcT identifies other information units composing the utterance, namely: Topic, Appendix of Topic/Comment, Parenthesis and Locutive Introducer, among others.

According to L-AcT, proper dependency relationships operate only within the domain of a single information unit, considered as a semantic and syntactic island, while the relationships between units within the utterance are determined by information patterns carried on by specific prosodic profiles, serving specific communicative purposes of the speaker (Cresti, 2014). L-AcT distinguishes, then, proper subordination constructions as occurring within the same information unit (*linearized syntax*) from subordination constructions occurring across more than one unit, and pragmatically oriented due to specific information patterns (*patterned syntax*).

Our analysis of compleutive and adverbial subordination in an informationally annotated sub-corpus of the spoken BP corpus C-ORAL-BRASIL (Raso & Mello, 2012) has resulted in the identification of different insubordination phenomena (Evans, 2007).

With respect to completives, we observed that in patterned configurations the traditional dependency hierarchy between main and subordinate clause can be reverted by virtue of specific information patterns (as example [1] shows), in which the dependent clause becomes *pragmatically* dominant over the main one:

- [1] acho que com um metro e vinte /=TOP= ela fica boa //COM=  
I think that with one meter and twenty /=TOP= it will be fine //COM=

From an information point of view, in [1] the dependent verb in Comment becomes the main one, for it carries the illocutionary force necessary for the utterance pragmatic autonomy, while the *putandi* verb, traditionally considered the head of regency, within the Topic unit becomes background information.

With respect to adverbial clauses, we noticed that, despite the strong reduction of adverbial clause typologies in speech (causal, temporal, and conditional being almost the only ones), an extensive insubordinate use of them is observed ([2], [3]), in contrast with a strongly reduced proper adverbial use ([4]):

- [2] se é um rato //COM=  
if it's a rat //COM= (illocution: question)
- [3] se cê quiser comprar as duas //COM=  
if you want to buy both //COM= (illocution: invitation)
- [4] esse tipo de muro /=TOP= se ficar baixo demais ele fica feio //COM=  
this kind of wall/=TOP= if it's too short it's ugly //COM=

By virtue of specific prosodic profiles, therefore, dependent structures can acquire pragmatic autonomy, i.e. illocutionary force, regardless of their syntactic status as traditionally understood for written language. Insubordination turns out to be a very productive phenomenon in speech, due to the pragmatic/prosodic orientation of syntax in this domain.

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**Wendy ELVIRA-GARCÍA** (Universitat de Barcelona)

**Prosody as a phonological cue for differentiating between elliptical and insubordinated constructions in Spanish**

In this paper we shed light on how the level of dependency of a grammatical construction with subordination marks can be reflected in its prosody. Insubordination studies often refer to some prosodic particularities (Evans 2007, Kawachi 2010, Schwenter forthcoming) of insubordinated constructions, but no systematic research has yet been carried out on the implications of prosody for the theory of insubordination.

Phonetic studies have proposed high boundary tones as an intonational cue for “non-final” clauses in a wide range of languages (Chen, 2007; Gussenhoven & Chen, 2000), Spanish among them (Beckman, Díaz-Campos, McGory, & Morgan, 2002). Following this thesis, we argue that elliptical constructions have rising intonation patterns; meanwhile syntactic independent clauses show falling patterns. Therefore, we propose prosody as an acoustic cue for the level of the syntactic (in)dependency of a construction in Spanish.

In order to do so, we analysed prosody at the four stages of the insubordination process proposed by Evans (2007) by designing an *ad hoc* corpus with controlled segmental material elicited by means of an adaptation of Discourse Completion Task (DCT) (Blum-Kulka, 1982), which consists of 3 insubordinated and 3 elliptical constructions that have been attested, classified and described in Gras (2011): si+indicative, para que+subjunctive, como si+subjunctive for insubordinated constructions and si+indicative, para que +subjunctive, como+indicative for elliptical constructions. The utterances (432) were performed by 4 speakers of Peninsular Spanish. The recordings were made by means of Marantz PDM60 and a microphone SHURE SM58 and recorded in mono, encoded in PCM at sample rate of 22050 Hz. The data was analysed within the AM model (Pierrehumbert, 1980) and the Sp\_ToBI conventions (Prieto & Roseano, 2010).

The results show that in Spanish the intonation of similar formal constructions differs according to the different degrees of syntactic dependency (i.e. elliptical and insubordinated) they show. Elliptical clauses present a rising boundary tone (H%), which appears as well in the first clause of subordinate constructions (thus, being a prosodic mark related to syntax), while insubordinated constructions convey either a falling contour (L\* L%) typical of neutral declarative sentences, or a rise-fall contour (L+H\* L%), which is used to express different pragmatic functions.

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**Nikolas GISBORNE and Robert TRUSWELL** (University of Edinburgh)

### Old English headed relatives between parataxis and hypotaxis

A restrictive parametric theory reduces variation and change to lexical features, including very local selectional requirements. We discuss an example of historical syntactic variation which doesn't straightforwardly reduce like this.

If natural language behaved itself, headed relatives would fall into two classes, exemplified by Old English (1-2).

- (1) [se [þe \_\_ þær gehæled wæs]] nyste hwæt se Hælend wæs  
he that there healed was NEG.saw what the saviour was  
“The person who was healed there did not see what the saviour was”  
(coaelhom,+AHom\_2:51.271)
- (2) Hire com ælce niht [[sumes haliges wifes] gast] to, [seo wæs haten Sancta Theodote]  
her came each night some.GEN holy.GEN woman.GEN ghost to she was called Saint Theodote  
“Each night, the ghost of a holy woman called Saint Theodote came to her”  
(comart1,Mart\_1\_[Herzfeld-Kotzor]:De25,B.10.26)

(1) contains a hypotactic relative, with the subordinating complementizer “þe” and subordinate word order, adjacent to its antecedent and contained within another clause. (2) contains a paratactic relative, in clause-final position, unattached to its antecedent “sumes haliges wifes”, with no clear signs of subordination (“seo” is a demonstrative pronoun). “Seo wæs haten Sancta Theodote” could be an adjoined relative, or an independent sentence.

On many accounts, hypotactic relatives emerged in OE, with ancestral varieties having only correlatives and paratactic structures like (2). The ambiguity of (2) might then represent an environment in which hypotactic se-relatives emerge through reanalysis of properties of functional heads (“seo” and/or C), as in standard parametric change.

However, examples like (3) don't fit this description. This construction is common in OE, and slowly declines in frequency until c.1700. In it, the antecedent is embedded within a larger NP and so cannot be related to the relative by extraposition (compare #”I met a woman's father called Julia”, Akmajian 1975). “Þæs folces” is therefore related anaphorically, rather than syntactically, to “þe”. This suggests that the “þe”-clause in (3) is syntactically independent of the matrix. Consistent with this, >96% of relatives with non-c-commanding antecedents are clause-final. However, c.81% of such examples contain subordinating “þe”, typically with subordinate clause word order. This is in fact slightly higher than the overall incidence of subordinating “þe” in OE headed relatives.

- (3) & him beag [god dæl [þæs folces]] to [þe ær under Deniscra manna anwalde wæron]  
and him yielded good dale the.GEN people.GEN to that before under Danish.GEN man.GEN rule  
were  
“and the good dale of the people that were previously under Danish rule yielded to him”  
(cochranA-2c,ChronA\_[Plummer]:913.7.1221)

In sum, the “þe”-clause in (3) simultaneously shows the hallmarks of syntactic subordination and insubordination: “þe”-clauses cannot stand alone, even in constructions where their external distribution suggests that they are unembedded. This tells us something about the dimensions along which syntactic change can progress: the decline of examples like (3) reflects an increasingly common restriction of “þe”-clauses to classic subordinate environments, which must be distinguishable from the antecedent requirement that “þe”-clauses have a syntactic host.

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**Beatriz MATO-MÍGUEZ** (Universidade de Santiago de Compostela)

**A syntactic and pragmatic approach to insubordinate *if*-clauses  
in formal spoken American English**

Insubordinate *if*-clauses in English show the form of a prototypical subordinate conditional clause but contain no attached corresponding apodosis and have the illocutionary force of a directive (e.g. *If you can move your head a little*). These clauses are said to have undergone the process known as ‘insubordination’, i.e. “the conventionalized main clause use of what, on *prima facie* grounds, appear to be formally subordinate clauses” (Evans 2007: 367). In other words, although they seem to have originated in subordinate clauses, synchronically they need to be interpreted as independent clauses. The aim of this paper is to delve into the nature of these clauses by examining, on the one hand, their grammatical status and, on the other, the illocutionary force they serve to convey. As regards their status, I will argue here that insubordinate *if*-clauses behave as non-dependent clauses syntactically, prosodically, and semantically. I will consider, among other features, one of the aspects taken by Evans (2007: 370) as criterial for the identification of insubordinate clauses, i.e. ellipsis. By analyzing to what extent the alleged ellipted main clause can be recovered from the structural or situational context, I will show that insubordinate *if*-clauses do not fulfill any of the criteria for elliptical clauses proposed in, for example, Quirk et al. (1985: 884-890). Their intonation patterns, which differ from those of syntactically dependent constituents (cf. Schwenter fc.), and various syntactic tests (see, for example, those proposed in Schwenter 1996) will also be taken into consideration in order to characterize these clauses as non-dependent.

As regards their semantics and pragmatics, insubordinate *if*-clauses are said to be used with directive meaning; in particular, as stated by Evans, “the most common function of insubordinated conditionals is to express polite requests” (2007: 380; see also Stirling 1999 and Mato-Míguez 2014), since, through their indirection, the directive implication is left hanging in the air and issues of damage to the face of the hearer are avoided (cf. Brown and Levinson 1987). Given that insubordinate *if*-clauses seem to have emerged from conditional clauses with directive meaning (e.g. *If you can move your head a little, I will examine you*), I will consider the frequency and illocutionary force coded by both subordinate and insubordinate *if*-clauses on the basis of data extracted from the *Corpus of Spoken Professional American English*. I will try to determine, firstly, whether insubordinate *if*-clauses are specialized in the issuing of requests or whether they can be used for a wider range of directive meanings; and, secondly, whether the two related constructions are used for the same type of illocutionary acts or, on the contrary, each of them is used to code specific directive categories.

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**Cristina SÁNCHEZ LÓPEZ** (Universidad Complutense de Madrid)

**The mapping between semantics and prosody:  
Evidence from Spanish main sentences with the form <*que* + V<sub>subj</sub>>**

Spanish main sentences introduced by *que* ‘that’ with a subjunctive verb are ambiguous between an optative reading and an evaluative reading. They can be interpreted as optatives and express the vivid wish

or desire of the speaker, as in (1a); they can also receive an evaluative meaning that consists of expressing the speaker's displeasure about a fact, as in (1b). These two readings differ in the presuppositions they convey: the optative reading presupposes that the proposition is not factual, whereas the evaluative reading presupposes that the proposition is a fact:

- (1) ¡Que trabaje él mañana!  
 That works<sub>subj</sub> he tomorrow  
 a. Optative reading: 'I wish he works tomorrow!'  
 b. Evaluative reading: 'It is awful that he works tomorrow!'

The only way to distinguish the two readings is by the intonation: the optative reading is marked with a downward final intonation whereas the evaluative reading is marked with an upward final intonation:

- (2) a. Optative reading: ¡Que trabaje él mañana!  
 'I wish he works tomorrow!'  
 b. Evaluative reading: ¡Que trabaje él mañana!  
 'It is awful that he works tomorrow!'

The evaluative reading crucially indicates a negative attitude by the part of the speaker. The positive attitude reading (that is, 'It is wonderful that he works tomorrow') is not possible for (1). This draws the line between main sentences with the form *<que + V<sub>subj</sub>>* and subordinate sentences with the same form, which can depend on a wide range of main predicates, such as intensional or non veridical predicates –for example, verbs of desire, order, probability, necessity-, and factive predicates –for example verbs of emotion, positive or negative evaluative attitude, achievement, etc. –(cf. Quer 1998, Ridruejo 1999).

In order to explain this fact, I propose that the sentence in (1) must be analyzed as an optative main sentence and that the two readings are the result of the type of the bouletic scale that orders the proposition and the relevant alternatives. Since in the evaluative reading the sentence expresses the proposition that it is less desired than any other salient alternatives, I propose that the evaluative reading is actually an optative reading with an inverted bouletic scale. Intonation marks the inversion of the ordering source of the scale.

My analysis builds on the idea that expressive utterances –i.e. exclamatives and optatives– are main sentences with a complex left periphery. I propose that the main sentences with the form *<que + V<sub>SUBJ</sub>>* contain an *EX* operator –as proposed for exclamatives by Gutiérrez Rexach (1996, 2001), Castroviejo (2006), and for optatives by Grosz (2011)–, which combines with a proposition and turns it into the expression of the speaker's emotion. The emotion is evaluated with respect to a bouletic scale that orders the proposition and all the contextually salient alternative propositions with respect to the desires of the speaker. Following Villalta (2008), I assume that the selection of subjunctive mood follows a general principle, according to which the predicates that require the subjunctive mood introduce an ordering relation between propositions by comparing the proposition to its contextually available alternatives; I extend this principle to the selection of mood in main clauses like (1).

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**Daniela SCHRÖDER** (Universität Hamburg)

### Insubordination in English from 1500 to 2000: A quantitative approach

Specific syntactic constructions such as “[I don’t understand] How they can bet on a bloody dog like that!” or “[I can’t believe] what a nice girl she is!” are difficult to account for in any existing grammar theory because these clauses show the formal features of subordinated clauses, but they are used as conventionalized and independent main clauses. This phenomenon has been labeled insubordination (Evans 2007). When it comes to the diachronic development of these structures, different theories have been put forward. They are either supposed to have developed out of ellipsis (Evans 2007), by extending dependency beyond the sentence level (Mithun 2008) or via a dependency shift (D’Hertefelt & Verstraete 2014).

The current study investigates the phenomenon of insubordination in English from a diachronic perspective by looking at historical and present-day data. Using four different language corpora, covering documents from around 1500 to present, the developmental trajectories of three specific insubordinated structures, namely “what a”-, “how + adjective”- and “how + personal pronoun”-exclamatives, are scrutinized.

The four corpora are subdivided into matching genres, allowing for comparability between the corpora and comparisons between genres over time. The outcomes of this method advocate a peak of insubordination in the 18<sup>th</sup> and 19<sup>th</sup> century, regardless of the genre it occurs in. Generally though, the data suggest that text genre plays an important role, with fictional prose being the most prominent genre featuring insubordination.

Overall, the following picture emerges: In line with research on other European languages (cf. van Verstraete et al. 2012 for Dutch) the present study shows that the different structures investigated here empirically behave differently, which points towards the fact that they have different origins. Furthermore, examining the ratio between insubordinated and subordinated patterns makes a theory of ellipsis as the developmental force of insubordination highly unlikely. Moreover, insubordination occurs significantly more often in direct speech in fictional literature than in any other genre, which is in line with previous research on exclamatives (Collins 2006), but which has not yet been explicitly stated for insubordination.

Finally, the outcomes of the study enable us to discuss the consequences insubordination has for a theory of grammar and the notion of grammatical change. The results of the present study support a usage-based grammar model and argue for a treatment of insubordination that is not purely based on syntax, but rather focuses on discourse-pragmatic features.

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### On the topic of insubordinate clauses

This paper presents the case of apparent main and subordinate uses of the same clause type which differs from those described in the literature on insubordination so far. In Jaminjung, a Western Mirndi language of northern Australia, clauses featuring a second-position clitic =ma occur in two discourse functions, as established through analysis of corpora of coherent discourse from different genres, based on primary fieldwork. The first function, illustrated in (1), is that of a subordinate clause type which subsumes the functions of relative clauses, but also of spatial or temporal adjunct clauses (Hale’s 1976 “adjoined relative clauses”; cf. also Lehmann 1984: 136ff.).

- (1) jurlu-g=gung                dij        yurr-irdba-ny=murlu \  
 hill-LOC=RESTR                stay        1+2PL-fall-PST=COLL  
 [miskita-ni=ma                digirrij gan-ba=mindag]ADJ.REL  
 mosquito-ERG=MA                die        3SG>1-bite.PST=1+2  
 ‘Right by a hill we camped, [where/while the moskitos bit you and me “to death”]’

In the second function of this clause type, the clitic follows a contrastive topic in what appears at first sight to be a main clause, as shown in (2).

- (2) Balinybaliny    nganth-arra-m                nami.  
 kite.species      2SG>3SG-put/call-PRS 2SG  
 [Gajerrawoong-ni=ma]TOP        [burr-arra-m                mijijing.] COMMENT  
 <language.group>-ERG=MA      3PL>3SG-put/call-PRS kite.species  
 ‘Balinybaliny YOU call it. The [GAJERRAWOONG] call it mijijing.’

Crucially, clauses in the two functions differ prosodically, in entirely regular ways. The prosodic pattern of the “subordinate” type in (1) is the overall falling contour of a topicless declarative. In the contrastive topic type (2), the pattern is that of a prosodically bipartite topic-comment construction, with a prosodic break following the constituent hosting the clitic (the topic), and a falling contour aligning with the element in focus. The clitic here could thus be analysed as a contrastive topic marker.

We argue that a link can be established between the two functions by analysing the clitic =ma as a marker of simultaneity or concomitance rather than a standard relative clause marker. Semantic extension from temporal simultaneity to contrast, based on the generalisation of an invited pragmatic inference, is a well-established historical process, as shown e.g. in the literature on English while (e.g. Traugott & König 1991: 199–203; González-Cruz 2007). The link is made explicit by a translation of (2) as ‘Balinybaliny YOU call it, while the [GAJERRAWOONG] call it mijijing.’

The two competing analyses of =ma in clause type (2) – as a contrastive topic marker in a main “insubordinate” clause, or as a subordinate clause marker with a contrastive rather than temporal interpretation induced by a topic-comment prosodic contour – lead us to reconsider the very notion of dependency. First, the degree of syntactic dependency of the generalised subordinate clause is already low. The clause is finite, and there are no obligatory gaps or other indications of deranking; thus the clitic is the only marker of dependency. The topic-comment construction, on the other hand, is certainly pragmatically dependent: a topic that is formally marked as contrastive invokes an explicit or implicit alternative topic (e.g. Büring 1997). Thus neither clause type occurs in isolation, without a discourse context.

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### When insubordination is an artefact (of sentence type theories)

Insubordination describes a scenario where structures are used autonomously which, “on *prima facie* grounds, appear to be formally subordinate clauses” (Evans 2007: 367). The phenomenon of insubordination, we show, sometimes hinges on purely theory-internal problems: The “*prima facie*” appearance of subordination really exists only from the point of view of inadequate classification criteria used in some sentence type theories (henceforth: *STTs*). These *STTs*, we demonstrate, can be replaced by better classifications.

German provides relatively well-studied examples of insubordination – which may still only be theoretical artefacts. Many *STTs* describe German sentence types syntactically (e.g. Truckenbrodt 2006a, b). However, purely syntactic STTs falsely predict (1) is a subclause:

- 1) Dass er immer zu SPÄT kommt!  
*that he always too late comes*  
 “Oh, that he must always come too late!” (exclamative sentence)

Despite “prima facie” clues like the subordinating conjunction *dass* and V-last order, (1) is not subordinated (not even under an elided matrix clause) – and neither is (2):

- 2) Ob er wohl kommt?  
*whether he part comes*  
 “Will he come (what do you guess)?” (deliberative question)

To consider these sentences subordinated is a mistake purely syntactic STTs are bound to make. However, sentences that seem to display virtually the same syntactic structures can differ in other factors, minimally prosody (cf. 3) and modal particles (cf. 4).

- |  |  |
|--|--|
| 3) Dass er immer zu spät kommt.<br><i>that he always too late comes</i><br>“(...) that he always comes too late” | <i>(w/o accent (= 1), no exclamative reading; subordinated clause under some elided matrix clause)</i> |
| 4) Ob er kommt?<br><i>whether he comes</i><br>“(Did you ask) whether he comes?”                                  | <i>(absence of modal particle “wohl” (= 2) = subordinated clause w/ elided matrix clause)</i>          |

We propose to regard prosodic contours and the occurrence of sentence type-related particles as classification factors. The resulting theory avoids the definition of “prima facie” subordination:

- Empty “prefields” (as in examples 1-4, V1-questions/-declaratives) denote an abstract semantopragmatic property, and not subordination per se: The respective clauses’ truth values cannot be evaluated by inspecting a world under discussion.
- Boundary tones (e.g., L% in 1/3 vs. H% in 2/4) signal truth value assessments (cf. Truckenbrodt 2013). The exclamative accent (e.g. L+H\*) distinguishes (1) from (3).
- Modal particles contribute to the set of sentence type properties (Struckmeier 2014), distinguishing (2) from (4).

In this scenario, insubordination ceases to be a property of (1/2) – because the definition of what “prima facie” cases of subordination are, is changed under the new STT.

We therefore propose that some cases of insubordination do not constitute actual empirical phenomena in their own right. Rather, these cases seem to reduce to artefacts of the definition of STTs. In our talk, we will point out characteristics of “insubordination artefacts” and the theories that cause them. We will furthermore generalize properties of our STT, which makes theories of this kind, we hope, less susceptible to producing the kinds of artefacts other STTs often entail.

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#### Does structural coreference correlate with degrees of functional dependence?

This paper addresses clauses which have a mismatch between their formal and functional features. Common examples are those which are formally subordinate but used independently. In some other cases there seem to be intermediate degrees of syntactic and functional dependence. In example (1a) *while* has a temporal sense and introduces a dependent clause which modifies the event in the matrix clause. In (1b), by

contrast, *while* introduces an equally subordinate but, in discourse terms, independent event which stands in contrast to the matrix clause event.

- (1) a. Jeder Läufer<sub>i</sub> hört Musik, während er<sub>i</sub> durch den Park joggt.  
Every runner listens.to music while he through the park jogs
- b. Jeder Athlet<sub>i</sub> geht morgens joggen, während er<sub>i</sub> abends schwimmen geht.  
Every athlete goes in.the.morning jog while he in.the.evening swim goes

While both clauses are clearly subordinate, different degrees of structural integration may be identified between them in phenomena such as binding (Reis 1997, Haegeman 2004, Frey 2011). Authors have consequently used evidence from binding as a test of integration. However, this data contains a number of complicating factors and can require fine judgements. The work reported here examines these phenomena in carefully controlled conditions.

Our research aim is to explore whether binding data provides reliable empirical support for current models of interclausal relations. We conducted a series of experiments on English and German using variable binding as a diagnostic tool. We compared a wide range of clause types of varying degrees of structural integration, like temporal and adversative clauses with *während/while* (1a, 1b).

We tested these sentence types in four conditions varying on two binary parameters; these were Clause Order (matrix clause precedes, subordinate clause precedes) and Location of Binder (in matrix clause, in subordinate clause). The key test is the degree of acceptability of the conditions with successful binding by the quantifier phrase (e.g. *every NP, an NP, no NP*).

The results confirm that clauses thought to have varying degrees of structural dependence exhibit correspondingly varying binding behaviours, thus confirming the claim that binding is a symptom of integration (Reis 1997, Frey 2011). In the fully dependent example (1a) above, informants judge the quantifier variable binding (*jeder Läufer<sub>i</sub> ...er<sub>i</sub>* ‘every runner<sub>i</sub> ...he<sub>i</sub>’) as more natural than in the functionally more independent example (1b).

Using the variable binding test we therefore observed a clear difference between temporal and adversative clauses with the same connector (e.g. German *während*, English *while*). An additional interesting finding is that the quantifier phrases used to test for variable binding have to be controlled for very carefully: for some there are additional factors involved that have to be clearly separated from structural binding.

Our data shows that binding behaviour is a robust measure of integration. Since our binding evidence suggests that there is not just integration or non-integration, but rather at least one intermediate degree, it provides additional insight into the different degrees of dependence on a syntactic level.

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#### Björn WIEMER (JGU Mainz)

#### How to distinguish independent infinitives, “analytical moods”, and predicatives from “parentheticalization” and (semi-)insubordination (Background from Slavic)

In Slavic languages, different clause types figure prominently as debatable cases of either insubordination via main clause ellipsis (Evans 2007) or of clauses regarded as ‘semi-independent’ (Van Linden/Van de Velde 2014): they complement a predicative expression deprived of verbal features. The former type (A) is represented by main-clause infinitives, with or without ‘optative-hortative’ particles (e.g., Russ. *Uspet'.INF by vovremja If only I/we will make it in time*), the latter type (B) is illustrated with ‘predicatives’ deriving from “nouny” parts of speech (e.g., Mac. *Sramota da P* ‘It's a shame if P’, Russ. *Žal*', *čto P* ‘It's a pity that P’; ex. (1)). Both the nature and diachronic provenance of these phenomena differ, but neither of them fits insubordination (on Evans’ criteria).

As concerns Type A, main clause usage of independent infinitives and particles as “analytical mood” markers preceded their use in dependent clauses, but in order to judge about insubordination, one first has

to establish a diachronic “point of departure” (say, Common Slavic). A particular problem arises with clause-initial particles: how can they be distinguished from complementizers e.g. if they mark quotes? After all, (modal) particles pragmatically depend on preceding discourse (Diewald 2006; Nau/Ostrowski 2010).

As for Type B, predicatives can express speaker’s stance. They arise, however, from a process that is structurally opposite to that of epistemic and perception verbs if, via communicative downgrading, they become parentheticals (Thompson 2002; Keevallik 2011), or to that of speech act verbs turning into reportative particles (*Harris/Campbell 1995*; compare Romance *DIZQUE*). In the latter cases, reanalysis leads to a decrease in syntagmatic tightness whereas with predicatives, syntagmatic tightness increases. Thus, “parentheticalization” and the rise of predicatives represent inverse processes (compare (1a-b) and (2a-c)). The former, furthermore, may cause the appearance of “zero complementizers” if reanalysis, together with frequency, creates a pattern expanded by analogy (Tagliamonte/Smith 2005 as for English). Therefore, in order to determine (semi-)insubordination, it is crucial to establish the relative chronology of purported developmental steps and to ascertain whether any kind of ellipsis or reanalysis occurred. I will use Slavic examples to compare Type A and B, and to distinguish both from parentheticalization and the alleged omission of complementizers. To this end, a differentiation between structural and pragmatic dependence is necessary, too (Boye/Harder 2007; Wiemer 2015). Finally, I will show that a careful differentiation between these processes aids a proper understanding of how Cristofaro’s (2003) purely cognitive ‘Asymmetry Principle’ relates to (semi-)insubordination vs. the aforementioned diachronically opposite processes.

**predicatives**, e.g. Pol. *szkoda* ‘damage > pity’: (1a) > (1b), rather than (1a) < (1b)

- |  |   |
|--|---|
| (1a) <i>Szkoda, nie możesz przyjść.</i>    | juxtaposition                                       |
| ‘It’s a pity, you can’t come.’             |   |
| (1b) <i>Szkoda, że nie możesz przyjść.</i> | (syndetic) subordination (= semi-insubordination ?) |
| ‘It’s a pity <b>that</b> you can’t come.’  |   |

**parentheticalization** (2c < 2a or 2b ?)

- |   |  |
|---|--|
| (2a) <i>I believe you’ll make it in time.</i>             | juxtaposition (asyndetic subordination ?)    |
| (2b) <i>I believe <b>that</b> you’ll make it in time.</i> | (syndetic) subordination                     |
| (2c) <i>I believe / you’ll make it in time.</i>           | parenthetical use of former matrix predicate |

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# WORKSHOP

## Additives across languages

### *Convenors*

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### *Description*

Additives (such as English *also* and *too*) can be characterized informally as associating with an element of the proposition and indicating that what is said about this element also holds for an alternative. A number of European languages such as English and German have particles that exclusively mark this function. These particles have been quite well studied, especially from a formal semantic point of view (e.g. Reis & Rosengren 1997, Krifka 1999, van der Sandt & Geurts 2001, Rullmann 2003, Sudhoff 2010, Winterstein 2010, Winterstein & Zeevat 2012). However, some recent studies indicate that additive particles in non-European languages may have a much broader range of application than those in English (Lahiri 1998, Göksel & Özsoy 2003, Demeke & Meyer 2008, Tosco 2010, van Putten 2013, Öpentin 2013, Konnerth 2014, Forker submitted). Cross-linguistically, recurrent functions of additive particles include non-scalar additivity (corresponding to English *also*, *as well*, *too*), scalar additivity (English *even*), the marking of concessive clauses, indefinite pronouns (free-choice, universal, negative), topic switch and/or contrast, and NP coordination.

A major goal of this workshop concerns the agenda to better understand as well as disentangle the multifunctionality of additives: First, are there additive particles with functions other than the ones mentioned here? Second, how do additive particles develop historically - do they tend to originate with one of these functions and then take on others? What types of elements historically originate from additive particles? Third, what are operationalizable definitions of the various functions? A fourth question is whether multifunctional additive particles may be described as having a single more abstract function which unites their various uses.

Another important line of research into additives is their interaction with information structure and their role in discourse organization. Additive particles have been called focus particles or focus-sensitive particles (see e.g. König 1991), but it has also been noticed that they may associate with topics (Krifka 1999, Dimroth 2002, van Putten 2013). How the particles interact with other categories of information structure may differ from language to language and warrants further investigation. The functions of additives in discourse organization and processing have not been studied much (but see Dimroth 2002, Eckardt & Fränkel 2012 for experimental approaches). Some questions are whether and to what extent additives are obligatory (see also Kaplan 1984), what their role is in increasing discourse coherence and what functions they may have in conversation.

In addition to the functions and information-structural properties of additives, a number of other research questions are highly relevant to understanding the phenomenon of additive marking. Some interesting problems to address are:

- Which (experimental, corpus-based, or other) methodologies can we use to study additive particles?
- What are the morphosyntactic properties of additives: what types of constituents do they associate with and what types of constructions do they occur in?
- What does a typology of additives look like? Are there functions that are more common than others in particular genetic or areal units?

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**Irina BAGIROKOVA** (Institute of Linguistics RAS) and **Yuri LANDER** (National Research University, Higher School of Economics)

### Grammaticalization of the analytic additive in Circassian

West Circassian (Adyghe), a polysynthetic language of the Northwest Caucasian family, often may choose between morphological (synthetic) and syntactic (analytical) strategies of conveying information. Morphological means are more grammaticalized and display much polyfunctionality, while syntactic means typically have more restricted distribution. In this talk, we show that an analytical marker may undergo grammaticalization as well, despite the presence of a highly grammaticalized synthetic marker. There are two basic additive markers in West Circassian: the synthetic suffix -jə and the analytical “conjunction” æč’jə (both can be used monosyntetically and bisyntetically). The suffix is highly grammaticalized and is used in coordinating constructions, in scalar contexts, as a marker of a series of indefinite pronouns, etc.; cf. Rogava & Kerasheva 1966, Arkadiev et al. 2009: 102–103, Kapitonov 2010). The “conjunction”, on the other hand, is sometimes thought to be restricted to coordination of predicates where it appears as a marked option (Kumakhov 1971), although its increasing use was reported by Kumakhova (1978). Our data show that the range of functions of æč’jə is wider than it has been assumed and includes:

- (i) coordination of clausal predicates expressed by verbs (1), nouns (2), adjectives (3) and even pronouns (4) :
- (1) æč’jə tə-qe-şʷe-š’t æč’jə wered qe-t-?ʷe -š’t  
also 1PL.ABS-DIR-dance-FUT also song DIR-1PL.ERG-say-FUT  
We’ll both dance and sing.
- (2) a-r æč’jə s-jə-nəbž’erʷ æč’jə s-jə-ahəl  
that-ABS also 1SG.PR-POSS-friend also 1SG.PR-POSS-relative  
He is both my friend and my relative.
- (3) mə qeprazə-r æč’jə jənə æč’jə ?aṣə  
this water.melon-ABS also big also sweet  
This water-melon is both big and sweet.
- (4) se-r-ep æč’jə we-r-ep æč’jə a-r zə-şə-ke-r  
I-PRED-NEG also you(SG)-PRED-NEG also that-ABS REL.IO-do-PST-ABS  
It’s neither me nor you who did it.

(ii) coordination of adverbials:

- (4) mə č'ale-r psənč'-ew əč'jə dax-ew əč'jə ma-txe  
this boy-ABS fast-ADV also nice-ADV also DYN-write  
This boy writes both fast and nicely.

(iii) coordination of NPs in non-predicate positions:

- (5) əč'jə č'ale-xe-m-jə əč'jə pšaše-xe-m-jə tə-q-ja-č'a-κ  
also boy-PL-OBL-ADD also girl-PL-OBL-ADD 1P.PL-DIR-3 PL.IO+DAT-call-PST  
We've called both boys and girls.

(iv) coordination of clauses:

- (6) hač'e-r qe-kʷa-κ əč'jə d-κe-šxa-κ əč'jə  
guest DIR-go-PST also 1PL.ABS-CAUS-eat-PST also  
The guest has come and we've already dined him.

(v) scalar additivity in interrogative-negative sentences:

- (7) ade əč'jə wə-qə-z-de-gʷəš'ə?e-š't-ba?  
PTCL also 1PL.ABS-DIR-1SG.IO-COM-talk-FUT-EMPH  
Won't you even talk to me?

(vi) emphatic usage in negative clauses

- (8) se-r-ep əč'jə mə-r zə-txə-κe-r  
I-PRED-NEG also this-ABS REL.ERG-write-PST-ABS  
It's not me who wrote this! (It has nothing to do with me!)

This spread to new contexts together with pragmaticalization (evidenced by (v) and (vi)) suggests the continuing grammaticalization. An additional piece of evidence for this is presented by the fact that in contexts like (vi) əč'jə can be phonologically reduced and appear as a bound morpheme; cp. (8) and (9):

- (9) se-r-ep-č'jə mə-r zə-txə-κe-r  
It's not me who wrote this!

We conclude that the suffix -jə does not block the development of əč'jə as a generalized additive marker. An important further issue concerns the relation between such grammaticalization and specifics of the constructions, though.

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**Krishna BORO and Scott DELANCEY** (University of Oregon)

#### Additive among the discourse particles in Boro

Studies of additives in English and similar languages examine it as a distinct category. We will describe the expression of additivity in Boro (Tibeto-Burman, Assam), where it is one interpretation of one of a rich set of particles indicating the relation of the marked referent to a set of presupposed possible referents, including:

- sw of a presupposed referent, replace it with this one  
lo of a presupposed set of referents, eliminate all but this one

bw of a presupposed set of referents, be sure to include this one

bw can express additivity:

- 1) dwi hw-na-nwi kharwi-phwr-khw-bw ese hw-naŋ-sigwn  
 water give-NF-NF kharwi-PL-OBJ-ADD little give-NEED-FUT  
 ‘After you add water, you need to add a little kharwi too.’ (Onla)

And has other functions typical of “additives” in TB languages, including concessive (2) or universal quantification (3) under negation:

- 2) mura hw-ba-bw zirai-a  
 stool give-NMZ-ADD rest-NEG  
 ‘Do not sit down, even if offered a stool.’ (Treasure)
- 3) wmbala aŋ ná-bw mwn-la aŋ thánj-swi  
 then I fish-ADD get-ANYMORE I go-INTENT  
 ‘Then I’m not going to get any fish, I’ll just go home.’ (Treasure)

Marking both of two coordinated referents, it can express either ‘both’ or ‘either’:

- 4) ekka khompothi-a-bw laplap wthi-bai  
 really property-SU-also EXP grow-PERF  
 mwso guli-a-bw goŋ-nwi zalai-laŋ-bai  
 cow cowshed-SU-also CL-two happen-take-PERF  
 [Their] property also grew. Their cowsheds also doubled. (Treasure)
- 5) iniphrai be-khw zwŋ-w sarai-ou-bw soŋ-za-yw  
 afterwards that-DOM we-SUB sarai-LOC-ADD cook-INCEPT-GEN  
 debsi-phwr-ou-bw soŋ-za-yw  
 debsi-PL-LOC-ADD cook-INCEPT-GEN  
 ‘After that we cook it in (either) a sarai or in debsis.’ (Onla)

Thus bw is not intrinsically additive. It directs the hearer’s attention to a referent which must be included in the set which the proposition is true of. If the hearer has other referents in mind, the reading is additive. If not, we get other readings. In (3) bw simply specifies that ‘fish’ must be included in what was not gotten, it does not imply that there is (or is not) anything else. (5) does not imply that there are or are not other things we might cook onla in, it only specifies that these two referents are correct answers to the question ‘What do you cook the onla in?’

We do not analyze a form by starting with its most familiar function, taking that as basic, and trying to derive its other functions from that. We have to look at the overall range of functions in the context of the system of which the form is part. We cannot understand the uses of bw by starting with additive and adding on other functions. Rather, the various functions, including the additive, are derivative from the more general meaning of bw, which occupies a particular slot in a system of discourse particles which specify the relationship of the mentioned referent to a presupposed set of potential referents.

This paper will situate the various functions of bw within the larger system of Boro discourse particles, and show how these functions derive from its place within this larger system.

**Denis CREISSELS** (University of Lyon)

### **Non-scalar additive markers in Subsaharan languages: polysemy patterns and grammaticalization paths**

In Subsaharan languages, the words expressing non-scalar additive (corresponding to English also or too) are rarely completely specialized in this function. However, their additional functions vary cross-linguistically, as illustrated by the following languages (1 = non-scalar additivity ('also'), 2 = scalar additivity ('even'), 3 = topic shift ('in his/her turn', 'as for him/her'), 4 = NP coordination ('and'), 5 = comitative adjunction ('with'), 6 = plural marking, 7 = clause coordination, 8 = contrast between successive clauses ('however'), 9 = concessive subordination ('although'), and 10 = formation of indefinite pronouns from interrogatives):

Amharic (Semitic) mm: 1, 2, 3, 7, 10  
 Goemai (Chadic) zak: 1, 8  
 Hausa (Chadic) kuma: 1, 7  
 Igo (Kwa) ka: 1, 2  
 Jamsay (Dogon) kan: 1, 2  
 Kanuri (Saharan) ye: 1, 7  
 Khwe (Central Khoisan) tamaxa: 1, 2  
 Koyraboro Senni (Songhay) moo: 1, 3  
 Maba (Maban) ka: 1, 4, 7  
 Mandinka (Mande) fanan: 1, 3  
 Mano (Mande) ni: 1, 2, 6  
 Sar (Central Sudanic) gee: 1, 4, 6  
 Sereer (Atlantic) o: 1, 4  
 Soninke (Mande) qa): 1, 3  
 Tswana (Benue-Congo, Bantu) le: 1, 2, 4, 5  
 Wolof (Atlantic) itam: 1, 9  
 Yoruba (Benue-Congo) pelu: 1, 4, 5  
 Zay (Sematic) -m: 1, 9

Some of the historical processes that may be responsible for the polysemy of the words that have the expression of non-scalar additivity as one of their possible functions have been discussed in the literature (see among others Abdoulaye 2004, Amfo 2010, Aubry 2014, Lord 1993, Mithun 1988, Trutenuau 1973). In this paper, after summarizing the explanations found in the literature for some aspects of the polysemy patterns in which additive particles are involved, I focus on the use of the same morphemes as additive particles and plural markers, which to the best of my knowledge has never been discussed in the grammaticalization literature. Among Subsaharan languages, this polysemy pattern is found in at least two language groups (Mande and Sara) that are not considered as genetically related, and are spoken in areas very distant from each other. The explanation I propose is that plural marking may develop from the use of additive particles as NP coordination markers: conventionalization of the ellipsis of the second conjunct in NP coordination may lead to the reanalysis of a coordination marker as an associative plural marker, which may subsequently be reanalyzed as an ordinary plural marker ( $X$  and  $\emptyset > X$  and other persons associated with  $X >$  several  $X$ 's).

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**John DU BOIS** (University of California, Santa Barbara)

#### **The Additive Edict: Rules for Intersubjectivity**

One enduring mystery in the study of additive particles concerns the elusive nature of the rules—if any—which govern their use. Additives are deemed obligatory in some contexts (Kaplan1984), but are optional (or even inappropriate) in others. What is the relevant context, and what is the rule? More importantly, why should additives be obligatory under just these conditions? This paper seeks to identify the cognitive, pragmatic, and interactional factors that govern the use of obligatory additive particles, and to explain why they are influential. Key to this new approach is the recognition that language users carefully monitor intersubjective relations, attending to the relation between their own epistemic, affective, modal, and other stances and those of their interlocutors (Du Bois 2007). The dynamics of dialogic engagement often

triggers a linguistic response involving additives, which prove to be sensitive to certain specific configurations of intersubjectivity between speaker and recipient.

This analytical insight, initially developed through the analysis of naturally occurring spoken language use (based on the Santa Barbara Corpus, Du Bois et al. 2000-2005), led to the development of a new experimental protocol for the controlled elicitation of additives. This experimental paradigm provides the primary data for this paper. The experimenter draws one card from a stack of cards containing pictures (of animals, cars, etc.), looks at it, and says either “I like these” or “I don’t like these”. S/he then shows it to the subject, who says whether s/he likes them or not. The procedure is repeated for a number of cards; then a similar procedure is followed using a different verb (e.g. have). Preliminary results for English suggest that subjects are more likely to produce an additive particle when the verb is subjective (like) than when it is objective (have). To gain a comparative perspective on additives, we will run the same protocol in Spanish (where we predict similar results). Pilot research suggests that this experimental paradigm shows considerable success in inducing speakers to produce additives, under conditions which can be varied in controlled ways. Compared to existing experimental protocols (Eckardt & Fränkel 2012), which often fail to elicit additives in predicted environments, the rate of additive production by experimental subjects is substantially improved.

I argue for the relevance of an additive stance, which goes beyond the mere “addition” of objective referential content to encompass the indexing of intersubjective alignment. Current efforts to gain a deeper understanding of the use of additive particles across languages can benefit from the novel methodological innovations of the present work, and the theory of intersubjective stance that underlies it.

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**Ines FIEDLER, Tom GÜLDEMANN and Henok WONDIMU** (Humboldt Universität zu Berlin)

#### **On the relationship between additive and topic markers with special reference to African languages**

Elements used as additive markers have been shown to be recruited recurrently also for other grammatical functions, notably in the domain of information structure. The paper addresses in particular a relationship recorded previously, e.g., by Demeke & Meyer 2007, Fiedler 2009, and van Putten 2013, viz. between the marking of additive focus on the one hand and of contrastive topic on the other hand. On the basis of information-structural data from a sample of more than 20 African languages and additional cases from the literature, we attempt to show first that this poly-functionality pattern is a wide-spread phenomenon on the continent.

Secondly, we will undertake a typological comparison of the attested cases in both structural and semantic terms. We will look at the range of constructions where additive particles may occur. As was already observed by Krifka (1999) for German, and Fiedler (2009) for Aja, additive and topic interpretation are related to structural differences in some languages. In Aja, the particle follows the agent in its canonical position to fulfill the additive function, as in (1), but the topic reading is only achieved in a left-dislocation construction, as in (2).

- (1)      ïjsú      ó      cán      lè      jū      shí      kó.  
           man      DEF      also      PROG      course      run      PROG  
           {The dog is running and chasing the man (in the forest).} The man is running, too. (Fiedler 2009: 304)
- (2)      {Maria has invited some friends for dinner. For this, she has prepared different dishes.}  
 a.      ègblén      ó,      nyísó      dìyí      yí      é      tó      yé      dàdá.  
           akassa      TP,      yesterday      ?since      FOC      3S      begin      3S      RED.cook  
 b.      èlán      ó,      é      tò      yé      èssó,  
           meat      TP      3S      grill      3S      yesterday,

- c. ñtónú cán, égbé é xó yé ké.  
 sauce TP, today 3S hit 3S PRED

As for the akassa, she already started to cook it three days before, as for the meat, she grilled it yesterday; and the sauce, she prepared it today. (Fiedler 2009: 305)

In other languages such structural restrictions seem to be unknown (Avatime, van Putten 2014, Amharic, Demeke & Meyer 2007). On the basis of our language sample, we will show what kind of structural restrictions can be found in different languages and whether they are directly related to the contradicting interpretations.

Besides this construction-type condition, we assume a common denominator of the elements to fulfill these two functions – additive focus and contrastive topic –, also taking into account previous hypotheses such as that proposed by Krifka (1998). This common denominator might be related to the concept of ‘contrast’ which is exploited in both functions.

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**Diana FORKER** (University of Bamberg/James Cook University)

#### Building a semantic map for additives

Additives such as English *too* and *also* can be defined as focus-sensitive particles indicating existential quantification over alternatives with respect to the material contained in the scope and the inclusion of some alternatives as possible values for the open proposition in their scope (König 1991: 33). Additives in European languages have been the object of numerous studies, especially within formal frameworks (see, e.g. Kaplan 1984, Rullmann 2003, Reis & Rosengren 1997, Krifka 1999, Sudhoff 2010, Umbach 2012). There are also a few studies of additives in non-European languages (e.g. Amharic (Demeke & Meyer 2008), Malay (Goddard 2001), Karbi (Konnerth 2012), Avatime (van Putten 2014: Chapter 6), and Ishkashimi (Karvovskaya 2013)).

However, up to now there is no typological research assessing the full semantic range of additives. In this talk, I will present a cross-linguistic investigation of additives in around 40 languages based on grammatical descriptions, elicitation and data from language experts. The study is meant to fill the gap by showing that the central functions of additives attested in many languages from all over the world are much broader than what we know from English or German and include:

- pure additivity and scalar additivity (similar to English *even*)
- contrastive topics and topic switch
- various types of indefinite pronouns and similar indefinite expressions
- concessivity
- conjunctival adverb ‘and then’
- conjunctive constituent coordination, including emphatic coordination

Within a usage-based approach, I will provide explicit characterizations of the functions and in a second step of the commonalities and semantic relation between these them. The explanations of the semantic links are further supported by means of two different types of semantic maps. First, I will develop a categorical (‘traditional’) semantic map with lines connecting the functions that allow detecting implicational relations and possible grammaticalization paths. Second, I will present a continuous semantic map based Multidimensional Scaling produced by and large automatically from the data.

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**Marion KNECHT** (University of Tübingen)

**Leftward Association of English and German Focus Particles**

In the literature on English and German focus particles, there are controversial observations about the leftward association of exclusives and additives. The goal of our study is to provide experimental evidence in order to shed light on this topic.

It has been reported that the English exclusive *only* cannot associate with material to its left. Leftward association of the scalar-additive focus particle *even* is, on the other hand, possible (e.g. Jackendoff, 1972, Erlewine, 2014). Example (1) illustrates this difference. In (1a.), the extracted, focused object *Mary* is associated with *even*. The same construction with *only* yields the infelicitous sentence in (1b.).

- (1) a. ✓ [Mary]<sub>F</sub>, John *even* met \_\_\_\_ at the party.  
 b. \* [Mary]<sub>F</sub>, John *only* met \_\_\_\_ at the party. (Erlewine, 2014, p. 11)

It is controversial whether a similar contrast also exists in German. Erlewine (2014) assumes that *nur*, in contrast to the corresponding English particle *only*, can associate to its left and proposes different scope reconstruction mechanisms for English and German particles. Krifka (1999, p. 112) claims that “[in German] all particles can follow their focus [...]. Jacobs (1983), on the other hand, notices a difference between *nur* and *sogar* (‘even’) as shown in (2).

- (2) Ich vermute, daß seine Mütter morgen {?? nur/?sogar} kommt.  
*I suggest that his mother tomorrow {??only/?even} comes.* (Jacobs, 1983, p. 109)

We conducted two rating studies in order to answer the question whether English and German particles behave differently with respect to leftward association. In the first study, we compared the German particles *nur* (‘only’), *sogar* (‘even’) and *auch* (‘also’). The additive particle *auch* can easily associate to its left and has the special property of being stressed in constructions with leftward association (e.g. Krifka, 1999; Reis & Rosengren, 1997; Sudhoff, 2010). Items consisted of question-answer sequences. In the answers, the particles either associated with the object to their right in canonical word order or to their left in topicalization structures. Participants (n=72) had to rate the naturalness of the answers on a 7-point scale. Results are illustrated in the diagram below, with an example item in speech bubbles. Items with *nur* were rated significantly worse than items with the additive particles *sogar* and *auch*. Furthermore, the leftward association of *sogar* was rated significantly worse than the leftward association of *auch*. In contrast to the other two particles, there was no effect of word order for the particle *auch*. The difference between *nur* and *sogar* supports Jacob’s (1983) assumptions.

In an English rating study, we compared the leftward association of *only* and *even*. As claimed in the literature, *even* was rated significantly better in constructions with leftward association than *only*. Our findings do not lend support for a different treatment of English and German focus particles as, for example, suggested by Erlewine (2014). In follow-up studies, we are currently investigating which properties of focus particles are responsible for the restrictions on leftward association and to what extent context and prosody can facilitate leftward association. First results of a follow-up study for English indicate that the difference between *only* and *even* disappears when the leftward associated constituent is prosodically highlighted. This suggests that the leftward association of *only* is more dependent on prosodic information than the leftward association of *even*.

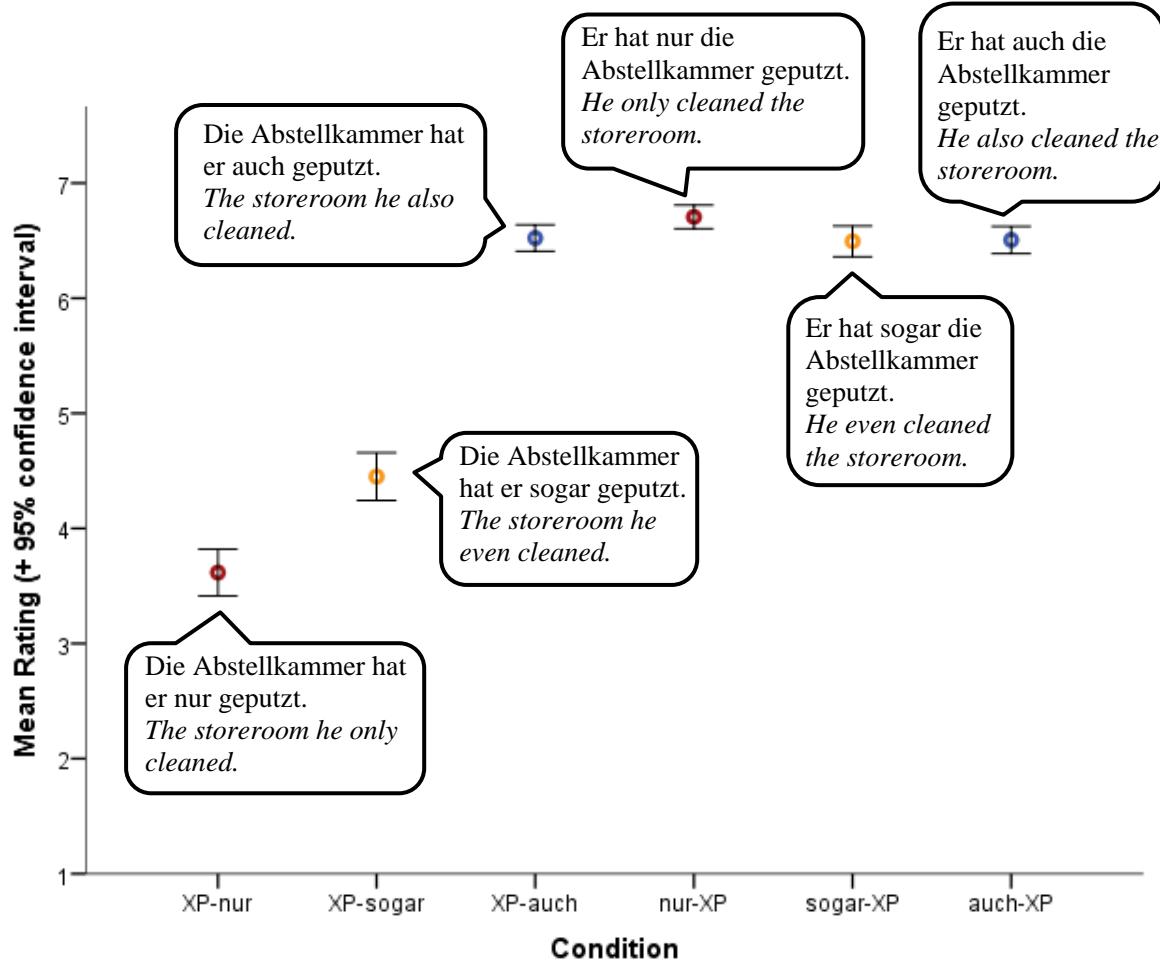


Diagram: *nur*, *sogar*, and *auch* in canonical and non-canonical word order

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Linda KONNERTH (University of Oregon)

### Also ‘still’ and ‘only’: The Monsang additive particle in its areal and phylogenetic context

Monsang (Northwestern Kuki-Chin; Tibeto-Burman) is spoken in Manipur, Northeast India. Its additive particle *=dʒe* covers a somewhat unexpected range of functions when compared to the additive particle *=tā* in Karbi (Konnerth 2014), another Tibeto-Burman language of Northeast India, which is both geographically and phylogenetically fairly close to Monsang.

The primary purpose of this paper is a descriptive account of Monsang *=dʒe*. A secondary goal is to highlight the major differences with Karbi *=tā* in order to move towards a better understanding of the variability of additive particles within their areal and phylogenetic context and the grammatical factors that can help explain this variability.

Monsang *=dʒe*, like Karbi *=tā*, marks the following syntactico-semantic additive functions: simple additivity ('also'); bisyndetic coordination; scalar additivity ('even'); and concessive conjunction ('even if'). In addition, the additive particles of both languages are used for discourse-structuring purposes to mark contrast along similar lines described for other languages previously (e.g., Demeke and Meyer 2008; Tosco 2010; van Putten 2013). The particular formal, and therefore also functional, properties are, however, different. Karbi *=tā* occurs in paradigmatic opposition to three other information status particles: *=ke* 'topic', *=si* 'focus:realis', and *=le* 'focus:irrealis'. Furthermore, *=tā* cannot occur on a finite verb. In Monsang, however, *=dʒe* regularly occurs on finite verbs. It occupies its own morphological slot and may syntagmatically co-occur with other discourse/information-structuring particles, such as *f̚iu* 'topic-switch' or *k̚a*, the marker of elements that are newly or re-introduced into the discourse but expected to be known to the listener.

While Monsang=*dʒe* thus covers less discourse-pragmatic ground compared to Karbi *=tā*, it has several other interesting pragmatic and semantic functions not found in Karbi. These functions require the additive particle to occur on the verb. Specifically, *=dʒe* by itself marks temporal continuity ('still') in conjunction with the nonpast inflection via *na?*, see (1). Even more interestingly, it functions as a restrictive particle ('only') in the nominalization-based verb construction that involves the copula *ka*, as in (2). This overlap between additive and restrictive marking is highly unexpected given that the two functions ordinarily seem like opposites. It must be based on an underlying grammaticalization pathway involving nominalization, which is known to have focalization effects (e.g., Bickel 1999).

The functional range of Monsang *=dʒe* is furthermore interesting in that it does not straightforwardly include the universal quantification or exhaustiveness function found in other Tibeto-Burman languages. Thus, while *=dʒe* may occur on interrogative pronouns in conjunction with negated verbs to yield negative indefinites ('nobody', 'nothing', etc.), it cannot occur on enumerated noun phrase ('five people') to mean all of a given set ('the five of them'), unlike Karbi *=tā*.

In sum, the Monsang additive particle covers a typologically interesting functional range. The comparison with Karbi furthermore shows the formal and functional variability of additive particles within Tibeto-Burman and Northeast India.

#### Examples

- (1) *atele um=dʒe na?*<sup>2</sup>*=mo*  
now exist=ADD NONPAST=Q  
'are (the trees) still there?' (Fauna Flora 074)

- (2) *Rəniy=iŋ ba:r a-k̚i?*<sup>2</sup>*=dʒe=ka*  
NAME=ERG yam 3SG-peel=ADD=COP  
'Riining is only peeling potatoes (i.e., not performing other cooking actions/duties)'

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**Timur MAISAK** (Institute of Linguistics, Moscow)

### **The functions of additive markers in two Lezgic languages**

The existence of frequent and polyfunctional enclitic additive markers (which are not necessarily cognates) is a characteristic feature of the East Caucasian languages. I will present the analysis of the range of functions of the additive particle *=ra* in Agul, a language of the Lezgic branch of the family, based on a corpus of the Huppuq' dialect (ca. 90,000 words, with more than 3,500 occurrences of *=ra*). I will also compare the functions of this particle to the functions and distribution of the additive enclitic *=al* in Udi, also a Lezgic language. Agul and Udi are not closely related and have not been in contact for more than 3,000 years (presumably). The additive particles *=ra* and *=al* in the two languages do not seem to be etymologically related. Still, functionally they are quite similar and represent a common, yet insufficiently studied, "East Caucasian type" of additives. Although additive clitics are mentioned in many grammatical descriptions of East Caucasian languages, no detailed research based on corpora has been conducted in this field so far.

The preliminary analysis shows that additives are especially often found with discourse functions in the broad sense, namely signalling the addition (roughly, 'X also') or the contrast with the information already known (roughly, 'X, in its turn'). Not just the participants, but situations on the whole can be introduced as "additional" to what have been said, although as a rule, the additive enclitic is still hosted by the NP, not by the verb. The particle is also frequent in "symmetrical" coordinating constructions, usually with emphatic meaning ('both X and Y'). In this case, the additive is attached to both conjuncts. As a (quasi-)coordinating device, the additive in both languages is opposed to another particle (*=na* in Agul, *=q:a* in Udi) which is a means of asymmetrical coordination and is only hosted by the first component. The latter construction represents a more neutral coordination strategy, and the conjuncts in this case are not contrasted or compared, but are introduced as parts of a whole.

The additive enclitics are also a regular means of deriving concessive verbal forms ('although', 'even if') from conditional forms in both languages. In Agul, collective numeral phrases represent cardinal numeral phrases with the additive marker, although this use seems to be absent in Udi. Also in Agul, negative pronouns are derived from interrogative pronouns by means of an additive as an "external" enclitic, which is hosted by a fully inflected interrogative pronoun. In Udi, it is not quite clear whether it is historically the additive that is found in the interrogative pronouns ending in *-al* (like *šuk:k:al* 'nobody'), but if it is, it is already a lexicalized ("petrified") part of the pronoun stem, and inflected forms of negative pronouns are derived from the stem in *-al*.

The paper will present a corpus-driven overview of the additives' functions, with quantitative data showing the difference in frequency between various uses.

**Dejan MATIĆ** (University of Duesseldorf/MPI for Psycholinguistics)

### **Additive suffixes and particles in Tundra Yukaghir**

Tundra Yukaghir, an isolate spoken in north-eastern Siberia, has three sets of suffixes related to expression of additive semantics: (a-type) suffixes derived from imperative and predicative forms of the copula, *-noll'əlk* and *-ŋolləŋ*, restricted to subjects and objects, respectively; (b-type) suffixes derived from the particle (n)də, enhanced with a non-specificity marker *-ŋ*, restricted to peripheral constituents, and (c-type) complex suffixes formed from possessive and comitative markers (*-də-hə*), which can be attached to any type of constituent. In addition to this, the additive particles *wa:ji* and *=də* are widely used. The functions of these five means of marking additivity overlap only in part: c type suffixes are mostly used in non-scalar, usually enumerating contexts, while a- and b-type suffixes form a kind of suppletive paradigm which covers a wide array of meanings, from scalar additivity to free-choice. The particle *wa:ji* tends to be used in

the temporal sense ('again') without being restricted to it, while =də often occurs in scalar contexts, but appears to have a much broader meaning.

The purpose of the present paper is twofold. First, it aims to offer a first detailed description of the meaning and syntax of these markers, based on a 50,000-word corpus of naturally occurring utterances and some elicitation. Second, it will attempt to derive the meaning effects of these suffixes and particles from their diachronic sources and from some basic compositionality principles.

**Ergin OPENGİN** (University of Bamberg)

### **The additive enclitic =īš in Central Kurdish**

The additive enclitic =īš in Central Kurdish (\*This abstract has been sent to the conference manager in pdf format)

The additive enclitic =īš in Central Kurdish (a north-west Iranian language spoken in Iran and Iraq) is employed in a number of functions, such as, among others, simple additivity (1a), scalar additivity (1b), (bi/)syndetic constituent and clause coordination (2).

In all these cases, the use of the additive particle implies the truthness of a presupposed alternative, in conformity with the prototypical semantico-pragmatic contribution of additive particles as focus-sensitive elements (cf. König 1991; Krifka 2008).

However, the same particle is also widely employed in narratives where its interpretation is based on discourse continuity/textual cohesion and used almost always with a topic (extensively discussed in Öpengin 2013). In this case, the particle is mainly used in contrastive topic constructions (3), for topic-shift or foregrounding/retrieving a participant of the event (always in the form of a "left-dislocated topic"), or yet for establishing a relationship (correlation) between consecutive events (5).

Based on a 13,518-word corpus of connected speech, this paper will provide a fine-grained descriptive account of the functions of the additive particle in Central Kurdish. The paper will than investigate the viability of a unified analysis for its two subsets of the functions in terms of a shared function of 'evoking alternatives' (Öpengin 2013) and/or of other shared semantic contribution to the organization/structuring of the discourse. The presentation will also consider both the diachrony of the particle (its use in Parthian and early-modern Kurdish) and the impact of potential language contact (e.g. with Turkic) on the diversification of its uses.

Examples:

- (1) a. gā-eke-ān=īš=im de-č-in  
ox-DEF-PL=ADD=1SG:POS IND-go.PRS-3PL  
'[If I lose the bet, not only I will not get the girl,] I will lose my OXEN too.'
- b. hetā le dāyk=ū bāb=īš ūrīn-tir-e  
until from mother=and father=ADD sweet-more-COP.3SG  
'S/he (the child of one's own) is even sweeter than PARENTS' EP.336
- (2) [ew\_demī māšīn=īš=mān ne-bū] [terextūn=īš=mān ne-bū]  
then car=ADD=1PL NEG-be.PST.3SG tractor=ADD=1PL NEG-be.PST.3SG  
'Back then, we had neither a car nor a tractor.' HA.076
- (3) [A- Do you know the King? B-It is not necessary to know him,]  
emin bo=y de-be-m  
1SG for=3SG:R IND-take.PRS-1SG  
  
ew=īš pūl=im de-dā-t-ē  
3SG=ADD money-1SG IND-give.PRS-3SG-DRCT  
'I will take it (the load of melons) to him, (and as for him,) HE will give me money.'
- (4) [Now that you have completed four nights of guard shift, here are hundred     heads of sheep  
I give them to you]  
ew kuř-e=š, [de-zān-im engo bi-řo-n]  
DEM boy-DEM1=ADD IND-know.PRS-1SG 2PL IRR-go.PRS-2PL

šewe de=y-bā-t-ewe  
 ghoul IND=3SG;O-take.PRS-3SG-ASP  
 '(but) as for this child, I know, if you leave, the ghoul will take him back.' [that's why, you had better take him with you.] CN.042

- (5) [(After his car accident) they had taken Xalid to the hospital of Mahabad]  
 lewē=īš ū be ū=yān kird-bū bo kin škestebend-ī  
 there=ADD POST to road=3PL:A do.PST-PST.PRF to next bonesettler-OBL  
 'From whence they had sent him to the bonesettler.' TS.29
- škestebend=īš dest=ī bo heł-best-bū-ewe  
 bonesettler=ADD hand=3SG:A for PVB-tie.PST-PST.PRF-ASP  
 '(As for) the bonesettler, he had settled his hand.' TS.30

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**Pavel OZEROV** (La Trobe University)

#### Correlation of propositions as a trigger for additivity in Burmese

The study analyses the marker =lè in Burmese in the functional-pragmatic perspective. Although =lè is readily obtained as the “additive focus particle” (Hole and Zimmermann 2013), it also exhibits discourse structuring functions such as topic-shift, or resultative, concessive or textual-cohesive readings. It is argued that the primary role of =lè is to correlate adjacent propositions: it calls for their joint evaluation indicating that their mutual relevance outweighs the relation suggested by the context otherwise. The apparent additive and focus-related functions are interpretive outcomes of this global role. Thus, =lè is employed to unify consecutive cause-and-result events into a single macro-event (1). The subject in (1) represents an apparent non-established topic, yet it is not marked by the differential subject marker ká used in similar cases. Instead, =lè indicates that the proposition is a part of a larger macro-event: it is to be evaluated jointly with the preceding proposition as subsumed under its topic. In other cases =lè indicates that multiple events should be evaluated jointly, e.g. providing ramified reasoning for a single fact (2) (cf. König 1991:65), or having other non-trivially consecutive readings, like concessive (3). Typically, =lè is hosted by the clause-initial constituent. Consequently, it attaches to topical expressions – if present (2)(b), and to focal ones otherwise (2)(a).

The correlative function of =lè paves the way for its ad hoc additive and information structural usages. This consists in contextual interpretations that are never unique even in a given context, which links correlation with additivity and different categories of topic/focus (cf. Gil 2004; Matić and Wedgwood 2013). For instance, =lè is often associated with contrastive topical elements (4), because contrast typically arises out of joint evaluation of parallel propositions. In a favourable context, the correlation of two events is motivated by their similarity to a significant degree, triggering the interpretation of narrow additive focus on the dissimilar element (5).

Examples: (COMP – complementiser; NVL – non-volitional; NST – new situation; PN – proper name; POL – politeness; QUOT – quotation; R – realis)

- (1) Oo turned to Myint Naing and told him what to do.  
 māu-mjí.nāi=lè ?ú ?əmēi-ko na.khā-já-tó-te  
 brother-PN=ADD PN order-OBJ obey-NVL-NST-R  
 '(And) Myint Naing=ADD obeyed Oo's order.'
- (2) The speaker explains that she is in trouble, because the friends she was waiting for did not come.  
 'I cannot say (whether they will come or not).'  
 (a) pjā=lö=lè já=má mə-já-ta=pè  
 return=COMP=ADD possible=FOC NEG-possible-R.NMLZ= EMPH  
 '[And] it is absolutely impossible to return=ADD [home] anymore.'  
 (b) θu-tó-ká=lè ?è-di-ká sāu-Ø=té

- 3-PL-SBJ=ADD DEM-this-ABL wait-IMP=QUOT  
 ‘[And] they=ADD said “Wait here!”’
- (3) ‘[I]’ll have to ask [Oo about it].’  
 ?ú-ká=lè tca-lai?ta  
 PN-SBJ=ADD last(a.long.time)-FOLLOW-R.NMLZ  
 ‘(However,) it takes a very long time for Oo (to come back)!’
- (4) ‘My female followers ... did not see me going out ...’  
 təəno-ká=lè mə-khɔ-pa-phù  
 1-SBJ=ADD NEG-call-POL-NEG2  
 ‘I=ADD did not call [out to them], (either).’
- (5) ‘Once upon a time there were three bulls living in a forest...’  
 teà.θi?-tə-kāu-ká=lè ?è-di tò-thè-ma ne-te  
 leopard-one-CLF-SBJ=ADD DEM-this forest-inside-LOC live-R  
 ‘There was [also] a leopard=ADD living in this forest.’/‘A leopardADD lived in this forest, (too).’

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**Yvonne TREIS (LLACAN - INALCO, CNRS, PRES Paris-Cité)**

### Additives in Kambaata

My paper gives a descriptive account of the functional, morphosyntactic and discourse-pragmatic properties of the coordinative morpheme *-V* in Kambaata, a Cushitic language of Ethiopia, and thus makes a contribution to the development of a typology of additive particles, as intended by the workshop. My work is based on a corpus of discourse data from fieldwork, elicited material and written texts (Schoolbooks grade 1-8, Gospel of John).

Kambaata has two coordinative suffixes, *-V* and *-na*, which are placed word-finally after derivational and inflectional morphemes (*-V* stands for an added final vowel). While *-V* is used for the coordination of NPs and clauses, *-na* is mostly found on modifiers in an NP (genitive nouns, adjectives, relative clauses). Both morphemes are not only functionally but also formally different: In coordination, *-V* needs to be added after every coordinand, while *-na* is only attached to the penultimate coordinand.

After the division of labour of the two morphemes has been outlined, the main part of my paper is concerned with an analysis of the multifunctionality of (single) *-V*, which is used – unlike *-na* – as an additive morpheme. As such, it marks that what has been said about an element in an earlier clause *also* or *even* holds for the element to which it is attached (non-scalar / scalar additivity), e.g. *háqqus murammóochch zakkiiní-i* ‘even after the tree has been cut down’ (sentence continues: the stump does not dry up but shoots again). If *-V* is suffixed to a conditional verb, it marks the clause as concessive: *hoolámus díubb itumboddá-a* ‘even if / although many don’t eat their fill’. (Note that Kambaata is a head-final language.)

Interrogatives can acquire the function of indefinite pronouns in Kambaata, if the coordinative *-V*-morpheme is suffixed to them directly or to the head of the phrase or clause in which they occur. They may then function as (i) free-choice pronouns (*ichcháta ayeehá-a qixxansítée-u* ‘she prepared food for anyone (lit. “and for whom”)’) and (ii) negative pronouns (*ichcháta ayeehá-a qixxansítimbá-a* ‘she did not prepare food for anyone (lit. “and for whom”)’). Furthermore, interrogative pronouns are used as (iii) universal indefinite pronouns in conditional clauses, in which case the *-V*-morpheme is not added to the interrogative itself but clause-finally (*habanká gizzá xa’mmeedá-a* ‘no matter how much money he demands (lit.: “and if he demands how much money”)’). Finally, my paper also explores a function less commonly associated with additive morphemes cross-linguistically, namely the function of expressing ‘at

least', see *maccaachchisí-i tórrinne* 'Throw at least a part of the ear to us!' (addressed to Father Hyena who is eating up a donkey all alone).

As Amharic, the contact language of Kambaata, is one of the few African languages whose additives have been analysed in any detail (Girma & Meyer 2008), I will dedicate the last section of my paper to a discussion of differences and commonalities between the additives in these two languages.

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**Saskia VAN PUTTEN** (Max Planck Institute for Psycholinguistics, Nijmegen)

#### The additive particle, alternatives and contrast: the case of Avatime

Avatime, a Kwa language spoken in Ghana, has an additive particle *tsye*, which can often be translated as 'also' or 'too' in English. English additive particles presuppose that an identical event or situation is true for an alternative to the constituent marked with the additive particle (see e.g. König 1991). Their Avatime counterpart, however, does not carry this presupposition. This can be seen in (1), where what is said about Lulu (marked with *tsye*) is not identical to what is said or implied about the alternative, Atrodze. There is no implication that anyone other than Lulu was holding someone.

- (1) Atrodze and Lulu want to eat leftover porridge at the location of a party. Lulu wants to wait until the people have gone, but Atrodze does not agree.

atrodze e-*tsyidzyì* sì y-*i-ze-hali* lififlì-ne

Atrodze 3s.SBJ-be.impatient COMP LOG-3S.SBJ.SBJV-IT-collect porridge-DEF

‘Atrodze was impatient to go and collect the porridge.’

*lulu tsye e-vù=ye* sì o-*kí-tre*

Lulu ADD 3s.SBJ-hold=3s.OBJ COMP 3s.SBJ-PROH-go

‘Lulu (*tsye*) was holding him so he would not go.’

In examples such as (1), it looks like the additive particle is used as a marker of contrast between two alternatives. However, Avatime has a different set of particles to mark contrast. Both the additive particle and the contrastive particles indicate that there is an alternative to the marked element, but the two types of particles differ in the kind of relation they require to hold between two events.

Using a corpus of spontaneous discourse, I investigated the meaning and use of the additive particle *tsye* as well as that of the contrastive particles. The additive particle *tsye* seems to indicate that two events 'go together', that is, uncontroversially co-occur or follow each other (see also Van Putten 2013). The contrastive particles, on the other hand, indicate an opposition.

To investigate the meaning of the particles more systematically, I carried out a production experiment. Participants watched video clips of pairs of events that were related in different ways (identical, similar, opposite, unrelated) and their responses were annotated for whether or not an additive or contrastive particle was used. Results partly confirm the findings from the corpus study. The identical events lead to the largest proportion of additive particles. However, unlike what we might have expected (see Kaplan 1984), the additive particle was not obligatory in the description of these events. In other types of event pairs, both types of particles could be used, but there are differences in preferences. The fact that both types of particles can be used for the same event types shows that which particle is used is not determined by context. Speakers are free to use the particles to highlight aspects of the events that they consider important.

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# WORKSHOP

## Aspect vs. verbal and nominal valency

### *Convenors*

**Maria Bloch-Trojnar** and **Anna Malicka-Kleparska** (Catholic University of Lublin)

### *Description*

The aim of the workshop is to evaluate and discuss most recent theoretical developments in the area of valency and aspect related phenomena, as expressed in clausal structures and nominalizations. Spatio-temporal boundedness of an event and its participants enter into mutual interactions, which are as complex as they are puzzling, given the fact that these two parameters appeal to dimensions of a different character (qualitative and material) (see Lyons 1977, Tenny 1987, 1992, Dowty 1991, Verkuyl 1993, Lakoff 1970, Jackendoff 1990, 1996, 2010). In this workshop we are planning to bring to light the major interrelations between aspect and valency to gain a better understanding of their spectrum, characteristics and limitations. The workshop will focus on the classification and co-occurrence of arguments, as well as on limitations concerning their possible realizations and constellations dependent on the aspectual (and aspect related) properties of verbs (Levin 2006, Goldberg 2005, 2006, McDonald 2008). The typology of verb classes with subsistent realization of aspectual and argumental properties is more urgent and complicated a task than is generally assumed (VanValin 2013, MacDonald 2008). Argument Structure preservation/realisation in deverbal nominalizations will be considered from both a constructionist (Borer 2003, Alexiadou 2001, 2009, 2010, Harley 2009, Roeper 2005) and a lexicalist perspective (Newmeyer 2009, Bierwisch 2009).

The link between the affectedness of the internal argument and the telicity of the proposition will be explored. One of the functions of the perfective aspect is to contribute to the measured nature of the event, and/or vice versa (Tenny 1987, 1992). The measured arguments occupy the direct object position and reveal interesting formal (e.g. inflectional) properties. It is not immediately evident why the internal argument of measure/change is obligatorily present in clauses but not in nominalizations. The valency related consequences of a recent proposal of Filip (2008, 2013) to view a perfective proposition as maximally all-encompassing will also be taken into account.

Interconnections between aspectual and configurational properties as well as arity operations that can feed nominalisation will be of particular interest, e.g. English verbs from the native stock of vocabulary displaying the causative/inchoative alternation are nominalised without an overt suffix and it is only the intransitive variant that has a nominalised counterpart (Smith 1972). There are also voice alternations within nominalizations (e.g. in Hebrew, Hungarian, Russian, French), which relate to unaccusative and subject-experiencer nominals and less frequently to reflexive and reciprocal event nominals (Reinhart and Siloni 2005).

The link between the resultative semantics and the perfective aspect has been established in connection with prefixation phenomena in Slavic languages (Svenonius 2004, Romanova 2007). It remains to be tested whether such proposals can be extended to other languages and whether they have a bearing on the analysis of nominalizations.

Another point of interest is case assignment, since it may signal distinct aspectual/Aktionsart properties. The realization and choice of case (understood as pure form or semantic property) have been observed to be conditioned by aspectual properties, e.g. in such phenomena as unaccusative (change of state and completive) vs. unergative (non-completive) structures (Levin and Rappaport Hovav 1995, Romanova 2004), telic/atelic properties of the proposition manifested as the co-occurrence with the partitive genitive (Dixon 1994, Kiparsky 1998), etc.

The workshop will also address argument overtess, argument alternations, the presence of logical arguments seen in the light of aspectual/verb class considerations, and viewed as either structural or pragmatic phenomena (Levin 2006, Goldberg 2006, Segal and Landau 2012, Alexiadou and Agnostonopoulou 2012).

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### Odelia AHDOUD (The Hebrew University of Jerusalem) Psych Nominalizations in Hebrew

On the basis of contrasts between object experiencer verbs and their nominalizations, it has been claimed that derived nominals have restrictions on the realization of the external argument which do not hold in the corresponding verb (Chomsky, 1970; Rappaport, 1983; Rozadowska, 1988; Grimshaw, 1990). While the verbal clause is usually ambiguous between a stative and a causative reading, the nominals tend to be stative (1b). Furthermore, the nominal clause, as opposed to the verbal clause which permits both agents and causers (1a), is restricted to agents as external arguments (1c):

- (1) a. The article/my kid disappointed/amused me
- b. My disappointment/amusement (at the results/at my student)
- c. \*The article's/my kid's (deliberate) disappointment of me

The data on Hebrew, a language with rich verbal morphology, yields two interesting findings regarding event and argument structure in nominals: 1. Two transitive verbal templates derive Psych nominals. As opposed to English, these nominals are eventive (CENs, Grimshaw, 1990), and denote a causative change of state (2); 2. Similar to the findings on Greek and Romanian (Alexiadou and Iordăchioaia, 2014a, 2014b), in Hebrew nominals corresponding to the subject experiencer verbs are also eventive, and may realize the original external argument (the agent/causer in the verbal clause) with a causative preposition (3).

- (2) **ha'alavat** ha-saxkan al-yedey mevaker ha-tarbut/\*ha-bikoret b-a-iton  
'The cultural critic's/the newspaper critique's insulting of the actor'.
- (3) **ha-hitaxzevit** (ha-xozeret) šel dani me-ha-sofer/me-ha-ben šelo  
'Danni's (repeated) disappointment from the writer/from his son'

However, not all Obj-Exp predicates derive eventive nominals, thus creating a gap in the system of Psych nominals in Hebrew: some roots have either stative nominals only (as in English), or no derived nominals. Crucially, these verbs have nominals corresponding to the Subj-Exp form, and these are eventive, as abovementioned. Importantly, all Subj-Exp verbs which have eventive nominals appear in unaccusative middle forms.

A possible explanation for this gap can be achieved by a closer inspection of the thematic and aspectual properties of the relevant Psych verbs. Pesetsky (1995) defines two subclasses of Psych verbs: cause-experiencer verbs and T/SM (target/subject matter) verbs. In the former, the cause of the mental state can be indirect, possibly triggering some emotion that is actually directed towards a different object (the T/SM). However, the latter verbs denote a mental state directed towards a target, which triggers the emotion directly. Crucially, the T/SM argument is never agentive, and the clause does not denote a change of state, as is required for the transitive eventive nominals to exist (1c, 2). In Hebrew, as well as had been claimed for English, Greek and Romanian (Pesetsky, Alexiadou and Iordăchioaia), the stative Psych verbs do not have corresponding eventive nominals, but only stative ones (if any):

- (4) **ha-mirmur** šel ha-talmidim (\*al-yedey ha-mora)  
the students' bitterness (\*by the teacher) ['the student's state of bitterness']

The intricacy of the verbal system of Hebrew shows that the inability to derive argument-taking, eventive Psych nominals is not a universal phenomenon. However, the derivation is not without exceptions, but rather restricted by the semantics of the verbs.

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**Ana Maria BRITO (FLUP/CLUP)**  
**Nominalizations in -da in Portuguese: a syntactic approach**

Said Ali (1964) suggests a Past Participle (PP) origin for some Romance entity nouns like *o bordado* (the embroidery), *o legado* (the legacy), examples from Portuguese, which suggests a gradual process of grammaticalization of verbal forms (+V, +N) to pure nominal forms (-V, +N). What about feminine forms? Apart some entity nouns (*a bebida*, the drink) and some constructions with noun ellipsis (*a [-]N ferida foi levada para o hospital*, the injured<sub>fem</sub> one / person was taken to the hospital), nominals in -da are in general event nouns. The classical analysis in Morphology is to consider that there is a -da suffix that is associated to a V form (Rodrigues 2013, 2014) or to a verbal root (Scher 2006 for Brazilian Portuguese) (in a Distributed Morphology framework). In a different direction, and developing Bordelois (1993) for Spanish, Fábregas (2010) proposes that these deverbal nouns are formed from the PP and presents a strong argument in favor of that: when there are two forms of PP, only the “irregular”, the short form, gives the event noun: *a escrita* (the writing=short form of the PP) and not \* *a escrevida* (the written). But in order to explain the formation of event nouns in -da one must say something more. It is why Fábregas suggests that in -da there are two different morphemes, -d and -a, a proposal that we share for Portuguese. An argument in favor of this is that not only Portuguese and Spanish but also French exhibit the feminine form in event deverbal nouns (cf. *l'arrivée* (the arrival) (Martin 2010).

Many of the event nouns in -da are derived from movement and direction inaccusative verbs (Bordelois (1993), who even proposed that nominals in -da are related to ergativity; cf. her examples (1) and (2)):

- (1) \*La llegada por Pedro (the arrival by Peter)
- (2) La llegada de Pedro (the arrival of Peter, Peter's arrival)

However, this kind of nominalization may be derived from different verb roots (unaccusative, *chegar*, arrive, inergative, *caminhar*, walk, transitive, *tomar*, take, and even a predicative verb *estar*, to stay) and may assume different aspect values:

- (3) A tomada da favela pela polícia numa semana... (the taking of the favela by the police in a week) (accomplishment)
- (4) A caminhada durante trinta minutos... (the walk during 30 m) (process)
- (5) A entrada do exército às 10h... (the entrance of the army at 10h... (culmination)
- (6) A estada do Presidente no Brasil em 2011... (the stay of the President in Brazil in 2011) (state).

This shows that this type of deverbal nominalization conserves in general the aspect value of the verb root and that this suffix is not specifically related to the telic / atelic nature of the verb root; what is more important is the type of argument structure: the verb roots that have “incremental themes” (Fábregas 2010) / “rheme path objects” in Ramchand (2008) terminology are the most favorable ones for this derivational process.

All this favors a syntactic analysis in the line of Fábregas (2010) and Resnik (2010). I will propose that an acategorial root is associated to the thematic vowel, to Aspect (where -d codifies a Perfectivity feature, cf. Mondoñedo 2005) and to n, where -a codifies a [+/-bounded] feature: [-bounded] for event nouns and [+bounded] for entity nouns, justifying in this way the projection (or not) of NumberP (or, in alternative, the projection of ClassP, in the lines of Alexiadou, A. et al (2011)).

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**Bożena CETNAROWSKA** (University of Silesia)

**Group adjectives, argument structure and aspectual characteristics of nominals  
in Polish and English**

This paper investigates aspectual characteristics and argument structure of Polish and English nominals which are modified by group adjectives, as exemplified in (1) and (2):

- (1) *prezydencka próba wprowadzenia zmian w ustawie*  
 presidential.NOM attempt.NOM introducing.GEN change.PL.GEN in bill.LOC  
 ‘the presidential attempt to introduce changes in the bill’.
- (2) *road closures for Papal arrival tonight*

Group adjectives (GAs) are relational adjectives derived from names of professions, titles, countries or regions (e.g. *presidential*, *papal*, *Greek*, cf. Grimshaw 1990). They have recently received much attention cross-linguistically, especially a subgroup of GAs called Ethnic Adjectives (Alexiadou and Stavrou 2011, Marchis 2010, Arsenijević et al. 2014).

Some researchers (e.g. Bosque and Picallo 1996 for Spanish) assume that relational adjectives can carry theta-roles assigned by head nouns and can saturate argument positions. Others claim that the interpretation of relational adjectives is determined contextually (McNally and Boleda 2004, Arsenijević et al. 2014). Given such a diversity of views, it seems worthwhile to examine the occurrence of group adjectives with event-denoting nouns in the two languages (English and Polish) on the basis of the Corpus of Contemporary American English (COCA) and the National Corpus of Polish (NKJP).

The following research questions will be addressed:

- i/ Can group adjectives modify only Referential nominals (which are either names of simple events or names of objects), as is proposed by Grimshaw (1990) and Alexiadou and Stavrou (2011)? Can GAs occur with argument-supporting nominals (i.e. Complex Event Nominals)?
- ii/ Is the interpretation of group adjectives theta-related?
- iii/ Is there any relationship between the presence of group adjectives and the aspectual characteristics of the event nominals?

Group adjectives in English and Polish tend to accompany countable event nouns which are recognized as names of simple events by Grimshaw (1990) and Alexiadou and Grimshaw (2008). I will argue (in agreement with Bloch-Trojnar 2011) that some countable event nouns, e.g. those in (3) and (4), should be treated as argument-supporting ones since they contain internal arguments, aspectual modifiers and/or agent-oriented modifiers.

- (3) *częste ministerialne kontrole szkół wyższych*  
 frequent.NOM ministerial.NOM control.NOM school.PL.GEN higher.GEN  
 ‘frequent ministerial controls of universities’

- (4) *celowe ataki terrorystyczne na ambasady*  
 intentional.NOM attack.PL.NOM terrorist.ADJ.NOM on embassy.PL.ACC  
 ‘intentional terrorist attacks on embassies’

Furthermore, I will show that group adjectives can occur in Polish with verbal nouns (terminating in the suffix *-nie* or *-cie*), which are aspect-preserving and show other properties of Complex Event nominals (cf. Rozwadowska 1997).

- (5) *północnokoreańskie jednostronne zerwanie rozejmu*  
 North-Korean.NOM unilateral.NOM breach.PFV.NOM truce.GEN  
 ‘North Korean unilateral breach of truce’

Finally, I will consider the relationship between the telicity of the verbal predicate (from which the event noun is derived), the number of participants in the event (cf. Rozwadowska 1997) and the felicity of a group adjective as the accompanying satellite.

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**Hanna DANBOLT AJER** (University of Cambridge)

#### Voice, valency and aktionsart in the Arabic verb

This paper explores how middle semantics affects aktionsart and valency in several verb Forms of Modern Standard Arabic. I argue that the middle Forms are characterised by allowing subjects which are in some way construed to be ‘affected arguments’. The aktionsart and valency associated with each Form largely follows from the type of affectedness it encodes.

Arabic verbs are derived by combining tri-consonantal roots with set vocalic and consonantal templates. Verbs which are formed from the same template are said to belong to the same ‘Form’, and are thought to share some component of meaning. The function of many Forms is still obscure, but it has been suggested that some encode the middle voice (Wright 1962: vol. 1, pt. 2). Danks (2011) shows that aktionsart might also be relevant to the analysis of the Forms.

My analysis is based on a sample of 479 verbs of Forms V, VII, VIII, and the I- and U-patterns of Form I. I argue that the morphology of each of these Forms introduces a middle voice head, placing a requirement on subject-affectedness. The traditional notion of affectedness, where the argument undergoes change as a direct result of the event, has previously been tied to the English middle (Anderson 1979; Roberts 1987). This ‘direct affectedness’ can be displayed by the subject of the Form VII verb *inħatṭa* (“sink”). However, I propose that the notion of affectedness must be extended to encompass two other types of affectedness. A ‘lastingly affected’ argument, such as the subject of the I-pattern verb *jadila* (“be happy”), is one of which the effect of a previous event still holds. The last type is ‘mentally affected’ arguments, which display

mental involvement in the eventuality. This is the case for the subject of the Form VIII verb *intahara* (“scold s.o.”).

Form	Pattern	Roles	Aktionsart	Valency	Example
I-pattern of Form I	<i>faziла</i>	Often lastingly affected	Unbounded	Disfavours transitivity	<i>faziла</i> (“be terrified”)
U-pattern of Form I	<i>fazula</i>	Lastingly affected	Unbounded	Intransitive	<i>batu'a</i> (“be slow”)
Form V	<i>tahaffaзala</i>	Often directly affected + other role	Tendency for gradualness	Disfavours transitivity	<i>tahaffaza</i> (“prepare o.s.”)
Form VII	<i>insalaзala</i>	Directly affected	Tendency for punctuality	Intransitive	<i>insalaзa</i> (“burst”)
Form VIII	<i>iftaзala</i>	Often mentally affected + other role	Tendency for gradualness	Compatible with transitivity	<i>iddaзa</i> (“accuse s.o.”)

The middle voice heads of these Forms introduce different requirements on the affectedness types and argument roles their subjects must be able to bear. The type of affectedness associated with a Form can influence valency. For instance, Form VII favours directly affected subjects, and having an object which also undergoes change might take away from this focus. This leads the Form to have a strong association with intransitivity.

Furthermore, the aktionsart properties of a Form might follow from the type of affectedness it favours. As the focus on lasting affectedness means all U-pattern verbs must allow stative readings, which are strongly unbounded, unboundedness is also favoured in the other readings of these verbs.

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**Aidan DOYLE** (National University of Ireland, Cork)

#### Anomalous promotion in Irish and boundedness

This paper deals with an apparent anomaly of case-assignment in Irish. In this language, a periphrastic construction with *bí ‘be’* and the past participle (PPar) is used to form perfect passive; the original direct object moves into subject position. Thus, from the active sentence (1) we get the perfect passive (2):

- (1) Rinne sí an obair.  
 did she the work  
 ‘She did the work’.
- (2) Tá an obair déanta.  
 is the work do.PPar  
 ‘The work has been done’.

Like in English, we can add a *by*-phrase to express agent/cause:

- (3) Tá an obair déanta aici.  
is the work do.PPar by-her  
'The work has been done by her / She has done the work'.

A standard account of this phenomenon would run roughly along the following lines. The verbal form in the perfect passive is the PPar, which cannot assign case to a following noun-phrase, hence the ungrammaticality of:

- (4) \*Tá sí déanta an obair.  
is she do.PPar the work

Thus, the object moves to subject position to receive case.

However, a rule for passivization like that just suggested does not cover intransitive verbs, like in the following example:

- (5) Bhí a lán siúlta acu.  
was a lot walk.PPar by.them  
'They had walked a lot'

Measure phrases like *a lot* are not normally promoted cross-linguistically:

- (6) \*A lot was walked by them.

The traditional account for this would be that a measure phrase like *a lot* is not a Theme, and as such is not available for promotion to subject position.

To account for this apparent anomaly, I draw on the notion of boundedness found in Depraetere (1995). This author distinguishes between situations with an inherent endpoint (telic) and those with a temporal boundary (bounded). Combined with the feature telicity, this enables us to identify precisely what elements may be promoted to subject position, and what kind of semantic predicates they may co-occur with. It turns out that what I call anomalous promotion of measure phrases is confined to situations which are non-telic and bounded.

It is hoped that this paper will enable us to specify more precisely the aspectual features which determine specific morphosyntactic patterns in language, by investigating a body of data which, to my knowledge, has not yet been dealt with in the literature.

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### **Lars HELLAN (NTNU)** **On 'de-verbal' nouns in Norwegian**

In Norwegian, and other Germanic languages as well, there is a well-known asymmetry between

- (a) nouns analyzable into a verbal stem and a nominalizing morphological marker, exhibiting both a regular pattern of aspectual and valency transfer from the base verb and gender determined by the morphological marker, and
- (b) 'bare nominalizations' ('BN'), exhibiting neither of these properties.

We propose that lexical entries are organized in a type hierarchy where the 'common core' in the BN case is an underspecified sign with a specified semantics, and this sign is inherited by the lexical entries feeding the grammar. Fig. 1 suggests the form of such a hierarchy, where the 'leaf' nodes feed into grammar. The semantic core may well be inherited by many verbal and nominal entries.

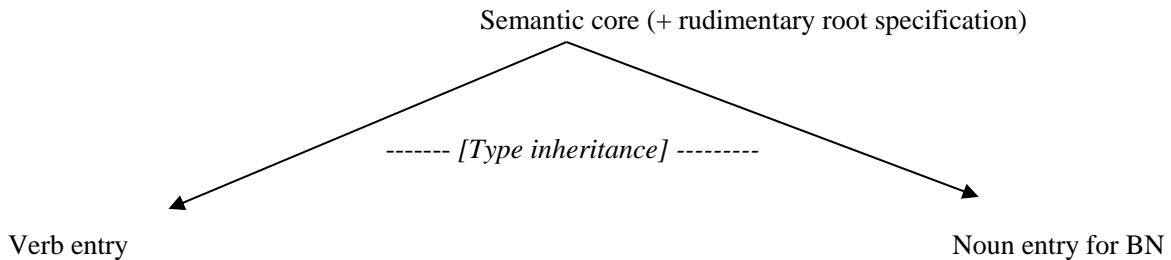


Fig. 1 *Inheritance* design for basic lexical entries

The Verb entry follows a standard design of ‘derivation’, where nominalized derivatives in grammatical respects are determined by the nominalization marker, cf. Fig. 2.

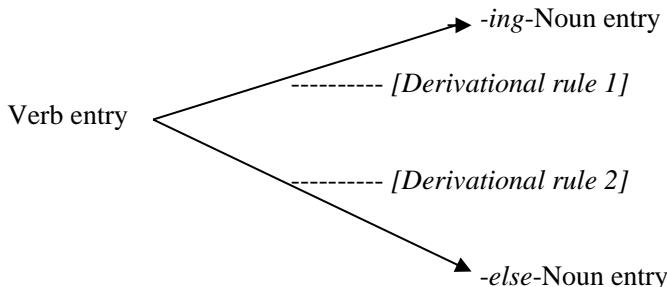


Fig. 2 *Derivation* design for non-basic nouns

For instance, the underspecified structure may represent a concept of *running*, being inherited into the verb entry *løpe* ‘run’, with aspectual protractedness, directional motion semantics and the corresponding valency frame, on the one hand, and the noun entry *lop* on the other, which adds the information of neuter gender, but leaves valency and aspect non-determined. The verb entry *løpe* can in turn – following the derivational track - undergo affixation with *-ing*, which creates a noun with masculine gender as dictated by *-ing*, and retains reflexes of the ‘verbal’ semantic features mentioned.

The design allows one to relate a notion like ‘blocking’ of participant roles to the derivation track, where the semantics is largely parallel to valency, while keeping the BN semantics more open to contextual interpretation.

For the BNs, this is only half the story: valence and aspect explicitation is typically provided through a complex predicate/light verb construction (LVC) having the BN as object or governed by a preposition. Crucial for these LVCs is that the verb (or preposition) is often *selected* by the BN, thus instantiating a selectional relationship going the opposite way than the standard head-complement relationship. For instance, the verb '*bero*' ('rest', as for a case in court) has as BN *bero*, and the typical LVC for this BN is *stille i bero* ('set in rest'): the BN *bero* here may be seen as selecting the preposition *i* as well as the verb *stille*, whereas *i* of course governs *bero*, and is itself governed by the verb:

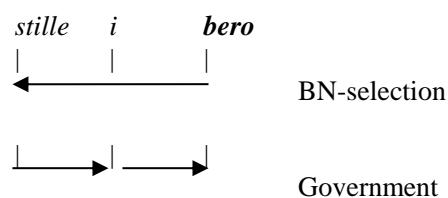


Fig. 3 BN selection and government as opposite relations

Representing the BN-selection requires an extension of standard selection formalisms, along with a design for exponency of the BN semantic core together with valence and aspect carried by the LVC.

The grammar model to be explored for these purposes, using *Typed Feature Structures* (cf. Copestake 2002, is HPSG, cf. Pollard and Sag 1994).

The model is developed against a hand-crafted set of 2000 nominalization examples in Norwegian.

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**Tabea IHSANE and Margherita PALLOTTINO** (University of Geneva)

### Genericity and aspect in Italian

Previous work presenting Italian facts (Chierchia 1998; Zamparelli 2002, a.o.) highlighted the relation between the features of a subject and genericity. In this research we claim that also referentiality of the direct object (DO), whenever present, affects the generic interpretation of a sentence.

Following Carlson (2011) we consider genericity to be a single mechanism of abstraction over entities or events. We assume that this abstraction operates both at the sentential and nominal level because the two domains share the general property of un/boundedness as originally proposed by Krifka (1992). The question is how this property is transferred from the direct object to the sentence.

Our approach builds on Guéron's time-based analysis (Guéron 2006) in which she suggests that the generic reading does not need a Generic Operator interpreted at LF but simply depends on  $T^\circ$ . We further elaborate on this idea and suggest that aspect is the relevant notion rather than tense and that the aspectual properties of the predicate and the DO must match in generic contexts. Therefore, the generic reading arises only when aspect is unbounded at both the complement and the predicate level.

In order to identify the relation between a complement and genericity we explore the hypothesis that boundedness at the nominal level corresponds to referentiality, while unboundedness to the lack of it. The information related to boundedness is transferred to  $Asp^\circ$  via head movement by the verb (similarly to Guéron 2006). As a result it is possible to derive the generic reading mapping an event onto a non referential object.

Consider the following Italian data:

1)	<i>Gianni lava <u>tappeti</u>.</i> Gianni washes.pres carpets.	Generic
2) a. b.	<i>Gianni lava i <u>tappeti</u>.</i> Gianni washes.pres the carpets.	a. Generic b. Particular
3)	<i>Gianni lava il/un <u>tappeto</u>.</i> Gianni washes.pres a/the carpet.	Particular

This paradigm is thus explained as follows: we assume that Italian bare plurals denote properties (McNally 2004, Belletti & Bianchi 2015) and hence that their denotation does not include any entity. This means that such complements are non-referential and unbounded, a condition to obtain the generic reading in (1).

Conversely, (3) shows that an internal argument denoting a singleton set always prevents the generic reading to arise. We suggest that this is because such DOs are necessarily bounded and referential (also in the case of indefinites DO, see Ihsane 2008).

Finally, whenever the complement is a definite plural, both interpretations are possible because definite plurals in Italian are ambiguous between two interpretations. The sentence is particular when the object refers to a definite set of entities as in (2b); conversely, when the complement is interpreted as a kind, as in (2a), it denotes an unbounded class of elements without referring to any specific entity or set. We take kinds to be unbounded sets (Chierchia 1998), and we assume that this property allows them to meet the requirements imposed by genericity to the DO.

How the above characteristics of the DO interrelate with the aspectual properties of the predicate will also be discussed.

**Gioia INSACCO** (Roma Tre University)

### Argument structures in Italian nominalizations

The aim of this research was to analyze the argument structure of a subset of Italian nominalizations – characterized by the suffix *-ata*, *-mento* and *-zione* – taken from *La Repubblica corpus* (Italian journalistic

*corpus* which numbers about 380 millions of tokens). From a methodological point of view, the analysis involved the following phases:

- a) extraction of the most frequent (75) nominalizations from *La Repubblica corpus*; for each selected nominalization, its first 30 occurrences were analyzed (a whole of 2250 tokens);
- b) classification of each nominalization on the basis of the verb from which it morphologically derives. The starting verb was defined on the strength of three parameters:
  - i. *Aktionsart*;
  - ii. Argument structure;
  - iii. Transitivity.
- c) Argument structures identification – as well as possible argument alternations – of the selected nominalizations, in relation to the argument structure of the starting verbs;
- d) identification of thematic roles assigned to detected arguments and examination of the most realized thematic roles.

The nominalizations analysis of *La Repubblica* pointed out two phenomena:

- (a) argument roles reduction;
- (b) flattening of their superficial differences.

As far as the first point is concerned, the majority of the analyzed nominalizations only focus one portion of the event (Simone 2003, Jezek 2005); thus, in the presence of more arguments, it will express just one argument. Therefore, the distinction among *complex event nominals*, *simple event nominals* and *result nominals* suggested by Grimshaw (1990) does not seem to be valid in Italian: independently from the type of denoted event (simple or complex), not only the result nominals, but also the eventive ones tend not to fulfill the whole argument grid.

The most realized arguments in transitive and unaccusative nominalizations are respectively the Patient and the Theme, which occur in over 65% of occurrences. On the contrary, the Agent tends not to be expressed (Picallo 1999).

- (1) *La cancellazione di questo biglietto* non è prevista. (PATIENT)  
This ticket cancellation is not possible.
- (2) *La diminuzione dei prezzi* è inspiegabile. (THEME)  
Prices drop is inexplicable.

Differently from transitive and unaccusative nominalizations, unergative nominalizations show a much higher percentage of realization of the Agent:

- (3) *La manifestazione degli operai* si è protratta a lungo. (AGENT)  
The workers strike lasted for a long time.

The second important point is related to the argument roles flattening: Agent, Patient and Theme are realized using the same superficial codification, the prepositional phrase *di* + NP. This can determine ambiguities in transitive nominalizations, especially when only one participant is realized, since the same prepositional phrase can be interpreted both as the Agent and the Patient:

- (4) *L'imitazione del pagliaccio*. (AGENT or PATIENT)  
The clown's imitation.

In Italian, the sentence (4) could be interpreted in two ways: in the first interpretation the clown is the subject of the verb 'imitare' ('imitate'), while in the second one the clown is the object of the verb. However, the flattening of argument roles does not cause ambiguities in unaccusative and unergative nominalizations, where, the Patient is not part of the argument structure and thus, the prepositional phrase can only correspond to a Theme (if the nominalization originates from an unaccusative verb); or to an Agent (if the nominalization derives from an unergative verb).

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**Eva KARDOS and Gergely PETHO** (University of Debrecen)

### Event structure determines argument structure

In this paper we provide novel evidence for the claim that argument structural complexity can be derived from event structural complexity. More specifically, we test Rappaport Hovav and Levin's (RHL 2001, LRH 2004) hypothesis that there is at least one argument XP in the syntax per subevent in the event structure (a condition that may also be implicated in how (non)scalar properties of predicates determine argument realization, as discussed in Rappaport Hovav 2008, among others) against Hungarian base verbs and morphologically more complex particle verbs.

We devote the first part of the paper to event structure properties. We examine the event structural effects of Hungarian verbal particles and resultative/locative expressions and show that these elements telicize verbal predicates by virtue of (i) constraining the semantic properties of the argument whose referent undergoes change in a way that it has quantized reference (Krifka 1989) and (ii) by ensuring that the result state that this referent attains be specifically identifiable, which are both necessary conditions for telicity to obtain (Beavers 2012). This in turn often gives rise to a more complex event structure, which is evidenced by the diverging interpretive effects of the scopal modifier *majdnem* 'almost' in the environment of such complex predicates (Piñón 2008). Consider (1).

- (1)    a. Mari        majdnem    írt        egy        email-t.  
           M.NOM      almost        wrote      an        email-ACC  
           'Mari did not begin writing an email.'  
       b. Mari        majdnem    **meg**-írt        egy        email-t.  
           M.NOM      almost      PRT-wrote    an        email-ACC  
           'Mari did not begin writing an email.' or 'Mari did not finish writing an email.'

The second part of the paper shows that a variety of argument structural properties fall out of our analysis including (i) the obligatory and optional nature of internal arguments of base verbs and particle verbs, as shown in (2); (ii) the (un)availability of non-subcategorized objects in the environment of base verbs and particle verbs, as in (3); and (iii) the functional similarity between particles and resultative expressions (É. Kiss 2008).

- (2)    a. János        egész nap    írt        (egy        könyv-et).  
           J.NOM      whole day    wrote      (a        book-ACC)  
           'János wrote (a book) all day.'  
       b. \*János        egész nap    **meg**-írt        (egy        könyv-et).  
           \*J.NOM      whole day      PRT-wrote    (a        book-ACC)

- c. János **fel**-sepert (minden padló-t) a ház-ban.  
 J.NOM PRT-swept (all floor-ACC) the house-in  
 'János swept (all floors) in the house.'
- (3) a. Péter halál-ra ette magá-t.  
 P.NOM death-into ate himself-ACC  
 'Péter ate himself to death.'
- b. \*Péter halál-ra **meg**-ette magá-t.  
 \*P.NOM death-into PRT-ate himself-ACC
- c. Péter **ki**-ette a szülei-t a pénzük-ből.  
 P.NOM PRT-ate the his.parents-ACC the their.money-from  
 'Péter ate his parents our of their money.'

Although we focus on how argument structure properties can be predicted in light of event structure properties in the case of Hungarian verbal expressions, we will also briefly address argument realization in English and German. This will allow us to point out cross-linguistic similarities and differences with respect to the type of event structures corresponding verbal predicates in these languages are associated with and the argument structural consequences of this.

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**Lior LAKS** (Bar-Ilan University)

#### Morpho-thematic transparency: Instrument noun formation in Hebrew and its relation to the verbal system

This talk examines morphological variation and change in instrument nouns (INs) formation in Hebrew. Such variation is demonstrated below:

- Morphological variation of INs
- a. maxded mexaded 'pencil sharpener'
  - b. makrer mekarer 'refrigerator'
  - c. magresa(t)-kerax gores-kerax 'ice-crusher'

In the examples above, both INs in each pair share the same stem consonants and are formed in different templates. maxded and mexaded (a), for example, share the consonants x-d-d and are formed in maCCeC and meCaCeC respectively. In some cases both forms are used and considered normative, while in others only one form is considered normative. Following Bolozky (1999, 2003), I argue that INs tend to change into templates that are identical to the participle form of the corresponding verb. While both maxded and mexaded, share the same nominal meaning, only mexaded also has a verbal meaning of 'sharpens'. This study accounts for the morphological changes that the nominal system of Hebrew is undergoing.

The study is based on searches I conducted online and in various media. Examination of the data reveals that the change is always from the non-participle templates into a participle template and never the other way around. Nonetheless, not all INs change their template. I argue that this change can be predicted based on systematic criteria. The formation in the participle templates targets what I define as ‘morpho-thematic transparency’, namely morphological and thematic (semantic) transparency between the IN and the related verb. Thematically, the participle IN corresponds to the argument structure of the related verb and the thematic roles that it assigns (Grimshaw 1990, Rappaport-Hovav & Levin 1992, Alexiadou & Schafer 2008, among others). The IN has to be agentive in order to be thematically transparent and undergo a morphological change. The more transparent the thematic relation between the verb and the IN is, the greater the chance for morphological change. Moreover, INs that are heads of compounds are more likely to undergo variation (c). The presence of both the instrument itself and the patient in the same NP makes the IN thematically more transparent as it corresponds to the thematic roles of the verb. Morphologically, the formation of the participle form is more transparent as it requires fewer changes between the verb and the IN. The formation in the participle templates preserves the prosodic structure of the base verb.

The study adds to previous accounts of morphological changes that take place cross-linguistically in different domains. It enables to shed more light on the motivation for such change both from morphological and semantic-thematic perspectives.

The proposed analysis also provides support for a word-based approach of word formation. I will demonstrate that when forming INs based on existing verbs, other structural properties of the base are taken into consideration in addition to the consonantal root. This provides further support for the existence of a stem modification mechanism that operates directly on existing words without separate reference to the consonantal root.

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**Chiara MELLONI** (University of Verona)

#### **Aspectual properties of psych nominals in Italian and other Romance languages**

Under the common view that nominalizations preserve many features of their base verbs, the aspectual/actional properties (i.e. *Aktionsart*) of deverbal nominals represent an especially challenging domain of investigation. As for Romance, several studies have argued that the aspectual properties of the base are indeed preserved under nominalization (see in particular Meinschäfer 2003, 2005). On the other hand, other approaches proposed that the nominalization process alters the verb aspectual features (see Gaeta 2002 for Italian), specifically, by telicizing/bounding the unbounded value of the base verb (but see Melloni 2007 for a different analysis on Italian).

An especially thought-provoking data-set is represented by nominals derived from psychological verbs. While these predicates do not represent an aspectually homogeneous class (see Marín and McNally 2011 for a careful analysis), it has been claimed that psych nouns are homogeneously stative (see Pesetsky 1995, among others). Hence, some psych nominalizations would actually produce a change in the aspectual properties of their eventive (i.e. non-stative) verb sources. Fábregas et al. (2012), however, on the basis of Spanish data, endorses the opposite view that psych nouns do preserve the aspectual features of their base verbs.

The present research intends to address the question whether psych nominals in Italian preserve or alter the aspectual features of the base verb by analysing their morphosyntactic derivation and interpretive (aspectual) features in actual contexts of use.

This study will specifically target the class of Italian ObjExp verbs (see Pesetsky 1995, Belletti and Rizzi 1998). SubjExp verbs will be considered too, to the extent they are the intransitive/pronominal forms of the corresponding ObjExp Verb (*irritare* vs. *irritarsi* ‘irritate’). ObjExp verbs have an overall causative semantics, but crucially differ in allowing prototypical agents and/or involuntary causes as external

arguments (e.g. *spaventare* ‘frighten’ and *preoccupare* ‘worry’, see Arad 1998 for an enlightening view). As a consequence, their aspectual characterization is ambiguous, since ObjExp verbs can often be either eventive (i.e. dynamic) or stative, depending on the thematic roles of their subjects and the presence of a change of state in the Experiencer. In all the cases, however, ObjExp verbs have a causative semantics.

As far as nominalizations are concerned, on the one hand the ambiguous (eventive vs. stative) interpretation of ObjExp verbs is not always preserved under nominalization, since some psych nouns are unambiguously stative, although derived from verbs that are eventive (*agitare* ‘upset’ vs. *agitazione* ‘agitation’).

A special attention will be paid to the morphological features of psych nominals, in particular it will be considered whether psych nouns are zero-related to the verb or whether an overt nominalizing suffix is attached.

The research will be mainly based on Italian, but other Romance languages will be taken as a basis for a comparative analysis (Marín and McNally 2005, Iordachioaia et al. forthcoming). Data will be retrieved from the literature and psych nouns’ behaviour in context will be studied with the aid of written corpora (in particular, itWaC Italian Web Corpus, Baroni e Ueyama 2006).

This study on Italian psych nominals aims to underpin interpretive and morphosyntactic features in their derivational pattern. In particular, it will be argued that:

1. Causativity and dynamicity, the latter being a core *Aktionsart*/aspectual feature, must be carefully teased apart;
2. Nominalizations from psych verbs generally preserve the aspectual properties of the base verbs (see, in particular, its dynamic vs. non-dynamic character) and convey ambiguous reading that can be disambiguated in context; however, a fine-grained analysis of their inner verb structure and aspectual characterization is needed, especially in order to detect the source of psych nouns’ stativity;
3. Stative readings of psych nouns are obtained from different sources: the stative character of the base root for underived (or zero derived) psych nouns; the stative characterization of the base verb semantics; the presence of a target state (Parsons 1990) in the verb syntactic/semantic structure.

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**Joseph POTASHNIK** (Tel Aviv University)

### **The Locus of the causative-unaccusative alternation**

The well-known causative-unaccusative alternation has been a source of an ongoing debate among linguists. Two central approaches exist: (i) A syntactic, decompositional approach, which assumes that the relevant relation is established in the syntax (Alexiadou et al 2006, Harley 2008, Pylkkänen 2008 and Ramchand 2008, among others). (ii) A lexicalist approach, which assumes that the alternation is derived in

an active lexical component (Levin & Rappaport-Hovav 1995, Reinhart 2002, Koontz-Garboden 2009, Horvath & Siloni, 2011, to name a few). In this paper, I pursue two complementary tracks of argumentation, based on new empirical evidence, which lead to the conclusion that the alternation is lexically derived.

The existence of a (decomposed) syntactic architecture consisting of a causative head and a RESULT STATE constituent has been argued for, based on data concerning alleged sites of adverbial modification (Dowty 1979, von Stechow 1996; Beck 2005; Pylkkänen 2008, among others). An influential claim advanced by proponents of syntactic decomposition is that restitutive readings arise from having again modify the RESULT STATE, a constituent below the VP. Hence, the fact that alternating causatives such as open show a restitutive reading is taken to support a syntactic decomposition analysis (see von Stechow 1996, Beck 2005). In the first part of the paper, I present evidence (from four different empirical domains) that syntactic constituency is not a necessary condition for a restitutive reading.

In the second part, I present novel evidence demonstrating that syntactic operations cannot give rise to the unaccusative alternation. I survey several syntactic transitive constructions; each transitive contains a causative external argument and a RESULT STATE constituent, which was generated compositionally. Yet, none of them shows a corresponding alternate. If these causatives have the same syntactic structure that is postulated for alternating verbs in syntactic decomposition theories, the fact that the unaccusatives alternates are ungrammatical is unexpected. Lexicalist approaches, by contrast, are consistent with the data, because the change-of-state interpretation is introduced compositionally. In the lexical absence of such interpretation, the verbs are not expected to alternate, dating back to Fillmore's (1970) hit vs. break.

**Svetlana SOKOLOVA** (UiT The Arctic University of Norway)

**Aspect and metaphor: argument structures of Russian  
paired imperfective and perfective verbs**

The focus of the present study are paired imperfective and perfective verbs that share approximately the “same” lexical meaning. In Russian, such pairs can be formed via perfectivization (*pisat'* IPFV – *na-pisat'* PFV ‘write’) or imperfectivization (*perepisat'* PFV - *perepis-yva-t'*IPFV ‘rewrite’), where the imperfective and the perfective verbs are believed to share similar argument structures (see discussion in Kuznetsova 2013, Berdičevskis & Eckhoff 2014). Some aspectual pairs of the “perfectivization” type also have a second imperfective correlate formed by imperfectivization (*goret'* IPFV – *s-goret'* PFV – *sgor-a-t'* IPFV ‘burn’). In this case we have an aspectual triplet consisting of a primary imperfective (IPFV1), a perfective and a secondary imperfective (IPFV2) (Apresjan 1995, Zaliznjak & Mikaèljan 2010). The research question of this study is: How are the argument structures of the three forms in an aspectual triplet related? I set particular focus on the distribution of metaphorical extensions among paired imperfectives and perfectives, which has not been investigated before. Why does the system allow for two imperfectives that are expected to function as equivalents?

I show that all three verbs in a triplet, although characterized by similar semantics, have different argument structures. The difference is particularly noticeable in metaphorical contexts, where IPFV2 has a higher frequency of metaphorical uses. Due to the presence of a prefix, IPFV2-s become more telic, or “oriented towards a result” (Veyrenc 1980), and share similar argument structures with prefixed perfective verbs. To illustrate this point, I have chosen the verb ‘load’, which has IPFV1 *gruzit'*, three perfective counterparts *na-gruzit'*, *za-gruzit'*, *po-gruzit'* and three IPFV2: *nagružat'*, *zagružat'*, *pogružat'*. Both IPFV1 and the three IPFV2-s are characterized by a relatively high frequency in the Russian National Corpus (RNC, [www.ruscorpora.ru](http://www.ruscorpora.ru)): *gruzit'* (1537), *nagružat'* (328), *zagružat'* (406), *pogružat'* (720). All the ‘load’ verbs show alternation between the two constructions, the Theme-Object (‘load the hay onto the truck’) and Goal-Object (‘load the truck with hay’), which can have metaphorical extensions (for instance, ‘load somebody with information’). I analyze the distribution of the two constructions, taking into account both literal uses and metaphorical extensions, by using constructional profiling methodology (the frequency distribution of a given linguistic unit across syntactic environments, developed in Janda & Solovyev 2009). The distribution of the two constructions among the ‘load’ verbs in the RNC indicates that IPFV2-s behave differently from IPFV1-s in terms of constructions and metaphorical extensions. IPFV2-s indeed show a higher frequency of metaphorical uses than IPFV1: 25% (*gruzit'*) vs. 44% (*zagružat'*) and 60% (*nagružat'*). The metaphorical patterns of IPFV2-s are more similar to the patterns attested for the perfective counterparts than those of IPFV1. This observation serves as evidence that prefix affects metaphorical uses, opposing perfective verbs and IPFV2-s to IPFV1-s.

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**Lucia TOVENA** (University Paris 7)

**Constraints on the arguments of an event noun with delimited duration**

Arguments, as syntactic realisation of participants, have played a considerable role in literature on aspect and nominalisations. Deverbal nominalisations have been analysed as ‘mixed category’ cases that inherit their argument structure from the base. Nominals ending by -ata- in Italian would qualify as simple events nouns in Grimshaw’s (1990) terms, because arguments are not obligatorily present. They are used to refer to temporally delimited events, e.g. -sciata- (a descent on ski), -mangiata- (a big eating). Feminine singular (Latin) past/perfect participles possibly are at the origin of the word-formation pattern, but the diachronic process of re/grammaticalisation is not entirely understood. Aspects issues are relevant at least in studying the class of verbs that can serve as bases, and accounting for the impossibility of using these nominals in habitual sentences. This paper tackles the first point. Our background assumption is that the -ata- ending is a nominal derivational suffix in synchrony, whose aspectual restrictions paired up with loss of verbal inflectional status. It works like an event modifier that measures an event using contextual information. Being a measure function, it is sortally restricted to apply to processive predicates, which are homogeneous. But unlike standard durative adverbials, e.g. -for-phrases, it does not specify a duration value. We discuss cases of sort of valency reduction that we ascribe to enforcing the homogeneity requirement, and argument structure (re)organisation that we ascribe to the requirement of a controller for the instruction of perfectivity.

*Atelicity and Themes*

The view that -ata- nominals derive from atelic predicates (Gaeta 2000) has been recently challenged (Folli & Harley 2013). Core data concern participants that discharge the role of Theme, see -una lavata (di camicie)/??delle camicie- (a washing of shirts/of the shirts). Themes can compositionally contribute to the structure of the event, in particular for accomplishments (Krifka 1989, Dowty 1991, Tenny 1994). Assuming a homogeneity constraint enables us to make sense of the restrictions on Themes in terms of suppression of sources of event delimitation. Predicates of achievements can be ruled in under analogous conditions, i.e. -ata- event nouns can be formed if the verb gives access to a preparatory phase that is processual and can become the depicted event via coercion, cf. -entrata- (entering) vs. -#esplosa- (explosion).

*Argument structure*

Bordelois (1993) argued that suffixes can impose constraints on the argument structure inherited from the core, namely that the Spanish equivalent of -ata- is the expression of unaccusativity. Despite straight false predictions for Italian, cf. unergative -nuotata- (swim), we pursue the discussion examining uses of -ata-nominals in light-v constructions, where they ‘share’ arguments within a complex predicate. Light-v selection would depend on the participants that have to be expressed (Samek-Lodovici 2003). -Fare-(make) combines with nominals with intransitive core, also unaccusatives provided they have animate subjects, see -\*il baule/l'uomo ha fatto una caduta- (the trunk/the man made a fall). This suggests that events described by -ata- nominals must be controlled by a participant which must be overt if the core does not satisfy this assumption. We can make sense of it within our measure function theory. The controlling participant is presupposed by the suffix, because the ‘perfection’ of the event is licensed without outer

aspect projection. Next, the measure+presupposition content of the suffix is exploited in the early '90 neologism -x fa un'ospitata- (x is the guest (in a public event)), where the core Theme is interpreted as controlling the duration of the event and is realised as subject of the construction. Accordingly, the light verb must be -fare- although -ospitare- is transitive. The core Agent gets suppressed or realised as locative. Argument structure change is costly and rare.

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## WORKSHOP

### Categorial shift: From description to theory and back again

#### *Convenors*

**Liesbet Heyvaert** and **Hubert Cuyckens** (University of Leuven)

#### *Description*

The aim of this workshop is to discuss the linguistic phenomenon of **categorial shift** in view of recent descriptive research. Studies on categorial shift have tended to be either inductive and crosslinguistic in focus (e.g. on nominalization/verbalization: Hopper & Thompson 1984; Mackenzie 1987; Lehmann 1988; Givón 1990; Croft 1991; Koptjevskaja-Tamm 1993; Dik 1997) or they are deductive and theoretically oriented (see, for instance, on the English gerund: Lees 1960; Chomsky 1970; Pullum 1991; Hudson 2007). This workshop wants to pick up on the role of **language-particular, micro-level descriptive studies** and probe into the contribution that they can make to our **general understanding of categorial shifts**. In particular, informed by language-particular studies on categorial shifts (e.g. shifts in the English and German *-ing/-ung* form; shifts in functional modification patterns within the NP and the clause), it wants to critically examine

- (1) whether nominalization and verbalization can be accurately characterized as the **ordered acquisition or loss of particular hierarchies of nominal or verbal categories** (see, among others, Givón 1990; Croft 1991; Malchukov 2004; 2006);
- (2) how the synchronic bias that characterizes most theoretical approaches to the phenomenon of categorial shift can be enriched by **diachronic analysis**;
- (3) what the **functional underpinnings** are of (trans)categorial shifts;
- (4) what benefits as well as limitations there are to a **quantitatively-oriented methodological approach** to the description of categorial shifts.

The workshop aims to combine descriptive studies with theoretical and methodological reflection. Descriptively, it will focus on a range of (aspects of) categorial shift as manifested in nominalization/verbalization patterns in a variety of languages but it is not confined to shifts in this domain. A particularly interesting case of nominalization/verbalization that may lead to a fresh perspective on categorial shift is, for instance, formed by the *-ing* form in English and its German counterpart in *-ung*. Present-day English has two types of gerunds: nominal gerunds (NGs, as in (1)), which have the internal syntax of a noun phrase, and verbal gerunds or VGs, as in (2), which developed out of nominal gerunds in the course of esp. Modern English and allow for a range of verbal features (such as auxiliaries of secondary tense, modality and passive voice; adverbials and non-peripherastically realized participants):

- (1) I have noticed *this abridging of articles from The Times* on several occasions. (COCA)
- (2) I remembered *him using the word malfunction*. (BNC)

It is especially the curious mixture of nominal and verbal features or the ‘intersective gradience’ (Aarts 2004: 32-33) in VGs that has been debated in more theoretically-oriented approaches (e.g. Milsark 1988; Pullum 1991; Yoon 1996; Hudson 2007). Diachronic analyses of the gerund have likewise tended to focus on the *verbal* gerund and map out its gradual acquisition of *formal* verbal properties (e.g. Tajima 1985; Jack 1988; Van der Wurff 1993; Fanego 1996, 1998, 2004; De Smet 2007, 2008). Picking up on the recent attention for an alternative, (discourse-)functional perspective on gerunds (Heyvaert, De Smet, Cuyckens & Fanego 2012; Heyvaert 2013), the workshop aims at (1) paying due attention to (possible changes in) the functional behaviour of the *nominal* gerund too (e.g. in terms of aspectual properties, pluralization, adjectival modification and referential behaviour); (2) combining diachronic with synchronic description; (3) considering more closely the different paths of ‘nominalization’ that appear to have been taken by English nominal gerunds and German *-ung* forms (cf. Demske 1999, 2000); (4) exploring how this all feeds back into a theory of categorial shift in general.

The research questions that will be addressed in the workshop include but are not restricted to the following:

1. Is a language-particular case of categorial shift (such as, for instance, the English gerund) best described in its own terms only, by means of language-particular descriptive categories (Haspelmath 2010), or can its description lead to new, more general insights in the grammatical behaviour of the ‘comparative concepts’ of, for instance, noun and verb (Haspelmath 2010, 2012)?;
2. What can a diachronic perspective on de- and recategorization processes add to our understanding of categorial shift?
3. Are the processes of decategorialization (Hopper & Thompson 1984) and recategorialization (Bhat 1994) accurately described in terms of the mere loss or acquisition of certain morphosyntactic categories (e.g. the use of determiners, the noun- or verb-like inclusion of participants), or can the description of degrees of re/decategorialization (viewed both as synchronic gradience and as diachronic gradualness) benefit from more fine-grained analysis (e.g. of whether the *full* range of determiners is exploited in a nominalization type; e.g. of how a nominalized/verbalized structure comes to function in the *discourse* and which *collocational* ties it holds with its co-text)?;
4. Gerunds have been identified as synchronic instances of ‘intersective gradience’ (Aarts 2004: 32-33). Can this synchronic view of gradience be fruitfully combined with a diachronic perspective whereby nominal and verbal gerunds themselves are said to show signs of ‘subsective gradience’ as well, as they have gradually come to resemble the noun phrase, resp. verb phrase prototype more closely? Do we need to recognize an *intra-categorial* type of nominalization/verbalization or adjectivization to account for this?
5. Which statistical models can be adopted to quantitatively capture (gradual shifts in) the formal and functional characteristics of de- and recategorized structures?

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**Elisa BEKAERT and Renata ENGHELS** (University of Ghent)

### **On the edge between Nouns and Verbs: the heterogeneous behavior of deverbal nominalizations empirically verified**

Deverbal nominalizations can be defined as verbs functioning as nouns, or, in conceptual-semantic terms, as events represented as entities. Thus, they take an intermediate position between the nominal and verbal prototypes and exhibit properties of both categories (Hopper and Thompson 1984, Koptjevskaja-Tamm 1993, Givón 2001). Moreover, the category of deverbal nominalizations as a whole cannot be analyzed as a homogeneous class, but incorporates both more verbal and more nominal forms and uses. Indeed, traditionally, the distinction has been made between action or event nominals (1), on the one hand, and result or referential nominals (2), on the other (Grimshaw 1990, Picallo 1999, Alexiadou 2001, Mellon 2011).

- (1) The *building* of the house took five years.
- (2) My neighbors are building a stone *building* in the backyard.

The first type still refers to an event and displays more verbal properties, such as the inclusion of an overt argument structure (*of the house*) and of a certain aspectual content (*took five years*). The referential type approximates the prototypical noun and thus presents more nominal features: they can be combined with a larger range of determiners (*a, that, some*, etc.), frequently appear with adjectival modifiers (*stone*), etc. However, these observations are mainly based on laboratory examples, while the analysis of attested examples is less straightforward, as is shown by the following example, that can difficultly be attributed to one of the two classes:

- (3) El presupuesto total de la *construcción* es de 500 millones [...]. (CREA: Prensa, 2001)  
The total cost estimate of the *construction* amounts to 500 million [...].

In this presentation, we examine therefore to which extent these theoretical assumptions concerning deverbal nominalizations can be empirically verified by analyzing a large corpus of ‘prototypical’ Spanish nominalizations – selected from CREA. These are ‘nomina actionis’ derived from transitive agentive verbs (*construcción* ‘construction, building’, *creación* ‘creation’, *traducción* ‘translation’, etc.). To this end, the presence of nominal and verbal features will be quantitatively and qualitatively analyzed, mainly focusing on the argument realization. These results are statistically corroborated through the classification tree method, which aims at ‘measuring’ the relevance of the different features.

The thorough empirical analysis of these prototypical instances will allow us to reject the rigid bipartition of the class of deverbal nominalizations and to describe its heterogeneous nature as a continuum evolving from the verbal to the nominal prototype.

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**Ulrike DEMSKE** (Universität Potsdam)

#### **Categorial Changes of *-ung* Nominals in German: Evidence from Linking**

Categorial shifts concerning the *-ing* form in English have attracted a lot of interest, as the literature well attests. As shown by Demske (2000, 2002), the historical record of *-ung* nominals suggests that we observe a categorial change in German as well, giving rise to the question whether English and German behave alike in this respect.

Considering *-ung* nominalizations in Present Day German (= PDG), we find a fairly productive word formation pattern yielding deverbal nouns which may denote different eventualities and entities, as demonstrated in detail by Ehrich & Rapp (2000). Even so, *-ung* nominals are subject to a number of restrictions in PDG that do not hold in earlier stages of German:

- i. While the derivation of *-ung* nominals in PDG is restricted to particular semantic verb classes, no such restriction holds for Early New High German (= ENHG) (*Verkauffung unangenehmer Bücher* ‘selling of unpleasant books’ vs. *\*Verkaufung von Büchern*).
- ii. Depending on the respective verbal base and the particular context, *-ung* nominals in ENHG may refer to processes, states or events, while only the latter reading is unmarked in PDG, cf. ENHG examples like *streiffung* ‘roaming’, *wünschung* ‘desire’ and *abfertigung* ‘handling’.
- iii. While linking properties of event nominals in PDG crucially differ from linking properties of their verbal counterparts, no such differences are observed with respect to the linking properties of verbs and event nominals in ENHG: Both arguments of the underlying verb can appear in the noun’s argument structure (*auff des Königs abfertigung warten* ‘waiting for the King to deal with them’, *abfertigung der Türck: Botschafft* ‘dealing with the Turkish ambassador’).

Based on a comprehensive corpus of *-ung* nominals in ENHG as well as in PDG, I argue in this paper that changes in the history of German *-ung* nominals are best captured in terms of a change affecting their lexical semantic structure, rendering *-ung* nominals in German more noun-like. In view of the fact that German *ung*-nominals and English *-ing* nominals evolve from a common source, the question arises why German and English develop so differently? In Present-Day English we rather find a verbal gerund used besides a nominal form with the verbal use at least partly triggered by a morphological change affecting the present participle throughout the history of English, i.e. the inflectional suffix *-ende/-inde* being replaced by *-inge* due to phonological changes (cf. Wik 1973, Nehls 1988 among many others). Taking into account the

development of the nominalized infinitive in German, I suggest that English *-ing* nominals do not behave like their German counterparts because they can still be used in nominal as well as verbal environments.

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**Lauren FONTEYN (K.U.Leuven)**

#### On the multi-layered nature of diachronic transcategorial processes: the case of the English gerund

This paper examines transcategorial processes of nominalization and verbalization in the history of the English gerund and argues that the categorial shifts which the gerund has undergone are best described as **gradual** and **multi-layered** developments of a general **functional** nature.

Gerunds in Present-day English have been characterized as instances of intersective gradience, as they “fuse verbal and nominal elements” to varying extents (Aarts 2004: 20). This synchronic gradience results from a long-term diachronic process in which a subset of gerunds adopted a verb phrase- rather than noun phrase-like structure, leading to a split (Aarts 2004:36) between the original nominal gerund (NG, (1)) and a new, more verbal gerund type (VG, (2)):

- (1) *Brown's deft painting of his daughter* is a delight to watch.
- (2) *Brown deftly painting his daughter* is a delight to watch.

While the **morphosyntactic** changes (and variation) in English gerunds have been documented extensively (Fraser 1970; Fanego 2004; Hudson 2007), the semantic and functional aspects of the transcategorial processes occurring in the gerund have only recently been taken note of (Croft 2007; De Smet 2008; Traugott & Trousdale 2010).

A detailed analysis of 2000 gerunds from the PPCME2, PPCEME and PPCMBE shows that (1) the morphosyntactic *verbalization* of the gerund is closely linked to significant changes in its discourse-functional and semantic behaviour; (2) the NG too, while not undergoing notable formal changes, went through critical functional changes suggesting increasing *nominalization*. It appears, then, that diachronic transcategorial processes do not exclusively involve morphosyntactic phenomena, but, as the NG shows, also (and sometimes predominantly) operate in a construction’s functional-semantic layers. Specifically:

- (i) From Middle English onwards, the gerund verbalized in that it acquired clausal rather than nominal grounding strategies (Langacker 2009: 149), i.e. by means of control and temporal integration with the matrix clause (3) instead of through determiners:
  - (3) a. In *erecting a figure ryght at noone* I fynd the moon to be just in the angle of the east. (1612, PPCEME)
  - b. I will prove, First, That he had a malicious Intent in *making of this Book*. (1590, PPCEME)

This ‘**indirect clausal grounding**’ became the most frequent grounding strategy for formally verbalized VGs (50.6%), but had disappeared as a grounding option for NGs by Late Modern English (3b). NGs, however, came to allow a fuller range of nominal grounding elements, including the indefinite article (e.g. There was *a perpetual slamming and banging of doors* [1837, PPCMBE]);

- (ii) NGs gradually became more likely targets for **anaphoric tracking** (from 15% in EmodE to 23% in LModE), indicating that they increasingly take part in the nominal system of identification and reference. VGs moved in the opposite direction (10% in EmodE to 7% in LmodE);
- (iii) A similar increase in the ‘nominality’ of NGs is attested in their **semantic** and **aspectual properties**. A distinctive collexeme analysis (Gries & Stefanowitsch 2004, Hilpert 2006) shows that while VGs continue to profile events/actions rather than physical objects, NGs increasingly express events/actions with an object-like aspectual bounding and lexicalized nominal *ing*-forms become more prominent.

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### **Livio GAETA (Università di Torino)** **On the primacy of decategorialization**

Although it is usually seen in merely negative terms, the phenomenon of decategorialization, namely the loss of categorial traits (cf. Hopper and Traugott 2003), reveals interesting properties if the vantage point is adopted that losing certain properties does not necessarily amount to acquiring a new set. The paper will argue that this perspective is illuminating for a number of phenomena occurring in German, a language which is particularly rich in decategorialization types (cf. Gaeta 2010, 2014). In particular, the paper will focus on the usage of certain nouns like *banane* ‘banana’, *klasse* ‘class’, etc. as adverbs in the following examples:

- (1) Der Junge hat doch komplett banane gespielt.  
the:NOM kid has yet completely banana played:PSTPTCP  
'The kid has played really weird'.
- (2) Den Sound find ich sehr klasse gelungen.  
the:ACC sound find I very class succeeded:PSTPTCP  
'I find the sound has succeeded really well'.

This usage results from a complex process of reanalysis which benefits from the peculiar syntactic position in which these words are placed, namely the right branch of the so-called verbal bracket. In particular, the adverbial usage comes about via a process of reverbalization of compounds headed by a verbal abstract in which they serve as modifiers with an intensifying value: *Klassespiel* ‘great game, lit. class play’ -> *klassespielen* ‘to play masterfully’. In this way, a so-called separable verb comes into existence in which the modifier is dislocated in the right branch of the verbal bracket and is paralleled by the common placement of manner adverbs:

- (3) Die Mannschaft spielt heute wirklich klasse.  
 the team plays today really class  
 'The team is playing today really masterfully'.
- (4) Die Mannschaft spielt heute wirklich gut.  
 the team plays today really good  
 'The team is playing today really well'.

It has to be stressed that this adverbial usage cannot be explained away as a marginal phenomenon due to the general trend towards analyticity and multi-functionality characterizing the diachronic development of German. This is shown by the adverbial usage of the adjective in (4) which used to be overtly marked in older stages as witnessed by the Middle High German form *guot-e* 'well'. Rather, it results from a peculiar trait of the discontinuous language type represented by this language, in which the right branch of the verbal bracket can be seen as an active locus of decategorialization, characterized by a low degree of activation of morphosyntactic features. This is strictly connected with the crucial role played by the highly productive process of reverbalization of compounds in contemporary German as shown by cases like *verkehrsberuhigen* 'to abate traffic' <- *Verkehrsberuhigung* 'traffic abatement', etc. (cf. Wurzel 1998), which also foster a typically synthetic trait like incorporation.

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**Stefan HARTMANN** (Johannes Gutenberg-Universität Mainz -Fachbereich 05: Philosophie und Philologie; Deutsches Institut)

#### **Pathways from verb to noun and back again: Categorial shifts in English -ing- and German -ung forms**

The English suffix -ing and the German suffix -ung can be traced back to the same root, but have taken remarkably different paths of development in both languages (Dal 1952). Both English -ing-derivation and German -ung-nominalization have been studied extensively in recent years (for overviews, cf. Fonteyn 2014 for English -ing and Hartmann 2014 for German -ung). As Demske (1999) has already pointed out, a cross-linguistic comparison of the development of both patterns can yield valuable insights for a theory of word-formation and word-formation change.

English nominal and verbal gerunds in -ing as well as German -ung-nominalizations have been perceived as a challenge for word-formation theory (cf. Fonteyn 2014; Hartmann forthc.). In this paper, I will discuss theoretical and methodological approaches that allow for a straightforward account of both the synchronic productivity and the diachronic dynamics of these patterns as well as other word-formation constructions. I will argue that German -ung-nominals have not only undergone significant changes in productivity (cf. Demske 2000) but have also experienced categorial shifts: In the Early New High German period (c. 1350-1650), the use of -ung-nominals was extended from abstract concepts to progressive and highly "verby" constructions. Today, by contrast, the word-formation products of this pattern tend to exhibit a high degree of "nouniness" (Ross 1973; Sasse 2002), as they can also denote objects and persons (cf. Demske 2000). In the case of English -ing forms, the shift in functional behavior has gone much further (De Smet 2008; Fonteyn, De Smet, & Heyvaert 2015), to the extent that the suffix -ing is productive not only in derivation but also in inflection (Demske 2000). Both patterns have taken different pathways of constructionalization (Traugott & Trousdale 2013). Many highly frequent German -ung-nominals have undergone lexical constructionalization, i.e. they have become independent form-meaning pairings detached from their respective constituents. The development of English -ing, by contrast, can be seen as an instance of procedural constructionalization (Traugott 2014: 10), i.e. the development of a more schematic and more general construction with abstract meaning.

On a more practical level, I will argue that studying complex phenomena such as the diachronic development of morphological patterns requires a multidimensional methodological approach. Converging evidence from multiple case studies employing a variety of well-established quantitative methods and drawing on data from the Mainz Early New High German Corpus (cf. Hartmann 2014) and the GerManC corpus (Durrell et al. 2007) lends support to the theoretical considerations outlined above. In addition to previously suggested statistical approaches, I propose morphological cross-tabulation analysis, an extension of collostructional analysis (Stefanowitsch & Gries 2003), as an appropriate method for assessing the schema salience (Taylor 2002) of morphological constructions in a usage-based perspective. This method adopts the logic of traditional cross-tabulation tests to determine the degree of ‘attraction’ or ‘repulsion’ between a derivative and its base. The association strength thus calculated can then give important clues to a derivative’s degree of lexical autonomy (Bybee 1985, 1995), which in turn can be seen as an important determinant of morphological productivity.

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### **Liesbet HEYVAERT, Anouk BUYLE and Charlotte MAEKELBERGHE (University of Leuven) Nominal and verbal gerunds in Present-day English. Aspectual features and nominal status**

This paper deals with gerundive nominalizations in Present-day English, i.e. with nominal gerunds (or NGs, (1)), which have internal noun phrase syntax, and with verbal gerunds (or VGs, (2)), which have clause-like internal structure:

- (1) a. (...) reports of (...) naval activity, including [the sinking of the Belgrano] (...). (BNC)  
 b. (...) the significance which the certainty of the law has for [the smooth and efficient working of economic life] (BNC)

- (2) a. (...) few employees will volunteer for redundancy when they've little chance of [finding another job]. (BNC)  
 b. (...) the infant develops cognitive abilities as a means of [dealing with the world]. (BNC)

Diachronically, VGs developed from NGs in the Middle and Modern English period. While the formal differences between them have been described before (see, among others, Tajima 1985; Donner 1986; Jack 1988; Fanego 1996, 2004), it remains a matter of debate if and how any semantic differences between NGs and VGs have resulted from this development. In this paper, we focus on their aspectual semantics. NGs, Quirk et al. (1985: 1551) have argued, zoom in on an “activity that is in process” (1292) rather than on “the action as a whole event, including its completion”. Brinton (1998: 48) claims that *-ing* “has the effect of converting a situation into an activity, of making the situation durative, atelic, and dynamic”. Evidence for the activity qualities of *-ing* nominalizations, she adds, is “the fact that they are generally mass” (1998: 48; see also Langacker (1991: 26)).

We looked at (1) whether/to what extent NGs and VGs differ aspectually (and whether, as has been claimed, they typically denote Activities), and (2) how the aspectual features of NGs and VGs can be related to their alleged mass noun status. Our analysis was based on a set of 500 NGs and VGs randomly extracted from the BNC corpus which were coded for (a) the *inherent* temporal nature of the situation expressed by the underlying VP ('ontological' aspect; distinguishing between States, Activities, Accomplishments, Achievements and Semelfactives); and (b) the aspectual *perspective* that is taken of the actualization of that situation in the clause in which it is embedded (i.e. whether the situation is presented as temporally delineated or 'in progress').

Results show that (a) a significant number of both NGs and VGs denote non-durative (Achievements; Semelfactives) or telic situations (Accomplishments) (as in (1a) and (2a)); (b) NGs denote situations that are presented as durative and atelic (i.e. Activity-like situations) slightly more often than do VGs (cf. (1a) and (1b)); (c) the situation denoted by NGs is more frequently viewed repetitively (i.e. as repeating itself on different occasions) and as ongoing (rather than delineated) than that of VGs. The particular aspectual viewpoint that is taken on NGs and VGs, we will argue, ties in with their distinct nominal status in various ways, NGs forming a continuum from mass to (delineated) count noun-like uses and VGs ranging from mass noun to (near-)subordinate clause status.

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#### Aspectual change in English *-ing* and German *-ung* nominalizations

Present-Day English/German (PDE/PDG). English *ing*-of nominalizations encode processes, but not results. They are incompatible with achievements in (1) and fail telicity tests with accomplishments that choose ion/ment/al/ance nominals to express telicity in (2) (Borer 2013, Alexiadou et al. 2013).

- (1) \*Kim's reaching of the summit/\*Robin's finding of oil  
 (2) The separation/\*separating of the pupils took one hour.

In Rappaport Hovav & Levin's (2010) distinction between manner/mono-eventive and result/bi-eventive verbs, *ing*-of realizes mono-eventivity as in (3a):

- (3) a. [[x ACT<manner>]] manner/mono-eventive verbs  
     b. [[x ACT<manner>][CAUSE [BECOME [y <STATE>]]]] result/bi-eventive verbs

By contrast, Present-Day German (PDG) *ung* is bi-eventive (Roßdeutscher & Kamp 2010): it selects (simple/particle/prefix) verbs with a result state introduced by an ‘adjectival’/‘nominal’ root (e.g., *säubern* ‘to clean’, *be-stuhlen* ‘to furnish’ < *Stuhl* ‘chair’) and rejects mono-eventive verbs whether non-core transitive, unaccusative or unergative (e.g., *wischen* ‘to wipe’, modern ‘to rot’, *gleiten* ‘to slide’). The latter appear in the nominal infinitive: cf. \**die Wisch-ung* - *das Wischen* ‘the wiping’ (see Ehrich 1991).

Therefore, PD *ing* and *ung* contrast in their event structure: *ing* favors mono-eventivity (3a) and *ung* realizes bi-eventivity (3b). This is especially prominent by contrast to nominals that realize the disfavored pattern: Anglo-Norman suffixes realize (3b) in English, while the nominal infinitive realizes (3a) in German.

Old English (OE) and Old High German (OHG). Unlike nowadays, OE and OHG deverbal *ing* and *ung* nominals were aspectually similar (Werner 2012). Hindorf (1985) notes that OE deverbal *ing* (and its allomorph *ung*) had less of a process reading than in PDE and could denote states. She reports frequent (result) state-denoting nominals like *gitsung* ‘greed’ (<*gītsian* ‘to desire/lust’), *geearnung* ‘merit’, *willnung* ‘desire’, while Kastovsky (1985) notes many result nouns as *beorning* ‘incense’ < ‘burn’, *hunting* ‘game’ < ‘hunt’, *forgifung* ‘donation’ < ‘give’, whose source is the pattern in (3b). Like OE *ing*, OHG *ung-* was also aspectually flexible, since it easily attached to mono-eventive verbs: see OHG *bellunga* vs. PDG \**Bellung* ‘barking’, *bibinunga* vs. \**Bebung* ‘shaking’, *fluochunga* vs. *Fluch*/\**Fluchung* ‘cursing’.

We identify two main factors that trigger this change: 1) the competition with other morphological patterns, and 2) the grammaticalization of the progressive. The first concerns both *ing* and *ung*, modulo language-internal conditions, while the second applies only to English *ing*. We show that *ing* started losing its ability to denote result states/ telicity due to the competition with the Anglo-Norman suffixes *ion/ment/al/ance* and the parallel emergence of the progressive originating in prepositional constructions with *ing* nominals (e.g. *He was on/a hunting*) (Alexiadou 2013; cf. Visser 1973). German *ung* specialized for bi-eventive events as a result of its decline in productivity and the competition with the increasingly productive nominal infinitive (Ten Cate 1985, Demske 2002, Werner 2012). Demske shows that Early New High German still formed mono-eventive *ung* nominals like *ansehung* ‘looking at’, *murmeling* ‘grumbling’, *vertrawung* ‘trusting’, which are replaced by infinitives in PDG.

In conclusion, declining suffixal productivity leads to a specialized semantics for German *ung*, while the specialization of English *ing* nominals also involves an independent aspectual grammaticalization of the suffix.

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**J. Lachlan MACKENZIE** (VU University Amsterdam)**English *pluralia tantum* nominalizations in -ings**

Grimshaw (1990) observed that result nominals (e.g. *examination* in *The examinations were lying on the table for all to see*) accept pluralization whereas event nominals (e.g. *examination* in *The examination(\*s) of the students took all day*) do not. Recent work has shown, however, that telic event nominals do accept pluralization, as in *the repeated killings of unarmed civilians* (Alexiadou, Iordăchioaia & Soare 2010: 552). The singular form of countable event nominals (as in *a quick moving of his cigar to his mouth*) is analysed by Maekelberghe & Heyvaert (2015) as involving a particularized conception of an event; their data includes only forms that also have a productive plural. In some cases, however, the plural of an -ing nominal does not simply indicate a multiple of the singular as in *You hurt my feelings*, to which *\*Any one in particular?* is at best a jocular answer (cf. Acquaviva 2008: 18).

Plurals like *feelings* have a mass interpretation, and this is particularly true of the focus of this paper, *pluralia tantum* nominalizations (PTNs) ending in -ings, which have never been examined before as such. These nominal gerunds occur only in the plural (i.e. for each of these PTNs, \**a V-ing* is ill-formed). Some 50 PTNs have been identified. Many (like *pickings* and *droppings*) are result nominals, but several (like *journeyings* and *comings and goings*) are event nominals, which interestingly appear to be typically atelic. PTNs furthermore group into certain semantic areas such as communication (*jabberings*, *mouthings*, *musings*, *pleadings*, *ramblings*, *rantings*, *threatenings*, *urgings*, *writings*), finance (*borrowings*, *earnings*, *outgoings*, *savings*, *(share)holdings*, *spendings*, *takings*, *winnings*), cookery (*dippings*, *fixings*, *settlings*, *trimmings*), travel (*bearings*, *journeyings*, *travel(l)ings*, *wanderings*), distress (*longings*, *pinings*, *sufferings* (esp. of Christ), *yearnings*), the human environment (*belongings*, *furnishings*, *lodgings*, *surroundings*) and human action (*comings and goings*, *dealings*, *doings*, *filings* (in law), *proceedings*).

Doubts have been cast by Acquaviva (2008: 15-21) on the extent to which *pluralia tantum* in general (*looks*, *scissors*, *suds*, etc.) form a grammatical or semantic class. The present paper will examine (with appropriate consultation of corpora) the syntagmatic properties of PTNs with regard to their cooccurrence with quantifiers (e.g. *many/much sufferings*), with *one by one* (e.g. *work through his writings one by one*), with *count* or *enumerate* (*She counted the takings*), with reciprocals (*The furnishings complement each other*), etc. Occurrence with typical indicators of plurality may correlate well with Acquaviva's (2008: 105) 'whatever reading' (e.g. *findings* as 'whatever results have been found'), i.e. 'instances of a property' (2008: 115). Functional Discourse Grammar (see especially Rijkhoff 2008, Mackenzie 2013) has been used to give a fine-grained analysis of noun phrases and nominalizations in terms of properties, configurations, states-of-affairs, episodes and propositions and will be used here to provide a description of the full inventory of PTNs. The research is designed to enrich current understanding of gerundive nominalization in English.

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**Charlotte MAEKELBERGHE** (K.U. Leuven)**Nominal and verbal gerunds in Present-day English. A study of the interplay between their referential and distributional features**

This paper presents a comparative study of how events are conceptualized in Present-day English nominal (NG, (1)) and verbal gerunds (VG, (2)):

- (1) How can the president justify *the banning of the import of these assault weapons (...).*  
(COCA)
- (2) I'm sorry that I accused you of *taking them.* (BNC)

Previous studies have argued that NGs designate ‘actions’ (Langacker 1991: 32, Lees 1960, Mackenzie 2004), while VGs associate with ‘factuality’ (Kiparsky & Kiparsky 1971, Lees 1960, Langacker 1991). The accuracy of these semantic labels has been challenged (VGs can also be denote actions and NGs can be factual), and the need for a description that also integrates referential features was pointed out before (Schachter 1976; Heyvaert 2008). Current analyses of the English gerund, it is argued in this paper, lack (i) a solid quantitative, corpus-based foundation and (ii) can greatly benefit from a multifunctional perspective which considers the interplay between the gerund’s referential and distributional, especially collocational, properties.

My analysis is based on a quantitative study of 1600 NGs and VGs from BNC and COCA, which were first coded for their referential and lexicogrammatical function in the clause. For the collocational analysis, a distinctive collexeme analysis (Gries & Stefanowitsch 2004) was carried out on larger sets of NGs and VGs functioning as direct object (3) and as postmodifier to a head noun (4), two collocationally ‘rich’ contexts.

- (3) The decision to **regulate** *the printing of paper money* instilled some popular confidence in the currency. (BNC)
- (4) Mr Surkov would get the **chance** of *seeing the duty solicitor.* (BNC)

Results reveal that **nominal gerunds** mostly conceptualize events as time-stable, *conceptually autonomous entities*: (1) Referentially, they show a clear preference for definite determination (which enforces a noun-like conceptualization, cf. Hartmann 2013: 17), but allow for an indefinite article when an event is conceptually ‘particularized’ (Maekelbergh & Heyvaert forthc.); (2) This conceptually independent profile allows them to occupy both the peripheral and the more nominal-like “core complement” positions ( i.e. those of subject and object) significantly more often than VGs (cf. Fanego 2004: 41); (3) Collocationally, NGs occur more often in the object slot of non-controlled ‘public’ predicates (*permit*) (Thompson 1973) and provide presupposed information in the postmodifier slot (*retaliation for*).

**Verbal gerunds** show a different interplay of referential and distributional features: (1) A majority of VGs denote *conceptually dependent entities*: They downplay reification and in their distribution emphasize temporal integration with the main clause by establishing control relationships with a main clause participant. Collocationally, this is reflected in their preference for ‘private’ predicates like *enjoy* or *try*. (2) The smaller set of *uncontrolled* VGs, then, occurs in contexts which, rather than focus on identifying one specific instance (as do most uncontrolled nominal gerunds), create irrealis (virtual) or generic spaces that can involve multiple instantiations (*idea of, way of*).

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**Andrey MALCHUKOV** (University of Mainz)

### Nominalization, verbalization, and verbalized nominalizations: a typological outlook

The talk deals with mixed categories including nominalizations and verbalizations from a cross-linguistic perspective. It starts by introducing the model for transcategorial operations proposed by Malchukov (2004), the Generalised Scale Model, which is designed to capture dependencies between acquisition/loss of verbal and nominal categories in category shifts. The Generalised Scale Model relies on the functionally based hierarchies of verbal and nominal categories, shaped by the scope (or Bybee's "relevance") of respective categories. In the talk I will illustrate how GSM can be used to restrict the sets of nominal and verbal categories in mixed categories across languages, and compare it with other models (e.g., with the generative approach of Borsley & Kornfilt 2000). I will also address a question (not explicitly discussed in Malchukov 2004, but raised in the Call for Papers of the workshop convenors), whether different values ('grams') of individual grammatical categories are equally susceptible to acquisition and loss in transcategorial operations.

As such the Generalised Scale Model is panchronic: it is intended to ensure well-formedness of sets of (nominal and verbal) categories instantiated by different types of "mixed categories", so it is expected to perform independently of particular diachronic processes. Yet, it is interesting to consider whether the results of transcategorial operations depend on a particular diachronic scenario involved. Keeping the two perspectives apart is also important since what will be described as nominalization from a synchronic perspective, may be shown to increase in verbal properties from the historical perspective (cf., e.g., the remarks by Tabor & Traugott 1998 on the English gerunds). In my talk, I will consider several subtopics in this domain. After introducing the hierarchies for nominalization and verbalization processes, I address more complex category shifts involving reanalysis of nominalizations as final predicates. These involve "verbalization proper" (i.e., reanalysis of nominal predicate as a verbal one) and also "insubordination". The latter process (first discussed by Evans 2007) refers to reanalysis of a subordinate clause as a finite predicate. The two notions overlap in case this reanalysis takes a nominalized clause as its source construction. From the perspective of the Generalised Scale Model developed earlier, insubordination processes are peculiar in that they yield partial neutralization between verbal and nominal categories (for example, reanalysis of noun-style possessive agreement as finite verbal agreement). Different scenarios related to verbalization and insubordination will be illustrated with the data from North Asian languages (Malchukov 2013). In the last part of my talk, I will address reanalysis of nominalizations as infinitives, from a theoretical perspective (i.e., in relation to the Generalised Scale Model), and also a diachronic one. From the latter perspective many infinitives can be shown to result from reanalysis of action nominals, a path partially distinct from the purposive-to-infinitive reanalysis as discussed by Haspelmath (1989).

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**Muriel NORDE** (Humboldt-University of Berlin)

### Slipstream category shift: The case of adjectivisation of -vis adverbs in Swedish

In this talk, I will discuss a specific type of category shift in Swedish, whereby adverbs ending in *-vis* (a derivational suffix cognate with English *-wise*) are used as adjectives, mostly in attributive position. Not only do they occur in adjectival slots, they are also inflected as adjectives, for number, gender and definiteness. Earlier research (Norde 2005) suggests that this type of category shift is most likely the side

effect of nominalisation of a verb, a phenomenon for which I propose to coin the term “slipstream category shift”; this analysis is based on the observation that nouns modified by adjectivised *-vis* adverbs are mostly deverbal nouns, as in examples (1) and (2):

- (1) *Det blir en stegvis anpassning.* [GP 2013]  
‘It will be a stepwise adjustment’

(2) *denna gradvisa förfall* [GP 2013]  
‘this gradual deterioration’

This is corroborated by diachronic evidence – the oldest instances of *-vis* adjectives are part of deverbal noun constructions. At a later stage, the adjetival *-vis* schema expanded to other nouns, but the choice of nouns still seems to be fairly constrained. Nevertheless, examples such as (3) show that the adjetival *-vis* micro-constructions are becoming entrenched as adjectives, since they can form the basis of new adverbs (which in Swedish can be derived by adding the suffix *-t* to an adjective), even though the forms in *-vis* themselves are still predominantly used as adverbs.

- (3) 20 *slumpvist* utvalda personer [GP 2013]  
‘20 randomly (litt.: ‘coincidence-wise’) chosen persons’

Drawing data from the online corpora at *Språkbanken* (<http://spraakbanken.gu.se/>), I will trace the history of –vis adjectives in the newspaper newspaper subcorpora from 1965 to 2013. Focus will be on the type of noun they collocate with, as well as on their potential productivity (Baayen 2009). In a second study, I will contrast the findings of the first study with the collocational preferences and productivity of the micro-construction in contemporary social media, in order to assess whether this particular type of adjективisation is a formal written language phenomenon, or whether it is more widespread in informal written registers. The results will be analysed from a constructional perspective, in particular as regards the question of whether slipstream category shift is a case of constructionalisation, or of constructional change (in the sense of Traugott & Trousdale 2013).

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**Jan RIJKHOFF** (Aarhus University)

## **Functional Category Shift, with particular attention to Classifying, Qualifying and Localizing Modifiers in the NP**

This talk is concerned with functional categories, where ‘functional’ should be understood in the sense of the *Prague School of Linguistics*, whose members were seeking to understand what jobs the various components of an actual linguistic expression are doing (cf. Sampson 1980). Compared to formal and semantic categories, functional categories (as defined here) have played a rather marginal role in linguistics. In the tentative typology of functional categories proposed below, linguistic forms and constructions are classified on the basis of various kinds of interpersonal (discourse, communicative) acts.

**Interpersonal acts** minimally include SPEECH ACTS (Austin 1962), THETICAL ACTS (FDG: ‘subsidiary discourse acts’; Kaltenböck et al. 2011), PROPOSITIONAL ACTS (predicating, referring, modifying; Searle 1969) and PRAGMATIC ACTS (signaling the information value of a constituent in terms of Theme/Rheme or Topic/Focus distinctions; Prague School). Thus, a member of a FUNCTIONAL CATEGORY is the **formal manifestation of an Interpersonal Act**: it has an interpersonal function and it is characterized by a distinct set of grammatical properties:

- SPEECH ACT. **Form:** **sentence** (or rather: a linguistic unit that is the result of a ‘discourse act’ in FDG);
  - THETICAL ACT. **Form:** **thetical expression** (‘discourse marker’, ‘Extra-Clausal Constituent’ in Dik’s FG);

- PROPOSITIONAL ACT. Form: predicate - NP - modifier;
- PRAGMATIC ACT. Form: Topic/Focus marked constituent.

The main goal of this paper is to investigate FUNCTIONAL\_CATEGORY SHIFT involving formal counterparts of propositional acts of MODIFICATION (Croft 1990). At least **five different SUBACTS OF MODIFICATION** (SoMs) — and consequently **five Functional Modifier Categories** — can be distinguished, here illustrated with NP-internal modifiers (Rijkhoff 2008, 2010, 2014):

- CLASSIFYING SoMs, which further specify what kind of entity is denoted by the head constituent ('EVOLUTIONARY biology');
- QUALIFYING SoMs, which specify more or less inherent properties ('qualities') of an entity ('a HEAVY box');
- QUANTIFYING SoMs, which specify quantitative properties of an entity (e.g. 'TWO cars');
- LOCALIZING / ANCHORING SoMs, which specify locative properties of an entity, making it possible for the Addressee to ground/anchor the referent in conversational space ('THOSE cars');
- DISCOURSE-REFERENTIAL SoMs, which specify discourse-referential properties of an entity ('THE/A car').

In this talk I will focus on the various modifier functions of two constituents; (i) adnominal relational adjectives and (ii) Dutch adnominal prepositional phrases (PPs) with *van* 'of'. It will be shown that synchronically each modifier function comes with its own 'mini-grammar' and that shifts between functional modifier categories are gradual rather than abrupt in the case of adnominal PPs. It will also be argued that diachronically the development is from a modifier function with wide semantic scope to a modifier function that has narrower scope (i.e. 'from outer to inner layer' in a layered representation of NP structure). By contrast, the shift to membership of another functional modifier category tends to be abrupt in the case of relational adjectives (with the possible exception of e.g. ethnic adjectives), which provides support for the idea that the different modifier functions of a relational adjective are not due to a gradual, diachronic change (Heynderickx 2001).

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**Nikki VAN DE POL** (University of Leuven)

#### A game of give and take: the influence of the emerging verbal gerund on the development of augmented absolutes in English

The English absolute (AC)(1) is a non-finite construction consisting of a (pro-)nominal head and a predicate which typically adds adverbial background information to its matrix clause. The AC may, but need not, be introduced by a preposition; in the latter case it is called augmented (2-3).

- (1)... hem goyng away, Jhesus biganne for to seye ... (Visser 1972)
- (2) With that cam in the goodman, with contenaunce disgisid. (Visser 1972)
- (3) After which terme ended, he died... (Visser 1972)

The augmented variety is historically younger than the unaugmented one and, according to Visser (1972), temporarily peaked in type and token frequency during the Middle English and Early Modern English period. In all probability, the rise of augmented ACs can be linked to the loss of the English case system, and, as a result, the loss of the AC's dative marking, which used to signal its subordinate status.

Augmentors then, by making the AC's subordinate status explicit as well as by narrowing its semantics, could presumably resolve this loss of clarity. However, despite this apparent usefulness, the abundant use of augmentation was not long-lived and by the Late Modern English period, augmentors started to rapidly decrease in frequency.

The present paper seeks to investigate the reasons for the loss of augmentation on the basis of corpus data of ACs and verbal gerunds (VGs) taken from PPCME2, the Innsbruck Prose Corpus and LAEME as well as examples collected by Visser (1972), which will be considered in the larger context of 10.000 earlier collected ACs from Old English to the present. It is hypothesized that the emergence of the VG in *-ing*, which originated in prepositional contexts (de Smet 2008), and which has been proven to have a history connected to the AC (Fanego 2004) is a likely factor at play. Indeed, the strong association between VGs and prepositions probably caused a reinterpretation of most prepositionally augmented ACs as VGs. The AC itself, disassociated from prepositions, dropped most augmentors over time, except for *with*, which assumed the function of 'AC marker' previously occupied by the dative case. The result was a functional split (Fonteyn & van de Pol: 2015) in which VGs developed as the markers par excellence of specific, highly informative adverbial relations, while ACs became an intentionally vague way of adding somewhat backgrounded, additional information to the main proposition of the sentence (van de Pol: 2013).

This hypothesis may be corroborated by the fact that precisely those augmentors that are ambiguous between a conjunction and preposition reading, such as *after* and *before*, appear to have survived the longest. In addition, most augmentor types seem to have been lost first with present participle ACs and only later on with past participle ACs, which do not show formal overlap with VGs. Finally, augmentation other than *with* only survived in ACs expressing highly informative adverbial relations such as concession, which are hard to infer without explicit clues, and these cases are usually highly ambiguous between a VG and an AC reading.

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## WORKSHOP

### Clitics: areal and genealogical perspectives

#### Convenors

**Rik van Gijn** (University of Zürich) & **Fernando Zúñiga** (University of Bern)

#### Description

The phenomenon of clitics has generated a vast body of literature, from several theoretical perspectives (e.g. Klavans 1982, Halpern 1995, Gerlach & Grijzenhout 2000, Crysmann 2002, Anderson 2005 to name but a few). Yet defining what a clitic has been compared to "trying to catch minnows with your bare hands" (Spencer & Luís 2012: xiii). Clitics are so hard to define mainly because their behavior is determined by the interaction of several parameters that are independent from each other at least to a certain extent, and that moreover interact with different areas of grammar (phonology, morphology, syntax).

In this workshop we propose to regard clitics from the perspective of language change. Clitics can be thought of as a stage in a grammaticalization process, in which elements gradually become more affixlike (or, more controversially, the reverse). Given the many independent parameters and the areas of language structure involved in how clitics behave, there are many potential pathways of change, and many different orders in which elements may change their behavioral properties. In addition, other diachronic processes have been addressed less often in the comparative literature, from stabilization of clitics to their erosion and

loss. The idea behind the workshop is that taking a diachronic perspective can give us new insights into the phenomenon of clitics, different conceivable subtypes, their diachronic stability, and to what extent possible diachronic paths are areally and/or genealogically determined. The questions we would like to address include the following:

- Are (subsets of) clitics diachronically stable? Is there much variation in the clitic inventories between related languages in terms of function, phonology, syntax, or morphology, or are they rather comparable and stable? If there is variation, what is the main locus thereof (pragmatics, semantics, syntax, phonology, morphology)?
- Are (subsets of) clitics contact-sensitive? Syntactic units are generally seen as more likely to undergo contact-induced change than morphological units. Do clitics fall in between these two poles, or are they actually more contact-sensitive because they are diachronically unstable and therefore more prone to change through contact?
- Are there preferred grammaticalization paths? Does the comparison of clitic systems of related languages suggest a particular diachronic path within that family that is consistent with what we know about the evolution of that language family? Are there preferred orders of change?
- How sensitive are different definitions of clitics to descriptive traditions? One of the recalcitrant problems with clitics is that there seems to be no consensus on what we should and what we should not consider as clitics. One of the factors that may contribute to this problem is that different descriptive traditions for a certain language family or macro-area regard clitichood and cliticization in different ways.

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### **Spike GILDEA** (University of Oregon and Collégium de Lyon)

#### **Person Clitics and Prefixes in the Cariban family**

This paper shows that diachronic stability of clitic behavior varies depending on person in multiple paradigms of person-indexing clitics/prefixes of the Cariban family. The diachronically younger clitics for first and second person are becoming (or have become) invariant prefixes in several Cariban languages, while clitics for third person arguments are clearly older, but have remained clitics in most languages.

The Cariban family has a typical head-marking typology, with personal “prefixes” indexing arguments of verbs, nouns, and postpositions. Although these “prefixes” belong to unified morphological paradigms, individual forms display inconsistent syntactic behavior: some are prefixes, which may co-occur (i.e. agree) with free NP arguments, whereas others are pronominal clitics, in complementary distribution with free NP arguments. Despite these differences, all clearly belong to the phonological word, as shown by assignment of word-level rhythmic stress and vowel harmony. After explaining the prior reconstructions of these forms, I point out variations in syntactic behavior amongst individual clitics in individual languages, arguing that this variation reflects a process of change from clitic to prefix status.

The clitics/prefixes \**u=j-* ‘1’ and \**ə=j-* ‘2’ reconstruct readily to personal pronouns in tight phrases: [OV]<sub>VP</sub>, [possessor-possessed]<sub>NP</sub>, and [object-postposition]<sub>PP</sub>. Evidence for this history is the relational prefix \**j-*, a morpheme that marks all vowel-initial heads preceded by a dependent argument, which is trapped between the clitic/prefix and its host (Meira *et al* 2010:486-9). In about half the synchronic languages, these forms are clitics in alternation with a free pronoun. However, in some languages one or both of these forms alternate with and/or co-occur with free pronouns, and in others, they are fixed prefixes, regardless of the presence of a coreferential free pronoun.

There is both paradigmatic and syntagmatic evidence that the clitic \**i*- '3' is older than the 1SG & 2SG forms, yet in most modern languages, it is still a clitic in complementary distribution with a free NP object/possessor. In many verbal paradigms, additional layers have been added to \**i*- '3O' (Gildea 2012:461-2): a nasal onset \**n*- (tentatively reconstructed to an indefinite pronoun), plus deictic particles \**ki*- or \**mə*- (tentatively reconstructed to distal demonstrative pronouns). Even these more complex third person forms remain in complementary distribution with a 3O NP.

In contrast, the prefix \**ki*- '1+2' has no reconstructible clitic stage: it cannot alternate with a free pronoun and shows no reflex of the relational prefix.

Especially noteworthy innovations: In Tiriyó, all nonverbal clitics have become fixed prefixes and in Ye'kwana, all verbal clitics have become prefixes. In contrast, in Panare (where \**ki*- '1+2' has been lost), all person forms are clitics alternating with pre-head free pronouns; however, O clitics can be prefixes that co-occur/agree with postverbal O NPs.

	O/S <sub>o</sub> /PSSR/O of PP	Morphological Status	Etymology
1SG	*u=(j-)	clitic/prefix	pronoun
2SG	*ə=(j-)	clitic/prefix	pronoun
3SG	*i=	clitic	clitic
	*n-i=		PRO+clitic
	*ki-n-i=		DEM+clitic
	*mə-n-i=		DEM+clitic
1+2	*k(i)-	prefix	prefix

Table 1. Proto-Cariban clitics/prefixes: form, status, and etymology

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**Aaron GRIFFITH** (Universiteit Utrecht)

#### The stability of clitic systems in the Celtic languages

In this paper I argue that the cliticization of pronominals in the medieval Celtic languages Old Irish (OIr.) and Middle Welsh (MW) occurred in two (MW) or three (OIr.) mostly prehistoric waves:

- The first wave (see forms in (1)) occurred in Insular Celtic (the predecessor of Welsh and Irish) if not earlier, and it has tonic pronouns as its source. The clitics can appear with a coreferential NP in all positions (except following a preposition). The set is obligatory when referring to pronominal actants.
- The second wave (see forms in (2)) is most likely an Insular Celtic development, has deictic and anaphoric pronouns as its source, and is in complementary distribution to coreferential NPs (again except after a preposition). The forms are never obligatory.
- The third wave (see forms in (3)) occurs exclusively in OIr. and only in the 3<sup>rd</sup> person. It has deictic pronouns as its source, and cliticization is still in progress in the earliest language, with clitic forms everywhere except after prepositions. The clitic forms are optional, while the tonic forms are obligatory.

From these facts a detailed reconstruction can be provided of the prehistory of the many clitics found in OIr. and MW.

The paper finishes with a quick sketch of developments taking place after the medieval period, thus presenting a diachronic account of the building up and subsequent partial dismantling of the clitic pronouns for the Celtic languages over the span of approximately 2000 years.

Data (see CCCG and Willis 2009)

(1) Tonic Forms and Clitic Set 1<sup>1</sup>

		Old Irish		Middle Welsh	
tonic	dependent	acc.	gen.	tonic	dependent
1SG	<i>mé</i>	<i>m</i>	<i>mo<sup>L</sup></i>	1SG	<i>mi</i>
2SG	<i>tú</i>	<i>t</i>	<i>do<sup>L</sup></i>	2SG	<i>ti</i>
3SG.M	<i>é</i>	<i>a<sup>N</sup></i>	<i>a<sup>L</sup></i>	3SG.M	<i>ef</i>
3SG.N	<i>ed</i>	<i>a<sup>L</sup></i>	<i>a<sup>L</sup></i>	3SG.F	<i>hi</i>
3SG.F	<i>sí</i>	<i>s<sup>(N)</sup></i>	<i>a<sup>H</sup></i>	1PL	<i>ni</i>
1PL	<i>sní</i>	<i>n</i>	<i>ar<sup>N</sup></i>	2PL	<i>chwi</i>
2PL	<i>sí</i>	<i>b</i>	<i>for<sup>N</sup></i>	3PL	<i>wy(nt)</i>
3PL	<i>é</i>	<i>s<sup>(N)</sup></i>	<i>a<sup>N</sup></i>		<i>e/s</i>
					<i>eu</i>

## (2) Clitic Set 2

		Old Irish		Middle Welsh	
		sg	pl	sg	pl
1	<i>-sa/-se</i>	<i>-nai / -ni</i>		1	<i>-(f)i</i>
2	<i>-so/-siu</i>		<i>-si</i>	2	<i>-di</i>
3M	<i>-som</i>			3M	<i>-ef</i>
3N	<i>-som</i>		<i>-som</i>	3F	<i>-hi</i>
3F	<i>-si</i>				<i>-wy</i>

## (3) Clitic Set 3 (Old Irish only)

	Nom.		Acc.		Gen.	Dat.
	clitic	tonic	clitic	clitic	tonic	
3SG.M.	<i>-side</i>	<i>suide</i>	<i>-adi</i>	<i>-sidi / -ade</i>	<i>suidiu</i>	
3SG.F.	<i>-ade</i>	<i>suidi</i>	<i>-sidi / -ade</i>	<i>-ade / -adi</i>	<i>suidi</i>	
3SG.N.	<i>són / ón</i>	<i>són / ón</i>	<i>són / ón</i>	<i>-sidi / -(a)de</i>	<i>suidiu</i>	
3PL	<i>-(s)idi / -ade</i>	<i>suidiu / suidi</i>	<i>-(s)idi</i>	<i>-adi / -ade</i>	<i>suidib</i>	

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Antoine GUILLAUME (Laboratoire DDL, CNRS & University of Lyon)

**Second position pronominal clitics in Takanan languages:  
descriptive and comparative-historical perspectives**

All the Takanan languages (Araona, Cavineña, Ese Ejja, Reyesano and Tacana), spoken in the Amazonian lowlands of Northern Bolivia and South-Eastern Peru, have **second position (2P) / ‘Wackernagel’ clitics** which normally attach to the last word of the first constituent of main clauses. They can express various categories such as epistemic modality, evidentiality, discourse status, speaker attitude, and person / number / semantic function of the predicate arguments.

In this paper, we will be concerned with the latter type of clitics, i.e., **pronominal clitics**. The first goal is to propose a **synthesis of the main formal and functional characteristics of the 2P pronominal clitic systems** in the different Takanan languages, on the basis of the available descriptions, i.e., Pitman (1980) and Emkow (2006) for Araona, Guillaume (2006; 2008; 2010) for Cavineña, Vuillermet (2012) for Ese Ejja, Guillaume (2009) for Reyesano, and my own fieldnotes (2009-2013) for Tacana. I will show that depending on the languages, the pronominal clitics form systems which can have very different degrees of

<sup>1</sup> Superscript letters indicate grammaticalized mutations: A = aspiration, H = h-prefixation, L = lenition, N = nasalization, and S = soft mutation.

elaboration and functional load, whether they are available or not for all person (1, 2, 3), number (sg, dl, pl) and grammatical functions (S, A, O and DAT), and capable or not to co-occur / agree with a co-referential overt (pro)nominal NP in the same clause.

The second goal is to try to **reconstruct their past history**. I will claim that we can reconstruct a 2<sup>nd</sup> person singular 2P clitic \*=*mi* to proto-Takanan, as found in all the present-day Takanan languages. And I will argue that the remaining 2P clitic forms in languages with productive systems, in particular in Cavineña and Tacana, have been grammaticalized recently, out of independent (stressed) pronouns which are still used as such in these languages. Finally, I will investigate the possible motivations and pathways which could have lead to the present-day 2P clitic systems in Cavineña and Tacana.

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**Felipe Daniel HASLER SANDOVAL** (CONICET – Universidad de Chile) and **Rita Silvia ELORANTA** (Leiden University Center for Linguistics)

#### **Critic systems in transition: Evidence from two peripheral Andean languages**

In this talk, we will describe the clitic systems of two peripheral Andean languages: Allentiac and Mochica. We will discuss grammaticalization and show that the clitic systems in question are undergoing a process of stabilization.

Allentiac (Huarpe: Cuyo, Argentina) presents three mechanisms for the indexation of pronominal objects: a) as free word marked with dative case; b) by means of a prefix to the verbal complex without a case marker present or c) a suffix to the verbal complex.

Our tentative hypothesis in relation to Allentiac is that its object indexation system is unstable and in a process of change from a) towards c) with b) as an intermediate phase between the expression by means of a free word and a suffix. Here, one important question arises, could it be the case that a situation of language contact motivated the process of suffixation, taking into consideration that the surrounding Andean languages of the area, especially Mapudungun (cfr. Zúñiga 2006, Golluscio 2010), use this means for object indexation?

At the same time we observe that Mochica (an extinct isolate language from the northern coastal area of Peru) seems to have three invariant copular forms of the verb ‘to be’ coexisting with a clitic form. Verbal agreement is encoded in these clitics by affixation. It is suggestive that the case of Mochica clitics offers a snapshot of a process of language change where cliticization would have occurred prior to inflection. One can see as well that the invariant copular forms used as auxiliaries present a certain amount of instability when dealing with the pronominal persons in plural. The attested examples demonstrate the need to use the clitic forms as an innovation. Besides, in Mochica one can see a transparent relation between the free personal pronouns and the clitics which reveals a probable origin of the clitics in the free pronoun.

Comparing the clitic systems of these two languages will enhance the understanding of their respective processes.

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**Anna MALICKA-KLEParska** (Catholic University of Lublin)

### The status of Old Church Slavonic clitic *sę* in the diachronic perspective

The OCS clitic *sę* is assumed to have developed from the PIE pronominal element \*s(u)e- (see Cennamo 1993: 278). Our aim is to establish what function in the system of OCS this clitic performed (see Vaillant 1948/2002, Gorković-Major 2009, Savčenko 1974, Madariaga 2010) and how this function changed in time in such Slavic languages as Polish. In particular, we have asked the question whether this element in OCS is a pronoun occupying an argumental position (see Madariaga 2010), or perhaps a functional element of a different kind (see Krzek to appear). The theory we work with is a brand of Distributed Morphology, based on Alexiadou (2010), Alexiadou and Doron's (2012) research on voice systems. The analysis of various constructions in Old Church Slavonic has lead us to the conclusion that *sę* performs a key role in OCS, being the morphological marker of the middle voice in this language.

All the structures which have *sę* as their element are characterized by a common semantics: they target the internal argument of the predication, excluding the external argument, either in the form of an implicit argument, or an adjunct to the basic structure. These structures include anticausatives, reflexives, statives, reciprocals and reflexive impersonals.

In all these structures the clitic element does not show characteristic pronominal properties of arguments. In a relatively rich in inflection language, in which pronouns inflect for case, number and person, *sę* preserves a single form, and although, allegedly, it has a full variant *sebe* (see Lunt 2001), the variant has not been attested in the relevant structures. If it was a pronoun, then we could expect that it would be occasionally found in focused contexts. *Sę* also accompanies obviously mono-argumental (stative) verbs, beside their overt subjects. The clitic does not occupy the Wackernagel's position in a clause (cf. Madariaga 2010), which is characteristic for Slavic pronouns, but quite regularly adopts the post-verbal position. Similarly, it does not cluster with other pronominal elements, which again goes against Slavic characteristics of pronouns. It is also stable in the contexts where an anaphoric pronoun could be expected to delete, while if *sę* is a word-formational element, its disappearance would not be expected (Postal 1969).

Diachronically, in those cases where OCS had post verbal *sę* and where it disappeared e.g. in Polish, preserving the cognate verb, verbal valency and semantics of the predicate does not undergo significant changes.

Consequently, we have drawn the conclusion that OCS *sę* is not a pronominal element, but the head of the middle voice projection. At the same time this conclusion has significant consequences for the views upon the voice system of OCS. The language has the active voice, with the external causer introduced into the predication and the middle voice - introduced by *sę*, which focuses on the internal argument, but eliminates the external argument from the predication. The passive voice is quite marginal in OCS.

With time, some of the middle *sę* structures got replaced by passives in Modern Slavic, and the distribution of cognates of *sę* got diminished. This picture tallies with the view that *sę* is an important ingredient of the voice system, but not with the theory that it is an argument.

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**Krzysztof MIGDALSKI** (University of Wrocław) and **Hakyung JUNG** (Seoul National University)

**Diachrony of cliticization patterns in Slavic**

Slavic languages exhibit a remarkable variation concerning pronominal cliticization patterns: Serbo-Croatian, Slovene, and Czech have second position clitics (Wackernagel/2P; see 1); in Bulgarian and Macedonian there are verb-adjacent clitics (see 2), Polish has weak pronouns, while contemporary Russian and Ukrainian exclusively display strong pronominal forms. Historically, the distribution of pronominal clitics was more uniform, as in Old Church Slavonic relics pronominal clitics were predominantly verb-adjacent, while operator clitics that express illocutionary force occurred in 2P (see Radanović-Kocić 1988; Pancheva 2005; cf. 3).

In this talk we provide an analysis of diachronic changes in the syntactic position of pronominal clitics in Slavic. On the basis of Old Russian, Old Polish, and Old Serbian data, we show that the loss of verb-adjacent clitics was contemporaneous with the loss of tense morphology of the aorist and imperfect and the adaptation of aspect marking as the exclusive means of characterizing temporal relations in these languages. In syntactic terms, we analyze the change as the loss of the TP projection, as a result of which clitics may not adjoin to T<sup>0</sup> any more, the way they do in verb-adjacent clitic languages, but rather they target specifiers in the extended functional VP projections as XP-elements. We demonstrate that the loss of TP may have two potential repercussions: (i) the shift of verb-adjacent clitics to second position, attested in Serbian, Czech, and Slovene, or (ii) the reanalysis of verb-adjacent clitics as weak pronouns in Old Russian and Old Polish. We interpret the latter process as a case of degrammaticalization: in comparison to clitics, weak pronouns are prosodically more independent; they exhibit more robust scrambling possibilities (see 4), and they do not need to be adjacent to each other or to a verb (see 5). Thus, these data provide empirical evidence against the idea of the irreversibility of grammaticalization (Haspelmath 1999) and universal directionality of language change.

- (1) a. Veoma (*si mi*) lepu (*si mi*) haljinu (*si mi*) kupio  
very are<sub>AUX</sub> medAT beautiful are<sub>AUX</sub> medAT dress are<sub>AUX</sub> medAT buy<sub>PART.M.SG</sub>  
“You bought me a very beautiful dress.” (SC, Tomić 1996: 817)
- (2) a. Vera *mi go dade včera*  
Vera me<sub>CL.DAT</sub> it<sub>CL.ACC</sub> gave<sub>3SG</sub> yesterday  
“Vera gave it to me yesterday.”
- b. \*Vera *mi go včera dade* (Bg/Mac, Franks and King 2000: 63)
- (3) Elisaveti že isplъni sę vrěmę roditi ei. I rodi snъ  
Elizabeth CONJ fulfilled REFL time give-birth<sub>INF</sub> her<sub>DAT</sub> and gave-birth son<sub>ACC</sub>  
“And it was time for Elizabeth to have her baby, and she gave birth to a son.” (OCS, Luke 1: 57, Pancheva et al 2007)
- (4) Często (*go*) spotykam (*go*) na ulicy  
often him<sub>ACC</sub> meet<sub>PRES.ISG</sub> him<sub>ACC</sub> on street  
“I often meet him in the street.” (Spencer 1991: 367-368)
- (5) Jan *mu wczoraj chciał go wypożyczyć a nie sprzedać*.  
Jan him<sub>DAT</sub> yesterday wanted it<sub>ACC</sub> lend<sub>INF</sub> and not sell<sub>INF</sub>  
“Jan wanted to lend it to him rather than sell it yesterday.” (Polish)

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**Lidia NAPIORKOWSKA** (University of Cambridge)

**Caught In the Act: The Evolution of the Object and  
Pronominal Copula Clitics in the Neo-Aramaic Dialects**

The purpose of this paper is to provide an insight into the phenomenon of clisis from a perspective of a dialect continuum. Thus, having at our disposal related linguistics varieties we can observe patterns of evolution similar to those happening over time. In addition, the dialects discussed here fall within one of the world's linguistic areas, which invites addressing the question with possible contact-sensitivity factored in.

While the North-Eastern sub-group of the Neo-Aramaic (NENA) scattered over East Anatolia has long been recognised as deeply impacted by the surrounding languages, especially Kurmanji Kurdish (e.g. Kapeliuk 2011), clitics have so far been excluded from these studies. Thus, in a sample of NENA dialects I examine first the patterning of the pronominal copula and secondly the strategy of object marking, highlighting the features unattested at earlier stages of Aramaic. These are subsequently placed within a wider context of a contact situation.

Initially then, the properties of the two clitics are cast against the backdrop of earlier Aramaic and next compared with the dominant tendencies inside the NENA group. This diachronic mapping will help us determine the status of the clitics, revealing which of their features can be regarded as a stable typological drift and, conversely, which should be construed as a synchronic ‘detour’ in a long-spanning period of language change. Thus, enclisis and phonological and morphological reduction of the pronominal copula occurring in some dialects are here classified as a well-attested shift towards an inflectional. On the other hand, the placement of the pronominal copula before the verbal predicate found in a handful of NENA varieties is treated as an innovation in Aramaic for which a different motivation has to be sought. I propose that the phenomenon depicts as a transitional stage in the shift from pro- to enclisis, for which language contact served as a catalyst. In the case of the object marking, in turn, we can observe the developments of dissimilar properties of the direct and indirect object. The latter are parallel with those described by Borer and Grodzinsky (1986) for Modern Hebrew, suggesting a common path of development of indirect object marking in some modern Semitic languages, regardless of their linguistic setting. The direct object, on the other hand, displays such a degree of bonding as to lose its morphophonological substance in favour of a TAM maker in a few NENA dialects.

The findings demonstrate that, as far as can be ascertained now, only the linearisation of the NENA clitics can be regarded as a contact induced phenomenon (cf. Haig 2015), being, nevertheless, more of a convergence than structure replication. Thus, beyond word-order, the highly idiosyncratic behaviour of the NENA clitics will be presented as an independent development motivated largely by pragmatic factors and paradigm-pressure (cf. Bybee 1985; Russi 2008). The conclusions point to dissimilarity of feature evolution within a language continuum, on the one hand, and summarise the process of grammaticalisation of clitics in their micro and macro time-scale in Aramaic, on the other.

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**Anna PINEDA** (Centre de Lingüística Teòrica, Universitat Autònoma de Barcelona)

### **The role of dative clitic doubling in (Romance) ditransitive constructions**

The purpose of this talk is to assess the role of dative clitics in Romance ditransitive constructions. In particular, dative clitic doubling and its interaction with syntax will be analyzed. To begin with, and against the general trend, we will challenge the view defended by several authors (Demonte 1995, Cuervo 2003, a.o.) according to which dative clitic doubling in Spanish ditransitives signals a structural difference, so that clitic-doubled ditransitives correspond to English-like double object constructions or DOC (1), whereas non-clitic-doubled ones correspond to English-like prepositional constructions or PC (2):

(1) Double Object Construction

- a. **Spanish.** *María le da un libro a Juan*  
Mary CL gives a book to Juan
- b. **English.** *Mary gives John a book*

(2) Prepositional Construction

- a. **Spanish.** *María da un libro a Juan*  
Mary gives a book to Juan
- b. **English.** *Mary gives a book to John*

According to the mentioned authors, in Spanish the presence (1a) or absence (2a) of clitic doubling signals a different syntactic structure: DOC vs. PC, where the relationship between the objects (DO and IO) is not the same and thus produces asymmetries regarding anaphoric phenomena, binding of possessives, passivization, and so on, as has been proved to occur in English (1b) and (2b) (Barss and Lasnik 1986, Aoun & li 1989, a.o.).

We will show that this English-Romance parallelism turns to be wrong, this is to say, that the presence or absence of dative clitic doubling does not have any structural consequence (Pineda 2013). To do so, we will not only revisit the data and grammaticality judgments for Spanish, but we will also deal with data from other clitic-doubling languages, such as Catalan and Rumanian, as well as from other non-doubling languages, such as French, Italian and Portuguese.

Also, in this exhaustive cross-linguistic perspective within the Romance family, the contact-sensitiveness of the phenomenon will also be assessed, especially in the case of the contact between Catalan and Spanish. Finally, the behavior of other non-Romance doubling languages, such as Greek (Anagnostopoulou 2003) and Basque, will be referred to as supporting the view defended here.

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**Stefan SCHNELL (La Trobe University )**

### From prefix to suffix: detached TAM markers in Vera'a

Vera'a (vra, Oceanic, North Vanuatu) has a large set of TAM markers (Table 1 & 2) that occur as the first element of the verbal predicate, immediately preceding the head verb. While most of these markers are potentially phonological words by themselves, the two most frequently occurring markers TAM1 and TAM2 have allomorphs (m and k respectively) that consist of a single consonant and attach to another words as their phonological host.

The latter morph k is analysed by Francois (2009) as a prefix. This contrasts with neighbouring Mwotlap where the form is analysed as part of a special subject pronoun. Francois' (2009:187f.) arguments for a prefix analysis in Vera'a essentially rests on two observations related to syntagmatic arrangement:

1. k has to immediately precede the verb
2. k forms a syntactic unit with the verb and is thus not dropped where the subject is omitted

Francois (2009:192) reconstructs a prefixal 1SG form \*gu- for the North Vanuatu proto-language, 1SG k subsequently spreading across non-singular persons. Similarly, m is a vowel-harmonic prefix mV- in most neighbouring languages, and most likely a prefix in the proto-language.

Based on a thoroughly annotated corpus of spoken Vera'a texts comprising approx. 4000 clause units, this paper reports on a quantitative study of TAM markers that put into doubt the unequivocal prefix status. We investigate all TAM markers, using Zwicky & Pullum's (1983) criteria for distinguishing affixes from clitics. Our findings for k and m are as follows:

- k and m always adjacently precede verb stems
- k and m are 'detached' (Bickel & Nichols 2007:176) enclitics forming a phonological unit with a preceding word of (potentially) any category (cf. (1))
- k and m can occur without the subject pronoun (cf. (1)), but almost never do so, thus displaying the suffix feature of high host selectivity (cf. (2), Table 3).
- non-pronominal hosts constitute a fairly restricted set, often involving fixed expressions (cf. (5))
- other elements almost never intervene between a subject pronoun and k and m
- k and m tend to morphologically integrate with 1st person non-singular subject pronouns, for which reduced subject pronouns (cf. (3)) and fusion (in 1PL.EX, cf. (4)) are attested

Other TAM markers also adjacently precede the verb but occur significantly more often with no or zero subjects (cf. (6)) and do not show tendencies to integrate morphophonologically with preceding pronouns. Also, particles and adverbs can intervene between these markers and the subject.

Our finer-grained study suggests that – as part of grammaticalisation of subject agreement from free subject pronouns – foremost prefixes are step-by-step moving away from their verbal host and form phonological (and eventually grammatical) units with the newly emergent subject indexes through an intermediate stage of ‘detached’ enclitization. Our finer-grained study also shows that single criteria like Francois’ (2009) adjacency do not reveal the full picture of morphological elements

#### Examples

- (1) gēdu =k van =ē= =k traem  
1DL.IN =TAM2 go =EV= =TAM2 try  
'Let's go and try.' ANV.049
- (2) no =k van sar no =k 'og'og 'i no =k kel ma  
1SG =TAM2 go bushwards 1SG =TAM2 RED:stay DEL 1SG =TAM2 return hither  
'I will go bushwards, I will stay there (for a while) and then I will come back' JJQ.320
- (3) du =k gen qē' gēdu mak mulō  
1DL.IN =TAM2 eat finish 1DL.IN IMM go.home  
'[...] let's eat, and then we'll set off right afterwards.' GABG.044-45
- (4) a. kamam =k susuō  
1PL.EX =TAM2 RED-paddle  
'[...] so we paddle (around).' JJQ.020  
b. vaga kamak van kelkel ...  
often 1PL.EX:TAM2 go around  
'We often go here and there ...' JJQ.019
- (5) a. 'ekē =m ma'ava  
place =TAM1 morniing  
'Morning broke.' JJQ.059  
b. wo e ruwa ē=k virig ma =k sag gōr [...]  
and ART two DEM3 =TAM2 rush hither =TAM2 sit secure  
'The two came running and sat onto [his seat].' 1.PALA.057
- (6) a. ne maran ne qōn  
TAM2:3SG daylight TAM2:3SG night  
'Daylight broke, and night fell, [and daylight broke and ...].' ISAM.031  
b. e Dōl ne kalaka ne van rōw ma anē  
ART pers.name TAM2:3SG get.up TAM2:3SG go seawards hither DEM1.A  
ne kalu lē=n mie  
TAM2:3SG exit LOC =ART outside  
'Dōl got up, came over seawrds and then left the house.' 1.AS.044-046

**Table 1: Vera'a TAM markers**

AFFIRMATIVE		NEGATIVE	
<i>m</i>	TAM1	<i>e ... ros</i>	GENERAL NEGATIVE
<i>k, e, ne</i>	TAM2		
<i>mak</i>	IMMEDIACY		
<i>ga</i>	STATIVE		
<i>man</i>	PERFECTIVE	<i>... 'ēn</i>	'NOT YET'
<i>mal</i>	REMOTE PAST		
<i>mas</i>	OBLIGATION	<i>mas ... ros</i>	DISOBEDIENCE
<i>me ... mas</i>	ABILITY	<i>mas ... mas</i>	DISABILITY

**Table 2: Vera'a TAM2 formatives**

	SINGULAR	PLURAL & DUAL	TRIAL
1	<i>k</i>	<i>k</i>	<i>k</i>
2	<i>ē</i>		
3	<i>ne</i>		

Table 3: Co-occurrences of TAM markers and subject expressions in the Vera'a corpus

	<b>m</b>	<b>k</b>		<b>ne</b>		<b>other</b>		<b>TOTALS</b>
<b>pro</b>	837	76%	474	79%	231	24%	339	31% 1881
<b>np</b>	165	15%	42	7%	402	42%	303	28% 912
<b>0</b>	93	9%	84	14%	315	33%	456	42% 948
<b>TOTALS</b>	<b>1095</b>	<b>100%</b>	<b>600</b>	<b>100%</b>	<b>948</b>	<b>100%</b>	<b>1098</b>	<b>100% 3741</b>

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### Criticization and incorporation in Panoan

In this paper I attempt to tease apart the distinction between cliticization and lexical incorporation in Panoan languages (cf. Woodbury 1996). Verbs in Panoan languages are described as polysynthetic (Fleck 2003: 61; Valenzuela 2003: 80; Ferreira 2005: 48; Zariquey 2011: 4; Barbosa 2012: 6) capable of encoding a large amount of functional and lexical content primarily through suffixation (Payne 1990: 223; Loos 1999: 234; Fleck 2013: 44). However, in Chácobo the verb complex, which is described as a word unit for other Panoan languages (Zingg 199: 6; Valenzuela 2003: 255; Fleck 2003: 32-451; Zariquey 2011: 176-210; Ferreira 2008: 71), can be interrupted by a full subject noun phrase. The “inflectional suffixes” of other Panoan languages are detached from the verb stem in (1).

(1)	VERB STEM	SUBJECT NP	INFLECTIONAL “SUFFIXES”
	<i>kā=tíkī=yámà</i>	<i>hātírō?ā hónì=bò</i>	= <i>kàn=ní=kī</i>
	go=AGAIN=NEG	ALL man=PL	=3PL=REMPAST=PAST

‘All the men didn’t go again a long time ago.’

In this paper, I argue that the verb complex in Chácobo is a phrasal construct composed largely of syntactically placed prosodically dependent clitics (cf. Anderson 2005: Ch. 2; Spencer and Luis 2012). I consider the suffix/enclitic distinction of other Panoan languages in light of this analysis. I argue that the functional morphemes of other Panoan languages are, in most cases, better regarded as incorporated suffixes rather than enclitics (cf. Woodbury 1996). Evidence for this thesis comes from comparison of distributional facts, scopal based ordering of verbal morphemes, and morphophonology between Chácobo and other Panoan languages. This paper thus teases apart the distinction between clitics and clitic variants of suffixes through comparison of genetically related languages.

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### Clitics and particles in Tupian

Tupian is one of the largest and geographically most widespread families of South America, with an estimated time depth of 5000 years (Rodrigues & Cabral 2012). One of the salient characteristics of Tupian languages is the presence of an often large class of particles and clitics, characterized by the fact that they do not take any inflection and often have a fixed or host-dependent position in the clause. These clitics and particles show a number of overlaps in terms function across the family. Common categories encoded by these clitics and particles are evidentiality, epistemic modality, aspect, tense, interrogation, and negation. On the other hand, their formal attributes like their placement patterns and degree of phonological integration with their hosts differ from one language to another. Moreover, although some of these markers are cognate, there is not always an obvious formal connection. For instance, Mekens, Sateré-Mawé, and Kokama-Kokamilla, representing three different branches, all have a realis/certain versus unrealis/uncertain future distinction, but with obvious formal differences.

Language (branch)	realis future	unrealis future	Source
Mekens (Tupari)	pek	pegat	Galucio 2001
Sateré-Mawé (Saterá-Mawe)	wuat	aru	da Silva 2010
Kokama-Kokamilla (Tupí-G III)	utsu	a	Vallejos 2010

The markers in the Table furthermore differ in terms of their morphophonological and morphosyntactic behavior: the markers in Mekens and Kokama-Kokamilla appear directly after the verb phrase, in Sateré-Mawé they have more positional freedom. In Mekens and Sateré-Mawé the markers are phonologically independent, in Kokama-Kokamilla they are not.

The situation as presented by the Tupian family is of special interest to diachronic linguistics and more in particular to the study of the evolution of morphology in at least two senses. First, it allows for the study of the diachronic significance of abstract positions (such as second position of a clause) independently from formal and systemic differences between the languages. Second, the distinction between words and affixes has the character of a multi-dimensional continuum, allowing for several potential diachronic development paths (Spencer & Luís 2012, Van Gijn & Zúñiga 2014). The differences between the formal parameters of the particles and clitics of Tupian languages illustrate these different pathways of change, and can help increase our understanding of likely and unlikely diachronic paths.

In spite of their diachronic interest, these elements have not received much systematic attention from a comparative point of view in Tupian studies, with a few notable exceptions (e.g. Jensen 1998 for Tupí-Guarani). The present paper compares, on the basis of a sample of 25 Tupian languages, the formal and functional parameters of the Tupian clitics and particles, focusing especially on the rich Tense-Aspect-Mood area, in order to achieve a better understanding of the diachronic processes that gave rise to the present distribution of clitics and particles in Tupian languages. I will also make some suggestions for contact-induced processes potentially influencing the different placement patterns, a topic previously recognized as relevant in the South American context (Dooley 1990).

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**Mariarosaria ZINZI** (Università degli Studi della Tuscia)

### **The evolution of clitic pronouns in Greek. A case of study: private letters on papyri.**

The purpose of this intervention is to investigate in a diachronic perspective the dislocation of enclitic (weak) pronouns in Greek, focusing on a specific set of testimonies, private letters on papyri.

Weak pronouns' dislocation in Ancient and Modern Greek is well studied. Clitic pronouns in Ancient Greek immediately follow the first tonic element in the sentence: this placement rule is known as Wackernagel's Law (Wackernagel 1892). In Modern Greek they can be either proclitic or enclitic with respect to the governing verb, which means that they can either follow or precede the verb. Moreover, clitic pronoun sequences in Modern Greek are fixed with respect to the position of the recipient-like argument and the theme-argument in sentences governed by a ditransitive verb.

As far as we know, a deep investigation of the changes occurred between those two time-limits is still lacking.

For the purposes of this inquiry the material to be considered will be limited to private letters on papyri, as the closest testimonies to spoken Greek of the time. The chosen kind of testimonies cover a period running approximately from II BC. to VII AD. More specifically, we confine our examination to ditransitive constructions, in order to investigate the dislocation both of the recipient-like argument and of the theme-argument with respect to the governing verb.

The aim of the analysis is to trace early evidences of the change occurred and nowadays attested in Modern Greek. Whereas the current distribution of clitics is still not attested, papyri show that weak pronoun objects are still governed by Wackernagel's Law, given that they immediately follow the first tonic element in a phrase. What is remarkable is that we very often find the Verb in initial position, and clitics tend to immediately follow it: the "combination of canonical first position words with clitic pronouns seems to be no longer the result of a discourse strategy, but has been reanalyzed as a syntactic rule involving specific words and word classes" (Janse 2000: 245).

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### **What can we say about the origins and development of clitics in Quechuan?**

The Quechuan languages of western South America have several particles and clitics (or "independent suffixes") that express evidentiality and epistemic modality (e.g. =mi in (1a) and =si in (1b); cf. Faller 2002), illocutionary force and negation (e.g. =chu in (1b); cf. Pineda-Bernuy 2014), and pragmatic roles (e.g. =taq and =ri in (1c); cf. Sánchez 2010):

## (1) Cuzco Quechua

- a. Lima-ta=mi                      viaja-n.  
L.-ACC=DIR.EVID travel-3  
'She traveled to Lima.' (Faller 2002: 19)
- b. Mana=si                      phalay-ta                      ati-n=chu.  
NEG=REP.EVID fly-ACC                      can-3=NFACT  
'It cannot fly.' (Faller 2003: 21)
- c. Ima-ta=taq                      pana-yki=ri                      ruwa-chka-n?  
what-ACC=CONTRAST sister-2SG.PSR=TOP do-PROG-3  
'And what is your sister doing?' (Cusihuamán 1976: 256)

Parameters along which such elements may differ include their formal properties, viz. position and degree of integration with their hosts. Since the word-affix continuum is probably best seen as encompassing several phonological and morphosyntactic dimensions, morphological elements in different languages are possibly located therein along several of the potential diachronic development paths (Van Gijn & Zúñiga 2014). Thanks to their functional similarities and their formal differences, the particles and clitics found in Quechuan can give us illuminating insights into these paths. The present paper aims at ascertaining, based on the both descriptive and comparative literature (cf. e.g. Cerrón-Palomino 1987 and a number of later studies), the major diachronic processes that gave rise to the present distribution of particles and clitics in Quechuan languages. The paper pays special attention to systematic family-internal patterns of divergence regarding such morphological elements, e.g. those between Northern Quechua and Southern Quechua (roughly, Quechua IIb and IIc), in order to explore potential contact-induced change phenomena as well. Perhaps unsurprisingly, the extant reconstructions of most modal and illocutionary elements have received most attention in the literature and are comparatively straightforward while those of some of the pragmatic markers are rather tentative.

In order to see the relevant kind of variation for the phenomena under scrutiny, consider that the direct evidential =mi and topic =qa are both widespread and relatively homogeneous in Quechuan, whereas =ri is analyzed as topic marker in the Cuzco variety but as a politeness marker in Bolivian Quechua; it is absent from the Huánuco variety (Weber 1989), and non-clitic ri merely occurs as a fossilized inceptive or as an innovative reflexive morpheme in Colombian Quechua (cf. Parks 1990). Similarly, while the negative particle mana is widespread, nonfactual =chu occurs in both negative assertions and polar questions in most, but not all, varieties; in some Central Quechuan languages (Quechua I), its apparent cognate =tsu is restricted to negative assertions, whereas polar questions employ the possibly unrelated marker =ku (Cerrón-Palomino 1987).

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# WORKSHOP

## Experimental Pragmatics

*Conveners*

**Peter Hagoort** (Donders Nijmegen) and **Uli Sauerland** (ZAS Berlin)

*Description*

The field of Experimental Pragmatics has emerged within the last decade. It combines research in Gricean pragmatics with the formal models of modern grammar and the powerful experimental methods of psychology and neuroscience. As a result, Experimental Pragmatics can theoretically state and then empirically test much more precise hypotheses than research in pragmatics previously could. Experimental Pragmatics is thereby expected to lead to a new theory of the mechanisms involved in language in interaction.

The basis of experimental pragmatics is the increased access to experimental, psycholinguistic methods for researchers interested in advancing linguistic theory. Recent developments in software technology and access to sophisticated experimental methods now make it much easier for researchers to contribute to linguistic theory while at the same time conducting experiments. For example, use of the Mechanical Turk internet platform and similar software tools make it possible to conduct several types of experiments such as questionnaire surveys, reaction time studies and mouse tracking even for researchers without access to a laboratory. Furthermore, the R statistics software in the public domain makes it possible for researchers to create publication-quality statistical analyses and graphs in an economic way. In many other domains such as eye-tracking (gaze-plotting), software has become userfriendly, lowering the barrier to start experimental study. Another progress for eyetracking has been the development of the visual world paradigm. This method is based on the observation that as a sentence is presented to a participant, the eyes move towards the referents mentioned in the sentence. It thus allows the measurement of some aspects of meaning that are relevant for pragmatic investigation during the presentation of a sentence. This method has recently been adapted to research questions targeting situated cognition and the use of linguistic and non-linguistic visual cues during language processing and sophisticated technology is utilized to investigate how language understanding is impacted by the surrounding visual environment.

We expect the Workshop to bring about major progress in pragmatics in three direct ways: 1) subtle phenomena like vagueness and meaning projection become accessible for investigation through experimental methods, 2) timing and neural data tie pragmatic theory to psychological and neural models of language and support the development of processing models, and 3) populations other than healthy adults, especially children, and crosslinguistic comparisons can be investigated with experimental protocols. Beyond these specific areas, we expect two broad benefits of the project to cognitive science in general: For one, the focus on experimentally testable predictions supports the development of increasingly precise pragmatic theories. Furthermore, XPrag.de connects the model theoretic view of linguistics and the cognitive view of psychology and neuroscience in a vital way.

The workshop is planned as a joined event of the DFG funded XPrag.de priority program in Germany and the NWO funded Language in Interaction ([languageininteraction.nl](http://languageininteraction.nl)) gravitation program in the Netherlands to present our research to each other and a broader audience.

**Anna-Christina BOELL** (Universität Göttingen), **Joseph P. DEVEAUGH-GEISS** (Universität Potsdam), **Edgar ONEA** (Universität Göttingen) and **Malte ZIMMERMANN** (Universität Potsdam)

### Exhaustivity and at-issuehood in it-clefts: An empirical study

We present an empirical study on the exhaustivity inference in German it-clefts, in which the asserted and non-asserted content is tested systematically. The literature remains divided on whether cleft exhaustivity is semantic (i.e., conventionally coded in the structure; Percus 1997, Velleman et al. 2012, Büring & Križ 2013) or pragmatic (Horn 1981, 2014). However, although exhaustivity in clefts is generally argued to be not-at-issue -- i.e., not directly addressing the question under discussion -- this has not been properly controlled for in prior empirical work, presenting a potential confound orthogonal to the semantic-

pragmatic debate (Destruel et al. 2014, Horn 2014). In two experiments we compare it-clefts to exhaustivity inferences in exclusives, focus, and definite descriptions in order to detect similarities and differences across sentence types. Our primary research questions are as follows. Experiment 1: Is cleft exhaustivity at-issue or not-at-issue? Experiment 2: Is cleft exhaustivity semantic or pragmatic?

In a mouse-guided truth-value judgment task, participants hear auditory stimuli about four roommates, after which they uncover one-by-one with their mouse four boxes revealing what the four characters did. Participants are asked to make a judgment about the truth-value of the sentence they heard as soon as enough information is available. Location 2 is crucial:

- In Experiment I, Location 2 verifies the canonical meaning/prejacent of the target sentence, which is not enough to decide if exhaustivity holds. Here we predict that at-issue exhaustivity will require further uncovering of the remaining two boxes, controlled for by at-issue exhaustivity of exclusives.
- In Experiment II, Location 2 falsifies the exhaustivity inference. Here we predict that semantic exhaustivity inferences will be judged false, controlled for by the exclusive and definite description conditions, whereas pragmatic exhaustivity is defeasible and thus participants will continue uncovering the remaining two boxes, controlled for by the focus condition.

Our design investigates the behavior of clefts according to which of the sentence types they behave similarly to.

The results of the first experiment are in line with an analysis of exhaustivity being not-at-issue for clefts, definite descriptions, and focus -- in these conditions, it was often not necessary to check that exhaustivity held, illustrated by the high proportion of truth-value judgments made without verifying the exhaustivity inference; by contrast, the exclusive control condition required further uncovering 97% of the time, as predicted. Although there are compelling results in Experiment 1 showing parallels between clefts and definite descriptions when compared to focus, the first experiment is not designed to distinguish different types of not-at-issue inferences in terms of their semantic-pragmatic source. Results for the follow-up experiment (currently running), which specifically tests the defeasibility of the exhaustivity effect when falsified at Location 2, will be reported on at the workshop.

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#### **Twelve month-olds differentiate between typical and atypical turn timing**

Conversation is our first and primary mode of language use, and is the context in which children receive linguistic input and practice language production. A handful of recent studies on conversation have established that the timing of turns is a fundamental resource for coordination in conversation (Levinson, 2006). Children's sensitivity to timing begins developing in infancy (Bateson, 1975); research on mother-infant interactions indicates that timing development begins around 3–4 months (Hilbrink et al., under review), and experimental work has shown that 3-month-olds can sense a 1-second delay in interaction (Striano et al., 2006). But, there is currently no direct evidence bearing on when children start to understand conversational timing rules or what types of timing patterns they can distinguish.

To assess what young children understand about conversational timing rules we adapted the preference procedure designed by Hamlin and Wynn (2011). We showed twelve-month-olds videos of conversation featuring a trio of puppets (A–B–C) that were paired into two dyads (A–B and B–C). Two puppets (A and B) used typical turn timing (200ms inter-turn silence), and the third used atypical timing (delayed timing: 1200ms inter-turn silence or overlap timing: 3+ syllables vocal overlap). After showing the videos, we took

two measures of children's puppet timing preference. First, children gazed at a 30-second image of two puppets (A-typical and C-atypical). Second, the experimenter held out two real-life puppets (A and C) for children to choose between.

Preliminary results based on 20 sessions (10 overlap, 10 delayed) suggest that 12-month-olds detected a difference between puppet-timing. When viewing the pair of puppets on screen, 65% of children's first looks went toward the atypical puppet. Children's preference depended on the type of atypical timing used: For overlap 46.52% of their total gaze in the first 10 seconds went toward the atypical puppet (typical: 39.20%, off-screen: 14.28%), suggesting they prefer atypical timing. However, for the delayed timing they gazed more at the typical puppet (typical: 49.67%; atypical: 40.18%; off-screen: 10.15%). Similarly, when given the choice to play with one of the puppets 5 out of the 8 children who made a choice chose the atypical puppet in the overlap condition, while 3 out of 6 children chose the atypical puppet in the delayed condition. These initial findings support the idea that sensitivity to turn-timing develops in infancy. The difference in preference across conditions indicates that the developmental patterns for understanding the conversational rules for gaps versus overlap might be different.

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### **Testing implicatures of complex sentences**

It is a controversial theoretical debate whether implicatures can arise in embedded positions. To give an example, researchers disagree whether the sentence "Every person ate some of the cookies" implicates that every person ate some but not all cookies (e.g., Sauerland, 2004; Chierchia, 2004; 2006). On a globalist view, implicatures are computed after the literal meaning of the whole utterance is computed (e.g., Sauerland, 2004). On a localist view, on the other hand, implicatures are integrated into compositional semantics at the site where the implicature trigger appears (e.g., Chierchia, 2004; 2006). Accordingly, the question concerning the availability of embedded implicatures provides an important test bed adjudicating between different theories of implicature.

Experimental research concerning the existence of embedded implicatures has yielded contradictory results (see for example Geurts & Poucoulous, 2014; Clifton & Dube, 2010; Chemla & Spector, 2011) and the current literature disagrees on what exactly different experimental paradigms measure (e.g., Geurts & van Tiel, 2013; van Tiel, 2014; Degen & Goodman, 2014; Benz & Gotzner, 2014). Hence, before further progress on the theoretical issues can be made, it is necessary to investigate the degree to which different experimental designs (picture verification, inferential task, picture selection task, etc.) increase or decrease the probability of drawing embedded implicatures.

In order to compare the different paradigms, we have developed a scenario based on Degen & Goodman (2014), which we will implement in various paradigms. In this scenario, there are three children, each of which has a set of four marbles which they played with and which they have to find while they clean up their rooms. Given this background, we ask subjects in an inferential task whether the sentence All of the children found some of their marbles suggests that none of the children found all of their marbles. In a picture verification task, we ask participants to judge whether the same statement is true given a picture in which some children have found all four marbles. In addition, we introduce a novel paradigm, which we call optimal response paradigm, in which the scenario is embedded in a communicative environment. The test subjects have to reward the children, depending on their interpretations of the test statements. A child will get a chocolate when she finds all of her marbles, a candy when she finds some of her marbles and no sweets when she doesn't find any marbles. The subjects may again see the sentence All of the children found some of their marbles; then they have to react by choosing the optimal reward for each child.

In the talk, we will present the results of the experiments and discuss them with respect to the issue of comparability of different paradigms, what exactly is measured as well as the question of which paradigm should be preferred to test embedded implicatures.

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### **Animacy, Agentivity and Verbal Aspect: An Experimental Case Study of the German Progressive with Position Verbs**

According to some studies (e.g. Bach 1986, Maienborn 2000), intransitive position verbs form a verbal aspect class between statives (e.g. resemble, know) and processes or activities (e.g. rain, walk). What was neglected in past research is that this classification varies with the choice of an animate vs. inanimate subject referent and the agent-related pragmatic inferences we draw from the animate-inanimate distinction. While an interaction between agentivity, animacy and verbal aspect has been shown to influence the choice of telicity-related markers, i.e. HAVE vs. BE in German and LE vs. ZHE in Chinese, for position and motion verbs (Keller & Sorace 2003, Liu 2007), there is to date no experimental study investigating these factors for the progressive.

We will discuss new experimental data showing that animacy and certain features of agentivity, i.e. the capability of self-propelled motion, influence the acceptability and processing of the progressive. We tested German progressive forms of position verbs such as *stehen* ‘stand’, *liegen* ‘lie’ or *hängen* ‘hang’ while varying subject animacy systematically. Furthermore, we contrasted the progressives of position verbs with progressive forms of activities (e.g. *arbeiten* ‘work’) and compared both with their simple past counterparts.

Position verb:

...dass der Kollege / der Betonmischer auf der Straße am Stehen war / stand  
‘...that the colleague / the concrete mixer in the street was standing / stood’

Activity verb:

...dass der Kollege / der Betonmischer auf der Straße am Arbeiten war / arbeitete  
‘...that the colleague / the concrete mixer in the street was working / worked’

Besides relying on the results of acceptability judgment tasks, we will discuss the relatively new blank-screen-eye tracking method where participant’s eye movements were recorded while looking on a blank screen and simultaneously listening to auditory stimuli in order to assess subtle distinctions in terms of dynamicity and motion (Huette et al. 2014). In addition, we will compare the results with our experimental ERP-findings on the interaction between agentivity, animacy and telicity with respect to underspecified motion verbs (e.g. *schweben* ‘float’). ERPs were calculated relative to the past participle rendering the following auxiliary irrelevant for this effect. In detail, animate referents prefer telic events (goal-directedness, N400 for atelic contexts) whereas inanimate referents fit better in atelic situations (N400 for telic contexts):

...dass der Gleitschirmflieger / das Ahornblatt über dem Fluss / auf den Acker geschwebt hat  
‘...that the paraglider / the maple leaf above the river / to the ground floated HAVE-3SG’

Our present study will sharpen our understanding of verbal aspect between stativity and dynamism and of presumably universal, evolutionarily ancient core features of agentivity such as goal-directedness and self-propelled motion (see e.g. Leslie et al. 2004, Spelke & Kinzler 2007, Gelman 2002 and Carey 2009 based on developmental data).

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### A methodological problem of language acquisition studies

#### *Aim*

In experiments testing children’s sentence interpretation, the iconicity of the visual representation or the test situation itself may induce the child to interpret the stimulus as ostensive communication, the content of which is relevant (Wilson & Sperber 2004). When the purpose of the experiment is to test the relevance of a part of the stimulus, this yields misleading results. We demonstrate this by case studies involving Quantifier Spreading and the interpretation of numerals, and also show that the ostension effect can be eliminated by replacing icons by real-life photos, and by acting-out tasks in natural situations.

#### *Case studies*

**Quantifier spreading:** In sentence-picture matching tasks testing whether a certain visual element affects interpretation, the picture is usually a minimal model abstracting away from the irrelevant details of the situation. This often induces children to regard the elements of the stimulus as ostensive clues representing all and only the relevant elements to be matched with the sentence. If this cannot be done, they find the sentence false. This is what happens in the case of quantifier spreading (Geurts 2003, Philip 2011, etc.). If children are shown a drawing showing three girls each riding a bicycle plus a solo bicycle, and are asked the question in (1):

- (1) Is every girl riding a bicycle?

they often answer No, not that one – pointing at the empty bicycle; i.e., the universal quantifier spreads also to the bicycles in their interpretation. We hypothesized that because of the lack of irrelevant details, children conclude that every element of the picture is relevant and must be represented linguistically, i.e., they misinterpret the question as ‘Is every element in the picture a girl riding a bicycle?’ We tested this hypothesis in a sentence-picture matching experiment involving 8 universally quantified sentences of type (1), accompanied by both an iconic drawing and a photo rich in accidental details. 46 preschoolers had to match half of the test sentences with the drawing, and the other half with the photo. The proportion of quantifier spreading was significantly lower in the case of photos than in the case of drawings (12% vs. 25%).

**Scalar implicature:** The misinterpretation of a stimulus as an ostensive signal can also be due to the situation in which it is presented. We illustrate this with an experiment testing whether preschoolers can access the ‘at least n’ reading of numerals in sentences like The bears who collect three berries get a candy, i.e., whether they think bears collecting 4-5 berries are also entitled to a candy (cf. Musolino 2004). We carried out the experiment in four contexts of different naturalness. In clearly test-like circumstances, the interpretation of three as an ostensive clue blocked the ‘more than three’ reading in 100% of cases. The more we hid the test-like nature of the task, the more easily children accessed the ‘at least three’ interpretation. When they were given in a fully natural situation acting-out tasks such as ‘If you find three glasses on the table, you can pour the three of us a drink’, they fulfilled the request in 85% of cases although the number of glasses on the table was four.

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### **Disjunction in child language: Inclusive, exclusive, or conjunctive?**

*Summary:* This paper presents a set of experiments designed to test children's comprehension of simple and complex disjunctions in French and Japanese. First, consistent with previous literature, we found that both groups of children computed fewer 'not-both' exclusivity inferences (EIs) than adults. Second, we found clear evidence for conjunctive interpretations of disjunction across both kinds of disjunction, in both language groups. Finally, we found little evidence that children distinguish the two types of disjunctions in comprehension. We provide an explanation of our findings, tying them to recent discussions about the acquisition of disjunction and scalar implicatures (SIs).

*Background:* Children have been reported to compute fewer SIs than adults. For disjunction, Gualmini et al. (2001) and Chierchia et al. (2001) report that children lack EIs, accepting 'A or B' in 'A and B' scenarios. More recently, Singh et al. (2013) report that English-speaking children reject 'A or B' in 'only A' and 'only B' scenarios. They discuss two possible explanations: (i) children may associate or with the lexical item and; (ii) children may recursively exhaustify 'A or B' relative to the set of domain alternatives {"A", "B"}, and derive the implicatures 'not only A' and 'not only B', rendering 'A or B' and 'A and B' equivalent. Singh et al. (2013) present data in favor of (ii), but these results, restricted to English, have not been independently corroborated.

*Current study:* We extend the investigation of children's interpretation of disjunction to include both simple and complex forms of disjunction, in two further, typologically unrelated languages. While both the simple French ou/Japanese ka and complex French soit...soit/Japanese ka...ka give rise to EIs, the EI for complex disjunction has been argued to be obligatory (Spector 2014) (1). We set out to test for EIs across these two types of disjunction, and to establish whether the reported conjunctive interpretation reflects a developmental phenomenon generalizable beyond English.

- (1) Example of simple disjunction / Example of complex disjunction  
 Fr. La poule a poussé le bus ou l'avion. / La poule a poussé soit le bus soit l'avion.  
 Jp. Niwatori-san-wa Bus-ka hikooki-o osita. / Niwatori-san-wa Bus-ka hikooki-ka-o osita.  
 'The chicken pushed the bus or the airplane.' / 'The chicken pushed either the bus or the airplane.'

*Finding:* Our findings provide further evidence that children compute fewer EIs from disjunction than adults across different languages. They also shed light on how children engage with scalar inferences more generally. In particular, our results are consistent with recent proposals that place children's difficulty with SIs in the accessibility of the required alternatives (e.g., Barner et al. 2011). On the alternatives-based approach, children fail to compute EIs from both types of disjunction because they do not access conjunction as an alternative to the disjunction. Crucially however, the individual disjuncts that are required to compute a 'conjunctive' meaning for the disjunction (as proposed in Singh et al. 2013) are explicitly presented to the children – as substrings of the test sentences themselves. Thus we observed robust evidence for conjunctive readings across both forms of disjunction, in both language groups.

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### **The application of binding condition C during native and non-native pronoun resolution**

Anaphoric pronoun resolution normally involves the memory retrieval of a previously encountered antecedent, a process which may be more difficult [1] and more prone to interference from syntactically inappropriate antecedents in a non-native language (L2) than a native one (L1) [2]. When a pronoun appears *before* its antecedent as in (1) the parser engages in an active (i.e. forwards-looking) search rather than retrieval [3]. In L1 processing this search is constrained by binding condition C, which prohibits coreference between a cataphoric pronoun and a noun phrase within its c-command domain. Evidence from self-paced reading indicates that condition C constrains the real-time resolution of cataphoric pronouns in English and Russian [4,5]. We report the results from an offline pronoun–antecedent evaluation task and an online eye-movement monitoring study examining whether pronoun resolution in L1 and L2 German is constrained by binding condition C.

In the offline pronoun–antecedent evaluation task, both L1 (19 German native speakers) and L2 (23 L1 Russian-speaking learners of German) participants disallowed coreference in sentences where a personal

pronoun c-commanded a proper name, in accordance with condition C. In contrast, both groups allowed coreference in sentences where there was no c-command.

In the eye-movement monitoring study 32 German native speakers and 32 L1 Russian-speaking learners of German read sentences such as (1) and (2), in which a sentence-initial personal pronoun either did or did not c-command a following proper name, and with the proper name either matching or mismatching the pronoun's gender.

(1) *C-command, gender match/mismatch*

Er wusste, dass mit Sebastian/Alexandra heute etwas nicht stimmte...  
 'He knew that something was not right with Sebastian/Alexandra...'

(2) *No c-command, gender match/mismatch*

Sein Bruder wusste, dass mit Sebastian/Alexandra heute etwas nicht stimmte...  
 'His brother knew that something was not right with Sebastian/Alexandra...'

The L1 group showed a significant interaction between c-command and gender in their total-viewing times both at the name and at the two words following it, with gender-mismatching names leading to a slowdown in the no c-command conditions (2) only. The L1 group's selective sensitivity to gender match in the no c-command conditions suggests that the native speakers' forwards-looking search for a referent was constrained by condition C. The L2 group, in contrast, only showed main effects of gender (with longer reading times for gender-mismatch conditions) but no interactions. This suggests that the L2 speakers, despite having demonstrated native-like awareness of condition C in a complementary offline task, also initially considered syntactically inappropriate antecedents for cataphoric pronouns.

This confirms and extends previous findings indicating that L2 speakers have difficulty applying structure-sensitive constraints on coreference during online processing [2]. Our findings can be accounted for by assuming that unlike L1 pronoun resolution, L2 anaphor resolution is initially guided by feature-based similarity rather than by syntactic coreference constraints.

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#### Exploring the ambiguity between the “at least” and “exactly” interpretation of bare numerals: Evidence from event-related brain potentials

We present the first event-related brain potentials (ERP) study on the semantics of bare numerals (e.g. “three”). Bare numerals seem to be ambiguous between various readings. For instance,

- (1) Two roses are red.

may be interpreted to mean that exactly two roses are red (“exactly” reading) or that at least two roses are red (“at least” reading). Accordingly, (1) can be considered either false or true in a situation when there are three red roses. It has been a matter of an intense debate whether it is the “at least” or the “exactly” interpretation that is more basic, or whether numerals are simply lexically ambiguous between the two (Horn, 1972; Carston, 1998; Geurts, 2006; Schulz and Van Rooij, 2006; Breheny, 2008; Spector, 2013).

We applied a sentence-picture verification paradigm to investigate how the choice of reading (measured by the participants' intuitive truth-value judgments) modulates the ERPs evoked by critical nouns in sentences

with bare numerals. Participants were asked whether sentences of form (2) are true with respect to visual scenarios depicting two categories of objects (Xs and Ys) in different quantities.

(2) N pictures contain X.

In each trial, subjects (1) were presented with the phrase containing the numeral (Three/four pictures contain); next they (2) saw a scenario; and finally they (3) saw the critical noun X. They were asked to respond at the end of each trial (as the final word disappeared) whether the sentence was true with respect to the presented scenario. ERPs were measured on the onset of the critical noun X.

There were six evaluation conditions for the presented sentences, which were determined by the numeral N, the number of Xs, i.e. the objects mentioned at the end of the trial, and the number of the non-mentioned objects (Ys). The number of Xs was either smaller than N (FALSE condition), exactly N (EXACTLY condition) or larger than N (AT LEAST condition). However, the non-mentioned alternative was also represented in an “exactly”, “at least” or “false” way with respect to the numeral N. For instance, a condition named EXACTLY-false is a scenario in which the number of the mentioned objects X is exactly N and the number of the non-mentioned objects Y is smaller than N. We intended to test (i) how the expectation of the critical noun X depends on the quantity of Xs in the scenario given the numeral in the main noun phrase, and (ii) how this expectation is modulated by the quantity of the alternative objects (Ys) in the scenario.

Our preliminary results indicate that for the critical AT LEAST cases, most participants (63.6%, N=21) consistently say “false” (henceforth Lower- and Upper-bounded readers, or LU-readers). The remaining responders (36.4%, N=12) consistently say “true” to the AT LEAST cases (henceforth Lower-bounded readers, or L-readers). Importantly, the ERP pattern is different for the LU-readers and the L-readers. For the LU-readers, the N400 amplitude for critical nouns prompt is larger for the AT LEAST cases than it is for the EXACT cases – specifically it is larger in the AT LEAST-exactly condition than in the EXACTLY-at least condition. In contrast, for the L-readers the N400 is larger in the AT LEAST-false compared to the FALSE-at least condition but the difference between the AT LEAST-exactly and the EXACTLY-at least conditions is not significant. Remarkably, for both groups the N400 ERPs in the AT LEAST-exactly condition are larger than in the AT LEAST-false condition, indicating that the expectancy of the “at least” interpretation of the numeral changes depending on the semantic status of the silent alternative.

Our results can be taken to support the version of the ambiguity view by Geurts (2006), where numerals are considered lexically ambiguous between the “exactly” and “at least” readings, but the “exactly” reading is nevertheless more salient in unembedded contexts.

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#### **The influence of depicted actions and information structure on ambiguous pronoun processing in German children**

**Research question:** We investigated how depicted actions interact with event and information structure during the real time comprehension of ambiguous discourse reference in children. Effects of depicted actions on language and of syntactic cues on pronoun interpretation have each been investigated. However, it has never been examined how these two cues interact in pronoun resolution.

**Methods and predictions:** An eye-tracking study examined this issue in three- to seven-year-old children and young adults, all native speakers of German. Based on Bittner and Kuehnast (2011, First Language)

younger children should mainly use the visual, contextual cues, but the older children might exploit the pragmatic cues (focus it-clefts) to disambiguate pronouns. Furthermore, we expect to find a general subject preference in both adults the older children.

The participants were 3- to 7-year-old children, as well as adult control groups. They listened to sentences with canonical word order (2a) or subject focus (2b). At the same time, they watched illustrations of two animals (corresponding to the subject and the object) on a screen. The animals were half of the time shown performing the action (e.g., tickling), and the other half of the time not. Thereafter, the participants heard an ambiguous pronoun sentence (3), and eye-tracking data were collected to determine whether they looked at the subject referent or the object referent. In addition, offline data were collected, by asking the participants to name or point at the pronoun referent (4).

Example of the stimulus sentences:

1	Introduction sentence	Da sind Herr Bär und Herr Tiger
2a	Canonical sentence	Herr Bär kitzelt Herrn Tiger
2b	Subject-cleft	Es ist Herr Bär, der Herrn Tiger kitzelt
3	Pronoun sentence	Er kann schon bis zehn zählen
4	Question sentence	Wer kann schon bis zehn zählen?

Results: Preliminary analyses suggest that 5-year-old children disambiguated the pronoun offline (responses to comprehension questions) more often as the object than subject when actions were depicted (and more often as the subject than object when actions were absent). The cleft manipulation did not affect the responses of the 5-year-olds, but the 6-to-7-year-old children gave more subject responses for cleft structures. The adults, as expected, had a clear subject preference.

Analyses of the first looks after pronoun onset revealed that 3-to-4-year-olds made more first looks to the subject when actions were depicted. 6-to-7-year-olds, on the other hand, made fewer first looks to the subject referent when actions were depicted. Contrary to the findings of the off-line data for this group and the on-line data for the adults, no effect of linguistic focus emerged. These results (at least in the offline results) support the view that pragmatic cues (the cleft structure) affect pronoun resolution in older but not younger children. By contrast, the action depiction affected pronoun resolution at younger ages (e.g., the 5-year-olds' responses).

The online results are only preliminary and more detailed conclusions will follow.

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#### The role of perspective in the processing of speaker's meaning

Perspective may influence the processing of speaker's meaning. Travis (1997) suggests that truth-value assignments depend on perspective. To illustrate this, he presents a story in which a girl painted the russet leaves of her Japanese maple green. Then a botanist asks her for green leaves for a green-leaf chemistry study. The girl points at the painted leaves and says: 'These leaves are green.' Travis argued that from the girl's perspective this utterance is true; for the botanist and his particular needs, however, the utterance is false.

This view has been contested by Kennedy & McNally (2010) who argue for a semantic analysis according to which color adjectives are ambiguous with regard to their gradability. The botanist's perspective would be a non-gradable interpretation by classification. The girl's perspective represents a gradable reading because she can view the leaves as completely green.

To choose between these accounts, we use language comprehension data from stories similar to the green-leaves scenario (introducing an object with an inherently prescribed color (e.g. Japanese maple leaves) that is changed by a manipulator (e.g. girl)) and assess their truth-value judgments using behavioral and real-time processing measures. Crucially, this is done through different perspectives: i) the manipulator (*girl*), ii) a person that is interested in the object's original color but unaware of the manipulation (*botanist*) and iii) a neutral person (*man*) not aware of the color change). Following a context as described above, we assess the interpretation of utterances (a/b) that clearly identify the protagonist (1-3).

- i) *The girl looks at the leaves and says that ...*

- ii) *The botanist looks at the leaves and says that ...*
- iii) *The man looks at the leaves and says that ...*
- a) ... *these leaves are green.*
- b) ... *these leaves are red.*

We first report truth-value judgments using three values ('true', 'false', 'both') to get a fine-grained pattern of behavioral responses. If perspective affects truth-values as suggested by Travis, '*red*' (b) should be true only for the expert. In contrast '*green*' (a) should be false for the expert, true for the neutral person and true or both for the girl (depending on the impact of perspective and theory of mind). This was not supported by our data.

Additionally we present time-course data from electrophysiology, which allows us to gain insight into discrete processing steps as the sentence unfolds. Based on previous ERP-research (e.g. Nieuwland & Kuperberg, 2008), we predict false utterances to elicit a more pronounced N400 than true utterances. Perspective-based reasoning may further engender a positivity (cf. Meinhardt et al., 2012 on pragmatic inferencing). If however the different readings arise from semantic ambiguity (Kennedy & McNally, 2010), no positivity should be found. The ERP data will help to develop a neurologically plausible model of language comprehension including pragmatic processes.

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## WORKSHOP

### Historical Phonology and Phonological Theory

#### *Convenors*

**Martin Joachim Kümmel** (Friedrich-Schiller-Universität Jena) and **Roland Noske** (Université de Lille 3)

#### *Description*

Reconstruction of segment inventories of languages and description of sound changes (e.g. from PIE to daughter languages) often date back a century or more, from a time when linguistic insights were radically different from the ones of today. Nevertheless, analyses of 19th and early 20th century scholars are often taken for granted. This discrepancy is also reflected in the present-day division between historical linguistics and synchronic linguistics: whereas in, e.g., Indo-European or Uralic linguistics one often focuses on isolated phenomena, a more systemic vision prevails in synchronic linguistics. At the same time, many synchronic phonologists are usually still not very interested in descriptions of historical phenomena. In more recent times, some attempts have been made to bridge this gap. In historical linguistics systemic approaches have at least been *advocated* more and more since Martinet 1955 (cf. also Back 1991) but have still not been very much applied (like in Greenberg 2000 or Kobayashi 2004). In theoretical phonology, approaches such as evolutionary phonology (Blevins 2004) have tried to profit from the data and insights of historical linguistics and include them in the modeling of phonology. In Honeybone & Salmons (to appear) there will also be various contributions of this kind. The aim of this workshop is to strengthen these developments and make historical linguistics and modern phonology come together and benefit from each other. More specifically, the workshop will focus on theoretical phonological topics like, e.g., syllabic theory, vocalic scale, phonotactics, frequency effects, loan word phonology, constraint re-ordering in Optimality Theory, in their relationship with more concrete historical phonological topics like Siever's Law, the genesis of areal sound patterns, the development of heteroclity through gliding, the advent of palatalization, Modelling of both phonological change and phonological theory will be discussed, as well as

more practical theoretical matters as the organization of databases of phonological change. In addition to the papers, the workshop will also include an introduction given by the convenors, and a final discussion.

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**Sandro BACHMANN** (University of Zurich)

#### An alternative account for Grimm's, Verner's and Kluge's Law

Traditionally, Verner's Law is understood as a process voicing voiceless fricatives ( $\text{P} > \text{D}$ ) from Proto-Indo-European to Proto-Germanic. Chronologically, it has been posited right after Grimm's Law, which, under the traditional view, shifted aspirated voiced stops to plain voiced stops via voiced fricatives ( $\text{D}^H > \text{D} > \text{D}$ ), plain voiced stops to voiceless stops ( $\text{D} > \text{T}$ ), and voiceless stops to voiceless fricatives ( $\text{T} > \text{P}$ ); the voiced fricatives emerged as a result of Verner's Law would then later change to voiced stops ( $\text{D} > \text{D}$ ). Grimm's Law is generally assumed to have operated as a chain shift, there is no consensus, however, whether it was a push chain ( $\text{D}^H > \text{D} > \text{D}$ ;  $\text{D} > \text{T}$ ;  $\text{T} > \text{P}$ ) or a pull chain ( $\text{T} > \text{P}$ ;  $\text{D} > \text{T}$ ;  $\text{D}^H > \text{D} > \text{D}$ ). Although the traditional view is widely accepted and used in textbooks, many scholars have called attention to some issues associated with the relative chronology of Grimm's, Verner's and Kluge's Law, the typological improbability of the Proto-Indo-European stop inventory (which has extensive consequences for the sound shifts in Germanic and elsewhere), and others.

Solutions to these various problems have for example been suggested by Kroonen (2011), Iverson & Salmons (2003), Noske (2009, 2012, 2014), Kortlandt (1988, 1991) or Vennemann (1984, 1985). All of these approaches, however, posit new problems, and even if they usually manage to solve these one way or the other, the solutions are either based on highly controversial presuppositions or create mechanisms more complex than the ones traditionally assumed.

Therefore, in the present paper, I propose a much simpler sequence of events for the sound shifts in the obstruent system from Proto-Indo-European to Proto-Germanic, which is in line with the basic principles of the traditional view, but tries to solve the most debated problems by combining some of the ideas proposed by earlier work (cf. above). First, I assume Grimm's Law to have operated as a push chain, induced through the eradication of the much disputed aspirated voiced stop series by losing their aspiration ( $\text{D}^H > \text{D}$ ;  $\text{D} > \text{T}$ ;  $\text{T} > \text{P}$ ). Second, I propose Verner's Law not to have voiced the products of Grimm's Law ( $\text{P} > \text{D}$ ), but having acted directly on the Proto-Indo-European voiceless stops by means of passive voicing (cf. Iverson & Salmons 2003, Avery & Idsardi 2001), the result consequently being voiced stops rather than voiced fricatives ( $\text{T} > \text{D}$ ) – hence a case of bifurcation ( $\text{T} > \text{D} / \text{P}$ ) (similar to Vennemann 1984, 1985 and Noske 2009, 2012, 2014). Finally, I assume Kluge's Law to have operated even before Grimm's and Verner's Law (as proposed by Noske 2014). Meanwhile and subsequently, also the phonetically grounded processes of geminate devoicing (cf. Dmitrieva 2012, Hayes & Steriade 2004, Jaeger 1978, Ohala 1983, Westbury & Keating 1986; all cited in Noske 2014) and spirantization inhibition in geminates (cf. e.g. Guerssel 1977, Hayes 1986, Schein & Steriade 1986; also cited in Noske 2014) must have been involved.

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**András CSER** (Pázmány Péter Catholic University)

### **Scale-based phonological conditioning and changes in Latin inflectional allomorphy**

In the generally accepted reconstruction of Proto-Indo-European there are no inflectional classes for nominals and, with very few exceptions, all stems take the same case endings (e.g. Clackson 2007). The reconstruction of the verb system is more complex but inflectional classes defined by stem-final segments as in some of the daughter languages are not postulated. It is also well known that a variety of sound changes as well as morphological changes led to a system in Latin defined by inflectional classes based on the stem-final segments in nominal morphology and in verbal imperfectives.

The research question addressed in this paper is whether it is possible to find a common denominator in the phonological system of Latin whereby the conditioning of *all* inflectional allomorphy can be coherently described, and whose emergence represents a major diachronic shift away from the inherited patterns. A candidate for such a function can be the vocalic scale, a uniform scale based on consonantality and vowel height (though not necessarily in a binary fashion). The intuition behind this idea has long been present in the diachronic as well as the descriptive tradition (witness the time-honoured system of declension classes and verbal imperfective classes), and is also present with a narrower scope in the theoretically informed literature (Spaelti 2004, Emonds and Spaelti 2005 and Emonds 2014 explore such a possibility but only with respect to nominal declension, and their phonological analysis differs at several points from ours in focussing on binary features).

The results show that indeed the vocalic scale is uniform throughout Latin, it conditions all inflectional allomorphy (including the tantalizing variation found in the verbal perfective system), and displays the crucial feature of contiguity: if two environments that are not adjacent on the scale select the same allomorph, then all the environments between the two select the same allomorph. Without contiguity, the scale would be of no descriptive or theoretical significance whatever. Furthermore, importantly, the vocalic scale is completely independent of the putative morphological function of the stem-final segment (and our analysis is on that count simpler than analyses such as that in Aronoff 1994). It also makes the description of systematic heteroclysy (as in *i*-stem nouns and verbs) possible and makes reference to inflectional classes almost entirely superfluous.

The framework applied here allows for morphological constituency with phonologically (and otherwise) conditioned allomorphy; the method involves an analysis of morphological constituents that incorporates

the general insights of autosegmental phonology. All the data referred to in the paper were taken from volume 1 of the Brepols Corpus (CLCLT-5 – Library of Latin Texts by Brepols Publishers, release 2002). We have also made extensive use of the Perseus Digital Library for lemmata, glosses and loci (<http://www.perseus.tufts.edu/hopper/>).

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**Brent DE CHENE** (Waseda University)

### The Complementarity of Synchronic and Diachronic Explanation in Phonology

On one plausible view, there are no cognitive principles that determine what sound changes are possible or likely. Rather, the likelihood of a particular sound change is determined by factors involving the peripheral systems, articulatory and auditory, that permit the externalization of language: articulatory difficulty invites gestural simplification or realignment; perceptual confusability invites neutralization or reinterpretation. Insofar as synchronic phonology involves general phonotactic restrictions resulting from sound change and (“automatic”) alternations that follow directly from those restrictions, then, it is to be explained in diachronic terms, and ultimately in terms of the properties of the articulatory and auditory systems (Blevins 2004:259, Hale and Reiss 2008:158-159; for qualified dissent, see Kiparsky 2006, 2008).

Alternations, however, are typically reanalyzed at some point so that they no longer directly reflect phonotactic restrictions. Once this occurs, their subsequent history is guided by cognitive principles that are either specific to the language faculty or part of human psychology more generally. In particular, there are principles that determine for such “nonautomatic” or morphophonological alternations which of two or more competing sets of alternants are underlying and which of two or more competing alternations are regular. These principles typically privilege alternants and alternations that are salient, for example because of high lexical frequency, and they result in analytic decisions that play out over long periods of time as the gradual elimination of irregular forms (Kiparsky 1972:280). For morphophonological alternations, then, synchronic choices drive diachrony, reversing the relation of causal priority observed for alternations that are automatic responses to phonotactic restrictions.

If the picture sketched above is accurate, there is a complementarity between diachronic and synchronic explanation in phonology that correlates with the distinction between automatic phonology and morphophonology. In the remainder of the talk, assuming this complementarity, I discuss the principles that guide the analysis of morphophonological alternations, drawing examples from an in-progress database of rule inversions and neutralizing choices of URs. As an illustration of those two concepts, I sketch below the reanalysis that resulted in the Portuguese rule of Lowering (Harris 1974:75) under stress in verbal inflection.

The Western Romance seven-vowel system was subject to a neutralization rule reducing unstressed *ɛ* to *e* *o*. This resulted in alternations in verb stems (“deny”, “ask”); there were also stems with nonalternating *e* *o* (“fish”, “prune”).

Gloss	Unstressed	Original Stressed	Original Alternation	Portuguese Stressed	Portuguese Alternation
“deny”	neg-	nɛg-	ɛ ~ ε	nɛg-	ɛ ~ ε
“ask”	rog-	rɔg-	o ~ ɔ	rɔg-	o ~ ɔ
“fish”	pesk-	pesk-	—	pesk-	ɛ ~ ε
“prune”	pod-	pod-	—	pɔd-	o ~ ɔ

In Portuguese, the alternation in question was extended to originally nonalternating stems. This extension can be seen as the result of two analytic choices: (a) unstressed alternants were taken as basic (neutralizing choice of URs); (b) the *e/o ~ ε/ɔ* alternation, rather than the competing null alternation, was taken as regular, resulting in the rule of Lowering (inversion of the original neutralization rule).

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**Patrick HONEYBONE** (University of Edinburgh)

#### **Categorical frequency effects in historical phonology: formal phonology and multiple lexicalisation**

It is widely assumed that the existence of frequency effects in phonological change is evidence in favour of usage-based models of phonology. Bybee (2001 et seq), for example, (and a substantial tradition of related work) argues that patterns in phonological change in which words behave differently depending on their frequency of use are most compatible with Exemplar Theory. In this talk I argue the opposite: there are certain types of phonological pattern which are connected with word frequency ('categorical frequency effects') that only make sense in the light of a formal phonological model. The overarching research questions that I engage with are thus: what role do frequency effects have in phonological change, and what conclusions should we draw from their existence? I argue that frequency effects are often oversimplified in theoretical discussion in historical phonology – their patterning can be more complex than is typically understood.

I consider two phonological phenomena (T-to-R in the English of Northern England, and TH-debuccalisation in Scots), focusing on the diachronic changes that have brought about their current patterning. T-to-R involves underlying /t/ being neutralised with a variety's rhotic when it occurs word-finally and the following word begins with a vowel. Thus *shut* is [ʃʊt] but *shut up* is [ʃʊtəp]. It has a complex patterning, the crucial elements of which are that the process is productive, but is lexically constrained – only certain words allow T-to-R, and those words are the most frequent with word-final /t/ (eg, *get, not, what, but, put, that*). This is a categorical frequency effect, however: words which are only slightly less frequent than the group of T-to-R words do not allow the process to occur at all: frequency declines gradually, T-to-R does not. TH-debuccalisation involves underlying fortis dental fricatives being realised as [h], thus *think* can be realised as [hɪŋk]. While once quite general, TH-debuccalisation is now also lexically constrained – it occurs quite commonly in a small set of words and not at all in any other word, even though they feature dental fricatives in an appropriate environment. The words in which it can occur are, again, the most frequent words (which include dental fricatives).

These phenomena both involve discrete categories – the frequency with which a particular phenomenon occurs does not decline gradually, as lexical frequency does – so they do fit with formal models which assume such clear categories but not with the gradient expectations of exemplar approaches. I argue that they both involved ‘multiple lexicalisation’ as a major diachronic reanalysis which requires fixed underlying representations, and then a ‘conserving effect’ of frequency. I further argue that cases where frequency ‘conserves’ are fundamentally compatible with formal models (of a fundamentally ‘structuralist in the broad sense’ type, such as generative models – see Salmons & Honeybone 2015), and that the existence of categorical frequency effects can thus be seen as evidence in favour of such formal/structuralist approaches.

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**Martin KRÄMER** (UiT The Arctic University of Norway)

**How lexicon and phonology change in interaction:  
An amphichronic look at palatalization in Italian**

In this paper I discuss the influence of language acquisition and borrowing on the reorganisation of grammar and lexicon, illustrated by the development from Latin into Italian. We will have a look at the historical sequencing of the introduction of new phonological processes, velar palatalization, mid vowel breaking, and lateral palatalization, and how they conspire to create new contrasts or reintroduce contrasts that have been subject to neutralisation. Subsequent introduction of new phonological processes with a partial overlapping of targets and outputs leads to an increase in the degree of opacity in the grammar up to a peak at which original inputs become irrecoverable and speakers radically restructure underlying representations and the grammar accordingly.

A central part of the chain of events is illustrated by the word *cerchio* ['tʃerkjo] 'circle' from Latin CIRCULUS. First, the initial dorsal consonant /k/ is palatalized into the affricate [tʃ]. After syncopation of the medial vowel, the lateral is preceded by a consonant and subject to palatalization of laterals in complex onsets (as in *chiave* ['kja:ve] from Latin CLAVIS 'key'), resulting in the sequence [kj], which is the input of the velar palatalization that turned the other dorsal stop into a postalveolar affricate. Even though the context is given (as in Lat. ERICUS -> It. *riccio* ['rittʃo] 'hedgehog') the process doesn't apply. Finally, while velar palatalization is still active in restricted environments, as in second declension verbal inflection (compare the two forms in (a) and (b) below), or with most derivational affixes that provide the context, lateral palatalization has ceased to apply in contemporary Italian, as evidenced by relatively old loanwords such as *classe* 'class'.

- a. 1<sup>st</sup> declension: *cerco* ['tʃerkko], *cerchiamo* [tʃer'kjamo] 'search (1sg./1pl.)'
- b. 2<sup>nd</sup> declension: *vinco* [vinko], *vinciamo* [vintʃa:mo] 'win (1sg./1pl.)'

One generation of speakers must have had both processes in their grammar, interacting opaquely, while a subsequent generation has reanalysed underlying forms and reorganised the grammar, removing lateral palatalization, and lexically and contextually restricting velar palatalization.

Optimality Theory (Prince & Smolensky 1993/2004) explains the differences between languages as an epiphenomenon of different constraint rankings. Likewise, the differences between historical stages of a single language have to be seen in this way (e.g., Cho 1998, Holt 2003, Bermúdez-Otero 2006, 2007). A question not satisfactorily answered yet is how one ranking turns into another, i.e., how and why do rankings change.

The amphichronic analysis proposed here brings together insights from acquisition and loanword phonology in Optimality Theory to explain the above historical developments in Italian. We will have a look at the Biased Constraint Demotion Algorithm (Tesar & Smolensky 2000, Prince & Tesar 2004 inter alia), and how incomplete learning leads to the emergence of new processes, and at constraint indexation as a means used by adults to deal with exceptionality of unassimilated loanwords (Ito & Mester 1999, Pater 2009) and how these conspire towards reorganisation of constraint ranking and underlying representations by the next generation of learners.

**Johann-Mattis LIST** (Centre de recherches linguistiques sur l'Asie Orientale), **Thiago CHACON** (University of Brasília) and **Paul HEGGARTY** (Max Planck Institute Leipzig)

**Towards a Cross-Linguistic Database for Historical Phonology**

Two centuries of research have amassed a vast literature of language reconstructions and descriptions of sound change processes. But with few exceptions — notably Kümmel (2007) — rarely have scholars actually collected such data systematically, across multiple unrelated language families, or investigated them typologically and statistically. Existing online projects tend to share these limitations.

In short, in the digital age, historical linguistics still lacks a reference database of attested or reconstructed sound changes in the languages of the world. Here we report on progress and initial outcomes from a new collaborative project to develop just such a cross-linguistic database. The aim is to advance a range of fundamental research questions in both historical linguistics and phonology. The database will open up new ways of testing, more empirically and quantitatively than hitherto, competing hypotheses in synchronic and diachronic phonology. Among a wide range of new applications, for example, would be to provide

empirical tests of competing hypotheses on the **mechanisms** underlying sound change, such as lexical diffusion vs. gradual sound change (Chen 1972, Labov 1981, Mowrey 1995, Bybee 2001, Bermudez-Otero 2007, etc.). Similarly, it could serve as a starting point for closer empirical research into the **driving forces** behind sound change (Hocket 1965, Kiparsky 1988: 374–376, Ohala 1989), especially by comparing diachronic change with attested patterns of synchronic variation (Lass 1984: 329–338). It could also help to substantiate, challenge or refine phonological **theories**, such as the concept of phonological or prosodic “strength” (Foley 1977, Back 1991, Geisler 1992), or evolutionary phonology (Blevins 2004).

In order to maintain the transparency, applicability, and compatibility of a cross-linguistic database for historical phonology, we propose a novel schema of data representation and analysis. According to this schema, we take lexical entries in phonetic transcriptions as our primary data source. We start from a collection of datasets in which ancestral wordforms (both reconstructed and attested) have been phonetically *aligned*, by qualitative linguist judgement, sound by sound with their cognate reflexes in descendant languages (see List 2014: 134–169 for an overview on phonetic alignment analyses). This database is then populated by automatically extracting, from these alignments, individual sound changes, complete with both their phonological contexts and cross-references to all instances of each change, not just selected examples. This also allows us to locate all changes within reference phylogenies for each family, so that their relative frequencies can at last be quantified objectively, including the frequencies of changes which did *not* occur.

We have started to implement this schema, using a couple of reference datasets representing different language families. Our testsets currently cover Sinitic and Bai, Tukano, Quechua, and various branches of Indo-European. In the future, we hope to progressively expand these datasets with help of further collaborators in the future.

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**Dariusz PIWOWARCZYK** (Jagiellonian University Kraków), **Maciej EDER** (Institute of Polish Language of the Polish Academy of Sciences) and **Katarzyna JASIŃSKA** (Pedagogical University of Cracow)

#### A computational-linguistic approach to historical phonology

Nowadays, most applications of computational linguistics in the diachronic research on language concentrate on creating programs that find cognates, align the phonetic and semantic similarities between words in the lexicon, establish sound correspondences between languages and reconstruct the proto-forms (cf. Hewson 1974, Kondrak 2002). The other prevalent approach is that of the grouping of different languages. i.e. cladistics (cf. Ringe-Warnow-Taylor 2002). Yet, along these two trends there has also been the problem of historical derivation which received some attention in the past (cf. Kondrak 2002: 12–15).

The aim of such approach was to describe the sound changes which occurred in the development of the language under consideration for didactic purposes or for testing the hypothesis of the regularity of sound change.

The previous approaches to the problem of the historical derivation of the languages with the use of the computer-generated sound change (cf. Smith 1969, Burton-Hunter 1976, Eastlack 1977, Hartman 2003, Kondrak 2002: 141-143) only took into account the basic forms of words leaving aside the whole paradigm, the question of regularity and the direction of the analogical leveling. None of the programs mentioned above takes into consideration the whole lexicon of the languages tested including the complete paradigms (both nominal and verbal) in their evolution and the analogical changes which occurred. Nowadays, due to advances in corpus linguistics we are in possession of a large body of texts if not even complete lexicons for some periods of particular languages.

The purpose of this paper is to present the results of the application of a computationally-generated sound change to a fairly complete lexicon (including the full nominal and verbal paradigms) of a certain group of languages (Romance, Polish, derived from Latin and Proto-Slavic respectively). With the current use of the corpora of texts which include all the attested material, especially from the earlier phases of languages, it is possible to test the sound change on a wide spectrum of languages and a broad field of statistical data. The computer program applies the sound changes in their relative chronology to the complete lexicon of the language (Proto-Slavic, Latin) and generates the second phase of its development (Proto-Polish, Proto-Romance) which is then compared with the actual attested data of those languages (Old Polish, Old Romance). Such an approach allows to formulate hypotheses concerning the typology and tendencies of sound change and also of analogical leveling based on full empirical data. The results would confirm or falsify the existing theories on sound change and analogical remodeling and would form the basis for the future historical grammars which, in the authors' opinion, should encompass the whole corpora of texts from all the periods of the language development, including the statistical data. Such a large, possibly online, database would enable scholars to pursue further research in the area and would also serve as an educational help. Additionally the method itself could be applied to other languages thus forming the basis for research on universal tendencies in language change.

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#### Floarea VÎRBAN (CAPA Florence International)

#### **On the Phonology of Nasality in Old Romanian (Idioms). The Phonology of the grapheme $\uparrow$ [Yn]**

Part of a broader project, aiming at articulating a model of understanding for the emerging phonological system(s) of old Romanian (idioms), this paper inquires into the incipient phonology of nasality. The latter presents complexities that require both historical investigation and theoretical speculation.

Romanian is the only Romance language where a non-Latin script [Cyrillic] was employed when its first texts were written and, implicitly, its phonological system built – throughout its 'long Sixteenth Century': late Fifteenth–early Seventeenth (Gheție and Mareș 1974, 1985; Avram 1964; cf., from a broader perspective, Blevins 2004). This implied associating Cyrillic characters to the sound patterns synthesizing the phonetic reality of the old Romanian idioms; in a few cases, also introducing new graphemes. The grapheme generally acknowledged as 'specifically Romanian' is  $\uparrow$  [Yn]. Originated in the Cyrillic sign  $\text{Ѫ}$  [the big Yus] (Bărbulescu 1899:72–73; Bogdan 1978:180-181; Mareș 2005[1996]), used, besides other

graphemes, to reproduce/represent nasal Romanian vowels (Bogdan 1978:165; cf. 173), neither did  $\uparrow$  substitute for, nor was it a bare graphic variant of  $\breve{a}$ . It, instead, responded to a phonological need.

Amongst the various explanations one stands out – Avram (1964). He held that the introduction of  $\uparrow$  responded to the existence, in the Romanian idioms of the time, of a *sui generis* type of phoneme – /N/, which he called *nasality* and described as indefinite phoneme, neither vocalic, nor consonantal (1964:124-125; 130-131), but which could have multiple phonetic realizations: nasal vowel, nasal consonant (syllabic or non-syllabic), vowel + nasal consonant, or the nasality of a vowel (the preceding one) (1964:125).

Whilst most old Romanian texts seem to confirm Avram's theory, some anomalous scripts (the so-called double marks:  $\uparrow\breve{a}$ ,  $\uparrow\breve{n}$ [ $\uparrow n$ ]- $\breve{n}\breve{n}$ [nn]; marks of an intermediary phase of rhotacism:  $\uparrow\breve{r}$ [ $\uparrow r$ ],  $\uparrow\breve{n}$ [nr]; the script  $\uparrow\breve{s}/\uparrow\breve{o}$  [ $\uparrow u$ ] for the indefinite article m.sg. [un/unu], etc.) still raise some questions.

In this paper I undertake an in depth analysis of  $\uparrow$ , from a phonological perspective, particularly inquiring into the anomalous cases. Let me briefly consider here one example: the script  $\uparrow\breve{s}/\uparrow\breve{o}$  [ $\uparrow u$ ] (recorded in MOB). Multiple interpretations were contemplated (Vîrban 2013; 2013/2010):

1.  $\uparrow\breve{s}/\uparrow\breve{o}$  [ $\uparrow u$ ] = an inverted script of  $\breve{s}\uparrow\breve{o}\uparrow$  [ $u\uparrow$ ] = [un]
2.  $\uparrow\breve{s}/\uparrow\breve{o}$  [ $\uparrow u$ ] = an incomplete/defective script of  $\langle\breve{o}\rangle\uparrow\breve{s}/\langle\breve{o}\rangle\uparrow\breve{o}$  [ $<u>$ nu]
3.  $\uparrow\breve{s}/\uparrow\breve{o}$  [ $\uparrow u$ ] = \*[ $\hat{u}n\hat{u}$ ]
4.  $\uparrow\breve{s}/\uparrow\breve{o}$  [ $\uparrow u$ ] = ['nu] (cf. It.dial. 'nu, 'na)
5. in the script  $\uparrow\breve{s}/\uparrow\breve{o}$  [ $\uparrow u$ ],  $\uparrow$  = a mark of nasality.

The possibilities under 5 are two: 5.1: (against Avram)  $\uparrow$  marks the nasality of the following vowel  $\breve{s}/\breve{o}$  [u] – a case of anticipation of nasality; 5.2. (with Avram)  $\uparrow$  marks nasality, though not of the vowel following it, but of the one preceding it (marked graphically ‘zero’ in the text):  $\uparrow\breve{s}/\uparrow\breve{o}$  [ $\uparrow u$ ] might be a contracted form of  $\breve{o}\uparrow\breve{s}/\breve{o}\uparrow\breve{o}$  [ $u\uparrow u$ ] (through aphaeresis).

Beyond its immediate relevance, this example might reveal a passage in the very making of the phonology of nasality in old Romanian. It may also shed new light on other anomalous scripts, which might be more than bare graphic facts; might support (also) a phonological explanation; might be also indicative of various *degrees of nasality* (cf. Blevins 2004: 57-58) across old Romanian idioms.

Ultimately, I reshuffle Avram's theory; account taking of other views (Procopovici 1908; Balotă 1925; Petrovici 1930, 1957; etc.) and of theories with a broader scope (Coseriu 1954, Martinet 1955, Blevins 2004, etc.).

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## WORKSHOP

### Historical relationships among languages of the Americas

#### *Convenors*

**Kate Bellamy, Matthias Urban and Søren Wichmann** (Leiden University)

#### *Description*

Approaches to language classification in the Americas have fluctuated considerably over the past 100 years. The beginning of the 20th century saw a sense of urgency in proposing long-distance relationships, most of which were not supported by sound empirical evidence (e.g., Sapir 1921). In contrast, towards the end of the 20th century confidence in the viability of this kind of enterprise was increasingly waning, marked by publications such as Campbell and Mithun (1979) and Campbell (1997). More recent years, however, have seen a renewed interest in taking up the challenge of understanding the linguistic past of a continent usually taken to be one of the linguistically most diverse areas of the world. Recent proposals have tended to be cautious, paying more detailed attention to the presentation and analysis of the materials on which they are based, as compared to much of the earlier work in the area. Some examples include the proposed links between Harakbut and Katukina (Adelaar 2000) and between Totozoquean and Chitimacha (Brown et al. 2014), as well as the Macro-Jê affiliation of Jabutí (Ribeiro and van der Voort 2010). Such advances have in no small measure been possible because of the improved availability and quality of descriptive data. Current descriptive research on poorly documented languages, particularly in South America, will similarly allow for more progress in the understanding of the linguistic prehistory of Native America. Moreover, philological analysis of materials available for extinct and/or poorly documented languages has the potential to improve our understanding of their histories. Finally, computational methods have recently supplemented the toolkit of traditional historical linguistics, promising new ways of systematically arriving at potentially viable hypotheses in this field.

With this workshop we would like to stimulate a continuation of research into historical relations of languages in the Americas in the recent tradition of careful data analysis and rigorous application of comparative methodology. Departing from the position that the current state of comparative historical studies of Native American languages only reflects a partly complete classification, and that some existing proposals may require modification, we welcome papers that:

- (i) present evidence for hitherto unrecognized or poorly established genealogical relations among languages or language families of the Americas;
- (ii) revisit older proposals, taking into account more recent data and/or methodological improvements;
- (iii) assess the genealogical positions of extinct and poorly documented languages on the basis of detailed, philologically sound analysis of extant materials;
- (iv) bring languages into the purview of linguistic classification on the basis of new descriptive data.
- (v) revisit the internal classification and determine the boundaries of known linguistic groupings.

We intend to include a diversity of approaches ranging from the comparative method in historical linguistics to more recent quantitative/computational methods.

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**Towards a reduction of the number of linguistic genealogical lineages in the Americas:  
The case of South America**

From the perspective of historical linguistic research the Americas have long been treated as the most impenetrable region of the World, together with New Guinea. Within the Americas, South America was considered the most difficult area with more than a 100 distinct language groups and isolates; a comprehensive classification by Kaufman (1990) comprises 118 genealogical units. The fact that South America was one of the latest subcontinents to become populated by humans (ca. 12,000 years ago) is difficult to reconcile with the extreme diversity of its languages. Unifying attempts such as Greenberg's classification of the South American languages (1959), provided with a database and extended to the whole American continent in Greenberg (1987), were not favorably received by a majority of the descriptive and historical linguists working on these languages.

This situation of stagnation has begun to change. In spite of early colonial work from the 17th and 18th centuries, a great majority of the South American languages had never been documented. This situation was aggravated by waves of massive language extinction that occurred shortly after the European conquest and in the 19th century, leaving many languages without close relatives. Mainly since the 1990s, a massive effort geared at the grammatical analysis and typological characterization of the surviving South American languages has provided the necessary material for new historical research, and gradually the contours of more definitive classifications are emerging. The Amazonian region, which was previously considered particularly diverse, has turned out to be less diversified than it originally seemed. Three large language families (Tupí, Macro-Jê and Cariban) were identified as possibly related to each other (Rodrigues 2000), and several smaller groups and former isolates (Chiquitano, Jabutí, Harakbut-Katukina) may eventually be added to that construction (Adelaar 2008; Ribeiro and van der Voort 2010). This could reduce most of the languages of eastern South America to a single genealogical grouping. By contrast, the languages of the Andean region have remained more intractable due to a predominance of linguistic isolates and shallow families. In this region, however, we see interesting cases of interaction between highland languages, such as Aymara and Quechua, and lowland languages belonging to the Arawak language family, such as Pukina and Yanesha' (Wise 1976). Much research effort should be directed towards languages that occupy transitional areas between the Andes and the eastern lowlands, where the diversity is the greatest. Some of the challenges for historical linguistic work in South America lie in the delimitation of lexical roots by the elimination of morphological historical residue and the recognition of descriptive compounds that came to replace former non-composite elements (as in Mapuche ke-wiñ 'liver in the mouth' for 'tongue'). A thorough understanding of semantic and functional shifts proper to the area (for instance, from free form to nominal classifier and vice-versa) is required. Historical language contact plays a central role, as in the case of the extinct Pukina language, which combines an Arawak nominal morphosyntax with a verbal morphology reminiscent of Aymara and Quechua. Eventually, it will be necessary to pay attention to possible historical links between South America and the rest of the Americas, north-south relations being potentially as important as the now more familiar Amazonian-Andean relations.

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### **Subgrouping in Arawak: The Case of the Xingu Languages**

Two hypotheses concerning the ‘internal classification’ (sensu Wichmann 2010) of the Arawak family are addressed in this contribution:

- (1.1) Xingu hypothesis: The Arawak languages spoken in the Xingu Indigenous Park, that is, Mehinaku, Waurá and Yawalapiti, form a discrete subgroup within the Arawak family;
- (1.2) Xingu-Paresi hypothesis: The Xingu languages are joined at the next level of inclusiveness by Paresi, a non Xinguan Arawak language, thus forming a Paresi- Xingu subgroup.

The hypotheses above are accepted in much of the published literature on the classification of the Arawak languages (cf. Aikhenvald 1999; Campbell 2012). Note, though, that no published demonstration of the existence of these subgroups exists, something that raises the possibility that the classification has been accepted as ‘certain’ on the basis of geographic criteria alone.

These two hypotheses are assessed here by an application of the Comparative Method and the traditional methodology of distinguishing shared innovations from shared retentions and basing sub-grouping arguments on the former.

Evidence for the existence of a Xingu subgroup (1.1 above) is here explicitly discussed and presented. A number of lexical (e.g. a distinct form for ‘hand’), morphological (loss of gender in 3 person prefixes) and phonological innovations (palatalization rules, retroflex fricatives) are proposed.

Some developments are evaluated and rejected as sources of problem for the hypothesis (1.2): the operation of the context-dependent change  $*i > e$  (pace Payne 1991) in both Paresi and Terena (a non-Xinguan, southern Arawak language) is not a shared innovation: the two languages do not agree in the forms showing  $e < *i$ ; in addition, the change is also attested elsewhere in the family (e.g. in Chamicuro and Amuesha; cf. Payne 1991).

Other similarities between Paresi and Terena are, however, not so easily dismissed. One finds in Paresi a form *wi-* for the 1pl. prefix, an innovation with respect to proto-Arawak (PA) *\*wa-*. This innovation is also characteristic of the (geographically close) subgroup formed by Terena and the Bolivian Arawak languages. Also shared by Paresi and the Terena-Bolivian subgroup is a change PA *\*i > e* (cf. PA *\*api*, Paresi *ahe*, Terena *ope* ‘bone’; PA *\*uni*, Paresi *one*, Terena *une* ‘water’).

What is perhaps the strongest evidence so far identified for a Paresi-Xingu subgroup consists in a number of morphophonemic alternations that follow from the prefixation of cross-referencing markers in these languages; these seem to indicate that the 2 and 3 person prefixes are systematically distinguished by the quality of their vowels in both Paresi and the Xingu Arawak languages, constituting thus an innovation specific to these languages (cf. [author] submitted.).

Our overall conclusion is that grounds exist for recognizing the Xingu languages as a subgroup (hypothesis 1.1), but that the existence of the Paresi-Xingu higher-level grouping (hypothesis 1.2) has to wait for further investigation, especially on language contact and diffusion. The existence of a number of similarities and (apparent) shared innovations linking Paresi with the Terena-Bolivian subgroup would, if these cannot be rejected as the result of contact, lead to the rejection of Paresi-Xingu hypothesis.

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### **New Perspectives on Tukanoan Language History: A Combined Framework of Quantitative and Qualitative Approaches**

The Tukanoan language family consists of more than 20 languages spoken in Northwest Amazonia. Being one of the largest and most typologically diverse language families in the area, it is of great interest for both linguists and anthropologists.

Although research on the language family started more than 100 years ago (Brinton 1891), the history of the Tukanoan languages still remains relatively underexplored (see Chacon 2014). Previous approaches to the classification of Tukanoan were either exclusively quantitative, based on lexicostatistics (Waltz and Wheeler 1972), or qualitative, based on shared phonological innovations (Chacon 2014). The framework we propose combines quantitative and qualitative approaches and takes into consideration shared innovations from cognate and sound change data-sets.

Our starting point is a lexical database based on 750 meanings and corresponding lexical items from 16 Tukanoan languages. The historical relations between words and sounds in the database have been encoded in such a way that they provide an optimal fit for state-of-the art phylogenetic analysis. Thus, in “traditional” lexicostatistical databases, so-called “cognate” sets are formed only using items with identical meanings (Dyen et al. 1992). Since semantic identity is no defining criterion for etymological relatedness, this leads to an artificial separation of words into different “cognate” sets that share an etymological history. For instance, in common lexicostatistical databases the Russian word *nogá*, which means both ‘leg’ and ‘foot’, is assigned to two distinct cognate sets, which forces the algorithms to carry out two distinct calculations for the same word. Furthermore, words which have shifted their meaning are lost in the calculation, such as English *you* ‘thou (second person singular)’ which appears to be isolated when compared to the words meaning ‘thou’ in the other Germanic languages, but matches perfectly with their second person plural (compare German *ihr*). In order to deal with these problems, we employ a coding in which semantically shifted forms are included and meaning identity is no longer a criterion for cognacy (Michael et al. submitted). Not only is this new coding practice based on a much more realistic definition of cognacy, it also reduces homoplasy (i.e. similarity without a common genetic origin) resulting from parallel semantic shifts and helps to circumvent the artificial assumption that words evolve independently in their meaning slots (Atkinson and Gray 2006).

Additionally, we represent all cognate sets as multiple phonetic alignments, i.e. with the identification of sound correspondences across each set, using List’s (2014) method of sequence comparison, which first computes alignments automatically and then allows manual corrections. In the first stage of this procedure, all alignments have been linked to the Proto-Tukanoan 150 forms proposed by Chacon (2014); in the second stage, we will expand the phonetic alignments by incorporating all 750 items of the database. This will provide unique possibilities for testing the predictive power of reconstruction systems and investigating sound change processes in detail.

Work within this combined framework is still in progress. Our talk will present a detailed description of the database as well as preliminary results of phylogenetic analyses.

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**Phylogenetic Analysis of Morphosyntactic Data: a Case Study of Negation in Tupí-Guaraní**

The Tupí-Guaraní (TG) family is among one of the best-studied linguistic families in South America, and an accurate understanding of its internal classification is important to our understanding of the Pre-Columbian history of the continent. The TG family is known to constitute a well defined subgroup of the larger Tupian stock, and the traditional classification divides it into eight subgroups (Rodrigues 1984/1985, Rodrigues and Cabral 2002). Recent results from Bayesian phylogenetic analyses of lexical data drawn from 30 TG languages and two outgroup Tupian languages have, however, challenged various aspects of the traditional classification, yielding a much more articulated tree for the family, and proposing a different organization of both lower-level groups and novel higher-level groups (Michael et al. to appear).

The present study is intended to complement the lexical phylogenetic study of TG by analyzing morphosyntactic data using phylogenetic methods. We illustrate our methodology with the negation morphosyntactic domain. Our dataset consists both of morphemes and constructions involved in negation from the same 30 TG languages and two Tupian languages, including standard negation, privative, negative directives, focused constituent negation, negative response to polar question etc. We organized the data in both morpheme-based and construction-based cognate sets.

In preparation for phylogenetic analysis these data are coded both as: 1) binary characters based on the presence or absence of cognate morphemes and constructions; and 2) as multistate characters based on the morphosyntactic function of cognate morphemes or constructions. Once the resulting character matrix is prepared, it is subjected to Bayesian phylogenetic analysis as well as parsimony analysis with Mr. Bayes 3.2 and PAUP\* respectively, both standard phylogenetics applications. For the Bayesian analysis we are using a restriction site evolutionary model for the binary characters and a standard discrete morphology model for the multistate ones. We also use gamma-distributed rate variation across characters, to allow for different rates of character evolution. The parsimony analysis is unweighted and includes both ordered and unordered characters.

We compare the preliminary classification emerging from this study with the results from the above-cited phylogenetic analysis of lexical data, and discuss the evolution of particular negative morphemes in the TG family on the basis of ancestral state reconstructions.

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**Nicholas Q. EMLEN** (Leiden University Centre for Linguistics)

### Methods for Disentangling the Lexicons of Proto-Quechuan and Proto-Aymaran

The Quechuan and Aymaran languages of the Central Andes represent a complex, multi-layered case of language contact. Over the course of their long shared history, they have come to exhibit striking structural and phonological resemblances as well as a large quantity of shared lexical items. These similarities have led to centuries of speculation about whether the language families descend from a common protolanguage, but since the beginning of the comparativist period of Andean linguistics in the 1960s, a broad consensus has been reached that these resemblances are best explained as the result of language contact. But despite general agreement on this point, the historical nature of Quechuan-Aymaran language contact itself has not been systematically investigated, nor has an attempt been made to characterize the languages as they might have existed in the period before their first contact.

This paper attempts to clarify some aspects of the history of Quechuan-Aymaran contact by 1) characterizing, in the broadest terms, the various periods of lexical borrowing that have taken place between the two families, and 2) using a rough relative chronology of contact to strip away the successive layers of convergence and shed light on what the lexicons and phonologies of the languages--in particular, the ancient ancestor of the Aymaran lineage--might have been like before their first contact. The paper follows and expands upon the methods proposed by Adelaar (1986), who suggested that the non-shared portion of each language's lexicon likely gives the clearest view on the phonological characteristics of those languages. Three aspects of Pre-Proto-Aymara phonology will be described: the historical status of the aspirated and glottalized consonants (which may relatively recent innovations), the glottal fricative \*/h/, and non-resonant syllable codas.

If a hypothesis of genetic relatedness between the Quechuan and Aymaran families is to be adequately tested, the sort of procedure outlined in this paper is a methodological prerequisite. It is significant that while many of the similarities between the Quechuan and Aymaran languages disappear when the successive layers of lexical borrowing are stripped away, a number of them remain--in other words, it is not the case that all of the resemblances between the two language families can be explained by the known periods of language contact. However, given the large time depth of these phenomena, it is perhaps less productive to continue re-addressing the specific question of a Quechuan-Aymaran relationship than to consider the region more widely and ask whether connections to other language families might have existed in the more distant past. The paper concludes with a discussion of how such a search for external relations might unfold.

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**Patience EPPS** (University of Texas at Austin) and **Katherine BOLAÑOS** (MPI EvA)

### Reconsidering the ‘Makú’ language family of Northwes Amazonia

Despite rapid advances in the last few decades, our understanding of Amazonian linguistic diversity is still severely hampered by sporadic documentation and little robust historical work. However, as new data accumulate, so do the opportunities to evaluate prior claims of language relationship and to propose new associations among languages and families. In this paper, we consider the so-called ‘Makú’ or ‘Makú-Puinave’ language family of the northwest Amazon. This family has long been assumed to include the four ‘Nadahup’ languages (Hup, Yuhup, Dâw, and Nadëb) and the sisters Kakua and Nukak, as well as (though not without question) the language Puinave (see, e.g., Campbell 1997, Martins & Martins 1999). We examine a range of lexical and grammatical data, much of it gathered in our own recent fieldwork, in order to evaluate these putative relationships. A consideration of pronouns (see Table 1 below), other core vocabulary, and bound morphology indicates that a genetic relationship between the four Nadahup languages is supported by solid linguistic evidence (despite recent skepticism by Aikhenvald, e.g. 2012; cf. Martins 2005), but that the association between Nadahup and Kakua-Nukak appears to be unfounded, and can be attributed largely to a snowball effect of citations deriving from a very tentative suggestion by Koch-Grünberg (1906), as well as from a locally salient socio-cultural categorization that lumps the Nadahup and Kakua-Nukak together as ‘forest hunters’. On the other hand, the linguistic evidence is suggestive of a possible distant relationship between Kakua-Nukak and Puinave, but the similarities are too

few to yield a definitive conclusion (see also Girón 2008). In addition, we put to rest the groundless proposal of an affiliation between the unclassified language Hoti and any of the purported ‘Makú’ languages (Henley et al. 1994-96), while noting that suggestions of a distant relationship between Hoti and the Saliban family appear more promising (Coppens 1983, Zent & Zent 2008). Finally, we consider the extent to which the so-called ‘Makú’ languages share lexical and grammatical features that may give an impression of non-accidental similarity, but one that is better explained by areal diffusion than by genetic inheritance. We conclude that advances in our understanding of language classification in Amazonia are not likely to significantly alter the region’s remarkable profile of high genetic diversity, characterized by a large number of distinct but very small language families.

	Hup	Yuhup	Dâw	Nadëb	Nikak	Kakua	Puinave
1sg	~?áh	~?ah	?ãh	?ih (ha)	wæem2	wěm	?ãm
2sg	~?áb	~?ab	?ãm	?õm, ma-	mæem2	měm	mam
3sg	tíh	tíh	tih	ta-	kaan2, kaan?2	kăn, kăn?	jé'ə, dú'u DEM; ó'o NON.SPEC; bə̄i, bə̄t INDEF
1pl	~?íd	~?id	?id	?ə:r (INCL), ?äh (EXCL)	wít²	fít	bidú, bidút
2pl	~díg	~díg	níg	bə̄h, da-	jébm2	jébm	jām
3pl	híd	híd	hid	la-, ja-	këet2	kët	ka-

*Sources of data:* Hup (fieldnotes); Yuhup (Martins 2005, Ospina 2002); Dâw (Martins 2005, fieldnotes); Nadëb (Martins 2005, Weir 1984); Kakua (fieldnotes); Nukak (Cabrera et al. 1999, Mahecha et al. 2000, Huber & Reed 1992). A tilde preceding the word indicates morpheme-level nasalization (affecting all segments). Orthographic conventions have been somewhat regularized across the data to facilitate comparison.

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**Gary HOLTON and Anna BERGE** (Alaska Native Language Center)

### Linguistic Stratigraphy of Aleut (Unangam Tunuu)

This paper presents preliminary results of a comparison of Aleut, Inuit, and Na-Dene vocabulary across the material culture domain, as part of a larger project to clarify the source(s) of lexical development in Aleut. Aleut (ISO 639-3 alw/ale) is one branch of the Eskimo-Aleut language family and is traditionally

considered to have developed in relative isolation until the Russians colonized the Aleutians in the 18th century. It is greatly divergent, and only 15-25% lexical cognates are reconstructed between Aleut and Eskimo, many of which are tentative (Bergsland 1986:69); the source of this divergence is still unexplained. Despite few identified borrowings from or to Na-Dene languages (Bergsland 1994 lists only five such words pre-dating Russian contact), various researchers (e.g. Bergsland 1986, 1994, Ives 2007) have noticed similarities in lexical items of certain cultural domains and speculated on the possible shared history of these items. For example, Aleut *isxatiñ* ‘grass basket’, Eyak (Na-Dene) ‘ishx.ah, and Tlingit (Na-Dene) *x’ishâ* ‘pot;’ no proto- Eskimo term for ‘basket’ is proposed by Fortescue et al. 2010. The possibility that Aleut lexical divergence may have resulted from language contact is supported by studies in other fields. Leer (1991) and Fortescue (1998) discuss shared grammatical features in Aleut and neighboring Na-Dene languages, while the papers in Crawford et al. (2010) discuss genetic and archaeological connections.

**Jorge Emilio ROSÉS LABRADA** (University of British Columbia)  
**Is Jodí related to the Sáliban languages?**

Jodí [ISO 639-3: *yau*], also known as Yuwana, Chicano, Hoti, and Waruwaru, is a small language spoken in the Manapiare Municipality of the Venezuelan Amazonas State by approximately 900 people (INE, 2013). The language has generally been treated as an isolate or left unclassified in the language classification literature (cf., Migliazza (1985:46), Migliazza & Campbell (1988:372-373), and Kaufman (1990:50, 1994:75, 2007:77)). However, proposals of a genetic relationship between Jodí and three different families of the region have been put forward. The first one links Jodí to Yabarana [*yar*] and therefore to the Carib family. This proposal has its origins with Koch-Grünberg (1913) and Wilbert (1963) but has been rejected by Coppens (1983:252). A second proposal (Henley *et al.*, 1994) placed Jodí alongside Hup [*jup*], Yuhup [*yab*], Dâw [*kwa*] and Nadëb [*mbj*] in a Makú family that would also include Kakua/Nukak [*cbv/mbr*]. This Makú family, also known as Nadahup, has been shown to include only the first four languages (Epps, 2008) and examination of the data does not support the inclusion of Jodí in it (Epps, personal communication). The third proposal (Coppens, 1983:253; Mosonyi 2000:660; Zent & Zent, 2008:503) suggests that Jodí belongs to the Sáliban language family whose member languages are Piaroa [*pid*], Sáliba [*slc*] and Mako [*wpc*] (See Rosés Labrada, Forthcoming). In this talk, I examine the putative Jodi-Sáliban relationship by using four reference lexica, one for each the four languages included in this study.

The proposed genetic relationship between Jodí and the Sáliban languages thus far rests on the aforementioned reports, neither of which puts forward any linguistic data, and on one comparison (namely Jolkesky 2009) which merely points out shared typological characteristics—also shared by many other Amazonian languages—and some lexical similarities without showing any regular sound correspondences or changes. The aim of the research reported here has thus been to better evaluate this proposed relationship by means of inspection and comparison of lexical sets and the identification of regular sound correspondences and the changes that led to the observed correspondences.

Jodí and the Sáliban languages—all spoken to the east of the Jodí territory—have remained until recently largely underdocumented and underdescribed. This situation, however, has started to change and a substantial amount of linguistic research has been carried out and published in the last 30 years or so (See Rosés Labrada, Accepted). Using this published literature as well as unpublished materials from the author’s own fieldwork on Mako, four reference lexica have been built for inclusion and analysis in RefLex (Segerer & Flavier, 2011-2014). RefLex has greatly facilitated building and comparing cognate sets for identification of regular sound correspondences and changes between these four languages. This research thus not only allows for an in-depth evaluation of the classification proposal of Jodí as a Sáliban language but also contributes to our understanding of the pre-history and internal classification of the Sáliban languages. Additionally, it constitutes a test for the use of a novel tool (namely, RefLex) in traditional historical-comparative work.

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**Francia MEDINA** (Universidad Central de Venezuela) and **Jorge Emilio ROSÉS LABRADA**  
(University of British Columbia)

### Sapé: Revisiting its classification

The Sapé language [ISO 639-3: spc], also known as Kaliana or Kariana, has generally been considered an isolate in the language classification literature (see, for example, Campbell (2012:98)); other authors, however, have proposed that it is related to Uruak [ISO 639-3: atx], which is also known as Awaké or Arutani, and to Makú [Glottocode: maku1246] (Kaufmann 2007:68). Furthermore, Lewis, Simons & Fennig, (2014) suggest that the language also shows lexical correspondences with Warao [ISO 639-3: wba]. In this talk, we examine these hypotheses regarding the genetic affiliation of Sapé. We do so by carefully comparing published lexical data on the language (e.g., Koch-Grünberg 1913, 1928; de Matallana & de Armellada 1943; Migliazza 1978) as well as unpublished data gathered by Medina in 1999 (Medina 1999) with lexical data from its putative relatives (i.e., Uruak, Makú and Warao).

Sapé was originally spoken in the headwaters of the Paragua River in Venezuela but the group later moved downriver and settled in the Uraricáa and Uraricuarera rivers in Brazil (Migliazza 1978:135). By 1967 and as a result of assimilation into other groups, there were only about 10 speakers of the language (Migliazza 1978:135) and in 1999, there was only one remaining speaker who unfortunately passed away in 2004. In 1999, Medina had the opportunity to collect lexical data (200 Swadesh list) with the last speaker of the language. These data, unpublished to date, and previously published data on the language have been used to build a reference lexicon of Sapé for inclusion and analysis in RefLex (Segerer & Flavier, 2011-2014), a tool that facilitates building and comparing cognate sets for identification of regular sound correspondences and changes. Similar lexical data from Uruak, Makú, and Warao, also entered into RefLex, serve as the comparanda. The Makú data comes from both published and unpublished sources; and the Uruak and Warao data, from published sources.

The contributions of this presentation are thus threefold: 1) it offers new unpublished data on this little-attested South American language, 2) it evaluates its genetic connection to other language isolates of

southern Venezuela and northern Brazil, and 3) it tests the use of a novel tool (i.e., the RefLex software) for traditional historical-comparative work.

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**Sérgio MEIRA** (Museu Paraense Emílio Goeldi) and **Joshua BIRCHALL** (Museu Paraense Emílio Goeldi)

#### A character-based internal classification of the Cariban language family

The Cariban language family is one of the largest of South America, with approximately 40-50 members ranging from Northern Venezuela and Colombia to Central Brazil. The internal classification of this family has been a recurring challenge for historical linguists working in the area. Outside of a few subgroupings of clearly related languages, possibly relics of old dialect continua, scholars have been unable to identify a sufficient number of shared phonological innovations that allow for the clear identification of larger subgroupings. The lack of data on a number of contemporary and historically attested languages has also made classification difficult. Due to recent advances in the available documentation of Cariban languages as well as in computational phylogenetic methods, it is an opportune time to reexamine the classification of this family.

In this paper, we explore a number of questions concerning the relatedness and divergence of the Cariban languages, such as their relationship to one another (internal classification), the directionality of the population movements that resulted in their current geographic distribution (phylogeography), and the approximate age of the proto-language and its descendants (root height).

To approach these questions, we adopt an evolutionary framework that applies a character-based method of analyzing cognate sets using bayesian phylogenetic inference within the BEAST software package. Our current dataset contains approximately 680 cognate sets from basic vocabulary items identified across 25 languages by applying the comparative method to published and personal fieldwork data. We test different models of character evolution and evolutionary clocks to see which best fit the available data. Archaeological and epigraphic dates are integrated into the models as priors whenever possible to aid in the calibration of the chronology of the language dispersals. These methods are well suited to this family, and many South American language families in general, because they help to circumvent the problems mentioned above since cognate forms can often be identified in older and incomplete sources more easily than precise phonological correspondences.

Our results serve to support a number of previous claims on the internal subgrouping of the language family. However, we also identify a number of subgroups that have not been widely discussed in the literature and we are able to quantify the support that the data give for the different subgroupings proposed in our analysis. We are also able to infer likely scenarios for the migrations of Cariban-speaking peoples that help to untangle the history of the dispersal of these languages.

**Elisabeth NORCLIFFE, Simeon FLOYD and Harald HAMMARSTRÖM** (Max Planck Institute for Psycholinguistics, Nijmegen)

### **The reconstruction and classification of the Barbacoan family of languages**

The Barbacoan family of languages has been proposed to constitute five living languages: Cha'palaa and Tsafiki in northern Ecuador, Totoró and Guambiano in southwest Colombia, and Awa Pit in territory straddling northern Ecuador and southern Colombia. Another few extinct languages, Cañari (Burgos Guevara 2003, Howard 2010, Jijón y Caamaño 1919, Paz y Miño 1961, Santa Cruz 1921), Kara (Paz y Miño 1941) and Puruhá (Jijón y Caamaño 1919, Ortiz 1939, Paz y Miño 1942), attested only in toponyms, may also have been Barbacoan. The present delineation of the Barbacoan language family was proposed by Curnow and Liddicoat (1998) on the basis of 41 exact lexical correspondences and an additional seven partial correspondences. This study presented the first solid empirical argument for a genetic affiliation between the five languages, and strongly called into question Rivet's earlier speculative proposal involving Paez, Kamsá and the Chibchan languages (see Loukotka 1968). It also offered some insight into a possible subclassification of the family, suggesting the existence of two major subbranches: South Barbacoan, consisting of Cha'palaa and Tsafiki, and North Barbacoan, consisting of Guambiano-Totoró and Awa Pit. Given the small amount of data available to Curnow and Liddicoat at the time however, neither the family grouping, nor the subclassification of Barbacoan are yet regarded as conclusive. While Cha'palaa-Tsafiki as well as Totoró-Guambiano are indisputably closely related, subgrouping beyond these pairs remains largely speculative (cf. Adelaar and Muysken 2004:141-151).

Thanks to improved documentation on all five Barbacoan languages in recent years, we are able to put together a large lexical dataset based on a subset of the World Loanword Database (WOLD) meaning list of 1460 items (Haspelmath and Tadmor 2011:22-34). From this we can compile a (computer-assisted but essentially) human identification of cognates and sound correspondences. The cognate information and sound correspondences can be fed into an exhaustive computerized search for the best fitting tree of the five languages, from which the innovations supporting each branch can be read off. This confirms Curnow and Liddicoat (1998)'s classification of the Barbacoan languages, and provides for the first time a robust subclassification of the family and reconstruction of the proto-Barbacoan sound system and lexicon. Additionally, it also yields an indication of contact (i.e., innovative sound changes and lexical items not accounted for by the tree). Finally, thanks to a significantly improved proto-Barbacoan reconstruction one can also properly assess the position of the extinct Kara, Cañari and Puruhá, as well as proposals of deeper genetic affiliations involving the Barbacoan languages.

**Søren WICHMANN** (Leiden University)

### **Harrington was right: Zuni is Hokan**

Zuni is a language of North America usually considered an isolate, although there have been proposals for variously connecting it with Penutian (S. Newman, M. Swadesh, J. Greenberg), Aztec-Tanoan (E. Sapir) or Keresan (K.-H. Gursky). An additional, less prominent proposal is that of J. P. Harrington, who, in an unpublished note (not yet seen by the present author, but mentioned by Campbell 1997), claimed that Zuni is Hokan. This paper will address the question of whether Zuni can be connected to some other language family.

One initial way to address this question is to systematically compare Zuni lexically to all other language families in the world in order to determine which families it is most similar to. Subsequently, these clues should be followed up by a closer comparative study. In Wichmann (2013), a paper on the classification of Papuan languages, a lexical distance measure developed within the Automated Similarity Judgment Program (ASJP) was applied to all pairs among the great majority of language families and isolates in the world using the Glottolog family definitions. High-ranked family pairs in terms of similarity were assumed to be good candidates for being related at a deeper genealogical level than the relatively shallow level usually characteristic of Glottolog families. While this paper was not devoted Native American languages in particular, the discovery procedure, entailing a global comparison, also showed interesting results for families in this part of the world. In particular, strong support was found for the Hokan family in North America, which is considered controversial by some scholars, while other scholars (especially T. Kaufman and K.-H. Gursky) have devoted several studies to the detailed lexical and grammatical reconstruction of

the hypothetical proto-Hokan language. Moreover, several branches of Hokan showed similarities to Zuni, making Hokan the best candidate in this approach for being a long-distance relative of Zuni. Subsequent work has shown that the lexical similarities are enhanced when proto-Hokan, instead of individual Hokan languages, are compared to Zuni, and also that there are many similar grammatical morphemes. This paper will describe the discovery procedure through which the Zuni-Hokan link suggested itself and will then proceed to offer comparisons in detail of lexical and grammatical morphemes, going beyond the short lexical lists contained in the ASJP database. I hope to at least make a plausible case for a Hokan-Zuni relationship, supporting Harrington's proposal.

**Roberto ZARIQUIEY** (Pontificia Universidad Católica del Perú) and  
**Pilar VALENZUELA** (Chapman University)

### **Body-part nouns, prefixation and incorporation in Panoan and Takanan: some thoughts on a recent debate**

The similarities between Panoan and Takanan languages were first noted by Armentia (1886) (see also Navarro 1903: 172; Groeteken 1907: 733; Hestermann 1910; Créqui-Montfort and Rivet 1921: 298–301, and Rivet 1924: 676, among many others). More recently, linguists have used the comparative method to argue for a genetic relation between these two families (Key 1968 and Girard 1971). Although this proposal has traditionally been accepted in the literature (see, for instance, Suárez, 1973: 137), it has recently been put into question by different scholars (Fabre 1998, Loos 1999, Fleck 2013). One hot spot in this debate relates to body-parts: while Loos (2005) proposes the presence of a few body-part prefixes as one of the similarities between the two families, Fleck (2013) argues “that it turns out the Takanan languages do not actually have body-part prefixes”.

This talk argues that the question about body-part prefixes in Takanan requires careful attention. It has two different components that require to be teased apart. One has to do with the forms of body-part expressions and the other with the constructions in which these expressions may appear. We show that body-part nouns in Panoan and Takanan are saliently similar in terms of form. Furthermore, although there it is true that there is no body-part prefixation in Takanan, we find a type of noun incorporation that is reminiscent of it. Panoan body-part prefixation could in fact be interpreted as a historical development from a source that reminds us of synchronic Takanan body-part noun incorporation. Therefore, in this talk, we argue that the similarities between body-part nouns in Panoan and Takanan seem to go beyond the mere forms and reach the implicated constructions.

## **WORKSHOP**

### **How lexical relatedness is established and marked - prosody, compositionality and productivity**

#### *Convenors*

**Marko Simonović** (Utrecht University) and **Boban Arsenijević** (University of Potsdam and University of Niš)

#### *Description*

A cross-linguistic tendency has long been observed that in languages which have lexical accent affixes which are usually associated with inflection are far less commonly accented than those associated with derivation (at least since Dressler 1985). As Revithiadou (1999) notes “the empirical facts suggest that it is not very common to have morphemes other than inflectional suffixes marked with a weak accent.” Moreover, within the traditional domain of derivation, accented affixes tend to be characterised by a lesser degree of semantic transparency and a less predictable applicability (in the extreme case, a fully idiosyncratic selection of morphemes they combine with) (Arsenijević & Simonović 2013). In sum, there often appears to be a continuum from accentless all-round morphemes with fully predictable semantic

results to often accented morphemes with limited productivity and a tendency for idiomatic interpretive effects.

For instance, in English, Dutch and German, while all inflectional suffixes are unaccented, the native Germanic derivational suffixes, which are more productive and have more transparent meaning are mostly accentless (e.g. the nominalising suffix *-ness*, *-heid* and *-keit/heit* respectively), whereas the Latinate suffixes, which combine with a limited number of bases and have a more lexicalised meaning, are mostly accented (e.g. the nominalising *-ity*, *-iteit* and *-ität* respectively). In Serbo-Croatian, this dichotomy has been observed within the native domain: the same suffix can have an unaccented version, which is used more productively and with more transparent semantics, and an accented version, which is used in more unpredictable combinations with lexicalised semantics.

Arsenijević & Simonović (2013) termed the domain of prosodic base-faithfulness, productivity and semantic transparency *paradigmatic*, while the domain of accented affixes, limited productivity and lexicalised semantics is termed *non-paradigmatic*. Their concept of *paradigmaticity* thus establishes relations between the phonology, semantics and productivity of patterns. While quite a few models in morphology (e.g., Haspelmath 1995, Spencer 2013) build on the relations between selectional restrictions, semantics and productivity, instead of the traditional opposition between inflection and derivation, and a number of models tackle the problems of paradigm uniformity in a purely phonological perspective (e.g. Kenstowicz 2005), relatively little attention has been given to the correlations in a fully integrated perspective.

The goal of this workshop is to unite different perspectives on the relation between phonological base-faithfulness, semantic transparency and productivity. Although we are mainly focusing on prosodic information, other phonological features may also be of interest in establishing the correlation.

The questions we are interested in include, but are not limited to the following: What is the status of the observed correlation between phonological base-faithfulness, semantic transparency and productivity? Is it an emergent regularity or encoded in grammars? Does the role played by faithfulness induce phonetic effects, and can these effects be quantitatively correlated with the semantic and morphological properties such as transparency and productivity?

Is there empirical ground for, and theoretical gain from placing languages on a scale with respect to the degree to which they display the correlation of these three properties? The upper pole of the scale would include languages in which all the unaccented morphemes are maximally applicable and semantically transparent, all accented and dominant morphemes have limited productivity and induce idiosyncratic semantics and all the other morphemes fall in between, in congruence with their degree of accentedness and dominance.

Lexical Conservatism (Steriade 1997) - the force which imposes the similarity between existing and the newly generated allomorphs predicts that in the diachronic perspective, unstressed affixes should win productivity competitions with stressed affixes. Do languages in which these predictions are confirmed (e.g. Serbo-Croatian) represent a universal tendency, or are there languages in which opposite processes are verified? In the latter case, how can such a direction of change be explained?

Affix productivity has received many competing definitions and formalisations (Aronoff 1976, Baayen 1992, 2001, Bauer 2001, Plag 1999). How do these formalisations, or perhaps their modifications, match the conceptualisation of productivity viewed as entangled with phonological base-faithfulness and semantic transparency?

What do patterns where two words built from one and the same stem, combined with the stressed and with the unstressed version of the same affix differ in respect of compositionality tell us about the semantic and syntactic information contained in the lexicon, and about the interface of syntax with the lexicon (in particular in respect of sub-lexical semantic decomposition, or regarding the advantages of (non-)lexicalist views of syntax).

Are there lexical accent languages that show different tendencies? Do atypical lexical accent languages and those that do not specify accent lexically show any comparable interdependencies between aspects of prosody, productivity and semantic transparency?

The workshop aims at bringing together researchers dealing with the interaction of prosody, morphological productivity and transparency from a range of disciplines: phonetics, phonology, morphology, syntax and semantics, getting them to complement each other's views on this complex interdisciplinary issue, and increasing our understanding of the organization of the lexicon and the interaction between the different domains/modules of grammar.

**Sabine ARNDT-LAPPE** (Heinrich-Heine-Universität, Düsseldorf)

### **Prosodic Faithfulness and Variation in Stress Assignment in English Derivation**

Stress assignment in derived words in English has often been cited as evidence in the theoretical debate between different conceptions of phonology-morphology interaction. For example, the distinction between stress-shifting and stress-preserving suffixes is commonly taken to support the idea of interleaving phonological and morphological modules in a stratified lexicon. Furthermore, the existence of stress preservation effects where main stress in the base survives as secondary stress in the derivative has been used as evidence for lexical marking of stress and grammatically relevant paradigmatic correspondence relations. The crucial underlying assumption of most pertinent theoretical work has been that stress rules are categorical, and that variation can only arise as random or lexicalised exceptions. This view, however, has been challenged in recent work (cf. esp. Collie 2008, Bauer et al. 2013), which suggests that both the extent and the systematicity of the variation have hitherto been underestimated. Evidence is, however, so far often anecdotal and unsystematic, and the theoretical status of the findings is unclear.

Using data from CELEX (Baayen & Piepenbrock 1995), the Oxford English Dictionary, and the Switchboard Corpus (Godfrey & Holliman 1997), the paper presents a systematic empirical analysis of the role of prosodic faithfulness in three case studies. These concern main stress in adjectival formations ending in able (usually assumed to be mostly stress-preserving) and ory (usually assumed to be mostly stress-shifting), and secondary stress in derivatives ending in (at)ion and ity (extending Collie's 2008 dictionary-based study to data from the Switchboard Corpus). Examples of the variation are given in (1).

- (1) a. móitor-able (preserved from móitor) vs. analýsable (not preserved from áalyse)
- (2) b. réspirat-ory (not preserved from respirátion) vs. artículat-ory (preserved from artículate)
- (3) c. sensàtionál-ity (preserved from sensátional) vs. ìferiority (not preserved from inférior, ex. from Collie 2008)

The study finds a substantial amount of stress variation both across and within lexical types. Unlike previous work, the case studies on main stress in able and ory derivatives exclusively look at derivatives of long bases (> 3 syllables). It is found that the variation reflects the interaction of prosodic faithfulness effects and effects of phonological wellformedness (esp. of syllable quantity). Neither of the two effects is categorical in the sense that it is exceptionless, but the two morphological categories differ in terms of the relative strength of the two types of effect. Furthermore, phonological wellformedness seems to be constrained by stress preservation: Unfaithful stresses are more likely to occur if the unfaithful stress preserves the rhythmic structure of the base in the derivative. For secondary stress in ation and -ity derivatives, the Switchboard data largely confirm Collie's (2008) findings about the extent of the variation and its dependency on the morphological category (stress preservation is more frequent with ity than with ation).

Following Collie's proposal for secondary stress, the study will also test whether the stress preservation effects found in all three case studies are correlated with relative frequency of base and derivatives. Theoretical implications will be discussed.

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**Sonia BEN HEDIA and Ingo PLAG** (Heinrich-Heine-Universität Düsseldorf)

### **Gemination and Degemination in English Prefixation: Lexical Strata, Semantics, and Phonetic Evidence**

In English, prefixation may lead to the adjacency of two identical consonants across a morpheme boundary (e.g. *un#necessary*). The standard view of what happens in those cases is that with certain prefixes the

sequence of two identical consonants leads to a longer duration of the segment in question (gemination), while with others the double consonant is of the same duration as a single consonant (degemination). A standard view in the literature is, for example, that the prefix *un-* geminates, whereas the prefix *in-* does not. Hence, the nasal in *unnatural* is predicted to be longer than the one in *uneven*, while the duration of the nasal is the same in *innumEROus* and *inevitable* (cf. Cruttenden and Gimson 2014). Since in the case of gemination all segments of the affix and the word are present in the derivative, phonological faithfulness is given for these items. This does, however, not hold true for derivatives which display degemination.

The idea of *in-* and *un-* displaying different behavior is in line with the theory of Lexical Phonology which states different lexical strata determining the relation between base and affix. While Level 1 affixes like *in-* integrate phonologically with their base and feature a weak morpheme boundary, Level 2 affixes like *un-* display less integration and a strong boundary (cf. Kiparsky 1982, Mohanan 1986).

Until now, however, large-scale empirical evidence for this idea has been lacking. There is only one study that has empirically investigated gemination in English prefixed words. Oh and Redford (2012) found that, while some *in*-prefixed words showed gemination, some did not. This clearly contradicts the assumption that *in-* always degeminates.

The present paper investigates gemination and degemination with the two prefixes *un-* and *in-* (the latter in the form of its allomorph *im-*) by analyzing English words taken from conversational speech (i.e. the Switchboard Corpus). Linear regression models with a number of pertinent covariates (e.g. word duration) were used to compare the duration of two nasals (e.g. *n#n*, as in *unnatural*) with the duration of a single nasal (e.g. *n#V/C*, as in *uneasy*). The results reveal that, as expected, *un*-prefixed words geminate. Interestingly, gemination was also found for /m/-prefixed words, refuting claims concerning the prefix *in-*.

Furthermore, an effect of the semantics of the affix in interaction with the number of nasals was detected for *in-*. For negative *in*-prefixed words, the nasal duration in words with two underlying nasals (e.g. *immobile*) was longer than in words with a single nasal (e.g. *impossible*). For locative *im*- (e.g. *immigrate*), this effect could not be observed. Thus, negative *in*- geminates while locative *in*- degeminates. This shows that the semantics of the affix may have a correlate in phonological faithfulness. Furthermore, the results support the assumption that morphological information is mirrored by phonetic detail (cf. for example, Cho 1999, Plag, Homann & Kunter 2015).

In sum, this paper challenges claims about simple categorical effects of lexical strata and shows that the relation between phonetic detail and morphological and semantic structure is more complex than previously assumed.

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### Spanish Morphemes at the Interface: How Syntactic Position Affects Prosody

In Spanish, which has contrastive stress, a morpheme's productivity and metrical behaviour is explained by how its syntactic position is mirrored prosodically.

There are several classes of morphemes in Spanish with respect to stress assignment. Some morphemes, including derivational and non-φ inflectional morphology, are fully visible to the metrical algorithm, while clitics are invisible, and φ-morphemes (including theme vowels) behave variably, depending on the lexical specifications of their host (Roca 2005). The behaviour of these morphemes is explained by their position in prosodic structure, which imperfectly mirrors the syntax. For example, while clitics are separate

constituents with deficient prosody, φ-morphemes behave variably as either part or not part of the stress domain because they are prosodic adjuncts (cf. van Oostendorp 2000, 2006). For example, in (1a), the plural marker is not included in the stress domain, so does not cause a stress shift, while in (1b), it does.

- (1) a. *almíbar*      *almíbar-es*      ‘syrup(s)’  
       b. *carácter*      *caractér-es*      ‘character(s)’

A morpheme's position in prosodic structure can be explained by its morphosyntactic status at spell-out, as the prosody mirrors syntax (Selkirk 2011). For example, φ-features resulting from agreement are not associated with a head that can be linearized. When the prosody mirrors the morphosyntax, it adjoins these agreement features to the word, and the metrical algorithm can either include or exclude them. Evidence that subject-verb agreement morphemes are dissociated from the verb head comes from the fact that in some dialects, they can be re-ordered after enclitics (Harris and Halle 2005). The metrical behaviour of an element depends on its status in prosodic structure, which in turn depends on its morphosyntactic position. Because prosodic structure is determined at the interface, it receives access to the morphosyntactic structure in a piecemeal fashion, as each phase undergoes spell-out. In Spanish, a derivational morpheme may define its own stress domain (*buená-ménte* ‘well’), may be affixed after stress is assigned and trigger a reanalysis of stress (*buen-íssimo* ‘very good’), or may be affixed to a word before stress assignment (*bon-dád* ‘goodness’) (Harris 1983). The difference between the latter two types can be seen because they bleed processes such as diphthongization, shown above ([bon] ~ [buen]). The point at which these morphemes are affixed is also correlated with productivity (Eddington 2012). These phenomena can therefore be explained through the timing of spell-out within a Distributed Morphology (DM) framework. If a category-defining head marks a phase boundary, it will trigger the spell-out of its complement, then linearization and stress assignment. Morphemes which are affixed after this point will trigger a reanalysis of stress. They are also predicted to be more productive, since their relationship with the root crosses a phase boundary. This aligns with the findings of de Belder et al. (2014), who argue that the semantic transparency and phonological productivity of certain morphemes is determined by whether they are affixed below or above the category-defining head of a root.

This approach explains the productivity and metrical properties of morphemes through how their syntactic position is interpreted at spell-out.

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### The *-ish*-Factor: A Corpus-based Analysis of *-ish* Derivatives in English

In the course of English language history, the derivational suffix *-ish* has extended its range of application considerably (for previous accounts, see Marchand 1969, Malkiel 1977, Quirk et al. 1985:1553). Used in Old English chiefly to derive ethnic adjectives (e.g. *englisc* ‘English’, *denisc* ‘Danish’) and marginally also denominal adjectives (e.g. *cildisc* ‘childish’, *deuelisc* ‘devilish’), *-ish* became more common as of Middle English and subsequently underwent a number of changes. Thus, *-ish* gradually extended the set of bases to which it attached, starting with primarily monosyllabic adjectives (e.g. *bluish*, *darkish*, *oldish*) in the 14<sup>th</sup> century, with numerals (1) and proper names (2) from the 19<sup>th</sup> century, and, more recently, with increasingly more complex bases, e.g. compounds (3), phrases (4) or entire sentences (5):

- (1) I guess he was sort of 12ish when he invented the Scuba Scope. (1998 [COCA])
- (2) She offered a very Han Solo-ish grin in response. (2009 [COCA])
- (3) Lewis never lost his schoolboyish sense of wonder and enjoyment. (1985 [BNC])
- (4) “My father’s chair,” he said, “wasn’t so state-of-the-artish, and I remember those accidents.” (2002 [COCA])
- (5) I know the answer-ish but I need backup (2009 [Web])

Coinciding with the extension of the word formation pattern are semantic changes, which ultimately distort a former more or less consistent form–function mapping: the earliest -ish-formations denoted a quality belonging or pertaining to the nominal element – a function eventually ousted by rivalling affixes such as -y and -ous (cf. Dalton-Puffer 1996:173), whereas the semantics of -ish later on rather came to indicate a relation of similitude or, as in the case of adjectival bases, an approximative quality. This strongly subjective sense further develops into a stance marker, a usage that is particularly evident in instances where -ish occurs as an autonomous element as in (6):

- (6) You must try to remember that some people are normal. **Ish.** (1990 [BNC])

In a large-scale corpus-based study drawing on a wide array of historical and contemporary corpora (Dictionary of Old English Corpus, Penn Corpora of Historical English, Lampeter Corpus, Early English Prose Fiction, Eighteenth Century Fiction, Nineteenth Century Fiction; BNC, COCA), this paper provides one of the first empirical analyses of the intricately related semantic and functional changes that -ish underwent in its development from a rather neutral affix to a subjective discourse marker. By investigating the distribution of -ish-formations from both a morphological and syntactic perspective, this paper sheds light on the productivity of the suffix, which does not only become evident in the numerous hitherto unattested hapax legomena (cf. Plag 2008:545), but also in the trajectory of change itself in which -ish occurs in new syntactic contexts and new functions. Thus the paper also seeks to provide an empirical answer to the question of what kind of language change process affects -ish: degrammaticalization, as claimed by Norde 2009, or rather a less clear-cut unidirectional language change as suggested by the notion of constructional change (cf. Traugott/Trousdale 2013, Hilpert 2013).

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#### Structural complexity, recursion, and the genesis of lexically accented morphemes

Lexical accents are known to be primarily derivational rather than inflectional in nature, thus lexically-accented affixes arguably exhibit a lesser degree of semantic transparency and a less predictable applicability (e.g., Arsenijević & Simonović 2013). Here, we suggest that the relationship between transparency and unaccentedness is largely epiphenomenal because lexically-accented morphemes in otherwise edgemost stress languages characteristically degenerate from compositional structures, modulated by the morphological typology of the language (e.g., flexion, agglutination). Thus, the semantic

opacity and/or restricted distributional property of lexically accented morphemes descend from their genealogical complexity. Thus, we argue that prosodic recursion that mirrors morphosyntax has been the impetus behind the development of prosodic idiosyncrasies in diverse languages, in the spirit of Kabak & Revithiadou (2009a,b).

The key elements of our theory are as follows: A structure recursively assembled in the morphosyntax is prosodified as such in phonology. Its recursivity is metamorphosed into a complex and amphibious prosodic unit since (i) the structure inherits properties from the mother node (innermost Prosodic Word, PrW), but also (ii) forms a larger domain (outermost PrW) that may engender new properties. Crosslinguistically, this is the domain that offers a fertile ground for phonological idiosyncrasies. As such, the prosodic idiosyncrasy of the nominal predicate *kúz-du* '(s)he was a girl' in Turkish, which otherwise has regular word-final stress (*kuz-lár* 'girls') is the penumbra of its (earlier) syntactic complexity: the predicate derives from a compositional structure containing a noun and the copular verb *i*, which elided and formed a recursive PrW, *[kuz]<sub>PrW</sub> + [i-di]<sub>PrW</sub> > [kúz]<sub>PrW=du</sub>*<sub>PrW</sub>, whereas when the same morpheme is attached directly to a lexical verb (with no copula interfering), it forms a single PrW *[kuz-dú]<sub>PrW</sub>* '(s)he was angry'. The idiosyncratic behavior here is due the morphosyntax-phonology mapping, not due to any lexical property associated with productivity or semantic transparency. Furthermore, recursive structures may also further mutate into accented morphemes. In Pontic, for example, accented derivational suffixes emerge when certain stems in compound formations become bound elements. Crucially, the stress they once carried as the head of the recursive compound, e.g. /xalko-púli(n)/ *[xalko [púlin]<sub>PrW</sub>]<sub>PrW</sub>* 'bronze bird' is the vestige of the inherent property of the productive suffix, *xalkopúl* 'small bronze thing'.

Our talk explores the role of phonological domains and recursion in the genesis of deviant (non-default) accentual patterns. We also discuss cases in which the distributional property of an affix follows from its unique prosodic shape, which is the vestige of its prior morphosyntactic shape.. Most Germanic affixes in English, for instance, fail to syllabify to the base they attach to (see van Oostendorp 2000 for Dutch) thus forming recursive PrWs of the type found in compounding e.g., *[[computer]<sub>PrW-wise</sub>]<sub>PrW</sub>*. As a result, they can easily be 'dismantled', *software- and computer-wise*, unlike fully-incorporated suffixes, *\*legal- and formality*.

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Nancy C. KULA (University of Essex)

#### Correlations and non-correlations between productivity, prosody, and semantics in non-accent languages

Bantu tone languages are non-accent languages in the sense that they display no cumulative nor metrical prominence. This paper addresses whether the semantic and productivity correlations observed in certain accent languages (Arsenijević & Simonović 2013) are observed in non-accent languages and to the extent that they are (i) whether this implies that the observed distribution requires an alternative explanation or (ii) follows more broadly from prosody rather than accent specifically.

Bantu languages show a prosodic contrast between affixes that are either lexically High-toned or toneless. Data will be based on Bemba (central Bantu: van Sambeek 1955, Hoch 1954, Kula 2002). High-toned affixes are generally prefixes providing inflectional information in preverbal position while derivational suffixes are unexceptionally toneless with the basic Bantu verb structure: SubjectMarker-TenseAspectMood-VerbStem. The prefix *ba-* in Bemba alternates as a High-toned subject marker or as toneless subject relative referential concord. There is however no difference in productivity between the two variants correlating with their tonal status. Overall, in contrast to accent languages, inflectional affixes are semantically transparent irrespective of their lexical prosodic status.

Derivational suffixes (toneless) on the other hand, may show idiosyncratic semantics. The applicative suffix (marked by *-il-*), for example, canonically introduces a benefactive object but also results in somewhat lexicalized meanings involving concept strengthening and/or pragmatic licensing (Marten 2003). In (1) the applicative induces a change in argument structure in the first pair of examples but not in the next two pairs.

(1)	luk-a	'weave'	fwaal-a	'dress'	ly-a	'eat'
	luk-il-a	'weave for <i>x</i> '	fwaal-il-a	'dress up'	li-il-a	'feast/enjoy'

Furthermore, some toneless suffixes result in changes that violate base-faithfulness again deviating from attested patterns in accent languages. The causative, for example, lenites final consonants of the verb root and the perfective (one of two inflectional suffixes) alters the base contiguity of segments whether it occurs in its High-toned or toneless form as shown in (2). (P3 = intermediate past; P4 = remote past).

(2)	final -C lenition (causative)	final -C deletion/contiguity violation (past)
	lub-a > luf <u>y</u> -a 'lose'	sakul-a > sakul-ílé (P4) > sakwílé 'had combed'
	ak-a > ash-a 'light'	sakul-a > sakul-ile (P3) > sakwiile 'had combed'

The lenition-based causative forms on the left introduce an agent argument just like regular causatives marked by the suffix *-ish-*; in this case 'cause *x* to lose/light *y*'. Similarly, the perfective suffix *-ile* whether lexically High-toned or toneless results in the same deviation of base-faithfulness with no contrast in semantic transparency.

These patterns, which form a sub-set of lexical relatedness patterns identified in Spencer (2013), will be accounted for as correlating to the blurry distinction between inflection and derivation achieved by considering lexemes as having four properties; form, syntax, semantics, and lexical index. Under this view the above correlations are part of 8 logically possible mappings of the four properties involving a change in form which will account for any prosodic contrasts (accidental or tonal) and their related level of semantic transparency.

**Anthi REVITHIADOU** (Aristotle University of Thessaloniki) and **Vassilios SPYROPOULOS**  
(National & Kapodistrian University of Athens)

### 'Through the looking-glass': When prosody mirrors morphosyntactic structure

Building on a long discussion on the status and properties of derivational affixation in Germanic and Slavic languages (e.g., Kenstowicz 1996, 1997 et seq., Benua 1997), Arsenijević & Simonović (2013) draw a distinction between *paradigmatic* and *non-paradigmatic derivational morphology*. Paradigmatic morphology is characterized by accentual base-faithfulness, productivity and semantic transparency, e.g. *readable*, whereas non-paradigmatic morphology includes affixational machinery that disturbs the accentual pattern of the base and creates outputs that have limited productivity and lexicalized semantics, often eroding the morphological boundaries of complex words, e.g. *edible*. An immediate result of this assumption is that lexical stress in derivational suffixes comes with irregular semantics and less succinct morphological boundaries. From the diachronic perspective, the expectation is that normalization forces will exercise pressure towards analogical leveling and accent loss. In this article, we argue that these expectations are not met in languages which are rich in lexically accented morphemes such as Greek.

More specifically, in Greek accented derivational suffixes vastly outnumber unaccented ones, that is, suffixes that yield default antepenultimate stress, e.g., *práktoras* 'conductor' < *prat-* 'do'. Furthermore, in pairs of derivational suffixes with comparable semantics, the productive member (underlined) is accented and often is also super-dominant in the sense that it erases all other accents even those sponsored by other derivational morphemes (see *-tsí(ð)s*). E.g., *-tsí(ð)s* vs. *-ísta-s*, e.g., *buzuk-tsís* 'buzuki player' vs. *kiθar-ístas* 'guitar player'; cf. *buzuk-tsíð-iko* 'buzuki club' (-ik is post-accenting, e.g. *yiton-ikó* 'neighborly'); *-inó-s* vs. *-isio-s* *ayelað-inós* vs. *ayelað-ísios* 'of cow' (Anastasiadis-Symeonidis 2013). Finally, normalization is not to the direction of base-stress or even the default APU stress but is rather manifested as a shift from the marked final pattern to the more preferred penultimate one, e.g. *afrik-anós* 'African' → *afrik-áños*.

On the basis of the above observations, we claim that the reason as to why *Lexical Conservatism* (Steriade 1997) and, in general, analogical forces are numb in the accentuation of Greek derivational morphology must be sought to the functional load of accented morphemes in the sense that they facilitate processing by

providing cues about the mode of derivation, the internal organization, the morphological class membership (Revithiadou & Lengeris in press), and other morphosyntactic properties of the word (e.g. the noun-verb distinction). For instance, the nominal suffix *-ára*, which forms feminine augmentatives, e.g. *kaláθi* ‘basket’ → *kalaθára* ‘big basket’ determines the stress pattern of the derivative regardless of the stress properties of the base to which it is attached because it is accented and, within the complex construction, it occupies a hierarchically prominent (head) position. Furthermore, it is more likely to surface with penultimate stress because it contains the theme vowel *-a-* (cf. *-aros* which is associated with non-penultimate stress due to the theme vowel *-o-*, e.g., *yátos* ‘tomcat’ → *yátaros* ‘great big tomcat’). A welcome result of this proposal is that the way morphemes are assembled and the structures they form are reflected on phonology and the emergence of the ‘aberrant’ stress patterns of Greek reveal information about the derivational history of a complex word.

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**Marko SIMONOVIĆ** (Utrecht University) and **Boban ARSENIJEVIĆ** (University of Potsdam)

### The sound of Lexialisation – Post-Lexical Prosody in Serbo-Croatian

Arsenijević & Simonović (2013) and Simonović & Arsenijević (2014) discuss a particular pattern in Serbo-Croatian deadjectival and deverbal nominalisations, respectively. In both cases the nominalisations which the authors analyse as part of the paradigm of the base adjective/verb copy the prosodic pattern of the base, while the nominalisations analysed as having left the paradigm of the base and having their own lexical entry display a fixed prosodic pattern – a rising span over the two final syllables. This constellation leads to minimal pairs of the type illustrated in (1).

(1)

Base word	Paradigmatic nominalisation	Non-paradigmatic nom.
pUtovati “to travel”	pUtovaanje “travelling”	putovAAnjE “trip”
Opaasan “dangerous”	Opaasnoost “dangerousness”	opAAsnOOst “danger”

Simonović & Arsenijević (2014) analyse the non-paradigmatic pattern as the result of what they term Forced Lexicalisation, a process which forces a derived form to lexicalise as a separate item. Furthermore, they argue that this pattern is the result of the non-paradigmatic word having lost its internal structure, due to which the prosodic information from the elements gets deleted, so that the post-lexical prosodic pattern results. In claiming that the rising span is a post-lexical pattern, they go against the grain of most analyses of S-C prosody, according to which the only post-lexical is one with an initial falling accent (as in the base words in (1)). In this presentation, we are comparing the two cases of alleged deaccentuation and adding another one – a very limited number of nouns which display the same rising pattern only in some fixed expressions in the Locative Singular form.

(2)

na svakom korAAku	u tom slučAAjU	visi u vazdUUhu
at every step.Loc	in that case.Loc	hangs in air.Loc
“everywhere”	“then”	“is in the air”

na petom kOraaku/*korAAkU at fifth step.Loc “at the fifth step”	u Petrovom slUčaaaju/*slučAAjU in P’s case.Loc “in P’s case”	amonijak u vAzduuhU/*vazdUUhU ammonia in air.Loc “ammonia in the air”
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As will be shown, the three classes indeed display deaccentuation, but differ radically in productivity. Deaccentuation is obligatory in all deverbal nouns which are derived from perfective verbs. In deadjectival nominalisations deaccentuation is possible whenever the base is toneless (displays an initial falling accent), and the final syllable of the base is long and closed. In nouns, this pattern is limited to a few toneless nouns which have non-animate referents. We argue that this distribution is expected due to S-C-internal factors. For, instance, the existence of the aspect distinction, in combination with the fact that deverbal nominalisations are derived using the pre-lengthening suffix *-VV.je*, whose semantics is incompatible with perfective aspect (as argued by Simonović & Arsenijević (2014)) forms a perfect constellation for the obligatorification of deaccentuation based on purely formal conditions. In nouns, on the other hand, there is neither of these conditions. We discuss the mutual interaction of properties from different domains of grammar, such as the morphological (i.e. syntactic) structural complexity, specification for particular syntactic features (animacy), compositionality of interpretation, and the availability of the lexical specification of prosody, and its implication for the grammar of S-C.

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## WORKSHOP

### Latin influence on the syntax of the languages of Europe

#### Convenors

Bert Cornillie (KU Leuven) and Bridget Drinka (University of Texas, San Antonio)

#### Description

Latin has been the reference language of western Europe for centuries, serving as the source for recurrent waves of direct or indirect influence on the syntax, morphology and lexicon of many national languages. Solodow (2010) addresses the influence of Latin on the lexicon and the morphology, but does not pay due attention to the role of Latin syntactic patterns in shaping European syntax. More than half a century after Blatt's (1957) seminal paper on “Latin influence on European syntax”, an in-depth typology of the various Latinization strategies has yet to be proposed. This workshop aims to take a step in that direction, identifying and explaining different types of contact (or convergence) between Latin syntax and the syntax of the western European languages from an historical and geographical perspective. Special attention will be paid to (i) the type of contact and the level of linguistic analysis, (ii) the periodization of Latin influence and the role of translation, (iii) the actualization of new Latin-based constructions, (iv) the question whether the SAE Sprachbund is influenced or determined by Latin-based features, and (v) the repercussions of the study of Latin loan syntax for functionalist explanations of language change.

(i). Contact with Latin manifests itself in several ways. On the one hand, Latin constructions can be directly calqued in the European languages, with additional morpho-syntactic changes ensuing (Timofeeva 2010; Drinka 2015; Cornillie & Octavio de Toledo in press). On the other hand, syntactic innovation can also be the result of indirect Latin influence. Certain syntactic alternatives available in the vernacular languages are then favored due to the prestige of the Latin forms (Van de Pol 2012). In this case, there is convergence between vernacular structures and the syntactic patterns of Latin. Alternatively, it can be claimed that the syntactic structures of a given European language, although similar/parallel to the Latin ones, conform to the linguistic tradition of Europe, and, hence, are not contact-induced. Such views are based on the notion of natural communicative strategies (Kuhn 1972), or on corpus studies of periods preceding the times of heavy Latinization (Axel 2007). Furthermore, we aim to identify Latinization patterns on different levels of

analysis. Blatt (1957) gives numerous examples of how the structure of the clause of most written European languages goes back to the Latin complex sentence (period), with a focus on complementizers and conjunctions. It is to be expected that lower-scale linguistic expressions such as specific auxiliaries and the organization of the noun phrase display a much greater variation across languages, although striking similarities among languages may appear.

(ii). Given that Latin has been present in Christian writings and the church hierarchy since their very beginnings, the question arises as to the timing of Latin-based syntactic innovations.

(iii). Many Latinate constructions that show up at a certain point in the history of a language are lost at a later stage, e.g. the Accusativus/Nominativus cum Infinitivo (Rabelais: *Ils demandoient les cloches leur estre rendues*) or the sentence-final position of the verb in subordinate clauses. By contrast, many other constructions survived. Due attention should be paid to the possible distributional differences between the source expression in Latin and its counterparts in the European languages. Hence, questions like the following arise: what does it take for a new form to be considered part of the linguistic system? By means of which linguistic mechanisms does the actualization of a new form proceed? Is this process related to similar processes of standardization elsewhere? 2

(iv). Research on ‘exotic’ languages has shown that large European languages have idiosyncratic features as well and that Europe itself is a linguistic Sprachbund (cf. EUROTYP project). European languages are converging in many respects, with Standard Average European (SAE) crossing language family borders (Hall 1944; Haspelmath 1998, 2001; Van der Auwera 1998; Heine & Kuteva 2006). Questions like the following can be posed: which other features of the SAE Sprachbund can be traced back to Latin influence? To what extent does substratal as opposed to superstratal influence factor in?

(v). Finally, this workshop aims to discuss the repercussions of the study of Latin loan syntax for functionalist and formalist explanations of language change. The fact that many changes are first attested in high register, Latin-influenced contexts, i.e. away from the speaker-hearer interaction, provokes the following question: how much of language change is functionally driven? From a formalist linguistic point of view, what does the empirical evidence from contact with Latin tell us about the idea of parameter resettings?

The papers will deal with one or several of the following research questions:

- Is the phenomenon under study in line with the known Latinization strategies? What does the study add to the typology of Latinization strategies?
- What kind of contact did Latin have with the language under examination? What other languages may have influenced the new construction?
- Is contact a sufficient explanation for the Latin syntactic copy under examination? What kind of evidence can be used to state that the new construction is a calque? Which other factors play a role in this instance of language change?
- Does the syntactic phenomenon under examination lend itself to calquing? What kind of evidence can we provide for this?
- How can the timing of the Latin influence be accounted for? Why did the new Latin-based construction not arise earlier?
- What role did translations play in the creation and extension of the new construction? To what extent is Latin a conduit of the “sacral stamp” of Greek?
- What do we know about the actualization of the new constructions? By means of which linguistic mechanisms does the actualization of a new form proceed?
- How can the study of Latin syntactic copies and cognates be related to the SAE Sprachbund? Is there evidence to argue that this Sprachbund is influenced or determined by Latin-based features? What role does “roofing” play in generating clusters of shared calques?
- Which repercussion does the proposed study have for functionalist explanations of language change?

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**Brigitte L.M. BAUER** (The University of Texas at Austin)

## **Latin Influence and Old French**

The influence of Latin on French is a rather complex topic because of the historical origins of French. Structural parallels may be inherited features or may result from language contact. The earlier the language the more complex the picture may become.

To address the topic of Latin influence on Old French we will examine in this talk substantial segments of *Li Quatre Livre des Reis*, which is a 12th century translation in Old French of the Latin Old Testament Books of Samuel and Book of Kings. In our analysis we will focus on so-called brace-constructions, in which a grammatical element is inserted between the finite verb and the perfective participle or infinitive, cf.:

[FINITE VERB + (DIRECT) OBJECT + PERFECTIVE PARTICIPLE]

La.	habeo	epistulam	scriptam
	have-1sg.	letter-Acc.	write-Pf.Part.-Acc.sg.-F.

OF li empereres out sa raisun fenie (Rol.)  
the emperor-Nom. have-Pst-3sg. his presentation-Obj. finish-Pf.Part.

[FINITE VERB + ... + PERFECTIVE PARTICIPLE] / [PERFECTIVE PARTICIPLE + ... + FINITE VERB]

La.      admissus                ...    Caesarem        est        cum        suo        munere                (Petr.)  
         grant.access-Pf. Part.     Caesar-Acc.     be-3sg.    with     his        invention

OF	il	est	sur	sun	cheval	muntet	(Rol.)
	he	be-3sg.	on	his	horse	mount-Pf.Part.	

## [FINITE VERB + (DIRECT) OBJECT + INFINITIVE]

La.	coepit	barbam suam	evellere	(Pass. Perp.)
	start-Pf.-3sg.	beard-Acc.	tear-Inf.	

Brace constructions are found in both Latin and Old French, but their distribution differs fundamentally. Earlier research analyzing a number of late Latin documents has demonstrated that brace-constructions at that stage typically include infinitives and that the predominant sequence is [FINITE VERB + ... + INFINITIVE], cf.:

dignati sunt nos usque in Faran deducere (Per.) ‘they were so good to accompany us to F’  
 nec sufficio gratias agere (Per.) ‘I could not thank them enough’

For perfective participles the situation is different: the predominant construction features a finite form of the verb esse, which does not occur in a brace construction, but instead typically comes in second position with the subject following, cf. :

apprehensi sunt adolescentes (Pass. Perp.) ‘youngsters are arrested’

The later history of French, on the other hand, shows that early wide-spread brace constructions gradually came to be replaced by structures of the type [FINITE VERB + PF. PARTICIPLE/INFINITIVE + OBJECT], cf.: j’ai écrit la lettre / je vais écrire la lettre.

After a brief assessment of the linguistic situation in Old French—clearly showing the contrasts with Latin—I will analyze in this paper to what extent the Old French text follows the Latin original and evaluate parallels and deviations. This confrontation will allow us to assess the effect of Latin on newly developed structures in Old French. My findings will be related to the results of the few similar studies that exist already and to the literature about linguistic interference from translation. Since the *Li Quatre Livre des Reis* is known to often complete the original text, this comparison will allow us to assess the influence of Latin in the early stages of French on the basis of a well-defined corpus of examples.

**Anna CICHOSZ** (University of Łódź) and **Jerzy GASZEWSKI** (University of Łódź)

### Verb position in Old English and Old High German translations: the role of Latin

The proposed paper is rooted in a wide-scale comparative study of the constituent order of OE and OHG translations, whose aim is to establish the degree of syntactic dependence of selected translations on their source texts and compare the languages on the basis of their native syntactic features. Studies of OHG generally see Latin influence as a factor to be considered (Axel 2007, Bernhard and Davis 1997, Hinterhölzl & Petrova 2005), mainly because the available records of OHG are almost exclusively translations. By contrast, OE has many native compositions surviving; translations into this language are generally praised (Stanton 2002) and considered as reliable sources of syntactic information (e.g. Fischer et al. 2000); the role of Latin is usually ignored. We still lack a general study of the influence of Latin on the element order of OE translations (Koopman 2005).

This paper deals with the position of verb in various syntactic contexts (main vs. subordinate clauses, non-conjoined vs. conjoined clauses, relative position of verb and object). The analysis is based on a parallel corpus containing samples of translated texts and their originals (*Tatian*, *Isidor* and *Physiologus* for OHG, *The Heptateuch*, *The West Saxon Gospels* and *Bede’s Historia Ecclesiastica* for OE, ca. 21,000 clauses altogether). Our objective is to assess the degree to which the source texts affect the surface element order of the translations. We prefer ‘influence of source texts’ to ‘influence of Latin’ because the syntax of our Latin texts varies greatly: the biblical texts are mostly verb-initial, while others (e.g. *Bede*) are mostly verb-final.

Our study focuses on three interrelated issues. The basic one is the extent of face-value syntactic correspondence of verb positions between the source texts and the target texts. Next, there is the question of how often such correspondences involve orders expected in OE/OHG in a given grammatical context anyway. In this way we account for ‘literalism’ that does not necessarily involve calquing in the strict sense (cf. Marsden 1991:322 and Taylor 2008:342). Lastly, we also consider the dependence of the frequency of patterns untypical for OE/OHG on the Latin model. This assumes a possibility of a less direct influence of

the source text (“quantitative loan syntax” cf. Lippert 1974). The analysis of these research problems gives us a comprehensive picture of the relations between the element order of source and target texts. Our analysis is essentially a corpus-based descriptive study with a comprehensive quantitative analysis based on a relatively big amount of data, supported by statistical tests and complemented by an in-depth qualitative analysis. Our study shows that the source text influence on the element order of the investigated translations is rather subtle and not strong enough to violate well-known features of OE/OHG syntax. However, the relative frequency of certain orders differs between the translations and many of these differences can be attributed to source text interference. This finding is especially important for studies of OE, where – in contrast to research on OHG – Latin is not considered as a significant variable in the analysis of translated texts.

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**Bert CORNILLIE (KU Leuven)**

#### **On Latin calques and grammaticalization. The rise of auxiliary promter in Spanish**

In this talk I will discuss the evolution of the Germanic and Romance equivalents of subjective/auxiliary uses of ‘promise’ + infinitive, by which a speaker expresses a prediction on an inferential basis. Many synchronic studies deal with promise and threaten, and their equivalents in other languages, as a pair. The question to be addressed is whether there is a diachronic basis for treating them together. In several European languages, the auxiliary use of ‘threaten’ arose earlier than the auxiliary use of promise. Verhagen (2000) accounts for this difference in terms of discourse-pragmatics. Other accounts show that subjective ‘threaten’ verbs in Romance and Germanic stem from Latin calques containing a noun and that the grammaticalized constructions with the infinitive are instances of syntactic elaboration taking place at the moment of increased prestige of the vernacular language (e.g. the 15th century for Spanish and the 17th century for Dutch). The question arises as to whether the same view holds for the auxiliary uses of ‘promise’. The proposed diachronic contribution will show that, although the ‘promise’ construction arose as a Latin calque, the grammaticalization of the verb into an auxiliary is patterned on the grammaticalization of the ‘threaten’ verbs.

In the Library of Latin texts (Brepols) we found that the nominal construction with *promittere* is attested in Latin authors such as Seneca (1) and Virgil (2).

- (1) Avaritia pecuniam promittit (Seneca)
- (2) supra quos pendens faxum ruinam promittit,nec tamen cadit (Virgil)

In the early *Aeneis* translation of the Old French Roman d’Enéas (12th or 13th century) we find the verb *promettre* with a noun (3), despite the fact that *promittere* is not in the original (4), which suggests that the construction may be entrenched already in early stages.

- (3) De nule part ne veient port; Et ciels et mers lor promet mort.
- (4) Praesentemque viris intentant omnia mortem (Virgil, *Aeneis*. I, 91)

Interestingly, in a present-day English translation of (4) we found “and all things threaten instant death for the men”. The same can be found in the 15th century Spanish translation by Villena.

- (5) ... de tal guisa que todas las cosas ya a los navegantes en aquella hora les menazava la muerte  
(Villena, Eneida, I, 5, 83)

In this paper I will show that, despite their presence in similar contexts in early stages, the ‘promise’ constructions differ from the ‘threaten’ constructions in that the former take the infinitive later and less frequently than the latter. Once the subjective ‘threaten’ + infinitive construction is established, auxiliary uses of ‘promise’ + infinitive start to show up. Our account highlights that the success of Latin calques in Romance syntax, and probably in other languages of Europe, depends on different factors. One of these is the actualization of the exemplar, which in this case is the more entrenched threaten auxiliary. Given the shared lexical field of threat, the prometer auxiliary is an example of grammaticalization through paradigmization following the path of threaten.

**Federica DA MILANO** (Università Milano-Bicocca) and **Pierluigi CUZZOLIN** (Università di Bergamo)

#### Acl: heritage and influence on some languages of Europe

The aim of this paper is to shed some light on a alleged Latin syntactic copy found in some European languages, namely the so-called ‘accusative+infinitive’ (Acl) construction. This construction is found in Romance languages (it is also attested in contemporary Italian) and in Germanic languages. In the case of the Romance languages, the question arises whether this construction is inherited or is due to the influence of Renaissance Latin.

The Classical Latin employed practically as a rule this construction; however, since the 3rd century AD it was gradually disappearing, so that, according to Hofmann and Szantyr (1965:35), we can find in the collection *Vitae partum monachorum* (starting from the 6th century AD) only 275 examples of Acl. against 530 instances of compleative clauses beginning with the conjunctions *quod*, *quia*, *quoniam*. During the following centuries the construction totally disappeared (but see Boccaccio’s *Decamerone* (14th century AD), where, according to Calboli 2003, this construction was ‘reintroduced [...] on the Classical Latin model’: Bocc., Decam. 10.8.72 saranno forse alcuni che diranno non dolersi Sofronia esser moglie di Tito, ma dolersi del modo... ‘There will be people who will say that they are not worried about the fact that Sophronia is Tito’s wife, but that they are worried...’).

As for the genesis of this construction in Old English is concerned, scholars agree in assuming inheritance from Parent Germanic, where it is not infrequent: some examples are listed in Visser (1973). The number of verbs in early Old English occurring in this construction is relatively small, but the model went on extensively proliferating in Middle and Modern English, in the former probably through the influence of French idiom, in the latter perhaps owing to the attitude among writers and translators of XVIIth and XVIIIth-century to prefer the prestige of the Latin forms. From the Old English to the Early Modern English period, Latin was the most frequently occurring foreign language in English texts (Pahta/Nurmi 2006:205) and, according to Sairio and Palander-Collin (2012), this reflects its longstanding position as the international language of religion, administration, legislation, learning and diplomacy. As a matter of fact, later Bible translations into the national languages played an important role in the spread of Latinate constructions.

Our aim is to identify the distinction between internal dynamics of the language system and other kinds of phenomena (first of all, prestige) in the development of these syntactic constructions through the analysis of Bible translations in Romance, Germanic, Celtic and Slavonic languages (recent studies suggest the influence of Latin also on Old Church Slavonic).

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**Do the Parallels Meet?  
On the Origin of the Accusative with Infinitive Construction in Slavic**

It has been commonly accepted in the grammaticalization theory that replication can be achieved through language contact and internal restructuring (Heine and Kuteva 2003). With rare exceptions (e.g., Danylenko 2015), the contact-induced grammaticalization is perceived in terms of standard languages, cf. the concept of the ‘sacral stamp’ of Greek on periphrastic constructions in the New Testament translations of Latin, Gothic, and Old Church Slavonic (Drinka 2011; cf. MacRobert 1986). I argue that, for the accusative with infinitive (AcI), one can speak of grammatical replication as a result of contact-induced grammaticalization in standard varieties and internal grammaticalization in non-standard varieties.

Thus, discussing contact-induced grammaticalization cases in Slavic, Wiemer and Hansen (2012, 128) mentioned the introduction of the AcI instead of the indigenous construction with participial complement; following scholarly tradition (Miklosich 1883, 871–72), the authors viewed the AcI as a syntactic calque from Latin and/or German in Czech, Medieval Polish, and some Croatian dialects.

The borrowing scenario for the AcI construction needs diachronic attenuation. The AcI and the AcP represent two parallel pathways of the grammaticalization of the IE second accusative complement used after the matrix verbs of perception, communication, and cognition (Popov 1881, 271–72). The first pathway, leading to the emergence of the infinitival complementation pattern, has been attested in most Germanic and Romance languages as well as some standard and non-standard varieties of Slavic which all fall under the concept ‘Standard Average European’ (Danylenko 2013). It is not incidental that Wiemer and Hansen (2012, 133) emphasized “a striking dominance of analytical constructions,” including the AcI, in contact-induced grammaticalization in Slavic. The second grammaticalization pathway, conducive to the rise of participial complementation, has been historically documented for many IE languages, including Ancient Greek, Latin, and Gothic, becoming ultimately typologically representative for Slavic and Baltic. Grammaticalization of the participial complement in the place of the general oblique (second accusative) case, has progressed from the finite complementation pattern to a non-finite one (gerund).

For Slavic, one can speak tentatively about two types of grammaticalization leading to the development of the AcI construction: (1) grammatical replication from the analytical IE languages into standard Slavic languages (e.g., Greek > Church Slavonic, Latin > Middle Polish; French, German > 18th century standard Russian), and (2) an indigenous analytical development (internal restructuring) in non-standard Slavic varieties provoked by language contact, not necessarily with languages containing the AcI as is the case with the Transcarpathian Ukrainian dialects. Such contact brings about changes in the societal parameters of the corresponding speech communities such as their size, degrees of homogeneity and social stability, and some other factors (Trudgill 2011).

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**Santiago DEL REY QUESADA and Andreas DUFTER** (Ludwig-Maximilian University of Munich)

### **Latinate syntax in sixteenth-century French and Spanish: reevaluating the role of translations**

In the history of Romance languages, the fifteenth and sixteenth centuries are generally considered to be the heyday of learned Latin influence on both vocabulary and syntax. The so-called grammatical “latinismos” (Alvar & Mariner 1967) or “latinismes de syntaxe” (Lorian 1968) include various types of non-finite subordination such as *accusativi cum infinitivo*, participial and gerundial constructions, verb-final orderings and discontinuous constituents (hyperbata). In sixteenth-century French, referential null subjects constitute another marked variant, which has frequently been interpreted as an instance of relatinization. In early modern Spanish, constructions like the adverbial clauses which imitate the pervasive Latin *cum* + subjunctive type or the formation of synthetic superlatives can also arguably be added to the inventory of Latinate grammatical traits.

It is generally agreed that the extension and revival of Latinate syntactic structures can be largely explained by the massive increase in the number of translations of Latin texts into the European vernaculars in the wake of humanism. However, it has also been claimed that many of the great Renaissance translators were in fact highly sensitive to grammatical differences between Latin and their mother tongue (see the treatise on translation by Dolet 1540). In an attempt to avoid any syntactic structure which could have been interpreted as calque, these translators often exaggerated linguistic differences, resulting in several hypercorrections, or “anti-latinismes” as referred to by Lorian (1968: 1278).

In our talk, we will conduct an empirical assessment of a hypothesis which is far too often taken for granted. The hypothesis investigated suggests that Latinate syntax is featured more prominently in translations from Latin into sixteenth-century French and Spanish than in non-translated texts of the same period. We will investigate the distribution of Latinate syntactic structures in a range of translations and compare the structures found to their counterparts in the Latin source texts. In particular, we aim to identify “hyper-Latinate” structures in the Romance texts which have not been motivated by their Latin source (cf. Segre 1952).

In order to enhance comparability, we have chosen to focus on theological and historical works by two renowned authors in sixteenth-century France and Spain, Jean Calvin (1509–1564) and Alonso Fernández de Madrid, Archdeacon of Alcor (1474–1559).

Finally, we will attempt to situate our findings within the context of previous research on sixteenth-century French and Spanish syntax, and discuss possible implications for a theory of grammatical change initiated “from above”.

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### **The Role of Roofing: Latin influence on the development of the perfects in Europe**

A close examination of the distribution of the periphrastic perfects of Europe reveals a significant split between east and west: in eastern Europe, the oldest perfects tend to be built with BE auxiliaries plus past active participles, while in western Europe, perfects with HAVE and BE auxiliaries and past passive participles predominate. While many factors—internal as well as external—clearly played a role in this development, what emerges as crucial in the east /west split is the influence of the “roof” languages, Greek and Latin respectively, and the early cultural divide connected with Greek Orthodoxy and Roman Catholicism. This paper focuses on the role that Latin played at three stages of the development of the perfects in western Europe:

- as a conduit of the “sacral stamp of Greek” in bible translation and as influential in other ecclesiastical contexts;

- through the influence of scribal tradition and the establishment of the “Charlemagne Sprachbund” (van der Auwera 1998; Haspelmath (1998, 2001);
- as a model for classicized syntactic style of the Early Modern period, as exemplified by the patterns of perfect use by Elizabeth I and her contemporaries (Blatt 1957).

The superstratal influence of Latin on the syntactic patterns of Europe also stretched beyond the borders of western Europe, and is to be found in the perfect constructions of some eastern European languages, as well.

This paper tackles several of the key issues to be addressed in this workshop: it illustrates the stratified nature of Latin syntactic influence across time and space, and the effect of this recurrent replication on the temporal-aspectual systems of the western European languages. It explores the nature of syntactic calquing itself through a comparison of its effects in several speech communities and in various social contexts. Above all, this analysis underlines the essential role of calquing in superstrate-induced change, the social motivations that foster it, and the structural patterns that are most frequently affected.

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#### **Latin influence on German word order?**

Behaghel's claim that verb finality in German dependent clauses (DCs) reflects Latin influence (1892, 1932), frequently questioned (e.g. Ebert 1980), is revived by Chirita (1997, 2003). According to Chirita, DC word order remains variable up to Early New High German (ENHG), while in Latin, verb-finality is more frequent in DCs than main clauses (MCs); hence, she claims, German verb finality reflects Latin influence.

I show that the arguments for Latin influence are problematic.

First, Chirita lumps together different phenomena under “non-verb-last” in DCs, including (1a) which really contains an MC (though functioning like a relative clause), and (1b) with (elaborating) extraposition after the clause-final verb. (For ease of exposition, the examples are given in Modern German form.) Either type can be considered an exception to DC verb finality only by ignoring its syntactic structure; and either type is acceptable in Modern German, especially in colloquial varieties.

- (1) a. *Es war einmal ein König der hatte keine Kinder*  
          it was once a king DEM had no children  
          ‘Once upon a time there was a king, he (= who) had no children.’
- b. *Als Uhlenspiegel nach Braunschweig kam, in die Bäckerei ...*  
          when U.                    to Braunschweig         came in/to the bakery ...  
          ‘When Uhlenspiegel came to Braunschweig, to the bakery ...’

Second, even in earliest West Germanic, verb finality is much more common in DCs than in MCs. Walkden (2014) gives the ratios in (2) for Heliand. Axel (2007: 7) observes that the distinction between MC and DC in Old High German (OHG) is ‘fairly similar’ to Modern German, and verb position generally does not mirror Latin originals. The word order situation is similar in Beowulf, which unlike much of OHG and Heliand, cannot be dismissed as adaptation of an original Latin text (see e.g. Pintzuk & Kroch 1989, Hock 1982, 1986/1991).

(2)	MC	DC		
	Verb-early	88.5%	11.5%	
	Verb-late	25.8%	74.2%	

Third, Chirita's arguments focus narrowly on German, ignoring the evidence of Frisian which shares DC verb finality with German, although traditionally rural and not likely to show Latin influence. Kashmiri, too, distinguishes between MC verb-second and DC verb-final – clearly without the benefit of Latin influence.

Finally, examination of the Latin prose of Melanchthon, chronologically close to ENHG, yields 13% verb finality in MCs and 33% in DCs. It is difficult to see how this distribution would motivate the dominant Modern German V2 in MCs and verb finality in DCs. (Verb position in ENHG texts such as Luther's *Sendbrief vom Dolmetschen* differs little from that of Modern German.)

I conclude that the Modern German (Dutch, and Frisian) word order differences between MC and DC are to be explained by internal developments, the final step of which consists of a polarization between MC and DC word order that leads to a double marking of subordination, by means of COMP and verb finality. A similar double-marking of subordination is found in Vedic Sanskrit, in terms of verb accentuation (accent in DC vs. non-accentuation in MC) plus relative pronoun or adverb in DC.

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#### (Re)-latinization and spoken language: the Spanish and Portuguese personal infinitive

As illustrated by Fidalgo Henríquez (2011), Spanish has a personal infinitive which, in contrast to the Portuguese personal infinitive, is not inflected (cf. also Nakayama/Galembek 2009). Furthermore, the Spanish personal (non-inflected) infinitive has been perceived as an early modern re-latinization (cf. Lapesa 1981: 233+241).

In this paper, based on these facts and on the exploration of the CORDE corpus, I will first of all argue

A) that Spanish, besides the well-known **non**-inflected present-day use that can already be found in medieval texts (cf. Mensching 2000), also had an (early modern) **inflected** form, see for instance

- (1) "... *Jserá necessario hazer otros discursos para sabermos la cantidad del catheto [...].*  
(Pedro Núñez, 1567: Libro de Álgebra en Aritmética y Geometría, cf. CORDE corpus)
- (2) "... *Segundo estado desde el nacimiento matutino despues de saliren de los rayos del Sol: y començaren a ser Orientales [...].*"  
(Antonio de Nájera, 1632: Suma Astrológica, cf. CORDE corpus)

and

B) that – in order to assess the origin of the two types of the Spanish personal infinitive – we should have a closer look at medieval occurrences of an **inflected** use of the Spanish personal infinitive, see for instance

- (3) [...] *et otorgamos et prometemos de non venirmos contra ello en nengun tiempo.* [...].  
 (Permuta de bienes, 1276, cf. CORDE corpus)

In view of this status quo, the goal of the present contribution will be to gain new insights into

- the question of how to explain the origin of the inflected personal infinitive in general: Are we facing the continuation of the Latin imperfect subjunctive (cf. Meier 1951 and the discussion of the Maurer-Meier controversy in Nakayama/Galembek 2009) or rather the mere addition of personal inflections to infinitive forms in Portuguese (cf. Maurer 1968 and Rohlfs 1969: 90-92) and medieval and Renaissance Spanish?

In order to achieve this goal I will address the following (research) questions combining the philological-comparative approach with corpus linguistics and stressing the distinction to be made between *innovation* and *change* (cf. Coseriu 1974: 122) as far as the theory of language change is concerned:

- I) What is the relationship between Latin syntax, such as subordination and Aci-constructions, and the emergence and actualization of Spanish and Portuguese personal infinitives?
- II) How can we explain that the Portuguese personal AND inflected infinitive has “survived” as an everyday feature of spoken and written language whereas Spanish has retained only the non-inflected personal infinitive?
- III) What role did the interaction of “high” and “low” registers play in this process (functional explanations)?
- IV) To what extent do we have to consider processes such as *exaptation / junk morphology* (Lass 1990), *refunctionalization* (Smith 2011) and *adfunctionalization / capitalization* (Pountain 2000)?

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#### Latin and Romance Influence on the Basque Verbal Morphosyntax

While the phonetic and lexical influence of Latin and Romance upon Basque has been deeply studied from the beginning of the Basque studies (Schuchardt 1887, Mitxelena 1974/1987), its influence upon the morphosyntax has been often left as a secondary concern. Only recently has a vigorous interest in this issue emerged among Bascologists.

Leaving non-indicative TAM values aside, modern Basque dialects have six basic tense/aspect values for all verbs. They are formed by the combination of one of three possible non-finite lexical verbal pieces plus one of two possible sets of finite (auxiliary) pieces (present or past, each of them with transitive or intransitive subsets). Exemplifying this with transitive auxiliaries: *kanta-tu nuen* ‘I sang (aor.)’, *kanta-tzen nuen* ‘I sang (ipfv.)’, *kantatu-ko nuen* ‘I was going to sing’ / *kanta-tu dut* ‘I have sung’, *kanta-tzen dut* ‘I sing’, *kantatu-ko dut* ‘I will sing’. In addition, verbs of the patrimonial lexicon (‘come’, ‘bring’...) have strong or synthetic one-piece verbs, but only to form the past imperfective and the present imperfective.

In the configuration of this system, Romance influence has played a very important role. In fact, the present perfect *kanta-tu dut* (but intrans. *altxa-tu naiz* ‘I have stood up’) is clearly built upon the Romance model *cantatu(m) habeo / ventu(s) sum*. Like French and German, among the modern languages of SAE also influenced by Latin, Basque has maintained this transitive / intransitive opposition. Moreover, according to Mounole (2011), this opposition has spread to the periphrastic present, which in origin was an intransitive construction, implying continuous aspect, of the type ‘be in the ...-ing’ (*joate-n naiz* ‘I am in the going’ vs. *\*edate-n naiz* ‘I am in the drinking’ → *joaten naiz* ‘I go’ vs. *edaten dut* ‘I drink’, by analogy with the perfect).

As for the relative chronology of these developments, considering Mitxelena’s (1981/1987) broadly accepted view according to which the Old Common Basque previous to dialectal diversification is to be set around the 5<sup>th</sup> and 6<sup>th</sup> centuries AD, and taking into account that the periphrastic perfect is considered a verbal form already spread in Common Romance to express past action (Lausberg 1962/1988: 320), the afore-mentioned period (5<sup>th</sup>-6<sup>th</sup> centuries) is a reasonable candidate to be: a) the time frame during which Basque borrowed the periphrastic perfect from Late Latin / Common Romance —which, crucially for Basque, allowed a transitive/intransitive distinction—, and b) a *post quem* for the development of the periphrastic present, which, as expected if we assume this chronology, displays dialectal variability.

In any case, Basque has a verbal system which fits in quite well, in both its TAM values and its morphology, with the basic features of SAE. What differs from SAE is the relative order of the lexical piece and the auxiliary, which in modern Basque appears last, even in main clauses. This, however, is related to a set of more radical differences, such as the SOV order and the absolute-ergative morphosyntactic alignment, which put Basque aside from the bundle of features which characterize SAE.

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**Ann TAYLOR** (University of York)

#### The effect of translation from Latin on the syntax of Old English pronouns

Many of our surviving Old English (OE) texts are translations from Latin originals. Given that the syntax of Latin and Old English differ in a number of ways, it is natural to ask: what kind of effect, if any, does translation from Latin have on OE syntax? Answering this question will serve to increase both our understanding of native Old English syntax and how it can be influenced by external effects.

This paper reports on a case study comparing the syntax of personal pronoun objects in translated and non-translated OE texts. Taking the relevant point of comparison to be whether the pronoun precedes or follows the lexical verb, we find that both languages vary; however, in OE object pronouns are predominantly preverbal, while in Latin they are predominantly post-verbal. The expected effect, therefore, is a higher rate of post-verbal pronouns in translated texts. The potential impact of this effect follows from the fact that there is a concentration of translated texts in the early Old English period (<950), potentially leading to a false impression of the change over time from pre- to post-verbal position.

The methodology is that of Taylor (2008). On the basis of a selection of translated and non-translated texts from the early and late periods, we can investigate, first of all whether post-verbal object pronouns are

overall more common in translated than in non-translated texts, and at a more detailed level, whether the frequency of post-verbal pronouns is higher in OE when they translate a post-verbal pronoun in the Latin, as compared to cases where there is a pre-verbal pronoun in the Latin, or no source pronoun.

Preliminary results based on a limited set of clause types, show a significant effect in some clause types (e.g. main clauses with elided or pronominal subjects) and little or no effect in others (e.g. subordinate clauses). In addition, of the texts investigated so far, some show a clear direct effect in that they show a higher frequency of post-verbal pronouns when the source has a post-verbal pronoun than when it has a preverbal pronoun or no pronoun source. Other texts show no effect at all. These initial results raise a number of questions which will be pursued further in this study: (1) Which clause types show a translation effect and which do not? Is this consistent across texts? Why are these particular clause types affected and not others? (2) Earlier work (Taylor 2008) has shown an indirect effect of translation (i.e. a raised frequency of the “Latin” order whether or not the source contained the relevant construction), particularly in biblical texts. Can such an effect also be detected for pronouns? If not, why not? (3) How does the translation effect interact with other factors that affect pronoun position in OE (e.g. case, person, weight, saliency, etc.)? (4) How does the translation effect interact with change in pronoun position over time as represented by the non-translated texts?

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**Olga TIMOFEEVA** (University of Zurich)

#### **Latinate absolutes in Old English: translation and reverse transfer effects in Ælfric’s writings**

The study of Latin influence upon medieval languages often seeks to relate its extent to translation effects. The closer a target text comes to its source the more likely it is to transfer syntactic features from Latin into the vernacular. If the source text moreover is biblical, its translator is believed to adhere to formal equivalence even more zealously. While this view may well describe the general tendency, a few translators from Anglo-Saxon England stand out as exceptionally non-conformist in terms of their treatment of the source texts. One good example is Ælfric of Eynsham (c.950–c.1010), a bilingual writer of the Old English period, and his translation of the book of Genesis. In my PhD dissertation (XXX 2010) I examined how Ælfric renders Latin *ablativus absolutus* constructions, and it turned out that they all are replaced or paraphrased in his translation. I also found that Ælfric’s *Genesis*, produced towards 1000 AD, is different in this respect from his earlier works. The *Catholic Homilies*, for example, compiled from a variety of Latin sources, have a wide range of Latinate constructions, including the absolutes.

In this paper I would like to revisit these findings and to account for Ælfric’s choices in terms of translation proficiency and audience impact. My first hypothesis is that the rate of Latinate constructions in his texts would decrease as he acquires more and more translation experience. To check this I am going to extract the absolutes from the *York-Toronto-Helsinki Parsed Corpus of Old English Prose* (YCOE) and examine them against the chronology of Ælfric’s works. The results will next be analysed in terms commissioners and target audience of the translations. Hence my second hypothesis is that the rate of Latinate constructions would be lower in translations addressed to lay readers, in that Ælfric would try to use simpler syntax in such target texts. Finally I would like to bring in second-language-acquisition (SLA) research and see whether an alternative explanation for Ælfric’s use of the absolutes can be envisaged. This part of the experiment will compare the frequencies and contexts of the absolutes in his L1 (Old English) and L2 (Latin). Hence my third hypothesis is that Ælfric would use more absolutes in his Latin than in Old English writings, and that his L1 might be affected by the reverse transfer, that is to say influence from L2. The results of the study would thus provide a snapshot of the bilingual/biliteral practices in early medieval England and will hopefully be relevant both for the research aims of the workshop *Latin influence on the syntax of the languages of Europe* and for the typology of reverse transfer effects in SLA.

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**Nigel VINCENT** (The University of Manchester)

**Which Latin? Which language? Which texts?**

While Latin has undoubtedly influenced the syntax of European languages in a number of respects (Blatt 1957), it is essential to distinguish the varieties of Latin since the effects may differ in terms of register, period of origin and geographical reach. In this paper we explore these parameters with respect to three constructions. The first is the pattern [Adj Noun 'and' Adj] as in *in divina pagina et humana* 'in sacred and profane texts'. This forms part of the stylistic norms of Medieval Latin (ML) and is accordingly much more common in texts of that period than in those of the classical canon. From ML it spread across virtually the whole of Romance and Germanic: e.g. Old Venetian *grandi omni e possenti* 'great and powerful men'; Old Sicilian *diversi herbi et hodoriferi* 'varied and fragrant herbs'; Old French *bons chevaliers et hardiz* 'a good and brave knight'; Old Icelandic *vitt land og fagurt* 'a wide and beautiful land'; Old Saxon *uuid strata endi bred* 'a long and wide road'; Old Danish *blandt unge Folk og gamle* 'among both young and old people'; Old English *siocone monnan and gesargode* 'a sick and wounded man' (Fischer 2012).

Our second construction is the calque of the Latin accusative and infinitive as in Italian *dirà quello essere un bellissimo diamante* '(who) will say that that is a most beautiful diamond' (Galileo *Dialogo* 1632), Middle French *Aristote di appartenir aux beaux le droit de commander* 'Aristotle says that the right to command belongs to the beautiful' (Montaigne, 16th cent). This, by contrast, is directly modelled on classical usage, is restricted to Romance (nonetheless a learned syntactic borrowing and not a direct inheritance, Pountain 2011), and reaches its peak in Renaissance rather than Medieval prose.

Whereas both the preceding constructions disappeared from the modern languages as the influence of Latin textual models receded, our third example concerns a construction which has remained, albeit with diastratic and diamesic restrictions consonant with its Latin origin, namely the compound gerund as in English *having discussed*, French *ayant discuté*, Portuguese *tendo discutido* and the like. Synchronously speaking, such forms seem simply to be perfective equivalents of the plain gerunds *discussing*, *discutant*, *discutindo*. However, while the latter display a continuous history from Latin (and via Old French have then influenced the tangled history of the English -ing form), the compound gerund emerged in order render structures like *urbe capta* 'having captured the city' once classical texts began to be translated — in the Italian case specifically in the 14th century in Boccaccio's translation of Livy (Menoni 1982) — and spread out from there. Hence, even in the modern languages the textual and register distributions are different across all the languages which have such forms (Ramat & Da Milano 2011) whether in Romance or English.

In short, the respective geneses of these constructions evidence significant differences of period (early mediaeval, late mediaeval and Renaissance), languages affected (Romance and Germanic, Romance plus English, Romance only) and text type (all genres, translations, learned prose).

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# WORKSHOP

## **Locally bound possessives as a window on language structure**

*Convenors*

**Anna Volkova, Eric Reuland and Alexis Dimitriadis**

*Description*

The goal of our workshop is to bring together researchers working in different theoretical paradigms, language typologists and language specialists to discuss the factors governing the cross-linguistic distribution of locally bound possessives. In the languages of the world this structural position can be encoded by a pronominal (as in English *Mary saw her cat*); a dedicated possessive pronoun, often called possessive reflexive (as in the Russian equivalent *Masha uvidela svoju koshku*); a genitive form of an argument reflexive (Avar, Northeast Caucasian); or a head marking (Meadow Mari, Uralic). In addition many languages allow a modifying element as part of the possessive, such as English *own*, French *propre*, etc.

These patterns give rise to two major empirical questions:

- i. What factors govern the distribution of locally bound possessive pronominals versus possessive reflexives? The discussion will focus on the conjecture that the availability of dedicated possessive reflexives in a language correlates with the way the language encodes definiteness. In other words, languages without pronominal definite articles usually employ reflexive possessives while languages with pronominal articles employ simple pronominals (see Reuland 2011, and especially Despic (2011) and (forthcoming), for more discussion). Crucial follow-up questions include a) to what extent this conjecture holds also if a larger class of languages is considered, and b) why it would hold.

This issue is immediately linked to the next major question:

- ii. What is the role of elements such as *own* and *propre*? To what extent do they enforce locality, and how do they do so? These questions bear on fundamental issues in our understanding of anaphoric dependencies, specifically the factors underlying locality of binding domains. More generally we are interested in how ‘local binding’ of a possessive element is encoded, and what each element contributes to the binding pattern that obtains.

The issue of locally bound possessives can be approached from a number of different angles. Since the publication of Chomsky’s *Lectures on Government and Binding* in 1981 the nature of binding and its domains has been in the centre of the linguistic debate. Basic question one may raise include: What is the role of pragmatic versus formal principles? How are interpretive dependencies represented in functional approaches to language? What is the division of labour between syntactic and semantic principles? One of the crucial problems for Chomsky (1981) was the abundance of cross-linguistic variation in binding patterns of anaphors even among closely related languages (e.g. Germanic). Subsequent work, varying from Reinhart (1983) to Chomsky (1995) raised even more fundamental questions about the way anaphoric dependencies are linguistically represented. The nature of this representation is directly relevant for the question of how we can understand and explain locality conditions on binding.

In brief, we suggest that the variation in locally bound possessives may bear on such general questions, but also on very quite framework specific questions. For instance: Can locality be reduced to effects of phases (see Charnavel & Sportiche 2014, Despic, to appear, and also Hicks 2012), or rather to intervention/minimality effects (as may be expected in approaches such as Rooryck & Vanden Wyngaerd 2011 and Reuland 2011). Or do they arise from competition effects as in Safir (2004), and/or spell-out conditions, as in analyses in terms of minimal pronouns (e.g. Kratzer 2009)? Each of these approaches provides its own perspective on the empirical puzzles the variation poses. (For example, if bound variable pronouns acquire their features during feature transmission and get their pronominal shape at PF, why would we have languages in which local binding of a possessive requires a dedicated possessive reflexive instead of a personal pronoun?)

The contributions to the workshop are expected to be based on data from a variety of languages and on insights from a range of theoretical approaches.

**Ellen BRANDNER** (University of Konstanz)  
**Equation semantics as the base for Principle A anaphors**

The talk starts from the decomposition of possessive pronouns into an invariable s-component and the indefinite determiner, resp. the numeral *one*, e.g. German *s-ein*, as proposed e.g. in Corver (2003). The s-component is claimed to be a relic of the IE equative particle \*swe. Historical and dialectal data from Germanic and contemporary Slavic reveal that gender/person marked possessive pronouns (like *her*) are ‘secondary’ and super-imposed on the s-component.

This s-component (= so) induces a (reduced) bi-clausal equative structure which is claimed to be generally employed in natural language to express identity/co-reference (Principle A-anaphors), thus bringing the invariable s-component in reflexive pronouns in the same line as the possessives.

As for possessives, the assumption is that the so-called Possessor-doubling construction, exemplified in (1) with German (but known to exist in virtually all IE languages), is the underlying structure for all constructions with a possessive pronoun:

- (1) dem Vater/pro [s- [ein Haus]]  
          the-dat father/pro his      house

The indefinite determiner has the role to realize a sub-kind reading of the common noun, induced by *so*, see Carlson (1977) and acts as the ‘parameter’ in Haspelmath & Buchholz terms (1998). The possessor plays the role of the standard, i.e. is generally fixed – otherwise the common noun co-varies (bound variable reading). The equation particle normally equals two properties (e.g. “height” as in: *Mary is as big as John*). But the equation of the properties in (1) (the nouns *house*, *father*) would result in a lexical clash. However, what is/can be equaled in such a structure is an abstract location argument – an entity comparable to the event argument in the verbal domain – . Equating the two location arguments results in a BE-AT interpretation, i.e. possession. The ‘standard’ can also be realized as a *pro*, s indicated in (1). As such, its reference can come from ‘outside’ (*pro* is subject to Principle B) and thus, the seemingly contradictory behavior of possessives can be easily accounted for:

- (2) Peter<sub>i</sub> washes [pro<sub>i/j</sub> [his<sub>i/j</sub> hands]] (j= e.g. a child’s hands)

Nevertheless, the binding within the DP is strictly local and thus there is no (lexical) ambiguity in possessive pronouns.

The next step then is to apply this analysis to reflexives: The first observation is that cross-linguistically reflexives consist often of a possessive pronoun plus a body-part expression. This means that the strictly local binding can be derived the same way as with the possessives. As for the body-part-expression, it seems obvious that it is semantically bleached and thus not a restrictor in the semantic sense (no lexical clash). For this reason, the equation may target the referential indices and thus co-reference is possible, in fact required – much in line with Principle A.

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**Pauli BRATTICO and Saara HUHMARNIEMI** (University of Helsinki)  
**Local and non-local licensing of the Finnish possessive suffix**

Finnish encodes possessives by category-neutral head marking: the possessive suffix (Px) can be attached to non-finite verbs, adjectives, adpositions, adverbials and noun heads. There are three schools regarding the analysis of the Finnish possessive suffix: it can be a formal agreement marker (van Steenbergen 1991), a reflexive anaphor (Pierrehumbert 1980, Nevis 1984, Trosterud 1993), or a mixture of both (Toivonen

2000, Kaiser 2003). All analyses share the belief that the possessive suffix must be locally bound by an overt c-commanding antecedent, whether by means of agreement, binding or both. We show that this core belief is false. The possessive does *not* need to be c-commanded by a local (overt) c-commanding antecedent, as shown by (1-4) and other similar data.

- (1) [[äiti-nsä(i) näköinen] poika(i)]  
mother-Px look.alike boy  
'a boy(i) who looks like his(i) mother.'
- (2) [[[äidin(i) ottama] kuva] siskosta-an(i)]  
mother taken picture sister-Px  
'a picture of her(i) sister(j) taken by her(j) mother(i)'
- (3) [kuvat autosta-an(i), [jotka Pekka(i) oli ottanut]]  
picture of.car-Px which Pekka had taken  
'the pictures of his(i) car, which Pekka(i) had taken'
- (4) Äitinsä(i) hakee hänet päiväkodista iltapäivällä  
mother.Px brings him/her from.daycare afternoon  
'His/her mother will bring him/her from the daycare in the afternoon.'  
(discourse-salient antecedent)

These data show that the status of Finnish possessive suffix must be re-examined. We first exclude the possibility that examples (4) are misanalyzed. We then argue by relying on data from (i) overt pronouns, (ii) Condition B/C effects, (iii) sloppy reading, (iv) quantifier binding, (v) spilt antecedents, (vi) locality, (vii) properties of picture nouns, and other sources, that the possessive suffix and its standard and non-standard (i.e., 1-4) binding dependencies are generated by the *presence of a local covert pronominal*. The possessive suffix itself is an agreement marker that reflects the presence of the covert pronominal.

What kind of empty pronominals are we looking at here? In addition to (i-vii), we draw from a recent research by Frascarelli (in prep.), who shows that, and contrary to Holmberg (2010) and the standard literature on the topic thus far, also the Finnish pro-drop null pronoun *pro* that occurs in finite contexts can ignore the c-command condition. Her proposal is that *pro* is bound by a (covert) A-topic in the C-domain. Therefore, *pro* can be bound by "discourse topics", and binding is potentially "mediated" by the covert high A-topic. We follow these ideas and propose that Finnish possessive suffix involves the same *pro*. Specifically, *Finnish possessive suffix is a non-finite agreement marker licensed by a pro-element*.

Finally, we take issue with Frascarelli's proposal that the binder is the A-topic in the C-domain. In Finnish, local c-commanding antecedents exist side-by-side with A-topic antecedents, and are in fact often preferred, whereas there is no syntactic evidence for an A-topic positions inside the C-domain. We propose that *pro* searches the discourse repository for (non-c-commanding wild) antecedent(s) in parallel with grammatical (c-command based) local antecedents, and that the two computations interact with each other.

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**Irina BURUKINA (ABBYY, Russian State University for the Humanities)**

### **Implicit possessives in article and non-article languages**

Most of the world's languages allow simplified ways of marking possessive relations for constructions with inalienable nouns (kinship terms, body-part nouns). In several cases zero possessive markers (implicit possessives) can be used instead of explicit pronouns (Haiman 1983, Haspelmath 2008). Although implicit possessives are syntactically "invisible," their semantic presence is unambiguously understood by language speakers. The main goal of this paper is to describe implicit possessives as a universal linguistic phenomenon. I examine their properties and behavior in languages with and without articles and argue that they have an intermediate syntactic position between possessive pronouns and definite articles.

There are three components to this talk. First, I introduce the main properties of implicit possessives in Russian, an article-less (or non-article) language, with respect to locality and the syntactic and semantic roles of appropriate antecedents. Implicit possessives are frequently used in Russian; they are preferable with inalienable nouns and in several cases are even obligatory, (1). I argue that implicit possessives should be described as syntactic elements. All data comes from the Russian National Corpus, and native speakers were further consulted about semantic interpretation.

- (1) a. *Петя позвонил маме.*  
Peter.NOM called mother.DAT  
'Peter called his mother.'
- b. *Петя сунул руку в карман.*  
Peter.NOM put hand.ACC in pocket  
'Peter put his hand in the pocket.'

The second part of this talk compares properties of Russian implicit possessives to those of zero possessive markers allowed in other article-less languages (Czech, Serbian) and article languages such as Norwegian, German and Spanish, (2). Generally, implicit possessives are allowed in article-less languages, but can only rarely be used in languages that have articles (Loedrup 2010, Vergnaud & Zubizarreta 1992).

- (2) a. *Han stakk hendene i lomma.*  
He put hands.DEF in pocket.DEF  
'He put his hands in the pocket.' (Norwegian)
- b. *Sie wascht das Gesicht.*  
She washes face.DEF  
'She washes her face.' (German)

Finally, I propose a hypothesis about the nature of implicit possessives. I show that implicit possessives are not equal to zero possessive pronouns, as the former are used very differently in languages with and without articles. Furthermore, in article-less languages, implicit possessives are allowed in positions in which no overt possessive pronoun can be used. For example, in Russian possessive relations can be established between an inalienable noun, serving as the subject of a simple sentence, and one of the other elements in the same sentence, (3).

- (3) a. *Родители позвонили Пете.*  
Parents.NOM called Peter.DAT  
'The parents of Peter called Peter.'
- b. *\*Свои/его родители позвонили Пете.*  
His.SELF/his parents.NOM called Peter.DAT  
'His parents called Peter.'

Thus, I argue that implicit possessive markers have properties of both possessive pronouns and the definite article and execute two semantic functions simultaneously: they single out the particular item in the context and, at the same time, often unambiguously connect it with a particular possessor. The dominating function is determined by context.

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**Miloje DESPIC** (Cornell University)  
**Possessives Reflexives and the Phase-based Binding Theory**

In this talk I will investigate a puzzling correlation between two seemingly unrelated phenomena, which was originally observed in Reuland (2007, 2011) and further supported by additional cross-linguistic evidence in Despić (2011, in press). Namely, it appears that possessive reflexives are available only in languages which either lack definiteness marking, or encode definiteness postnominally; languages that have prenominal (article-like) definiteness marking, on the other hand, seem to systematically lack reflexive possessives. For instance, English has a prenominal definite article ‘the’ and disallows possessive reflexives (i.e., \*‘himself’s’). A similar type of contrast can be observed diachronically as well; e.g., within the Romance group only Latin has possessive reflexives, and unlike the Modern Romance languages (e.g., Spanish, Italian etc.), it lacks definiteness marking (e.g., Marej 2011). I will argue that this type of facts supports a particular approach to reflexive binding, specifically, one that has the following properties: (i) binding domains are stated in terms of phases (e.g., Hicks 2009, Lee-Schoenfeld 2008 etc.) (ii) in addition to CPs and vPs, DPs are phases (e.g., Adger 2003, Bošković 2005, Svenonius 2004 etc.), and (iii) DP is not universal – in particular, languages without definiteness marking lack DP (e.g., Bošković 2008). On the assumption that the possessor in DP languages is located right below the DP layer (e.g., Szabolcsi 1983, Kayne 1994), we can explain the lack of possessive reflexives in such languages, if DP as a phase “closes off” the binding domain for the possessor, as illustrated in (1). No such restriction will hold for languages without definiteness marking, however, since by assumption they lack DP.

(1) [DP D [PossP Poss [NP N]]]

At the same time, if the possessor in languages with postnominal definiteness marking is located in D’s edge (e.g., Delsing 1993), it would be available for binding in a higher phase, and consequently possessive reflexives would not be disallowed in this type of DP languages. In the talk I also closely examine Bošković’s (2008) ‘Left Branch Extraction’ generalization, according to which only languages without articles may allow ‘Left Branch Extraction’, and show how it directly follows from the key assumptions of the analysis. Finally, I investigate languages which allow locally bound reflexives in the sentential subject position (e.g., (2)), and show how my proposal can draw some potentially important parallels between the clausal and nominal domains.

(2) John-un caki casin-i chencayla-ko mitnunata.      Korean  
 John-TOP self-NOM genious-be-comp believe  
 ‘John believes that he is a genious.’

In particular, I will entertain the possibility that the phasehood of CP and DP is in part determined by the character of the phrase they immediately dominate; in a nutshell, I will propose that CPs and DPs behave like phases only if they form a complex with TP and PossP, respectively.

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**Daniel HOLE** (University of Stuttgart)

### Bound bridging definites in German and Theta-induced Binding

In this talk, I use German bridging definites to shed light on the mechanics of theta-induced binding (Kratzer 2009, Hole 2014) which targets possessor variables in a local binding configuration. The method of investigation is introspection. In certain reflexivizing constructions, the possessor variable of bridging definites is obligatorily bound. This renders bound bridging definites the German instantiations of reflexive possessive pronouns. (1) is a case in which a subject quantifier may bind the possessor variable of a body-part object. In this construction, as in English, the bridging definite or the possessive may be bound, but they don't have to be bound need

- (1) ...dass jeder diei/seinei/j Hand hob.  
     ‘...that everybodyi raised theiri hands/hisj hand.’

(2) displays a similar configuration with a free dative antecedent.

- (2) ...dass Klara jedemi streng auf seini/\*j/dasi/\*j Schnitzel guckte.  
     ‘...that Klara was looking at everybody’s cutlet in a strict way.’

A crucial fact about (2) is that, with a free dative antecedent, the dative antecedent must bind locally irrespective of the lexical spellout of the left periphery of the possessum DP: Free da-tives bind possessor variables, and they obligatorily do so locally (Obligatory Local Dative Binding; Hole 2012, 2014).

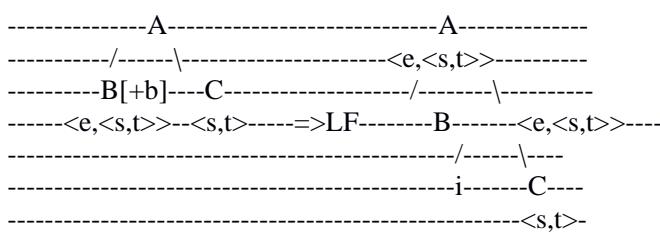
(3) tests the interpretive behavior of a definite article in an embedded clause.

- (3) Klara guckte jedemi so streng auf seini/\*j/dasi/\*j Schnitzel, dass der\*i Appetit schlagartig verschwand.  
     ‘Klara was looking at everybody’s cutlet in such a strict way that the appetite went away immediately.’ (\*bridging definite in the embedded clause)

The bound possessive construal of the bridging definite is only available locally, but not across the clause boundary. Returning to (1), I suggest that this sentence is really ambiguous between a reflexive and a non-reflexive variant, each of them triggered by suitable variants of the agent theta head: a reflexivizing one and a non-reflexivizing one.

Quite generally, then, all locally bound possessor variables can be described as bound by re-flexivizing variants of theta heads. A rule in the spirit of Büring’s (2006) Binder Rule which performs this task, but with a binder theta head as opposed to a DP as the trigger, is provided in (4). (In (4), B is a variable over theta heads and C a variable over potential complements of theta heads. For free datives, C is VP.)

- (4) General format of the theta-induced binding rule (BR-X)



This shifts the main work in reflexivization from pronominal classes to theta heads, quite in accordance with the spirit of recent work by Kratzer (2009) and Reuland (2011): “[S]emantic binders ( $\lambda$ -operators represented as binder indices) are introduced by verbal functional heads, rather than by ‘antecedent’ DPs, as assumed in Heim and Kratzer 1998, for example. Verbal functional heads, rather than DPs, are then the true syntactic antecedents for bound pronouns.” Kratzer (2009: 193)

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**Ekkehard KÖNIG (FU Berlin)**

### The Intensifier Strategy in the Marking of Possessive Reflexives

Possessive (attributive) reflexives are found *inter alia* in Latin (*suus*), in Russian (*svoj*), in Armenian (*ir*), in Scandinavian languages (*sin*) and in East Asian languages (cf. (1)), but seem to be rare in the world’s languages at large, a fact frequently summarized in typological studies by the implicational hierarchy (2) for possible grammatical functions of reflexives.

- (1)     a. [Lena]i tvättar [hennes]j bil. ‘Lena washes her (= somebody else’s) car. (Swedish)  
       b. [Lena]i tvättar [sin]i bil. ‘Lena washes her (own) car.’

(2) DO > IO > OBL > GEN/POSS > SUBJ

Interestingly enough, there is a lexical strategy for the expression of binding in attributive contexts for those languages that do not have dedicated possessive reflexives, which is completely analogous to the one found in languages which have formed and grammaticalized complex reflexive markers by combining personal pronouns and intensifiers in argument positions:

- |   |  |
|---|--|
| (3)     a. Fred hates him.<br>b. Fred hates him+self. | (4)     a. Fred attacked his theory.<br>b. Fred attacked his + own theory. |
|---|--|

Expressions of this type seem to be wide-spread in the languages without dedicated attributive reflexives. Moreover, they generally derive from expressions with the core meaning of possession (Germ. *eigen*, French *propre*, English *own*).

Building on earlier work by Zribi-Hertz (1995), Koenig & Vezzosi (2008) and others, this paper will examine the semantic and syntactic properties of the lexemes typically recruited for the expression of binding (co-reference) both from a synchronic and from a diachronic point of view. Synchronously, it will be shown that these lexemes have lost their original possessive meaning and exhibit the typical properties of intensifiers like German *selbst*, Dutch *zelf* or Russian *sam*. These properties include: lack of exophoric use (together with possessive pronouns) (4a), expression of contrastive opposition (4b), exclusion from contexts where no alternatives are available (4c) and the encoding of logophoricity (4d):

- (4)     a. Take his own car, not yours! \*(+gesture)  
       b. John loves his brother’s wife more than his own.  
       c. Don’t lose your (\*own) head.  
       d. [Strike]i froze, listening, panicking...It would be like her ...to make of his ally a friend, to saturate [his own]i staff with Charlotte’s version of the truth. (Galbraith, *The Cuckoo’s Calling*, p.237)

It will also be shown that the question of whether combinations of possessive pronouns and attributive intensifiers invariably express binding in a local domain requires different answers for different languages (French: yes; English: no). This depends on the degree of grammaticalization and/or lexicalization of the relevant constructions, which will briefly be discussed in the final, diachronic section of the paper. More often than not, languages with dedicated possessive reflexives have no pre-nominal definite article, but the assumption that there is strict correlation between these two properties is confronted with counterexamples even in European languages.

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**Marijana MARELJ** (UiL OTS, Utrecht University)

**Possessives in (a) Bare (and) Minimalist Setting(s)**

Our starting point is the contrast between (1) and (2).

- (1) Everyone<sub>i</sub> loves **his<sub>i/j</sub>** mother
- (2) a. Svako<sub>i</sub> voli **njegovu<sub>\*i/j</sub>** majku Serbo-Croatian (SC)  
everyone loves his-3Ps.Sg.Masc.Poss mother  
*Everyone loves his mother.*
- b. Svako voli **svoju<sub>i/\*j</sub>** majku  
everyone loves self-Poss mother  
*Everyone loves his own mother*

Since the seminal work of Reinhart (1976/1984), it has been recognized that the structural configuration for bound-variable anaphora is that of c-command. A way to derive Reinhart's insight is to capitalize on the similarities between traces and bound pronouns (see Aoun 1982 and Hornstein 2001 a.o.). Starting from Hornstein's account of (1), I argue that - unlike English - SC (2b) is a movement derivation. Treating (2b) as movement requires modifications of Hornstein's account: SC bound pronouns are spelled out traces, rather than results of failed movement. The analysis gives right predictions syntactically and semantically. E.g., in VP ellipsis cases, *svoj* has only sloppy reading:

- (3) Lorens mrzi **svog** komšiju, a i Tristram takodje  
Laurence hates self-Poss neighbor and Tristram too  
*Laurence hates his neighbour, and Tristram does too.*

When possessive pronouns occur in environments that allow movement (e.g., small clauses) only *svoj* gets the bound-pronoun reading. For cases (4a) that this analysis was argued to overgenerate (see Despić 2011), we will explore the Sideward Movement mechanism (see Nunes 2004 et seq. and Hornstein 2001) and also illuminate why (4b) is ungrammatical.

- (4) a. Svaki političar<sub>i</sub> je dao ostavku zbog **svoje<sub>i</sub>/njegove<sub>\*j</sub>** supruge.  
Every politician is gave resignation because self's/his wife.  
*Every politician resigned because of his wife.*
- b. \*Čije<sub>i</sub> je Marko dao ostavku zbog [t<sub>i</sub> supruge]?  
Whose is Marko gave resignation because wife  
*Because of whose wife did Marko resign?*

Differences between English and SC reveal a deeper pattern of crosslinguistic variation. Based on the sample of languages including Dutch, German, Latin, Russian and Spanish, I argue that there is a correlation in the way languages behave with respect to the pronoun insertion strategy and Left Branch Extraction (LBE); languages that disallow LBE pattern with English, whereas those that allow LBE pattern with SC. The split, in turn, is rooted in the presence/absence of the DP-layer, giving further support to the thesis that LBE-languages are determinerless (see Bošković 2005 et seq., among others).

We will explore a stronger generalization that naturally follows from the account of possessives here. If the movement derivation of bound pronouns is dependent on the presence of a DP-layer, then one predicts to find it all languages, restricted to instances where the DP-layer is not projected. To test this hypothesis, we will explore the bare instances of NPs in English type languages.

For Scandinavian languages that seem to challenge the account here, we will seek the possibility to tie the explanation to the generalization proposed in Reuland (2011) that these languages encode definiteness postnominally.

When movement is barred, SC resorts to the pronoun insertion strategy - insertion of a grammatical formative. As LBE is an island violation, this provides evidence in favor of the “competing derivations” view of Movement and Prenominalization.

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**György RÁKOSI** (University of Debrecen)

### On bound possessors in Hungarian

Hungarian has a prenominal definite article and no dedicated possessive reflexive, but it shows an interesting array of variation in encoding pronominal possessors anaphoric to a clause-mate antecedent. This talk aims at an adequate description of this variation in terms of recent advances in the analysis of possessor anaphora (see especially Reuland 2011 and Despić 2011).

Non-extracted possessors are in the nominative and they follow the definite article in Hungarian. Pronominal possessors agree with the possessum. They can be *pro*-dropped, but if they are overt, then the article is compulsory (1). The basic argument-reflexive *maga* ‘himself’ can also function as a possessor, and it requires the presence of the definite article (2). Qua possessors, complex reflexives (3, 4) do not require the definite article. In this, they resemble personal names and a subset of possessive noun phrases that act as possessors (5).

Reuland (2011) and Despić (2011) both argue that definiteness marking on the possessive DP correlates with the lack of a local syntactic dependency between the possessor and a matrix antecedent. I show in this talk that the Hungarian data in (1-5) in fact support this proposal (and this proposal is also in line with É. Kiss’s (1987) claim that the Hungarian possessive noun phrase constitutes a binding domain of its own). In particular, I will focus on the following points. The overt prounoun possessor can only be coreferential with the matrix antecedent, and it cannot be bound (1). Argument pronouns cannot normally take local coreferential antecedents in Hungarian, unlike in English. As a possessor, the basic reflexive can only be bound, but it is either logophoric in nature or the matrix predicate (including the possessive phrase itself) denotes a naturally or inherently reflexive relation. In either case, the reflexive does not act as a reflexivizer in the sense of Reinhart & Reuland (1993), and thus it does not form a local dependency with its antecedent. The definite article is optional in the case of complex reflexives (3, 4). Independent evidence is available that these complex reflexives are syntactically richer and they are more referential than the basic reflexive *maga*. Unlike the basic reflexive, but like possessive noun phrases and names (cf. 5), they can raise to the D-head and definite-mark the possessive DP that they are part of.

- (1) *Felfedezt-em* \*(az) én határ-a-i-m-at.  
discovered-1SG the I.NOM limit-POSS-PL-1SG-ACC
- (2) *Felfedezt-em* \*(a) magam határ-a-i-t.  
discovered-1SG the myself.NOM limit-POSS-PL-ACC
- (3) *Felfedezt-em* (a) saját magam határ-a-i-t.  
discovered-1SG the own myself.NOM limit-POSS-PL-ACC
- (4) *Felfedezt-em* (az) önmagam határ-a-i-t.  
discovered-1SG the myself.NOM limit-POSS-PL-ACC  
‘I have discovered my (own) limits.’
- (5) *Felfedezt-em* (a) világ-om/János határ-a-i-t.  
discovered-1SG the world-POSS.1SG.NOM /John.NOM limit-POSS-PL-ACC  
‘I have discovered my world’s/John’s limits.’

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**Johan ROORYCK and Elena KARVOVSKAYA** (Leiden University Centre for Linguistics)

### ***Own and himself: two sides of the same coin***

In this paper, we argue that the possessive intensifier *own* can function as the adjectival counterpart of the nominal anaphor/intensifier *himself*.

*himself* has 3 different uses: as an anaphor in (1), and as an adnominal or an adverbial intensifier in (2ab).

- (1) John hates himself (anaphor)  
 (2) a. The headmaster himself received John adnominal intensifier)  
     b. John makes his clothes himself. (adverbial intensifier)

The *adnominal* intensifier marks the presence of alternatives to the DP *the headmaster* and often has a scalar interpretation.

We concentrate on the 3 main interpretations of the *adverbial* intensifier (Eckardt 2001, not following her terminology). They are illustrated in (3) in form of question-answer pairs:

- (3) Answer: No, John makes his clothes himself.

*Question:*

- a. Did John **buy** his clothes in the store? (no alternative actions for *make*)  
b. Did John make his clothes **with his mother**? (no additional agents)  
c. Did **John's mother** make his clothes? (no alternative agents for *make*)

The possessive intensifier *own* shares some of the interpretations of intensifier *himself* (*own* also has other readings as, for example, “strong possession” (Spathas 2014)). For instance, *own* has the scalar interpretation similar to the adnominal use of intensifier *himself*, as shown in (4) (Charnavel 2012):

- (4) John didn't recognize his own daughter. (scalar)

In (4), *John's daughter* is ranked higher than other people for John not to recognize. However, of the 3 interpretations of the adverbial intensifier in (3), only 2 are attested for *own*: the ‘additional agents’ reading is missing.

- (5) *Answer:* No, John makes his own clothes.

*Question:*

- a. Did John **buy** his clothes in the store? (no alternative actions for *make*)  
b. # Did John make his clothes **with his mother**? (no additional agents)  
c. Did **John's mother** make his clothes? (no alternative agents for *make*)

We will present a syntactic analysis of both intensifier *own* and *himself* in terms of Rooryck & Vanden Wyngaerd's (2011) proposal for anaphoric and intensifier *himself*. We observe that the 3 interpretations that involve alternative actions, alternative agents, and additional agents all revolve around the vP. We therefore propose that these interpretations are calculated when intensifier *himself* and the DP containing *own* are positioned in an adjoined position to VP. The fact that *own* lacks the 'additional agents' reading will be derived from its syntax: while *own* is part of the DP, *himself*, a floating quantifier, is an adverb and therefore syntactically 'freer' to associate with constituents associated with the vP. The core semantic operation of the intensifiers *own/ himself* is over focus alternatives (Eckardt 2001, Hole 2002, Ahn 2010). The syntactic position of the intensifier determines the shape of the allowed focus alternatives. The scalar interpretation is contributed by the syntactic configuration in combination with the properties of the NP modified by the intensifier. Nouns like *headmaster* or *director*, modified by *himself*, highlight a world-given hierarchical scale of people in which the DP modified by the intensifier ranks highest.

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**Giorgos SPATHAS** (University of Stuttgart)

**A dedicated possessive reflexive in English**

The possessive marker *own* exhibits a complicated behavior that gives rise to a wide range of subtle meaning differences. Work on Binding Theory has treated *own* that modifies a possessive pronoun, as in (1), as a reflexive anaphor (Higginbotham 1985, Safir 1996), as a fourth type of anaphoric expression (Zribi-Hertz 1995), or an intensifier that is an add-on on an existing binding dependency (Baker 1995).

- (1) Zelda painted her own room.

This paper argues that there are at least two distinct items; *ownR*, a marker of reflexivization, and *ownIP*, a marker of inalienable possession. We detect *ownR* by examining the alternatives it generates when in focus (cf. Spathas 2010 for local reflexive anaphors). Whereas focus on *ownR* gives rise both to alternatives to the subject (SA), as in (2a), and the object (OA), as in (2b), *ownIP* only gives rise to OA, as shown in (3).

- (2) a. Zelda didn't paint her OWN room. OSCAR painted Zelda's room.  
b. Zelda didn't paint her OWN room. She painted OSCAR's room.

- (3) a. Zelda didn't paint the door of her OWN room. #OSCAR painted the door of Zelda's room.  
b. Zelda didn't paint the door of her OWN room. She painted the door of OSCAR's room.

Crucially for our ambiguity account, the distribution of SA cannot be reduced to the distribution of her *own*, as seen in the contrast in (2)/(3). So, like English reflexive anaphors, *ownR*, as detected by SA, not only leads to obligatory reflexivization but also obeys locality and c-command restrictions. We provide a compositional analysis of examples with *ownR* that derives its distribution without the need to invoke any item-specific principle of Binding Theory. Obligatory reflexivization and the generation of SA follow from the lexical semantics of *ownR*. *ownR* is an arity reducer, as in (4), that operates on a derived predicate (e.g.  $\lambda x \lambda y. y \text{ painted } x \text{'s room}$ ). To derive the predicate, *ownR* undergoes QR to the head introducing the external argument (5). After Index Re-analysis (Heim&Kratzer 1998) the sister of *ownR*, vP1, denotes exactly the relation that the reflexivizer can operate on, (6). Since derived predicates are generated via syntactic movement and movement is obligatory for interpretational reasons, the locality restrictions of *ownR* follow from independently motivated restrictions on movement.

- (4)  $[[\text{ownR}]] = \lambda R \text{est} \lambda x \lambda e. R(x)(x)(e)$   
 (5)  $[\text{vP } \text{ownR1 } [\text{vP1 } 1 \text{ [vP2 } v \text{ [VP } V \text{ [DP } [D \text{ her1 } t\text{-ownR}] \text{ [NP } \text{room}]]]]]$   
 (6)  $[[\text{vP1}]] = \lambda x \lambda y \lambda e. y \text{ painted } x \text{'s room in } e$   
 (7)  $[[\text{vP}]] = \lambda x \lambda e. x \text{ painted } x \text{'s room in } e$

The analysis (i) unifies the treatment of reflexivization in English, as local reflexivizers like *herself* have also been shown to be arity reducers (Spathas 2010) that are interpreted after movement (Lechner 2012) and (ii) provides novel evidence for the syntactic derivation of complex predicates.

**Anne TEMME and Elisabeth VERHOEVEN** (Humboldt-Universität zu Berlin)

### Backward Binding of German possessives

In our talk, we address the following questions: 1. What is a proper binding configuration for locally (backward) bound possessives? 2. Does German license Backward Binding (BB) between subject possessives and object antecedents?

At first, we discuss the empirical and theoretical basis on which we evaluate proper binding. We argue for the emergence of binding illusions under quasi-bound configurations (see also Fox & Sauerland 1996). According to this, empirical data that addresses the binding requirements of bound possessives need to be controlled for operators inducing opacity, since they license E-type interpretations of  $\forall$ -quantifying variable binders; see example (1).

- (1) a. \*Yesterday, his<sub>i</sub> mother visited everyone<sub>i</sub>.
- b. In general, his<sub>i</sub> mother visits everyone<sub>i</sub>.

The episodic structure in (1a) involves Q-raising across a co-indexed variable which, as expected, downgrades the structure due to WCO violations. In (1b) on the other hand, the induced genericity leads to unexpected WCO tolerance. The relevant reading can be paraphrased as ‘For every relevant situation  $s$  there is an individual  $x$  in  $s$  and  $x$ ’s mother visits everyone( $x$ ) in  $s$ ’. In this case, the possessive and the E-type-everyone are codependent on a generic operator.

Since some psych verb subclasses are argued to have underlying “inverted” syntax compared to canonical transitive verbs, they provide a perfect base for research on BB; with these verb types binding is licensed by a pre-derivational c-command relation between the quantifier and the possessive; see example (2).

- (2) a. Yesterday, his<sub>i</sub> health worried every patient<sub>i</sub>.
- a'. [[poss(i)]...[ V<sub>EXP</sub>...Q<sub>Binder(i)</sub> {poss(i)}]]

We conducted two yes/no-judgment studies (for accusative and dative experiencer structures) in order to test the impact of the factors SENTENCEASPECT (transparent, non-transparent) and STRUCTURETYPE (agentive, experiencer) on the acceptability of BB structures in German. See (3) for an example of target sentences containing accusative agentive verbs. The test subjects ( $n=75/73$ ) were asked to judge the grammaticality of the sentences under the assumption that the two marked elements (i.e. putative binder and bindee) are coreferent.

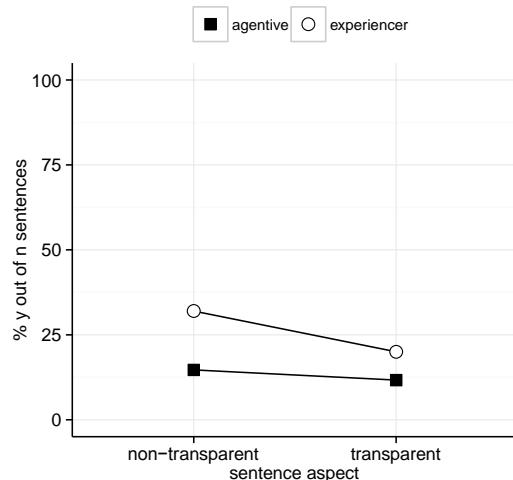
- (3) a. Gestern haben die Eltern seiner Freunde jeden begrüßt.  
‘Yesterday, the parents of his friends welcomed everyone.’
- b. Im Allgemeinen würden die Eltern seiner Freunde jeden begrüßen.  
‘In general, the parents of his friends would welcome everyone.’

Based on material controlled for proper binding configurations, we show that the structure types differ with respect to the licensing of BB. Accusative experiencer structures such as *worry* or *depress* are more tolerant with respect to Weak Crossover compared to agentive verbs (e.g., *visit*, *call* or *hug*), which supports the much-debated assumptions about special Psych effects (cf. Landau 2010). The same effect arises with dative experiencer structures. However, the positive decision rate for BB structures was very low, what indicates a rather weak acceptability for violations of binding configurations. See Figure 1 and Table 1 for the illustration of the results.

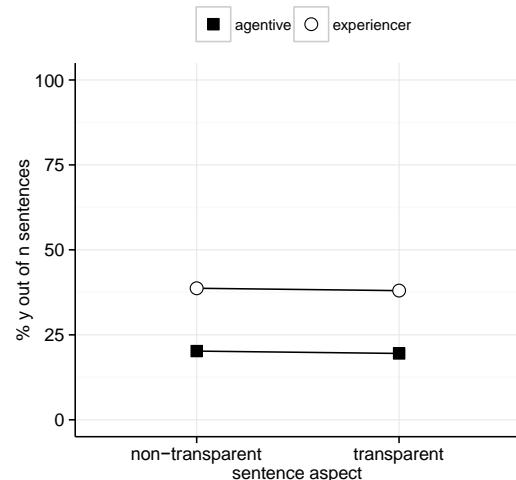
In sum, we provide evidence for binding illusions under opacity as well as for significant effects of structure type on BB of possessives in German.

Fig. 1. Proportions of 'yes' choices

a. Accusative



b. Dative



	fixed factor	estimate	SE	<i>z</i>	<i>p</i> (>  <i>z</i>  )
accusative	intercept	-5.87	.96	-6.09	< .001
	VERB CLASS (experiencer)	3.13	.86	3.64	< .001
	SENTENCE ASPECT (non-transparent)	-1.07	.23	4.67	< .001
dative	intercept	-2.46	.37	-6.69	< .001
	VERB CLASS (experiencer)	1.64	.30	5.05	< .001

**Table 1. Mixed effect regression results***References*

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**Svetlana TOLDOVA** (National Research University "Higher School of Economics")

**Locally bound possessor encoding in languages with head-marking possessive constructions.**

This paper deals with typology of constructions for encoding locally-bound possessors in languages with possessive affixation. The study is based on data from the Uralic (Mari, Komi, Udmurt, Moksha (Finno-Ugric), Nenets, Enets (Samojedic) and Altaic languages (Bashkir, Tatar, Khakas, Kazakh (Turkic), Nanai, Ulchi, Udihe, Uilta (Tungusic)). In these languages, the possessive-bound morphemes can or must be affixed to the possessee. The question is what the binding properties of these affixes are. The other issue whether there are some dedicated devices to mark a locally bound possessor in this type of languages. The goal of this research is twofold: to reveal clusters of features shared by all the languages in question, and to find out to what extent variation is possible. The research is based on corpus and fieldwork data. The main property of possessive constructions in these languages is the possibility of double possessor expression within a nominal complex: they can have an overtly expressed possessor plus a bound possessive morpheme. For the most of these languages, the omission of a possessor is possible. The possessive marker has the pronominal properties in this case.

Within the studied language groups possessive affixes form two different classes with respect to binding properties: the pronominal-like markers and the reflexive possessive markers. The latter are observed in Tungusic languages. These languages have two series of possessive markers. The Disjoint-subject possessor DP (NP) triggers pronominal non-bound possessive markers, while the possessor, coindexed with the clause subject, triggers reflexive possessive affixes (inflecting for number but not for person).

All other languages have pronominal possessive affixes only. However, for the majority of them, the two classes of constructions are possible: the constructions with a pronominal possessive affix without overt possessor, and the construction with a reflexive pronoun for the possessor (as in (1)):

- (1) er' loman'-s' kel'ksi (es') d'ed'e-nc  
     every man-nom.sg.def loves(praes.3sg) self mother-acc.3sg.poss  
     Every man loves his mother

The variant with a reflexive is coindexed with the Subject. The variant with a possessive marker without reflexive refers to any discourse salient referent. The main puzzle is co-existence of both strategies for bound possessor encoding.

The two types of languages have some prominent features in common:

- (i) they have φ-featured reflexive pronouns (inflected in case and number); the argument reflexive pronouns in languages with reflexive affixation lack the possessive markers;
- (ii) historically, the source for the reflexives are nouns ‘soul’, ‘body’ etc.
- (iii) there is a bare stem form for the reflexives; the scope of usage for it is the possessive constructions and postposition constructions;
- (iv) the overt reflexive in the possessive construction is optional.

The existence of bare-stem reflexive possessive constructions as well as correlation between the types of possessive affixes and possible locally bound possessor encoding can be accounted for within the DP/NP opposition approach (Bošković 2008) or phases-based approach (Despić, forthcoming). For investigated languages, the possessor binding is encoded primarily via possessive affixes (pronominal or reflexive). The usage of a dedicated pronoun is optional and depends on pragmatic reasons. It is used in emphatic or contrast context.

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**Anna VOLKOVA** (National Research University, Higher School  
 of Economics, Moscow & University of Utrecht)

#### **Locally bound possessives in Mordvin languages**

Reuland (2011) and Despic (2011, forthcoming) propose the following correlation between the prevalence of dedicated reflexives and definiteness marking: Languages without prenominal definite articles employ dedicated reflexive possessives while languages with prenominal definite articles employ simple pronominals. The question is, then, why this would be so, and whether more basic properties of the computational system underlie this correlation.

The present paper contrasts data on the use of locally bound possessives in two Mordvin languages: Shoksha Erzya and Moksha. Neither language has prenominal definite articles, hence in both one would expect to find a dedicated reflexive possessive. In Moksha, indeed, a dedicated reflexive possessive es' is used to encode this relation (1), while in Shoksha Erzya a genitive form of a pronominal is employed (2).

- (1) Son kel'k-si es' c'ora-nc.  
     S/he love-NPST-3SG.S.3SG.S self son-3SG.POSS.SG.GEN  
     She loves her son. (Moksha)
- (2) Son aj-n'ijh-sa-za sons'inde brat-t.  
     S/he IPF-see-PRS-3SG.O.3SG.S s/he.INTF.GEN brother-DEF.GEN  
     He sees his brother. (Shoksha Erzya)

Moksha es' is feature deficient in number and person (which is complemented by the obligatory presence of a possessive marker on the head noun), unlike the pronominal in Shoksha Erzya.

The question is then, what could explain the difference, and what it entails for the Despic-Reuland conjecture. In order to answer it we will have to consider the precise way in which the dependency is encoded.

I assume that the basic mechanism to syntactically encode local binding of dedicated reflexive possessives is Agree (see, e.g. Reuland 2011 for an implementation), which results in chain formation between anaphor and its antecedent. Crucial for syntactic encoding to obtain is that i. the goal (the bidee) is phi-feature deficient (an anaphor), and ii. no intervening factor on the path between binder and bidee blocks chain formation. If chain formation is blocked (for instance by an intervening phase boundary, i.e. the dependency is not sufficiently local), a phi-feature deficient potential bidee cannot be valued and interpreted, hence a pronominal must be used instead. Conversely, if no factor intervenes, the dependency is too local for a bound pronominal to be licit (see Reuland 2011 for an explicit derivation).

In case of reflexive possessive es', Agree results in chain formation between the subject of the clause and es', which occupies a Poss position in the nominal complex.

- (3) [VP V [PossP es' [NP Case Poss N] ]]

The structure of the clause Shoksha Erzya is parallel to that of Moksha, therefore using locally bound pronominal, which is fully valued for phi-features, is expected to be illicit, contrary to fact. However, at closer inspection it turns out that the form used in Shoksha Erzya is the genitive form of an emphatic pronominal (glossed INTF). I claim that the use of the emphatic form creates an additional level of embedding. It introduces the necessary intervening factor and makes the dependency sufficiently non-local. This indicates that the relevant factor is not the presence of a DP shell on the object NP per se, but that a broader range of intervening factors enters into an explanation.

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## WORKSHOP

### Managing multilingualism: Contact, attitudes and planning in historical contexts

#### *Convenors*

**Gijsbert Rutten** (Universiteit Leiden), **Joseph C. Salmons** (University of Wisconsin – Madison), **Wim Vandebussche** (Vrije Universiteit Brussel) and **Rik Vosters** (Vrije Universiteit Brussel)

#### *Description*

The study of contact among speakers of different languages or varieties and its linguistic outcomes is a flourishing field (see Thomason & Kaufman 1988, Van Coetsem 1988, Hickey 2010 and many more). Much work on language contact, however, focuses primarily on synchronic data and/or on structural effects of language contact. In this workshop, we shift attention to situations of contact in historical settings (cf. Braunmüller & Ferraresi 2003, Kossmann 2013, Schrijver 2014, Stenroos et al. 2012). In addition, we seek contributions which do not simply focus on contact-induced changes in the grammatical system, but which also take into account the sociolinguistic conditions of the contact (Schneider 2007), especially the sociolinguistic results of contact between speakers and communities of different varieties – in terms of attitudes, perceptions, ideologies, identity and planning (Hüning et al. 2012, Peersman et al. to appear 2015, Rouchdy 2002).

Topics to be discussed include:

- contact-induced changes, and the attitudes and perceptions they evoke in speakers and communities – beyond the level of loan words and discourses of lexical purism;
- the interplay of language ideologies such as standard language ideology and ideas about homogeneity and purity on the one hand, and language contact resulting in heterogeneity and/or language mixing on the other;
- language planning and language policy initiatives targeted towards reducing or promoting contact, or towards reducing or promoting the insertion of ‘foreign’ elements into the system;
- the linguistic biography of multilingual individuals in relation to individual and group identities;

- societal and individual multilingualism vs. metalinguistic discourse prototypically focusing on monolingualism;
- contact in colonial settings, and formal and informal planning activities connected to it;
- language-in-education policies aiming at the reduction of variability, heterogeneity and multilingualism;
- the multilingual experiences of migrating individuals and communities, and their linguistic consequences;
- domain-specific and/or socially conditioned language choice in situations of societal multilingualism.

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**Kurt BRAUNMÜLLER** (University of Hamburg)

### **Language change due to covert multilingualism and second language acquisition**

Covert multilingualism (CM) and second language acquisition (SLA) have been stepchildren as far as theoretical approaches to language change are concerned. Therefore we will focus on these two issues, emphasising some of the societal consequences.

CM is a recently discovered and under-researched language contact phenomenon that has its origin in unbalanced or incomplete (individual) bilingualism. The changes in grammar caused by CM are gradual and not salient, although these *ad hoc*-mutations sometimes offend certain linguistic norms. But when most speakers of that linguistic community are bilinguals and master the same languages on a high proficiency level, these individual and often peripheral changes due to another linguistic system will not be noticed as deviant or impeding mutual understanding. Moreover, CM can be regarded as one of the sources of the emergence of (new) regional languages.

SLA plays an important role in this kind of linguistic change as well: Adults tend to simplify the target language, i.e. they often do not acquire equivalent or alternative constructions to be found in that language and they prefer to use grammatical replications (cf. Heine & Kuteva 2005: ch. 2) that mirror most likely their own (source) language.

We intend to show that not only deviations from the grammatical norm are due to CM but also that grammatical replications from L2 may enter the L1 because they facilitate frequent code switching and narrow the distance between these two languages. The deepest impact of this kind of mutual inter-linguistic contact is, however, to be found between genetically related languages (Braunmüller 2009).

The theoretical background is mainly based on both Grosjean's Bilingual Mode Theory (1999) and Muysken's hypothesis (2000) that bilinguals tend to prefer Congruent Lexicalisations. As far as SLA is concerned, we rely on the research surveys displayed in Montrul (2008) and Meisel (2011). The approach to CM has been developed and elaborated by the author himself. We will also shed more light on Trudgill's (1986) term 'creoloid' and elaborate how this outcome of language change can be defined more precisely in terms of CM. This will be demonstrated by reference to Dano-Norwegian. On top of that, SLA-phenomena can be considered some sort of a litmus test of what is absolutely mandatory for a sufficient command of a language and which competing alternative constructions seem to be 'superfluous' (Braunmüller 2015: 23-26).

Our presentation focuses on (a) *Faroese* as an until recently unidentified contact language, (b) *Danish as used on the Faroe Islands* that best can be described as a contact-induced variety of Mainland Danish, and (c) the role of another non-received variety of Danish, *South Schleswig Danish*.

The data are based on three corpora, (a) on a 5-years project on linguistic variation on the (balanced bilingual) Faroe Islands (cf. Petersen 2010), (b) a collection of deviant language use in the Danish minority news paper *Flensborg Avis*, and (c) a dissertation on the linguistic use of school children in the Danish border region (Kühl 2008).

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**Rita FRANCESCHINI** (Free University of Bozen) and **Chiara MELUZZI** (Free University of Bozen / University of Pavia)

### Managing multilingualism in South Tyrol in a historical perspective

This work aims to contribute to the workshop "Managing Multilingualism" by exploring how several languages were managed in South Tyrol in the XVIII and early XIX century. South Tyrol is known for being characterized by manifold language contact phenomena (Hickey 2010). This area became part of Italy after War World I. Previously it was part of the Tyrolean and, then, the Habsburg kingdom. Due to its position at the crossroads of Germanic and Romance worlds, South Tyrol has been fulfilling a bridge function ever since.

Despite official documents being primarily monolingual, many private documents reveal multilingual practices throughout the centuries. This corresponds to the concept of "hidden multilingualism" (Braunmüller & Gabriel 2012) and an approach known as "history from below" (Vandenbussche et alii 2007). The largest part of the documents we have analysed so far originates from the archive of the Magistrato Mercantile, a trade chancellery instituted in Bozen in 1635 for the supervision of contracts, tolls, and possible arguments among traders. In Bozen, four annual fairs are attested from the XV century onwards, with merchants coming from almost all over Europe (Denzel 2004). Magistrato Mercantile, despite its Italian name, was in fact multilingual, since the head members were elected in equal numbers from German and Italian merchants. Nowadays, the documents are preserved at the Provincial Archive in Bozen. They consist of 58 record books, and 570 packets of acts and other documents from between 1635 and 1851. However, these documents have never been completely transcribed nor analysed from a linguistic perspective. These records testify that at least four languages were used, namely German, Italian, French, and Latin. Some instances of English have also been found, but only in few baptism certificates, which also feature a French translation as required by the counsellors of the Magistrato Mercantile. Finally, more documents, especially personal correspondence, are preserved (some of them already in a digital form) at the Chamber of Commerce in Bozen: they belong to the so-called "Menz Archive" related to one of the most important trafer family in South Tyrol. These documents are preserved at the Chamber of Commerce in Bozen, and they are partially digitalized.

Our results show a clear divide between official documents, which were strictly monolingual, and multilingual ego-documents. Apart from the choice of the language in each type of document of the corpus we have compiled so far, multilingual practices also emerge from glosses, for example comments,

summaries, and personal notes. For example, there are letters written from Augsburg in 1737 which present a French text and an Italian summary on the left margin, which was probably added by the addressee in Bozen. Glosses may also appear in German, but not, as far as we know, in French or Latin, thus indicating different usage of languages that were part of the linguistic repertoire of traders in Bozen.

In conclusion, this work investigates how multilingualism was managed at an unofficial and more “hidden” level, both as an individual and a social practice in an officially monolingual context.

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**Chiara GHEZZI** (University of Bergamo)

#### **Thanking formulae in the history of Italian: The role of contact with French**

This study analyses the role of language and cultural contact with French in the socio-historical development of Italian thanking formulae. Gratitude formulae, as Present-Day Italian *ringrazio* ‘I thank’ and *grazie* ‘thanks’, are formulaic and ritualized utterances which codify social deixis. Such utterances typically contain linguistic expressions that have been reduced to the status of extra-sentential markers of polite behaviour (Watts 2003: 168-169; Jautz 2013).

The analysis of the development that characterizes different thanking formulae from an historical sociopragmatic perspective proves extremely rewarding. On one hand the emergence of different expressions is connected to the performative properties of directive speech acts in which the forms functionally appear; on the other hand the mitigating and polite function of forms make them socially standardized ways of organizing interpersonal encounters deeply embedded in peculiar historical and socio-cultural contexts (Goffman 1967; Coulmas 1981). The use of gratitude formulae is thus organized according to socio-cultural norms, established by each society, which regulate the appropriate ‘polite’ behaviour of its members (Taavitsainen and Jucker 2010).

Moving from the 14th century, the Italian repertoire of thanking forms includes performative locutions and verbs, mainly associated with the Latin etymon *gratia* ‘favour’ (*rendo grazie* ‘I give thanks’, *ringrazio* ‘I thank’), and two concurrent holophrastic forms (i.e. *grazie* and *gran mercé* both meaning ‘thanks’).

*Grazie*, which is today the only attested holophrastic form, has pragmatalized through the routinization and crystallization of the locution *rendo grazie* ‘I give thanks’. *Gran mercé*, which was the only attested holophrastic form in the 14th century, probably entered Italian as a pragmatic borrowing from French during the Middle Ages (cfr. Fr. *grand merci*, Hope 1976; Andersen 2014). The form however is scarcely attested in the 20th century and has completely disappeared from Present-Day Italian.

By means of a balanced corpus of speech-related texts (prose fiction, as novellas and novels, and comedies) written in the 14th, 16th, 18th, and 20th centuries, this study describes the development of the Italian repertoire of thanking formulae in those centuries. Furthermore, through the analysis of vocabularies, grammars, and discussions on appropriate language behaviour written in the same years, the study also explores the role played in such a development by the sociolinguistic and cultural conditions of contact with French, especially as regards writers’ overt and covert attitudes towards the language.

In particular, it will be shown that the analysis of variation in the frequency of different forms within the repertoire of thanking formulae can be fruitfully correlated to different waves (in the 13<sup>th</sup>- 14<sup>th</sup> and 18<sup>th</sup> century, respectively) in which French language has exerted a major influence on Italian due to the salience of French culture for very different historical and socio-cultural reasons.

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**Karoline KÜHL** (University of Copenhagen)

### The contact-induced development of three Northern Europe Danishes

Despite its (by now) small size, Denmark has left surprisingly many linguistic traces in Northern Europe. Faroe Danish on the Faroe Islands, South Schleswig Danish in Northern Germany and historical Dano-Norwegian in Norway are three varieties of Danish outside Mainland Denmark that are shaped by language contact with other West or North Germanic languages (Faroese, German, and South Norwegian dialects, respectively) in (former) Danish dependencies. In the context of the accepted workshop ‘Managing multilingualism. Contact, attitudes and planning in historical contexts’, I will sketch the contact-induced change of these varieties based on the framework of post-colonial Englishes provided by Schneider (2007). Although neither the Faroes, South Schleswig or Norway are/were actual Danish colonies, they share(d) an institutionalized political connection with Mainland Denmark, Danish administration, Danish as the prestigious H-variety and, at least on the Faroes and in Norway, pronounced Danish political and cultural authority. The aim of the talk is to show how – and which – social factors (such as speakers’ attitudes towards the local variety of Danish, choice of group affiliation, communicative function of local variety) predict the amount and kind of contact-induced change and, furthermore, the possibilities of focussing (sensu Le Page & Tabouret-Keller 1985) and Ausbau of Faroe Danish, South Schleswig Danish and Dano-Norwegian. In the comparison of the varieties, I shall adopt a bird’s-eye perspective (similar to Schneider’s approach) but exemplify the differences in the contact-induced development of the varieties by linguistic features (cf. Kühl 2015). The comparison of one by now focused and codified variety (Norwegian Bokmål with its origin in Dano-Norwegian) with two contemporary Danish contact varieties (Faroe Danish, South Schleswig Danish) entails a diachronic perspective on the linguistic development of these three Northern European Danishes.

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**Samantha LITTY** (University of Wisconsin – Madison)

### Flying under the radar: Variation in Word Final Obstruent Neutralization in Wisconsin English

In an attempt to integrate the distinct research traditions of historical sociolinguistics and modern sociophonetics, I add acoustic analysis from historical recordings to historical sociolinguistics and greater time depth to modern sociophonetics to see what historical sociolinguistics can tell us about modern phonetics and how those changes can inform us about the past. I focus here on how the neutralization of a ‘voicing’ contrast in final obstruents in German has led to new patterns of feature loss when imposed on English, using real- and apparent-time data to track changes in Wisconsin English speech sounds from the 1850s to the present.

German neutralizes the distinction between lenis and fortis consonants in word final position, so that words like *Rad* “wheel, bicycle” and *Rat* “advice” are pronounced the same, while general American English maintains a distinction. Purnell et al. 2005 show that English in Southeastern Wisconsin distinguishes final obstruents differently than reported for General American English, as well as differently than what would be expected if this were simply taken over from German. Initial results from Wisconsin English support the view that final obstruent neutralization (hereafter FON) is a feature once imported by immigrant speakers of German, Dutch and Polish among others. FON, like the ‘stopping’ of interdental fricatives (e.g. producing [ð] in function words like *them*, *there* and *those* as [d] in “*dem*, *dere* and *dose*”), is another substrate influence stereotypically associated with German. Both are common in Wisconsin, often linguistic “stereotypes”, or “overt topics of social comments and subject to both correction and

hypercorrection" (Labov 1994: 78). However, over time FON has lost the evaluation of its 'Germanness' and been reallocated as a regional marker. In English, FON's 'Germanness' is a 'stealth feature', that insiders and outsiders are often not conscious of, or an "indicator" (Labov 1994: 78). It has gone widely unnoticed so no social stigma is attached and there is also no effort in schools to correct this as with 'non-stealth' features, like with 'stopping'.

Examples such as "blot", "calve" and "ticked" for "blood", "calf", and "ticket", suggest FON, and writers often hypercorrect in places where neutralized obstruents would not be expected, like not distinguishing between "send" and "sent" and writing "send" in all tenses. Later, as generations transitioned to the majority language (English) examples of FON are limited, suggesting that writers stopped neutralizing final obstruents. This is striking because the acoustic data of contemporary English speakers shows monolingual English speakers living in the same areas 3+ generations after the major waves of German immigration stopped, where the implementation of features that would mark the distinction as expected in Standard English, are not present (Annear et al. (manuscript), Purnell et al. (2005)). Preliminary analysis of contemporary speech supports this, and expands upon previous work (Bagwell & Olson, Annear et al., Purnell et al. 2005a, b, Salmons & Purnell 2010, among others) by increasing the geographic region to include South Central Wisconsin as well as the time period by looking at English from the mid-19th century to contemporary speakers.

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**Katherine MCDONALD** (University of Cambridge)

#### **Oscan and Greek in Italy: Contact Phenomena and Domain**

The study of language contact in the ancient world has been an area of huge growth over the past ten years. Ancient multilinguals are now seen as managing their languages creatively and independently, often playing on the associations of each language to display a mixed or complex identity. From Cicero's letters, to Egyptian papyri, to Roman funerary epitaphs, the bilingual speakers of Latin and Greek have been explored in greater and greater detail. Landmark works in this field are the seminal volumes by Adams (2003 and 2007), but the proliferation of collected volumes also reflects the depth and breadth of the interdisciplinary work which has been done on language contact in all corners of the ancient Mediterranean.

However, in areas where sources are more limited, scholars have been hesitant to make sweeping claims about the nature of language contact, even in communities where societal bilingualism is likely to have existed for many centuries. Languages only attested in fragmentary epigraphic corpora have therefore not always received a great deal of attention in historical sociolinguistics, despite these texts representing our best evidence of many of the communities across the ancient Mediterranean. In response to this problem, this paper asks how we should go about interpreting the evidence of ancient language contact in small or fragmentary corpora of texts.

This paper contributes to the growing methodological framework for fragmentary languages, adding perspectives from Greek/Oscan contact in Southern Italy. Based on research on South Oscan and on-going work tied to the AHRC-funded "Greek in Italy" project, I suggest several refinements for interpreting fragmentary evidence of language contact from an interdisciplinary point of view. This paper stresses the importance of considering domain and text-type in interpreting the evidence. Data gathered so far suggests that the writers of South Oscan inscriptions appear to have thought influence from Greek to be more appropriate to some genres than others. This paper outlines the data gathered from a range of different text

types from Southern Italy, enumerating and contextualising all instances of a range of contact phenomena in the corpus. For example, the majority of the eight curse tablets written in South Oscan show the use of Greek code-switching or borrowing, including one curse which code-switches from Oscan to Greek and another which shows unusual borrowing of Greek morphological endings. The level of contact phenomena in dedicatory texts, of which around 50 survive, is much lower and often limited to the borrowing names of deities such as Apollo.

This paper argues that the epigraphic habit of areas such as Southern Italy should be taken into account in assessing the nature and intensity of language contact – lack of evidence of contact in certain kinds of texts should not be taken as evidence that contact was limited. With this in mind, this paper proposes new models for the interpretation of language contact and bilingualism in fragmentary corpora, as well as describing the choices made by writers in the bilingual society that existed in ancient Lucania and Bruttium.

**Taru NORDLUND** (University of Helsinki)

### **Multilingual practices in early mass communication in (Sweden)-Finland**

This paper addresses multilingual practices of mass-communication between the 16<sup>th</sup> and the late 19<sup>th</sup> century when churches used to serve as centres of information in Sweden and Finland. Besides the religious message as such, there was a centuries-old tradition of reading aloud different types of secular announcements of the Swedish crown and later of the Russian emperor in church on every Sunday. Some of the announcements concerned more local and municipal matters, and there were even personal notes by individual writers. Typical topics included taxation, military issues, or organization of the infrastructure and healthcare. The practice of orally transmitted announcements has been characterised as an ingenious model of historical mass media in Sweden and Finland (Reutersvärd 2001, Villstrand 2008).

For Finland, official and state announcements were translated from Swedish into Finnish, and in printed announcements the Swedish and the Finnish text were typographically positioned side by side. To secure availability of information in Finnish in Finland, a translator's post was established in the royal secretariat in Stockholm as early as in 1735. However, the quality and the availability of the Finnish translations caused constant complaints, and demonstrated by the ample manuscript material, much of the translation work actually occurred locally and was conducted by local parish priests or other church officials. Translation into Finnish continued during the Russian regime (from 1809 onwards), as it was only gradually that Finnish started to gain status as an official language beside Swedish.

This paper will analyze the multilingual practices of church announcements in Finland by investigating archival material of one bilingual parish in the 19<sup>th</sup> century. Several samples from the century will be chosen for closer analysis to investigate the patterns of language choice along the 19<sup>th</sup>-century. The research will address the following questions: What forms of multilingual practices does the archival material reveal? How did the balance of languages (Finnish as opposed to Swedish) change in the course of time? Who were the actors of the process: is it possible to determine who did the actual translation work? Theoretically, the study will rely on the sociology of translation and translation as a process, that is, the focus will be on the whole process and production of translations, not only on the end result or the text itself (e.g. Buzelin 2007). In addition, the research will rely on the concept of language ideologies, conceptualizations of languages and assumptions of their nature and value (Kroskrity 2004). Preliminary findings show that the usage of languages in the announcements reflect the overall shift of linguistic power balance in Finland, with Finnish becoming the dominant language of the society. What is also noteworthy is that official announcements tend to be constantly written in Swedish while everyday practical information is often scribbled in Finnish on the margins of the paper. The actual linguistic choices thus reflect the changes in political and cultural hegemony of the society in many ways.

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**Manuel PADILLA-MOYANO** (U. of the Basque Country/U. Bordeaux Montaigne)

### From contact-induced change to language identity in Souletin Basque

The long-term contact situation between Basque and Gascon Occitan is a well-established fact (Rohlf 1977; Haase 1981; Cierbide 1987). Souletin, the easternmost Basque dialect, has experienced the strongest Gascon influence (Allières 1992). More interestingly, Souletin people have historically constituted a multilingual community. Apart from Basque, many of them learnt Gascon and/or French, Spanish was practiced in the areas near the border, and the most educated knew Latin too. As a result, multilingual passages often occur in the popular genres of Souletin literature. Moreover, language is the central element of Souletin identity. Indeed, the Souletin dialect shows a high degree of internal uniformity, while it is almost unintelligible to speakers of other Basque varieties. During the last three centuries this dialect has undergone a codification process, which fulfils most of the criteria for a standard variety (Urgell 2015).

Beyond the survival of a non-official variety with 5,000 speakers, one of the biggest challenges for present-day Souletin is the cohabitation with unified Basque, a standard created four decades ago, mostly based on central dialects. There is some reluctance to adopt the new standard, perceived as too distant: Souletin-speaking schools, language-learning schools for adults, written and spoken media, as well as a *de facto* academy are illustrative elements of a conscious community which does not benefit from any official recognition since the old regime.

Based on a corpus of historical Souletin (16th–19th centuries), in this paper I will address two features of this dialect: 1) the roman-origin feminine marker *-sa* and 2) the new group of participles ended in *-i*. I will argue that both elements must be explained in the light of an intensive language contact situation (Thomason & Kaufman 1988) between eastern Basque and Gascon Occitan, which has led to morphological changes in the recipient language (PAT-borrowing; cf. Gardani, Arkadiev & Amridze 2014). Nevertheless, without being conscious about the origin of these features, Souletin speakers have taken them as linguistic identity markers. More specifically, they have extended the use of the feminine marker *-sa*, initially present in a reduced number of nouns (Lafon 1947), to a larger amount of items. Although at a lower scale, the new group of verbs shows a similar evolution. Ultimately, the Souletin case illustrates the permeability of grammars between genetically and typologically distant languages.

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**Bob SCHOE MAKER** (Leiden University)

### Standard-dialect contact in Dutch classrooms, 1800-1850

Within European language histories and standardization studies the instrumentality of education in the diffusion of standard languages is often taken for granted. Yet we know little in detail about the everyday practice of language-in-education, making it a ‘black box’ in our understanding of standardization processes. This is due in part to a lack of sources that can tell us something about everyday teaching practices in the early days of standardization. The Dutch case, however, is somewhat of an exception,

because extensive educational debates and early school reforms present us with plenty of sources from the early 1800s onwards, including teaching manuals and handbooks, teachers' magazines and school inspection reports.

Within the framework of the newly created Dutch national state, language-in-education policies became central in the formation of national citizens. The school laws issued in the first decade of the nineteenth century listed reading and writing of the national (standard) language as a primary goal of education, while the language laws prescribed the Siegenbeek-Weiland spelling and grammar of 1804/1805 explicitly for use in school materials (i.e. books) and classrooms. This policy aimed at the spread of a standard variety and the stigmatization and reduction of variability. But since heterogeneity was the norm, classrooms inevitably became sites for intensive standard-dialect contact. The policy also clearly expressed a national (or standard) language ideology, and classrooms implicitly became sites for the transmission of such language ideologies and attitudes.

Drawing on teaching materials such as schoolbooks, handbooks, magazines, inspection reports and other archival sources, I will discuss the impact of language-in-education policies and practices on standardization processes in a situation of standard-dialect contact in the northern Netherlands in the first half of the nineteenth century. Research questions include: how was language-in-education organized? What language norms and language attitudes were presented in the school materials and in the classroom? Which language variety was used in spoken interaction in the classroom? Which teaching methods were used for language teaching?

Focusing on materials, methods and practices of education, I will show that the standardization of the Dutch language was inherent to the development of a national educational system based on modern principles of pedagogy and didactics. At the same time I will argue that the standardization achieved through schooling was a matter of scale and not of absolutes. Due to the dynamics of language contact situations and the uneven development of the educational system, what was achieved was not a uniform standard, but rather a 'proto-standard', a heterogeneous variety modeled after the educationally promoted standard, but which retained clear traces of the spoken language.

**Peter SCHRIJVER** (University of Utrecht)

**Recognizing prehistoric sound change caused by language contact:  
The rise of Irish (c. 100-600 AD)**

During the first centuries of our era, a relatively uniform variant of Insular Celtic split up into an Irish branch (the ancestor of Irish and Scots Gaelic) and a British branch (ancestral to Welsh, Cornish and Breton). In both branches, the differentiation was predominantly the result of sound change. In the extensive secondary literature on the subject (e.g. McCone 1996), this process is described in the form of long series of individual sound changes, which occurred in a definable relative chronology. In as far as it has been possible to align relative chronology with absolute chronology, it appears that the pace of sound change was slow to begin with and picked up speed between the late fourth to sixth centuries in both branches.

Drastic sound change of the manner observed in Celtic can be described in terms of a change of phonological type. Type change is a possible effect of language contact (language shift combined with imperfect learning). In the case of British Celtic, I have argued that contact with Late Latin was responsible for the majority of changes that occurred in this period (Schrijver 2002). In the case of Irish, there is no historical evidence for language contact, but there are indications that a non-Celtic and possible non-Indo-European language was present in Ireland at the time (Schrijver 2014: 72-87).

In the paper I argue that what has hitherto been described as series of sound changes occurring in a relative chronology, which calls up the image of gradual (though sequentially rapid) sound change over a number of generations of speakers, can alternatively be described as a pattern copy, which involves language contact and might take no more than one generation of speakers to evolve. Crucially, describing a large number of sound changes as a single pattern copy involves that a chronological sequentiality of those sound changes is absent, in other words, that the sound changes were adopted by the target language in one go.

Both descriptions of prehistoric Irish sound change will be weighed against one another in order to find out whether a reasoned choice can be made. If successful, this case study contributes to developing a methodology that is capable of detecting language change caused by contact in the absence of historical sources that testify to contact.

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**Lelija SOCANAC** (Faculty of Law, University of Zagreb )

**Language policy and language contacts in Austria-Hungary: the case of Croatia**

Throughout its history, Croatia has been an area of intense language contacts, with the Romance/Italian influence being dominant along the East Adriatic coast as a result of early Slavic-Romance symbiosis in Dalmatian towns, four centuries of Venetian rule (1409-1797) and intense contacts with different Italian regions. In western continental areas, Austrian German exerted a strong impact, while Turkish had some influence in the easternmost parts of the country due to the vicinity of the Ottoman Empire. Language contact phenomena included both close and distant borrowing, as well as extensive code-switching. Historically, language contacts involved different dialects, rather than standard languages.

The paper will outline the historical context of language contacts in Croatia focusing on the Austro-Hungarian period (1867-1918) when the Croatian territory was divided between the two parts of the Empire: Croatia, Slavonia and the town of Rijeka belonging to the Hungarian, and Istria and Dalmatia to the Austrian part. On the macro-level, legislation regulating the use of languages in the multilingual empire will be presented, ranging from Article 19 of the Constitution of 1867 granting all nationalities the right to use their language in public domains, to language provisions in the Civil and Criminal codes, and regulations regarding the use of language in the domain of education. The language legislation will be set against discursive construction of national ideologies where language functioned as a very important symbol of national identity. Nineteenth-century struggles for the use of Croatian in public domains were accompanied with strong purist tendencies, especially targeted against the German influence. The legislation, as well as ideological issues and language attitudes as voiced in Croatian newspapers published at the time will be set against the actual presence of language-contact phenomena exemplified in newspapers and literary texts from the period, primarily plays and dialogues in narrative literary texts, which can be assumed to reflect to some degree everyday language spoken at time.

Analysis of language contact phenomena (Clyne 2003) will be extended by applying discourse historical approach (DHA)(Wodak 2009) to language ideology. Research questions are centered on the extent to which purist tendencies were actually reflected in a corpus of literary texts and newspaper articles published in the period under consideration. Moreover, the question will be addressed on why and how power struggles were carried out via language and which discursive practices and strategies of legitimisation were employed to assert various hegemonic interests (Rindler Schjerve 2003).

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**Doris STOLBERG** (Institut für Deutsche Sprache)

**Colonial interactions from a micro-sociolinguistic perspective**

Colonialism promotes language contact within an asymmetrical power relation (cf. Calvet 1974, Errington 2008). This power asymmetry is often mirrored by the lack of documents and reports from the population

that was put under colonial control. The micro-sociolinguistic perspective taken here is an attempt to take a close look at the small steps of shaping communicative practices as carried out by German missionaries during German colonialism (1884-1919) in so-called German New Guinea (today, northern Papua New Guinea), a region of a particularly high language density.

Missionaries relied on language to communicate the contents of their belief, to missionize, and to teach. While the colonial language policy of the German government put emphasis on the spreading of German, the missionaries, when arriving at their destinations, needed a functioning means of communication as soon as possible. In addition, they often preferred the use of the native language(s) of their addressees for missionizing and teaching, for ideological reasons. Therefore, they put strong emphasis on learning the local language(s) as fast as possible. New Guinea was one of the colonial regions, however, where this intention was put to a hard test. Because of the high number of languages spoken there, it was impossible for the missionaries to learn all native languages within their mission areas. They had to make decisions on language use that ultimately led to changed language ecologies in these areas. The talk focusses on a geographically specified area, the Astrolabe Bay in Papua New Guinea, where three different German mission societies dealt with this challenge in different ways. The research questions that are addressed in this talk are:

- What steps did the missionaries take to achieve their goal, and what were the consequences for the language ecology of the area involved?
- How did governmental (large-scale) and missionary (general and local) language policies interact, and with what results?
- How did the local population feature in this colonially-dominated setting of (local) language politics, and how did they influence and shape it?

The data base for the investigation are documents from missionary archives, specifically of the Rhenish Mission Society (cf. Loeffen 1991), from the late 19th and early 20th century. Relevant document types are letters, (semi-)official statements regarding language choice and policy, the documentation of mission station activities, and reports from the mission's language conferences. A qualitative and comparative analysis of these archival documents is carried out regarding information on language policies and their local implementation, on language attitudes (of all parties involved), and on the language interactions between the local and the colonial population.

The investigation aims at a historical-sociolinguistic stock-taking of the negotiating of language interaction between exogenous and indigenous speaker groups in a colonial setting, arriving at a clearer picture of the involved speakers' participation in decisions on language choices. The presentation thus offers a bottom-up view on the processes of colonial(-time) language planning and language policy implementation.

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**Rik VOSTERS** (Vrije Universiteit Brussel & FWO Vlaanderen)  
 and **Gijsbert RUTTEN** (Universiteit Leiden)

#### **The Age of Frenchification French-Dutch contact and attitudes in the Low Countries (17<sup>th</sup>-18<sup>th</sup> centuries)**

In this paper, we focus on contact between varieties of Dutch and French in the southern and northern Low Countries in the seventeenth and eighteenth centuries, when French is generally assumed to have been a prestige variety for many speakers of Dutch. We will focus both on issues of attitudes and ideology connected to the language contact situation and on contact phenomena in language use.

After having given a brief sketch of the language contact situation in terms of demography (e.g. number of speakers) and intensity of the contact, we will first zoom in on the attitudinal and ideological issues involved, particularly on the discourse of *frenchification* (*verfransing*) that characterizes the Early and Late Modern period throughout western Europe including the Low Countries (Frijhoff 1989). From the sixteenth century onward and well into the nineteenth century, language observers have complained about the

influence of French on Dutch. This *complaint tradition* (cf. Milroy & Milroy 2012) peaked in the eighteenth and nineteenth centuries, when there was a general agreement that the *frenchification* of the Dutch language and literature had brought an end to a period of unprecedented cultural glory, viz. the seventeenth century. The discourse on frenchification was targeted towards the Dutch culture at large, while focusing strongly on lexical loans and issues of language choice, particularly among the socially privileged.

However, the actual influence of French on Dutch has hardly been investigated empirically on the basis of representative corpora of seventeenth and eighteenth-century Dutch. Therefore, in the second part of the paper, we will embark upon one of the first quantitative studies of linguistic outcomes of the contact situation. We will present a case study of the use of French loan suffixes in Dutch such as *-age* (as in French *courage*), which made their way into the Dutch morphological system (e.g. *lekkage* ‘leak’, with a native verbal base). Elaborating on earlier work on the use of French loan suffixes in the late eighteenth and early nineteenth century (Rutten, Vosters & van der Wal 2015), we will add a diachronic dimension to our ongoing research, focusing in particular on changes from the late seventeenth to the late eighteenth century, i.e. on the period that is usually considered the highpoint of *frenchification*. On the basis of two corpora of historical Dutch, viz. (1) with private letters from the 1660s-1670s, and (2) with private letters from the 1770s-1780s, we will identify social and linguistic determinants of the observed borrowing processes. Our preliminary results demonstrate a significant increase in the use of French loan suffixes between the 17th and the 18th century, but we will also show how the use of such loan suffixes is strongly conditioned by social factors such as rank and gender.

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**Evelyn ZIEGLER and Olivier MOLINER** (University of Duisburg-Essen)

#### **Language policy, language ideology and language practice: The case of German in Luxembourg (1795-1920)**

This paper is theoretically situated in the framework of language management as a novel approach to language policy in general and language standardization in particular (Spolsky 2009). Language management includes macro-linguistic and micro-linguistic aspects. Both aspects are investigated systematically to determine the effects of language policy on language practice and vice versa in 19th century Luxembourg. To study these processes in-depth, we focus on the domain of municipal communication and the standardization of German in multilingual Luxembourg. The analysis of language policy activities seeks to identify the construction of “language regimes” (Coulmas 2005), in particular “sociolinguistic regimes” (Gal 2012) and how they impact on the status standardization of German in linguistic diversity. Several sources are used: a) official documents concerning language laws, decrees and regulations, b) intra-institutional documents concerning the municipality’s language use and c) metalinguistic comments concerning language attitudes as expressed in newspapers and parliamentary debates to reveal the dynamics in the formation of language ideologies towards the languages in contact and attitudinal hierarchies between French, German and emerging Luxembourgish. A quantitative analysis of language choices in the municipal top-down communication gives an insight into actual language practice, i.e. how German was used and how its use changed over time according to political and socio-cultural developments. This part of the analysis draws on a large corpus of predominantly bilingual German/French public notices published by the municipality of Luxembourg. The corpus encompasses 2500 scanned and digitized large scale public placards, which were chronologically and representatively sampled.

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## WORKSHOP

# Morphological complexity: Empirical and cross-linguistic approaches

*Convenors*

**Peter Arkadiev** (Moscow) & **Francesco Gardani** (Vienna)

*Description*

The notion of “morphological complexity” (and “linguistic complexity” in general) has been on the linguistic agenda for more than a decade now (see, e.g., McWhorter 2001, 2005; Kusters 2003; Hawkins 2004; Dahl 2004; Shosted 2006; Miestamo et al. (eds.) 2008; Sampson et al. (eds.) 2009; Trudgill 2011; Dressler 2011; Baerman 2012; Baerman et al. forthc.; Corbett, forthc.). Thus far, there seems to be no consensus on several key issues, such as whether morphological complexity is a relative notion (“complexity for the learner”) or rather an “absolute” phenomenon; how morphological complexity can be measured and compared across languages; and, crucially, what phenomena constitute morphological complexity.

In current typological work, measures of morphological complexity are all based on the notion of morpheme and ultimately involve counting morphemes in one way or another (cf., e.g., “complexity” as sum of head- and dependent-marking points in Nichols 1992 or “category-per-word” value in Bickel & Nichols 2013). However, linguists approaching morphological complexity from the perspective of diachrony or language contact (e.g., Dahl 2004 or Trudgill 2011) have suggested that an important, if not the primary, locus of morphological complexity is phenomena that currently run under the heading of “autonomous morphology” (cf. Aronoff 1994; Cruschina et al. 2013), i.e. morphological entities and processes which are not straightforwardly extramorphologically motivated, such as inflectional classes, allomorphy, patterns of syncretism, and the like. As is well known, such phenomena can be diachronically stable (Dahl 2004; Maiden 2005) but, at the same time, are the first candidates for loss in situations of language shift or creolization (McWhorter 2001; Trudgill 2011; but see Roberts & Bresnan 2008, for a more fine-tuned analysis).

The goal of our workshop is to bring together linguists working on morphological typology, autonomous morphology, and language contact, in order to study the following fundamental, though yet unsolved, issues:

- 1) What exactly constitutes morphological complexity?
- 2) Do the following morphological phenomena contribute to morphological complexity and how can they be assessed from such perspective?
  - a. affixes: affix ordering (e.g. templatic morphology), syntagmatic interactions between morphological markers (e.g., between prefixes and suffixes, or between suffixes of different orders) in terms of restrictions on co-occurrence, allomorphy, and semantic interpretation;
  - b. morphophonology, i.e. sandhi, ablaut, lenition, etc.;
  - c. paradigm structure: e.g., syncretism, deponency, extended exponence, principal parts etc.;
  - d. autonomous morphology: inflectional classes, heteroclisis, stem allomorphy, stem suppletion, morphemic distributions of different kinds (Aronoff 1994), etc.;
  - e. non-concatenative and non-linear morphology;
  - f. interactions between bound morphology and periphrasis.

- 3) How can morphological complexity be measured in an adequate way, i.e. taking into account the phenomena listed above (see, e.g., Bonami 2012; Bonami et al. 2011)?
- 4) How can morphological complexity be compared across languages in a principled and unbiased way, in light of the plethora of empirical phenomena subsumed under “morphology”, though not being limited to morpheme or category counts?
- 5) Which phenomena pertaining to morphological complexity, and under which circumstances, are prone resp. resistant to loss in different historical situations, such as, but no limited to, language contact?
- 6) Are there morphological phenomena that, in situations of language contact, are subject to an increase in complexity?

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**Matthew BAERMAN (University of Surrey)**  
**Morphological opacity as a dimension of inflectional complexity**

Inflection classes are normally understood as the product of the lexically determined allomorphy of inflectional markers, and their complexity is measured by the relative unpredictability of the allomorphs. But allomorphy is not the only determinant of paradigm differences: even where the inventory of forms is the same, their distribution may vary. We see this in the (partial) suffixal paradigms in (1), from the West Nilotic language Nuer. The same suffix is used throughout, and the classes differ only in the case function it performs within each paradigm. (1)

	class I	class II	class III	class IV
NOM PL	-ni	---	---	---
GEN PL	-ni	-ni	-ni	---
LOC PL	-ni	-ni	---	-ni

Nuer (Frank 1999)

This type of paradigmatic configuration, though attested cross-linguistically (e.g. the Mexican isolate Seri (Marlett & Moser 2010) and Acazulco Otomí (Hernández-Green 2014)), is rare enough that it has contributed little to the construction of morphological theory or the development of complexity metrics. Contemporary work on inflection classes focusses on allomorphy, with complexity measured by the relative unpredictability of the allomorphs (Ackerman & Malouf 2013, Bonami 2012, Sims 2011, Stump & Finkel 2013). We argue that these investigations can be enriched by factoring in the sorts of paradigmatic configurations found in (1).

Consider the two artificial grammars in (2). (2a) represents a ‘conventional’ inflection class system, with classes defined by distinct allomorphs (or distinct combinations of allomorphs), while in (2b) the classes are formed by the variable paradigmatic distribution of shared set of markers *a* and *b*. Although the STRUCTURE of the classes in both is the same (represented here by shading of shared allomorphs), intuitively we want to say that the system in (2b) is more complex, because the morphological marking is more opaque. For example, while form *b* in (2a) has a consistent function (marking accusative), in (2b) its function varies with inflection class. But the complexity metrics developed to date do not distinguish these two very different systems; e.g. by all of the criteria set out by Stump & Finkel (2013) they are identical.

(2)

	class I	class II	class III
NOM	a	a	a
GEN	b	e	e
ACC	c	c	f

a. ‘conventional’ type

	class I	class II	class III
NOM	a	a	a
GEN	a	b	b
ACC	b	b	a

b. ‘distributional’ type

We suggest that the contrast can be formalized by invoking a variant of *minimum description length*, where the object of description is not the forms themselves, but rather the entire paradigm. On this approach the classes in (2a) can be identified by just listing the form sets: {a,b,c}, {a,e,c} and {a,e,f}. In (2b), because all the classes share the same form set {a,b}, this information must be paired with the case value in order to identify the classes, yielding a lengthier description, and hence indicative of greater complexity.

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Walter BISANG (University of Mainz)

#### On the strength of morphological paradigms — a historical account of radical pro-drop between hidden and overt complexity

Inflectional morphology as it is organized in paradigms is generally discussed as an example of linguistic complexity (e.g. McWhorter 2001) and as a result of a diachronic process of maturation (Dahl 2004). The present paper will discuss the diachronic stability of morphological paradigms and their interaction with

other levels of grammar (phonology, syntax) from the perspective of overt vs. hidden complexity (Bisang 2009) and radical pro-drop.

The presentation will start out from cross-linguistic observations on the presence or absence of radical pro-drop, i.e., the omission of subject arguments without the existence of concomitant agreement morphology (Neeleman & Szendrői 2007). A comparative analysis of highly analytic languages spoken in West Africa (e.g. Yoruba) and in East and mainland Southeast Asia (EMSEA, e.g. Chinese or Vietnamese) shows that the former languages do not have radical pro-drop (Creissels 2005), while the latter do. This fact correlates with the absence of inflectional morphological paradigms (person, number) in the ancestor families of EMSEA (Sinitic, Tai-Kadai, Mon-Khmer, Hmong-Mien) and the recurrence of such paradigms in Niger-Congo languages over several millennia (Hyman 2010). It will be argued that the expression of person and number features was passed on to syntax (use of obligatory pronouns) in West African languages that had lost their morphological paradigms. In contrast, EMSEA languages are radical pro-drop because their ancestor languages did not have morphological paradigms. The strength of morphological paradigms even after their diachronic erosion is also reflected in the radical pro-drop properties of creole languages. This will be discussed on the basis of my own data and on the basis of the *The Atlas of Pidgin and Creole Language Structures Online (APiCS)* (Haspelmath et al. 2013). Only 18 creoles out of 76 (or 23.7%) are '[o]ptional pronoun words' (feature 62) and are thus radical-pro-drop, given that there is no agreement on the verb. In the majority of the radical pro-drop creoles, the contact languages involved are also radical pro-drop and their superstrate languages are at least of the Italian-style pro-drop.

Based on these findings, the paper will argue that the development of morphological paradigms is only one type of maturation that aims at explicitness. There is another type of maturation, which is based on economy and pragmatic inference. Both types will be discussed. Of particular interest will be the complex interaction of phonological, morphological and sociolinguistic factors that produced and maintained the high degree of economy-based maturity that significantly blocked the development of extensive morphological paradigms in EMSEA languages over a long period of time.

From a more general perspective, the presence/absence of radical pro-drop illustrates that there are two sides of complexity—explicitness-based overt complexity as it shows up in morphological paradigms and economy-based hidden complexity as it can be observed in EMSEA languages.

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**Dunstan BROWN** (University of York)

### Evaluating Morphological Complexity with Default-Inheritance Modelling

'Morphological complexity' can differ widely in how it is understood. Associating it with the notion of autonomous morphology (Aronoff 1994; Cruschina et al. 2013) is a useful way to approach the issue, because we have a fairly precise understanding of what this means. Complexity in this sense is associated with the existence of distinctions that appear unnecessary from the point of view of syntax (including inflectional classes and syncretisms).

We address the question of how much complexity can be tolerated and how it is distributed across a morphological system by looking at the verb stem and tone properties of Tlatepuzco Chinantec. Chinantecan is a Meso-American language family belonging to the larger Oto-Manguean grouping, which

is well-known for the complexity of its morphological systems (Palancar Forthcoming), arising from the combination of cross-classifying tone, stem and affixal patterns to realize morphosyntactic distinctions.

Determining the limits of morphological complexity is hard. Given that morphological complexity is associated with varying degrees of regularity, methods and approaches that are designed to deal with subregularity and irregularity are particularly attractive. They should also be implemented computationally and tested to see how well they work. One approach is to use default inheritance frameworks, such as Network Morphology (Baerman 2012; Brown & Hippisley 2012; Corbett & Fraser 1993), where generalizations can be treated as a cascade of defaults, moving from the most general morphological patterns, through subregularities to those which are absolute exceptions. Network Morphology analyses are implemented computationally to test the generalizations and see how well they cover the data. Furthermore, as we can treat prosodic and stem information as separate default-inheritance hierarchies (or ‘layers’) we can observe the contribution of each to the overall complexity of the system.

We present a predictive model for over 770 lexemes based on data in Merrifield et al. (2007). The Network Morphology analysis is represented using the knowledge representation language DATR (Evans and Gazdar 1996). As with Baerman’s (2012) account of nominal case and number realization in the Western Nilotic language Nuer, we evaluate the model of the Tlatepuzco verb system by identifying deviations from default patterns by looking at the overrides in the lexical entries. We show that the Network Morphology model implements Palancar’s (Forthcoming) and Baerman & Palancar’s (2012) analysis by treating the tonal and stem information as different layers. While the system is undoubtedly complex, this is constrained to a degree by predictive relations between these layers.

**Francesca DI GARBO** (University of Helsinki)

**Measuring morphosyntactic complexity across languages  
Two case studies of grammatical gender**

This paper addresses how morphosyntactic complexity can be explored crosslinguistically by taking grammatical gender as a case in point, and based on two case studies.

Case study 1 proposes a complexity metric for grammatical gender and uses this metric to measure the absolute complexity of grammatical gender in 84 African languages. The metric consists of six features. Three features (“Number of gender values,” “Nature of assignment rules,” “Number of indexation (agreement) targets”) are based on Audring (2014). The remaining three features (“Cumulative exponence of gender and number,” “Manipulation of gender assignment triggered by number/countability,” “Manipulation of gender assignment triggered by size”) are my own. Following a method designed by Parkvall (2008), possible complexity scores range from 0 to 1. The results show that 64 out of 84 languages have Gender Complexity Scores (GCSs) between 1 (e.g., Swahili, Bantu) and 0.5 (e.g., Beja, Cushitic). GCSs below 0.5 are found in the remaining 19 languages, with the lowest GCS, 0.08, going to Mwaghavul (Chadic). The results suggest that, in African languages, low levels of complexity are not commonly associated with gender. In addition, closely related languages tend to have the same or similar GCSs. Outliers are rare and can be explained as a result of contact phenomena. This is, for instance, the case of Bila (Bantu), which has a GCS of 0.22, much lower than its relatives (e.g., Swahili). Bila is spoken in the northern-most corner of the Bantu speaking area, surrounded by non-Bantu languages (Lojenga 2003).

Case study 2, currently ongoing, explores in greater detail the role of language contact as a trigger of simplification/complexification, by measuring differences in the absolute complexity of gender between closely related languages. The sample consists of 10 pairs of closely related languages selected from the five world’s macro-areas (Dryer 1989). Each pair consists of two languages (e.g., Selee and Ewe) or one language and a set of close relatives (e.g., Standard Swedish and Northern Swedish dialects). The pairs differ in type of gender system (sex-based/non-sex-based gender) and type of innovation (“emergence vs. lack of gender” and “loss/reduction vs. conservation of gender”). New features are added to the metric used in Case study 1 (e.g., overt coding of gender on nouns, allomorphy in gender marking).

The paper seeks to contribute to the debate on morphological complexity by providing tools for the empirical investigation of morphosyntactic complexity in the domain of gender, and suggesting new methods to assess the role of language contact as a trigger of simplification/complexification. Moreover, the paper discusses relevant theoretical matters on what counts as morphological complexity. For instance, prior to Case study 1, relationships between cumulative exponence of gender and number and presence of gender syncretism in the context of number were scrutinized. The analysis revealed that, in the sample languages, the presence of syncretism presupposes cumulative exponence (see Carstairs 1987; Carstairs and

Stemberger 1988 for similar results on number and case). Syncretism was thus not included as a feature of the metric (see also discussion in Dahl 2004: 188).

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**Michele LOPORCARO** (University of Zurich)

#### Complexity trade-offs in Atlantic noun morphology and morphosyntax

The current reconstruction of Proto-Atlantic assumes a full-fledged prefixal noun-class system of the familiar Niger-Congo type, involving about 15 classes (Doneux 1975: 114). The present paper considers how the overall complexity of this system has decreased in one of the best known languages of this group, Wolof (North Atlantic, Atlantic-Congo; cf. Greenberg 1963: 8; Sapir 1971: 73). Other North Atlantic languages still retain clearer traces of class marking on the noun itself than Wolof does (cf. McLaughlin 1997:6): e.g., Fula shows a) initial consonant mutation (as a residue of class prefixes), b) class suffixes on the noun stem, and c) class-sensitive determiners – as seen e.g. in gor-ko oo ‘the man’/wor-be bee ‘the men’ – whereas Seereer-Siin also retains some prefixes in addition: o-kor-oxe ‘the man’/ø-gor-we ‘the men’.

In contemporary Wolof, the class system is much less complex: nouns have become largely invariable, though some remnants of word-initial consonant alternations are preserved to this day, and still more nouns had distinct plural forms in the 19th-century (as shown by Becher 2001: 50–52, drawing from Boilat 1858 and Kobès 1875). Nowadays, nouns like, say, xaj ‘dog(s)’ are the rule, while këf ‘thing’/yëf ‘things’ is exceptional.

In the present paper, analysing data from the Mbakke dialect of traditional Wolof, I shall argue that these remnants of noun-class marking force us to assume a series of (minor) inflectional classes in Wolof noun morphology, which – unlike Niger-Congo noun classes – are purely morphological (in Aronoff’s 1994 sense), just as English (residual) inflectional classes (e.g. goose/geese, ox/ox-en vs. dog/dog-s). This is a kind of morphological complexity which was not there in Proto-Atlantic’s regularly agglutinative noun morphology.

While inherited class marking is not preserved on nouns, it stays on class-sensitive determiners: e.g. xaj b-i [dog CL[ASS]-DEF.PROX] ‘the dog’/xaj y-i ‘the dogs’ vs. këf k-i ‘the thing’/yëf y-i ‘the things’. Based on the singular/plural pairings of noun class agreement markers, several agreement classes (i.e. genders, following Corbett 1991: 190–1) must be recognized. In the final part of the paper, I shall show that, while Wolof is usually said to possess a total of 10 noun classes (8 for the singular, 2 for the plural, viz. yi and ñi), two more classes (ci and si) occur in the plural – as argued in Babou & Loporcaro (2014), who show that previous analyses (e.g. Sauvageot 1965: 73–4, Thiam 1987: 26–9, Camara 2006: 11), treating these as instances of “collectives” rather than plurals, are untenable. Under the new analysis, Wolof has a total of four plural class-sensitive agreement markers, which in turn considerably complexifies the gender system, yielding no less than 17 distinct pairings (as opposed to a maximum of 14 in previous treatments: cf. Guérin 2011: 84).

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**Martin MAIDEN** (University of Oxford)

### **What is ‘complex’ for speakers? Empirical observations from morphological diachrony**

The diachronic behaviour of speakers faced with apparent morphological complexity is often strangely counterintuitive. They do not eschew what appear (on paper) to be highly ‘complex’ morphological innovations, even when a seemingly much ‘simpler’ alternative may be available, and apparent morphological ‘simplifications’ may be merely accidental results of highly ‘complex’ motivating factors. These observations I shall illustrate with a variety of examples from the morphological history of Romance languages, notably:

- a. The remarkable generalization of highly idiosyncratic and originally lexically restricted patterns of allomorphy where previously there was invariance
- b. The apparently unnecessary irruption of suppletion into inflectional paradigms where there had earlier been at worst mild allomorphy
- c. ‘Perverse’ maintenance of morphemic phenomena despite the patent availability of a clear and morphosyntactically transparent alternatives
- d. Apparent ‘alignment’ of an earlier morphemic pattern of root allomorphy with a coherent set of morphosyntactic features which, on closer inspection, seems wholly unmotivated by the reduced complexity it happens to produce.

An impressionistic conclusion that the historical morphologist might draw from such empirical findings is that, at least from the perspective of the speaker natively acquiring her own language, what look to linguists like substantial differences in complexity are simply insignificant; even that ‘anything goes’. This is not so. In fact, I shall argue that detailed examination of my examples favours the following, more nuanced, conclusions:

- i) What speakers appear to find truly ‘complex’ is *synonymy* (cf. Maiden 2004, ‘When lexemes become allomorphs: on the genesis of suppletion’, *Folia Linguistica* 38:227-56; Carstairs-McCarthy, *The Evolution of Morphology*. Oxford: OUP, 2010:ch4), and vastly preferable to lexical synonymy is suppletion, in which occasional synonyms are assigned to complementary domains within inflectional paradigms, even if those domains are morphosyntactically incoherent (‘morphemic’).
- ii) Formally highly complex (‘morphemic’) patterns show remarkable diachronic robustness provided that they are systematically predictable across the lexicon. In effect, distributional complexity appears from the diachronic evidence to present little difficulty to speakers (at least, as I shall

suggest, in the acquisition process) provided that the complex patterns in question are unfailingly predictable across the lexicon.

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and **Rachel NORDLINGER** (University of Melbourne)

### The changing complexity of Murrinhpatha verbs

In this paper we describe analogical changes that have occurred in Murrinhpatha verbal inflection over a 40 year period, asking whether these changes are optimized to reduce complexity, and thereby improve learnability of the paradigm.

Murrinhpatha is a polysynthetic, non-Pama-Nyungan language of northern Australia with a complex verbal system that includes 38 different inflectional classes, each with 50 cells marking subject person, number and TAM information. This presents the learner with a very high degree of enumerative complexity – i.e. a large number of paradigmatic cells to be learnt (Ackerman & Malouf, 2013). Murrinhpatha is experiencing extensive language contact with English, but there are so far no signs of language shift, with all members of the community still acquiring and using the language on a daily basis.

In this paper, we analyse analogical changes in Murrinhpatha verb inflection by comparing verb paradigms elicited in the 1970s with the same paradigms newly elicited from young adult speakers in 2011–12. We quantify complexity in the paradigms using conditional entropy measurements, which are designed to mirror the problem faced by speakers who must produce the correct form for a paradigmatic cell, given form(s) encountered in other cells (Ackerman & Blevins, 2009). It has been shown that this type of integrative complexity remains quite low cross-linguistically, even in languages where there is great enumerative complexity (Ackerman & Malouf, 2013).

To capture the implicational patterns found in Murrinhpatha, we formulate relationships between entire inflectional strings, rather than segmenting them into apparent affixal elements (Blevins, 2006; Bonami, Boyé, & Henri, 2011). The observed analogical changes are therefore analysed not as the copying of inflectional exponents from one cell to another, but instead as the copying of a relationship between a pair of cells, which is extended to some other pair that have the same morphosyntactic relationship – see Table 1 for an example.

INFLECT. CLASS	2SINGFUT	2SINGNFUT	ALTERNATION PATTERN
1	tji-	tjim-	X → Xm
6	thurru-	thurran-	Xu → Xan
7	thunu-	thunungam-	X → Xngam
8	na-	nam-	X → Xm
30	thurdi-	thurdam-	Xi → Xam
31	thula-	thulam-	X → Xm
34 (old form)	thama	nam	thama → nam (suppletive)
34 (new form)	thama	thamam	X → Xm

Table 1

Originally, the 2SINGNFUT inflection for class 34 was suppletive nam, which did not follow any of the alternation patterns found in other classes. The innovative form recorded in 2012 repairs this suppletion, and applies the most widespread alternation pattern, X → Xm, to produce an innovative 2SINGNFUT form thamam. Our initial analysis of selected examples such as this one suggests that changes are highly optimized to reduce paradigmatic entropy.

We argue that the analogical changes in Murrinhpatha show how diachronic changes keep a lid on integrative complexity, even while maintaining a high degree of enumerative complexity.

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**Felicity MEAKINS** (University of Queensland)

### **Orderly Demise: Language Obsolescence and Contact as a Principled Process**

Languages undergoing accelerated change as the result of language obsolescence are often characterised as displaying high levels of variation and optionality in comparison with conservative varieties of the language. These characteristics are assumed to be a symptom of a lack of systematicity and are often not explored further. In this paper I argue that, while variation and optionality in grammatical systems is one effect of language obsolescence, these changes are nonetheless highly principled. Furthermore they often represent an increase in linguistic complexity rather than reduction or simplification which is often described for situations of language obsolescence and language contact (Dorian, 1989; Janse & Tol, 2003). Here the concept of linguistic complexity/simplicity is broadened beyond the usual morphological observations, i.e. allomorphic reduction, syncretism and synthetic systems becoming analytic, to include interactions between morpho-syntax, semantics and discourse, and the variable use of morphology as a result of these interactions. I use two Australian case studies of the changes in the noun class system of Jingulu and changes in the case structure of Gurindji Kriol to argue for a more nuanced approach to language obsolescence.

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**Susanne Maria MICHAELIS** (MPI-EVA Leipzig)

### **Inflectional complexity in creole languages: Evidence from the Atlas of Pidgin and Creole Language Structures**

Inflectional morphology has been a key ingredient in assessing complexity in creole languages. It has been claimed that synchronically creoles strikingly show a lack of inflectional morphology, thus giving rise to morphologically extremely simplified languages. (McWhorter 2001, Good 2012, Duval-Markussen 2014, Siegel et al. 2014). In this paper, I will challenge this view by drawing on data of the Atlas of Pidgin and Creole Language Structures (Michaelis et al. 2013). I will consider the following morpheme types: tense-aspect markers, case markers, and definite articles:

- (1) Ternate Chabacano (Spanish-based, Philippines; Sippola 2013)
 

Ta	yudá	éle	su	marído
IPFV	help	3SG	3.SG.POSS	husband
'She helps her husband.'				
- (2) Korlai (Portuguese-based, India; Clements 2013)
  - a. Pedru su kadz  
Pedru GEN house  
'Pedru's house'
  - b. tidoy kadz Pedru su  
both house Pedru GEN  
'both of Pedru's houses'

(3) Haitian Creole (French-based, Caribbean; Fattier 2013)

- a.    kay       la  
        house     DET  
        ‘the house’
- b.    avyon    an  
        plane     DET  
        ‘the plane’
- c.    ti        fi       a  
        little     girl     DET  
        ‘the little girl’

The main misconception which has given rise to the idea that creoles lack inflectional morphology is the fact that scholars have implicitly or explicitly based themselves exclusively on spelling conventions in deciding whether a morpheme is an affix or a free morpheme (see e.g. Siegel et al. 2014). But the imperfective marker, the genitive case marker, and the definite article written as separate words in the cited examples above can be interpreted as affixes. I will consider two criteria for affixhood: (i) uninterruptibility and (ii) morphonological idiosyncrasies. In example (1) from Ternate Chabacano, nothing can intervene between the imperfective marker ta and the verb stem. The same holds for the genitive case marker su and the possessor in examples (2a./b.) from Korlai. In examples (3 a./b./c.) from Haitian Creole, the definite article shows morphonological variation depending on the phonological shape of its host: la, an, a. Instances of tense-aspect affixes are abundant in the creole languages in APiCS, and affixed case markers and definite articles also occur repeatedly. Thus, I argue that creoles have lost most of their lexifiers' inflectional marking, but have gained at the same time a considerable degree of complex morphology through unusual accelerated grammaticalization processes.

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**Johanna NICHOLS** (University of California, Berkeley)

#### **Complexity as non-canonicality: An affordable metric for morphology**

Large cross-linguistic surveys of morphological complexity have relied on counting inventories of elements or categories (Dahl: resource complexity; number of different phonemes, genders, tenses, etc.) because this is straightforward and not excessively costly in time. However, the complexity with interesting and sociolinguistic implications (Trudgill, Dahl) is not resources but non-transparency (Dahl: regulations) – which is almost impossible to compare across families (Miestamo) (allomorphs, syncretisms, position classes, etc. are incommensurable) and/or it requires extensive lexical, corpus, and/or computational resources (Juola, Szmrecsanyi±Kortmann, Stump/Finkel). This paper uses (non-)canonicality (Corbett) to identify relevant cross-linguistically comparable variables, capture non-transparency, and restrict the comparanda to a

manageable sample, thereby increasing accuracy and putting a time-affordable complexity metric, extractable from most descriptive grammars, into the hands of any linguist. It also contributes concretely to our understanding of whether inventory size and non-transparency are associated, and how both might contribute to overall complexity.

The comparanda sample is kept simple and maximally independent of sheer inventory size by restricting it to four common categories: person, number, case, gender, surveyed across three lexical classes: noun, independent pronoun, verb. Counted are number of inflectional classes of category affixes (e.g. case suffixes), number of root/stem-alternant classes (both with an arbitrary low cutoff of high-frequency classes), number of fusions per category pair, number of non-canonicality patterns per category and lexical class (syncretisms, allomorphy, wordhood discrepancies, position discrepancies, multiple marking, oblique zero allomorphs, etc.).

Total non-canonicalities per language correlates well with sociolinguistics, with sociolinguistically more isolated languages showing higher totals than expanding and inter-ethnic languages, e.g. within some Eurasian families (\* = expected ranking confirmed): Slovene (26) > Russian (22) > Bulgarian (17)\*; Erzja Mordvin (11) > Finnish (6)\*; Hunzib (20) > Ingush (17.5) > Avar (14);\* within areas Evenki (9) > Mongolian, generic Turkic (7);\* generic Daghestanian (~17) > Pazar Laz (12) > Kabardian (9).\* Finnish is similar to Turkic or Mongolian in strict morphological non-canonicality, but has much more complex morphophonology (not surveyed here). Polysynthetic Kabardian is low because the verb markers for the categories surveyed here are regular paradigmatic islands interspersed among more numerous slots that do not form paradigms and have open-ended and partly lexical fillers; those were not surveyed here. Totals are quite stable in young families and fairly stable even in older families; IE languages rank high overall because of their complex gender-number-case fusions, concomitant syncretisms and splits, and declension and conjugation classes.

Unweighted noncanonicality totals covary moderately well with synthesis index (Bickel/Nichols) and inventory size at the higher levels, but not at lower levels. Two weighting techniques are proposed, which improve the correlation at the higher levels but not at lower levels. This implies that only combined non-canonicality plus inventory size can capture overall complexity well.

A worldwide survey is underway. The presented paper will survey ~100 languages (25 done so far), genealogically and areally balanced, plus partial inventory-size totals for most of them. The data collection on non-canonicality is analytically and theoretically revealing and less time-consuming than tabulating inventory sizes.

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**Jonas NÖLLE** (Aarhus University), **Peeter TINITS** (Tallinn University), **Michael PLEYER** (Heidelberg University) and **Stefan HARTMANN** (University of Mainz)

### Experimental approaches to the emergence of morphological complexity

Recent discussions of morphological complexity have focused on three interrelated issues:

- 1) How can morphological complexity be defined (e.g. Anderson forthc.)?
- 2) Which factors determine cross-linguistic differences in morphological complexity (e.g. Trudgill 2011)?
- 3) Why and how does morphological complexity emerge (e.g. Carstairs-McCarthy 2010)?

In this paper, we pursue these questions from the perspective of usage-based models (cf. Barlow & Kemmer 2000). On this view, linguistic phenomena should be described in a bottom-up way, i.e. drawing on empirically validated hypotheses about the organization of language in the mind. In order to do so, we apply experimental approaches to phenomena traditionally regarded as manifestations of morphological complexity.

In particular, we adopt the Iterated Learning paradigm (Kirby et al. 2008), which has addressed the dynamics of morphological complexity with respect to social and communicative factors (e.g. Tinitis 2013; Atkinson et al. 2014). In this approach, participants are trained on an artificial language and then produce linguistic behavior which subsequent “generations” of participants learn from. Thus, the cultural transmission of language is simulated in a laboratory setting (Kirby et al. 2014). While previous work has focused on factors determining the loss of linguistic complexity, the Iterated Learning framework allows us to explore potential factors leading to an increase in morphological complexity. More specifically, we address the hypothesis that communicative relevance plays an important role in the emergence and maintenance of morphologically complex constructions.

Our study investigates the transgenerational dynamics of artificial language stimuli across various conditions with the help of an Iterated Learning study using a 2x3 experimental paradigm. Participants learn expressions for a variety of items which vary along the dimensions of color and number. In the complexity condition, these dimensions are jointly encoded in one portmanteau morph (as is the case in polysynthetic languages). In the isolating condition, by contrast, color and number are encoded as individual words. Participants then use the learned items in a communication game with a virtual interlocutor, which requires them to productively use the number and color constructions. The output of the n-th generation then serves as input for generation n+1.

In one of the three communicative conditions, color is highly relevant to the situation presented as context for the communication game; in the second condition, number is relevant, whereas in the third condition, both dimensions are equally relevant. If our hypothesis is correct, it is to be expected that in the isolating condition, morphemes encoding relevant concepts will tend to develop affix-like characteristics more than those encoding irrelevant concepts, thus contributing to the emergence of morphological complexity. In the complexity condition, it can be expected that the portmanteau morph will be reanalyzed as encoding only the more relevant concept, whereas in the condition in which both concepts are relevant, morphological complexity is likely to be maintained.

Overall, we aim to show that experimental approaches play a fundamental role in identifying the cognitive, socio-cultural, and usage factors leading to the emergence of grammatical structure, which in turn contributes to a better understanding of morphological complexity.

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**Gabriele PALLOTTI** (University of Modena and Reggio Emilia) and **Vaclav BREZINA** (Lancaster University)

### Defining and computing a text's morphological complexity

This presentation will discuss a theoretical and operational definition of the construct of 'text morphological complexity'. Most studies thus far have investigated morphological complexity of linguistic systems, i.e. at the level of Saussurean langue, comparing, for example, the complexity of inflectional paradigms across different languages or language varieties (e.g. Baechler & Seiler 2012; Shosted 2006; Stump & Finkel 2013). Here, we focus on morphological complexity as manifested in concrete texts, i.e. at the level of parole. The proposed measure is based on a purely structural view of complexity, conceptualising a text's morphological complexity for a given word class as a function of the number and variety of different inflectional exponents in a text (Pallotti 2015). More specifically, morphological complexity can be operationalized by randomly drawing samples of N forms of a word class (e.g. verbs) from a text and computing the average within- and across-sample range of inflectional exponents. This produces a morphologically complexity index, which can be used to compare different texts in the same language or translations of the same text in different languages.

The research uses a computer tool developed by the authors of this study (which will be made publicly available) that implements the operational definition of morphological complexity by sequentially performing two kinds of analysis. First, the tool carries out a linguistic analysis that identifies the word class of each word in a text (token) and assigns it the dictionary form (headword) using the TreeTagger (Schmid 1994). Each token is then compared with the headword and its specific inflectional form (exponent) is identified. Second, after the text has been linguistically analyzed and exponents have been extracted, the tool computes the inflectional diversity index.

The presentation will first discuss issues related to the construct's operationalization and validation, i.e. whether the measure is sensitive to text length, what the optimal subsample size is and what statistical computation is more reliable. Second, we will show the results of an application of the measure on several parallel texts from three European languages (English, German and Italian) to demonstrate how system complexity interacts with text complexity. In other words, we will consider the question of whether a particular text contains all of a language's possible inflections or just a subset, and how this is reflected in the morphological complexity index. Our analyses show that, in both inflectionally rich languages like German and Italian, and in relatively poor ones like English, texts' morphological complexity systematically varies across different genres, such as scientific articles, short stories and argumentative essays.

The proposed measure has a number of potential applications, including linguistic typology, studies describing L1 and L2 development, genre analysis and stylometry.

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**Jeff PARKER** (The Ohio State University)

### Paradigms and (semi)predictability: implications for measuring complexity typologically

Recent typological work on inflectional complexity investigates the organization of morphological formatives across inflection classes (Ackerman and Malouf 2013; Stump and Finkel 2013). Inflection classes represent systematic regularities across words in the lexicon. However, the number of inflection classes posited for a language crucially reflects assumptions about the extent to which lexemes' paradigms are regular/systematic vs. irregular/idiomatic. Importantly, the exclusion of lexemes because of their semi- or ir-regularity diminishes the validity of assertions about overcoming the challenge of predicting unencountered forms, the Paradigm Cell Filling Problem (Ackerman, Blevins, and Malouf 2009), and complicates paradigms as a typological variable. In this paper I use Russian data to challenge regularity as a discrete aspect of inflectional systems, and consider the implications for measuring and comparing inflectional systems typologically.

I show that incorporating all aspects of inflectional exponence (e.g. stress patterns, stem changes, defectiveness) for Russian nouns results in 656 distinct patterns, as opposed to the traditional four classes (see Corbett (1982)). Using type counts (Zaliznjak 1977) I show that the traditional four classes only describe 75.65% of Russian nouns, problematizing their use for representing the inflectional complexity present for the language user. I develop multiple analyses of Russian noun paradigms by incrementally including less frequent aspects of inflectional exponence, resulting in a different number of inflection classes in each analysis. I show that for every analysis the number of lexemes per class exhibits a Zipfian like distribution, problematizing any type of binary division between more regular and less regular aspects of inflectional exponence.

I then compare the average conditional entropy of each of my analyses of Russian nouns to data in Ackerman and Malouf (2013). I argue, counter to what Ackerman and Malouf speculate (2013:451), that implicational relations play a role in the organizational structure of Russian nouns. I suggest that the exclusion of semi-regular aspects of exponence artificially reduces the difficulty of the Paradigm Cell Filling Problem in Russian and that including all aspects of inflectional exponence illustrates the importance of implicational structure. However, I also show that the conditional entropy of my most robust analyses of Russian nouns are surprisingly high compared to other languages. I show that including statistical-distributional properties of the lexicon, i.e. weighting inflection classes by their type frequencies, reduces the conditional entropy more when more semi-regularity is included. It is thus possible, that the variance in our estimation of complexity that results from a more robust representation of inflectional exponence may be mitigated by weighting classes with frequency information. This suggests that both implicational organization and probabilistic properties of the lexicon play crucial roles in understanding how speakers overcome the Paradigm Cell Filling Problem.

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# WORKSHOP

## Non-canonical gender systems

### *Convenors*

**Jenny Audring** (University of Amsterdam) and **Sebastian Fedden** (University of Surrey)

### *Description*

Despite the variation found across the languages of the world, gender systems share a number of important characteristics. Some of these are definitional, the most important one being the presence of agreement. This is captured in Hockett's definition of gender: "Genders are classes of nouns reflected in the behaviour of associated words" (Hockett 1958: 231). Since gender is a morphosyntactic feature, agreement is a necessary condition, i.e. the gender of a noun must be marked on at least one element other than the noun itself. Without these targets for agreement there would not be any evidence for gender.

Other properties, by contrast, are expected rather than required, and individual languages can be more or less canonical with respect to any one of these properties. The Canonical Typological approach (Brown, Chumakina and Corbett 2013; Corbett 2006, 2012) establishes any linguistic phenomenon, for example a morphosyntactic feature like gender, in terms of a canonical ideal, i.e. the clearest instance of the phenomenon. The canonical ideal is defined as a clustering of properties that can be used to project the theoretical space, which is populated by real instances found in the languages of the world. The canonical ideal serves as the yardstick from which we measure the actual examples we find.

For a canonical gender system, we might propose the following expectations:

- Each noun belongs to exactly one gender.
- The number of genders in a language is small and finite.
- The gender system has a semantic core, typically based on the conceptual features SEX, HUMANNESS or ANIMACY.
- Gender is marked on more than one lexical category and in more than one syntactic domain.
- Gender marking is obligatory and unconditional rather than optional or subject to conditions.
- Gender agreement is morphologically bound.
- Given the same noun, gender agreement is consistent across target categories and utterances.

In this workshop, we are discussing gender systems that are non-canonical in that they violate one or more of the expectations. Some cases are known from the literature, others are new and will be presented by the workshop participants.

We are pleased to have Professor Greville G. Corbett as keynote speaker.

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**Yvonne AGBETSOAMEDO** (University of Ghana, Legon)  
 and **Francesca DI GARBO** (University of Helsinki)

### **Gender and its interaction with number and evaluative morphology: Two case studies of Africa**

This paper shows that the analysis of patterns of interaction between gender and other nominal features is an area of investigation that can shed new light on the typology of gender systems and the definition of canonical gender. The paper is based on two case studies.

The first study is a typological investigation of interactions between gender and number, and gender and evaluative morphology in 84 African languages, selected from 17 different genealogical units. The study proposes an inventory of morphosyntactic and semantic interactions between gender and the two above-mentioned domains.

In the methodology we developed, languages are classified according to morphosyntactic and semantic patterns. At the morphosyntactic level, we coded type of exponence of gender and number, patterns of gender syncretism in the context of number, competing gender and number indexation patterns, presence of dedicated diminutive and augmentative genders. At the semantic level, we noted whether gender assignment is rigid (i.e., nouns are assigned to one gender only) or manipulable (i.e., nouns can be assigned to more than one gender). Manipulable gender assignment is found to be associated with the modification of the countability properties of noun phrases and/or with the encoding of size variation.

The results show that certain patterns of interaction – e.g., manipulation of gender assignment to encode size variation – are widespread within Africa and cut across genealogical groupings. We call these *canonical interaction patterns*. Conversely, the distribution of the rarer patterns of interactions – e.g., manipulation of gender assignment to encode countability variation – is genealogically skewed. We call these *non-canonical interaction patterns*. In our sample, non-canonical interaction patterns are only found in languages with pervasive gender indexation and/or a high number of gender distinctions.

In the second study, we illustrate canonical and non-canonical interaction patterns in a language where both are attested: the Kwa language *Selēe*, spoken in Ghana. Data for this study were collected based on fieldwork. *Selēe* has a non-sex-based gender system characterized by a moderately high number of gender distinctions and pervasive gender indexation. After a short description of the system, we will focus on the analysis of patterns of interaction between gender and number and gender and evaluative morphology, using the typological classification proposed in the first case study as a model.

In *Selēe*, non-canonical interaction patterns are associated with both number and evaluative morphology. Some of these fit into the scenario described in the first case study, since they are attested in languages of the sample that are genealogically related to *Selēe*. Other interaction patterns attested in *Selēe* deviate from what is found in the languages of the first case study. We propose to explain these patterns as a Kwa-specific phenomenon.

The paper shows that, at least in African languages, relevant typological differences between gender systems (e.g., patterns of exponence, manipulability of gender assignment) rest on the way grammatical gender interacts with other nominal features. Based on this evidence, we suggest considering *interactivity of gender* as one of the dimensions along which canonical and non-canonical properties of gender could be evaluated crosslinguistically.

**Ellen CONTINI-MORAVA and Eve DANZIGER** (University of Virginia)

### Non-Canonical Gender in Mopan Maya

Mopan (Mayan, Belize/Guatemala) has two noun classifiers that resemble gender markers in that they indicate sex of the referent when used with nouns denoting humans, and are also used with terms for animals and inanimate objects. However, the Mopan gender markers (GM) violate expectations about canonical gender and agreement in the following ways:

- Only a minority of nouns co-occur with a GM; others co-occur either with an article or, if inalienably possessed, with a possessive marker. This violates the expectation that every noun should be able to trigger agreement.
- Counter to the expectation that gender agreement should occur in multiple syntactic domains, gender is marked only on the noun, and unlike some Mayan languages (e.g. Grinevald 2002), the Mopan GM are never used as pronominal reference tracking devices independently of a noun.
- Counter to the expectation that agreement should be obligatory and morphologically bound, the GM can be separated from the noun by an intervening adjective (ex. 1) and can sometimes be omitted (ex. 2—the word *much* ‘toad’ is normally preceded by the masculine GM *aj*).

- (1) Adjective intervening between GM and noun [Ventur (1976) 5:07, “The Orphans”, JI]

yan-aj-oo' u mejen. ka' tuul mejen.  
exist-TR.PFV-3B.PL 3A child\_of\_man two NUM.CLF.ANIM child\_of\_man  
jun tuul aj tz'i' xidal jun tuul ix tz'i' ch'up.

one NUM.CLF.ANIM GM.M little male one NUM.CLF.ANIM GM.F little woman  
'He had children. Two children. One little boy [and] one little girl.'

- (2) Omission of Gender Marker [author's data, “Maria Toad”, JS]

pues yalt-e' kut'an yalt-e' a jok'-s-en.

then try-TR.IMP 3.QUOT try-TR.IMP 2A exit-CAUS-1B  
 ix ch'up a b'e' pero much-Ø  
 GM.F woman ART DEM.4 but be\_toad-3B  
 ““Just try it” she said, “Try to get me out”. But that mentioned woman was a toad.”

What grammatical and discourse functions are served by the Mopan GM, and how can their non-canonical properties be understood? We address these questions by examining the productive functions of these forms, using data primarily from narratives (e.g. Ventur 1976; author's data). The GM serve as determiners, although they pattern differently from both the article and the possessive markers. Like the other Mopan determiners, the GM function productively to distinguish predicates from non-predicates in a language in which the lexicon is polyvalent (Lois & Vapnarsky 2006), i.e. many lexical roots can function either as argument or predicate. Mopan GM are also productively used to form agentives from active intransitive verbs. This allows specification of natural gender, which is not normally specified in the third person in Mopan. In addition, the GM may precede adjectival modifiers of normally non-gendered nouns, a differentiating function also linked to gender. The “non-canonical” appearance of Mopan gender markers is thus related to specific typological features of this language.

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## **Greville G. CORBETT (Surrey Morphology Group)**

### **New approaches to the typology of gender**

To set the scene for the Workshop, and make progress on the question “what is a possible gender system”, we begin from the notion “canonical gender system”. One value of this canonical approach is in helping us to see beyond the familiar systems, such as those of German or French. While these systems come readily to mind, they are typologically strange. We can pull apart the components of these and other gender systems, and use them as criteria to construct a large typological space. Doing this, using the notion of canonical gender (Corbett & Fedden 2015), then leads us to compare and contrast gender with the other morphosyntactic features. Canonical morphosyntactic features are clearly distinguished by formal means and their values are determined by simple syntactic rules. To distinguish gender from the other features we look at the interaction with parts of speech: gender is distinct since in the canonical instance there is just one gender value per noun. We can then investigate and better understand the numerous types of deviation from this ideal (hybrid nouns, nouns of common gender, and so on).

Given the baseline of the canonical gender system, we can appreciate more of the exoticism of parts of the non-canonical gender systems of languages like Miraña (Seifart 2005) and Dutch (Audring 2009). I concentrate on certain highly non-canonical systems which verge on classifiers. The data are an exhaustive sample of languages identified to date which have been claimed to have more than one system of classification, such as Mian (Fedden 2011), which has a four-valued gender system plus a different, but partly related, set of verbal classifiers. The sample of such languages is relatively small (though it has expanded considerably in recent years, as relevant languages have been described in sufficient detail). These languages require especially careful analysis, since the issue of whether complex phenomena justify an account requiring two systems/features (rather than a single more complex feature) has been little discussed. Here again, I argue, a canonical approach proves helpful (see Fedden & Corbett f.c.). The results are: (i) a nine-member typology of semantic-form relations, together with arguments for treating some of these as single systems and others as two systems; and (ii) the assignment of particularly interesting languages (including Mian) to their place within this typology. Not all nine cells of the typology have been filled to date; however, given the relatively small size of the sample it would be premature to give too much significance to the currently missing cells. The focus is on argumentation since, if we cannot reliably determine whether we have two systems or one, there is little point in attempting a typology (see also Round & Corbett 2015). This fits within the wider Canonical Typology approach which, while found most

widely for tackling morphological and syntactic issues (as in Brown, Chumakina & Corbett 2013), has been taken up in phonology (Hyman 2012), sign language (Cormier, Schembri & Woll 2013), the investigation of phonaesthemes (Kwon & Round 2014), and beyond.

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**Michael FRANJIEH** (University of Newcastle)

### Non-canonical gender in North Ambrym

Oceanic languages are well known for their systems of possessive classifiers which occur with semantically alienable possessed nouns. Typically a possessed noun can occur with different classifiers dependent upon the intended use of the possessed item and thus, in general, these languages exhibit canonical classifier systems.

North Ambrym (Oceanic, Vanuatu) represents a typological oddity in that prototypical alienable possessed nouns can only occur with one of five possible classifiers, as exemplified in 1 below.

(1a)	<i>ye-n̩g</i> CL1-1SG.POSSR	<i>barrbarr</i> pig	(b)	<i>*mwe/*bo/*to/*mwene-n̩g</i> CL2/CL3/CL4/CL5-1SG.POSSR pig	<i>barrbarr</i> 'intd: my pig'
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The rigid collocation between a possessed noun and a particular possessive classifier entails that the appropriate classifier is listed as a feature of the noun in its lexical entry, and are in fact markers of gender. Therefore, the gender of a possessed noun is realised by the different morphological forms of the possessive gender markers.

Further evidence of agreement within North Ambrym's gender system comes from anaphoric possessive constructions, where a possessed noun can be elided and replaced with the anaphoric *ge*, as shown in example (2)

(2a)	<i>ye-n̩g</i> CL1-1SG.POSSR	<i>ge</i> ANA	(b)	<i>mwene-n̩g</i> CL5-1SG.POSSR	<i>ge</i> ANA
					'that's mine'

Anaphoric *ge* 'that' is classifier neutral and therefore can potentially occur with any of the classifiers, though the classifier that occurs must agree with the elided possessed noun head. Thus, the elided possessed noun in (2a) must be a member of CL1 gender and the elided possessed noun in (2b) must be a member of CL5 gender.

As the gender system in North Ambrym has developed from a classifier system this has resulted in a restricted gender system that is non-canonical and whose only domain is the possessive construction. Furthermore the gender of a possessed noun depends not only on semantic assignment but also on how prototypical a possession the referent of the possessed noun can be, with speakers disagreeing on the gender of less prototypical possessed nouns. The result is an emerging gender system whose system of semantic assignment rules are still in the process of being settled.

**Felicity MEAKINS and Rob PENSALFINI** (University of Queensland)

### **Gender Bender: Disagreement in Jingulu Noun Class Marking**

Languages undergoing accelerated change as the result of language obsolescence are often characterised as displaying high levels of variation and optionality in comparison with conservative varieties of the language. These characteristics are assumed to be a symptom of a lack of systematicity and are often not explored further. In this paper we argue that, while variation and optionality in grammatical systems is one effect of language obsolescence, these changes are nonetheless highly rule governed.

Jingulu (Mirndi, non-Pama-Nyungan) is a traditional language of the Jingili people of northern Australia. It is a highly endangered language now only spoken by a few elderly people. Since its first documentation by Chadwick in the 1970s Jingulu has undergone a number of changes, some attributable to processes observed in situations of language obsolescence. One change occurred in the noun class system. Jingulu distinguishes four genders: masculine (I), feminine (II), vegetable (III) and neuter (IV), as is typical of Australian languages (Harvey & Reid 1997). NP modifiers generally show agreement in gender with the head noun, however Pensalfini (1999a) also observed that modifiers can optionally ‘disagree’ with their head. Disagreement or ‘superclassing’ (cf. Corbett 2012) is principled and hierarchical with masculine-marked modifiers optionally found with heads of all four genders and neuter-marked modifiers optionally found with heads of the vegetable gender.

Other Australian languages show similar system, which cannot always be attributed to language contact or obsolescence. Two generalisations can be made about the observed disagreement patterns, masculine gender is the default for animates and neuter gender is the default for inanimates. This suggests that language health is irrelevant as an explanation for gender disagreement. Obsolescence may accelerate the pace of change but does not influence the form it may take. Instead, general processes of language change are shaped by inherent semantic categories such as animacy.

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**Tania PACIARONI and Michele LOPORCARO** (University of Zurich)

### **Overt gender marking depending on syntactic context in Ripano**

In a fully canonical gender system, it is expected that gender is marked on the noun itself and is expressed on other parts of speech, thus doubling the marking on the noun (see Corbett 2006: 8-27, in particular p. 11, criterion 2). Moreover, an ideal overt system should have a dedicated marker for gender on every noun (cf. Corbett 1991: 62). While we know that languages deviate in different ways from this ideal, one specific deviation that has not ever been described is the syntactic dependency of gender marking on nouns.

This is exactly the case that we present in this paper, with new data from the dialect of Ripatransone, an Italo-Romance variety spoken in southern Marche, whose intricate agreement system has already been studied by many scholars (cf. e.g. Parrino 1967, Harder 1988, Mancini 1993, D'Alessandro 2010, Ledgeway 2012: 299-310). In this dialect, a subset of the nouns systematically takes inflectional gender marking, though not in all syntactic contexts (cf. Harder 1988: 114-121). Examples (1)-(2) illustrate that overt gender marking occurs in NPs containing a bare noun (in 1), but not in NPs with a determiner agreeing in gender (in 2).

## (1) Strong inflection (Harder 1988: 114-121)

	N	M	F
SG	'sala	'fiju	<i>frə 'kine</i>
PL		'fiji	<i>frə 'kina</i>
	'salt'	'son/-s'	'little girl/-s'

## (2) Weak inflection (Harder 1988: 114-121)

	N	M	F
SG	<i>lə</i> 'sala	<i>lu</i> 'fija	<i>le frə 'kine</i>
PL		<i>li</i> 'fija	<i>lə frə 'kina</i>
	'the salt'	'the son/-s'	'the little girl/-s'

This is somewhat reminiscent of strong vs. weak adjective inflection in German, except that this dependency on syntactic context affects agreement targets in German, whereas here (gender/number) agreement controllers are involved. The comparison of tables (1) and (2) shows another restriction as well: the complementary distribution of strong and weak inflection occurs in Ripano only with masculine nouns, not with feminine or neuter nouns.

The aim of this paper is to investigate the syntactic dependency of overt gender marking in this dialect through the qualitative analysis of two main sources of data. First, we analyse written production by native speakers (a dictionary, grammar notes, folk literature); second, we have elicited new data through dedicated fieldwork, testing the syntactic behaviour of nouns embedded in different contexts. We thereby test the behaviour of gender agreement on targets and of gender marking on controllers, given their different morphology (the inflectional class they belong to), morphosyntax (their gender and number values), and syntax (the configuration in which they occur). As a result, we will provide a finer-grained classification of the interaction between syntactic context and overt gender marking on controllers than available to date in the published sources (controlling, in particular, for the different kinds of determiners accompanying the noun within the NP), and explore its implications for the theory of grammatical gender.

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**Ruth SINGER** (University of Melbourne)

### Questioning the basis of the classifier-gender distinction

The use of gender in the Australian language Mawng shows why we need a typology of gender that starts with function rather than form. Mawng's gender system looks like a prototypical gender system but does not behave like one. It has five genders and gender agreement appears in both the verb and the NP. However, the way the system is used is similar to how free classifiers are used in other Australian languages. These free classifiers include the generic noun classifiers of the kind we find in Mparntwe Arrernte (Wilkins 2000) and the generic nouns that are incorporated into verbs in Bininj Gun-wok (Evans 2003). Nordlinger and Sadler (2008) point out that structural parallels exist across classification constructions in Australian languages regardless of whether the 'generic noun classifiers' are free or incorporated into verbs.

Two functions of Mawng gender are more often associated with classifier systems than gender. The first is the key role that verbal gender agreement plays in sense disambiguation between verbs and their arguments (Singer 2012). This role has been suggested by Denny (1976) to be a key function of classifiers. Gender agreement is also important in establishing initial references and modifying existing referents in Mawng (Singer 2012). However, since Heath (1983), tracking referents is often seen as the only real function of

gender. Mawng gender can play a similar role to classifiers in other languages because like most classifiers in Australian languages, Mawng's genders have a strong semantic basis (Singer 2015).

Nominal classification systems which challenge existing typological categories are often accommodated with reference to a gradient (Grinevald 2000). So we could argue that there are prototypical gender systems and classifier systems and Mawng sits somewhere in between these two prototypes. This approach avoids challenging existing assumptions about nominal classification. An alternative is to re-evaluate the assumptions. The prototypes of genders and classifiers that are used do not reflect recent documentation of diverse nominal classification systems. Kilar斯基 (2013) traces how historically, theories of nominal classification have struggled to accommodate systems with a strong semantic basis. European gender systems are still seen as the prototype for gender but these systems may be relatively unusual from a worldwide perspective.

The gender/classifier dichotomy rests on a number of connections between form and function which have not been adequately demonstrated. Gender systems are usually identified primarily by their agreement patterns and exclusive system of categorization (Corbett 1991). Perceived functional differences between genders and classifiers are thought to derive from their formal differences. However evidence for a formal-functional correlation is lacking because of the limited data available on the function and use of nominal classification systems (cf. Contini-Morava and Kilar斯基 2013). Typologies of nominal classification typically start with a split between classifier and gender systems. If we started with function rather than form, what might we find?

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#### **The noun classification continuum in Kotiria (East Tukanoan): ‘Non-canonical’ gender or a ‘typical’ mixed system?**

Studies of Amazonian languages demonstrate the existence of complex noun classification systems that display characteristics of both gender ('concordial') and more open-ended classifier systems (Gómez-Imbert 1982; Derbyshire & Payne 1990; Seifart 2005). These systems challenge our definitions of 'canonical' gender marking as well as early typologies of classifiers (e.g. Allan 1977) when viewed in wider typological perspective. They moreover suggest that 'continuum' models of noun classification are more applicable (Gómez-Imbert 1982, 1996; Derbyshire & Payne 1990; Grinevald & Seifart 2004; Seifart 2005; Aikhenvald 2000; 2012, among others).

Kotiria, an East Tukano language of northwestern Amazonia has such a continuum system. In part of its nominal grammar we find gender-like marking with the expected characteristics of gender systems—including a reduced number of classes based on transparent semantic features, nouns with inherent

assignment, and bound gender suffixes with concordial functions in several syntactic domains—yet another part of its grammar makes productive use of classifier morphology. The basic semantic distinction underlying the system overall is animacy, with scalar distinctions evident in both the animate and inanimate classes. Kotiria gender marking occurs with animates, and patterned use of bound gender/number morphemes reveals an internal hierarchy with humans and humanlike entities at the highest levels and collective or non-individuated animates at the lowest. The small paradigm of animate gender/number suffixes: -(k)i/u ‘MASC’, -(k)o ‘FEM’, -ro ‘3SG’, -~da/-a ‘PL’ are highly grammaticalized and occur on animate nouns themselves, in derived third-person pronominals, and as agreement markers on phrase-level modifiers of all types. These same markers moreover function at the clause level as nominalizers of subordinated constituents: adverbial, complement and relative clauses.

Inanimates are subcategorized according to mass/count distinctions and gradient levels of saliency. Certain inanimate roots, such as *wu'u* ‘house/edifice’ occur independently, without classifiers, and the full lexical form is repeated in the classifier slot in phrase-level modifying constructions, including (but not limited to) quantifying constructions. Most inanimates, however, regularly occur with classifiers, particularly when individualized. In contrast to the more fixed, inherent gender marking of animates, many inanimates can occur with different classifiers depending on the identifying trait—shape, function, type, or other salient feature—that the speaker wishes to emphasize in a particular situation. Classifiers themselves show varying degrees of grammaticalization, as evidenced by morphological and phonological reduction as well as loss of lexical transparency. They range from highly grammaticalized shape classifier suffixes such as -ka ‘round’ –da ‘filiform’ and -dtu ‘cylindrical’, to ‘repeaters’ and more transparently lexical classifiers that function much like compounds, such as -~phu ‘leaf of X’ and -ko ‘liquid from/made of X’. Like gender morphemes, classifiers function as agreement markers and are used to derive pronominal referential forms in discourse (Stenzel 2013).

This paper exemplifies and discusses the Kotiria system as a continuum of noun classification resources. Its similarity to systems described for a number of other Amazonian languages reinforces the notion that such ‘continuum’ systems constitute a profile unique to this still underexplored linguistic region, and should be recognized and integrated into existing typologies.

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#### Gender in Nalca and enlarging the canon of synchronic (and diachronic) canonical gender properties

Nalca, a Mek language of Tanah Papua (Svärd 2013) has a highly unusual gender system. Gender in Nalca is non-canonical already according to well-known traditional criteria for canonical agreement (see, e.g., Corbett 2006). For instance, in Nalca, due to pervasive switching, gender markers are not consistent across target categories given the same noun, gender is marked only on one lexical category and only in one syntactic domain, and gender markers are stems rather than affixes. However, Nalca exhibits a large range of properties which are so peculiar that most linguists not familiar with Nalca would hardly think of including criteria such as the following into the canon of canonical properties (all violated by Nalca): (i)

gender has at least one of the two major functions: classifying and reference tracking, (ii) gender is not predominantly assigned by default, (iii) not all non-default genders are inchoate, (iv) gender targets are not predominantly immediately adjacent to their controllers, (v) if gender switches, the switch is not conditioned by NP internal syntax, (vi) in formal assignment systems the phonological criterion is a part of the word, not the whole word structure, (vii) if coordination triggers a particular gender, this gender is not used exclusively in coordination, (viii) if plural words are involved in gender agreement, they are gender targets and not triggers.

Here we can give only one example illustrating the unusual properties. In Nalca gender can be switched on and off, causing a syntactic alternation between the gender they trigger and non-noun a-gender. This is shown in (1), where the NP headed by si ‘tooth’ takes the neuter ne- (because si has the structure CV) in one NP, but is switched off in the second NP (i.e., taking non-noun a-) due to the different attributes the two NPs have (genitive-marked possessor vs. unmarked possessor).

(1) Nalca

...[Sik-ja si ne-ra] [bei-gam singa si a-naso' a-k] u-lum-ek
3PL-GEN tooth NE-TOP wild-dog lion tooth A-EQUATIVE A-ABS be-IPFV-PST.3PL
‘...and their teeth were as teeth of lions.’

We will argue that the unusual properties of Nalca gender can be largely accounted for by its non-canonical diachrony. Nalca gender is diachronically non-canonical already by its being very young. The closely related languages Una, Eipo, and Yale all lack gender. Many synchronically non-canonical properties of Nalca gender can be either accounted for by the fact that it is a non-mature gender system or by the fact that it has an unusual diachronic origin. The diachronic perspective is also important since some of the non-canonical properties of Nalca gender recur in other Mek languages although they lack gender.

To summarize, this talk discusses the applicability of the notion of canonical gender to a non-mature gender system with a highly unusual diachronic development of gender. We will argue that the gender system of Nalca can give us insights into how various non-canonical gender properties can interact in a particular language system and how they relate to diachrony.

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## WORKSHOP

### Parameters in Diachronic Syntax

*Convenors*

**Theresa Biberauer and Ian Roberts**

*Description*

The central idea in generative approaches to diachronic syntax is that change results from children’s reanalysis of their parents’ grammar, G1: as they have only indirect access to G1, via its output, their grammar, G2, may differ from G1, causing syntactic changes to emerge inter-generationally. The advent of the Principles and Parameters era in the late 1970s led to the specific expectation in the diachronic context that at least some syntactic changes might be parametric, entailing parameter resetting. From the outset, however, the challenges facing a parametric approach to syntactic change were apparent. In the current generative context, opinion is divided as to the feasibility of a “post-GB” parametric approach to the understanding of syntactic variation: on the one hand, the empirical failures of GB parameters and/or the conceptual reorientation of the Minimalist Program are taken to argue against pursuing further parametric work; on the other, there is the argument that GB parameters should be viewed as “first-pass” parameters, with empirical and theoretical advances since the late 1970s and, particularly, in the minimalist context, pointing towards the kinds of modifications that could lead to a genuinely explanatory theory of parametric variation. The purpose of this workshop is to evaluate the future of parametric explanation in the domain of

diachronic syntax. Explicit consideration of the way in which parameters are operative in diachronic changes has decreased steadily during the minimalist era, and our objective here is to bring together established and emerging scholars, working on an unusually wide variety of languages, to determine whether this is the (accidental) consequence of the uncertainty surrounding the notion of minimalist parameter(s)' or whether it is in fact symptomatic of genuine incompatibilities between our current understanding of diachronic change and the possibilities predicted within a parametric framework.

More specifically, we will consider:

1. the evidence for and against the value of parametric approaches in diachronic syntax, i.a. considering the extent to which parametric work has contributed novel diachronic insights.
2. diachronic syntax in the context of a “three factors” approach to language (Chomsky 2005), probing whether diachronic work can shed novel light on the currently still mysterious nature of the “third factors”.
3. the role of learning theory in diachronic generative syntax (Lightfoot 1993, Clark & Roberts 1993, Roberts 2001, Yang 2002, 2013), and how this relates to our modern perspective on parametric syntax.
4. “flagship” GB parameters in the light of what we have learned about the ways in which the associated phenomena vary over time, e.g. V2, pro-drop, and whmovement.
5. what diachronic studies can teach us about the nature of the links between superficially unrelated properties, in particular the extent to which they highlight new clusters that have not previously been considered.
6. the relevance of parametric ideas in understanding change in areas that were not a primary focus in the GB era, e.g. alignment, information structure, cyclic changes beyond Jespersen’s Cycle, etc.
7. the extent to which our more sophisticated understanding of the synchronic differences between very closely related varieties can facilitate diachronic insights. Among other considerations, is it meaningful to talk of ‘microparametric change’ in this case?
8. whether parameters have anything to contribute to generative investigations of the factors determining stability/continuity versus change in (morpho)syntax (Breitbarth, Lucas, Watts & Willis 2010), and of directionality in change.
9. whether contact produces change that can be meaningfully described as parametric, and whether it is possible to discriminate contact-induced change from regular genealogical transmission by appealing to parametric profiling.
10. what the types of optionality evident in changing systems may teach us about the feasibility of a parametric approach to change. Is it always the case that optionality is only apparent, or are there cases where different structures are in free variation, creating a challenge for minimalist explanation, parametric or otherwise? What is the status of competing grammars (Kroch 1989) and combinatorial variation (Adger 2006) in diachronic explanation?

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### A mesoparameter for Talmy's typology

This work stems from the following research question: Can Talmy's (2000) well-known satellite- vs. verb-framed typology be explained in terms of a parameter, specifically a mesoparameter in the sense of Biberauer & Roberts (2012)? Mesoparameters are hypothesised to involve a particular functional head and, more importantly for present purposes, to be quite stable diachronically and to be reset only through contact.

I approach the issue through the parametric theory expounded in Biberauer & Roberts (2012), combined with Real-Puigdollers' (2013) theory of lexicalisation as a result of spell-out by phase. This mesoparameter is proposed to reside in the functional head Path, characterised as either heading a phase or not. In the former case Path may be lexicalised independently from the higher head (v), which accounts for the satellite-framed pattern (cf. English *go* (= v) *out* (= Path)); in the latter case it must be lexicalised with that head, yielding the verb-framed pattern (cf. Catalan *sort* (= v + Path)-*ir* 'go.out-INF').

I analyse two sets of data: a) the transition from Latin into Romance (1), illustrating satellite- to verb-frame change and b) the transition from Rhaeto-Romance into a satellite-framed language (2a), as compared to Northern Italian non-Rhaeto-Romance varieties (2b):

- |        |                         |            |             |  |  |        |
|--------|-------------------------|------------|-------------|--|--|--------|
| (1)    | <i>Latin</i>            | ex-i-re    | >           | <i>Catalan</i>                         | eix-ir                                     | /efiŋ/ |
|        |                         | out-go-INF |             |  | go.out-INF                                 |        |
| (2) a. | Lavar                   | *(oura)    |             | las maclas.                            | (Vallader dialect of Swiss Rhaeto-Romance) |        |
|        | wash.INF                | out        |             | the stains                             |  |        |
|        | 'Wash the stains away.' |            |             |  |  |        |
| b.     | Lavare                  | (via)      | le macchie. | (Northern Italian; Mateu & Rigau 2010) |  |        |
|        | wash.INF                | away       | the stains  |  |  |        |
|        | 'Wash the stains away.' |            |             |  |  |        |

The method involves comparing these two transitions within the abovementioned frameworks. In the former case phonological erosion has yielded the conflation of two different morphs, the one encoding the event and the one encoding Path. The generation first exposed to this conflated form had no cues that Path should be lexicalised as a different morph. The total or partial loss of case morphology in Latin and Ancient Greek, crucial in marking some PPs as locative or directional, did not help cueing either. All in all, this generation had to hypothesise that Path is not a phasal head, but has to form a spell-out domain with v. By contrast, (2a) shows that Rhaeto-Romance can be claimed to be a satellite-framed language, since in this predicate the element expressing the path is non verbal: a particle. Thus, the verb *lavar*, by itself, cannot express a removing event, as it can in Italian (2b), where the particle is optional. Rhaeto-Romance has most probably come to this status through long-standing and intensive contact with German varieties (Berthele 2006), conforming to Biberauer & Roberts' (2012) expectations on the resetting of a mesoparameter.

The label *mesoparameter* can be applied to Talmy's typology in so far as it can be described through the properties of the head Path. However, the sample suggests that contact is not needed in one of the two possible resettings: the one involved in the satellite- to verb-framed change. This suggests that for some parameters, specifically those related to the analytic vs. synthetic expression of functional heads, the two resettings may not need the same conditions.

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### The parametric setting for Obligatory Control in Old Romanian

This paper focuses on the parametric setting for generating constructions with obligatory control (OC) in Old Romanian (OR). The main observation: the setting for the OC parameter remained unchanged and exclusive since the 16th century, whereas the parametric settings concerning the values of the features associated with the C/T/Agr system in OC constructions show systematic change and overlapping.

Theoretically, OC verbs select full-fledged clauses, while raising verbs select truncated clauses (Rizzi 1982), i.e., ForceP vs FinP (Rizzi 1997). Furthermore, OC is forced in complement clauses when either semantic tense is missing (i.e. [-T]/anaphoric) or when morphological agreement is absent (i.e. [-Agr]) (Landau 2013). Romance and Balkan languages display opposite parametric settings for OC (Kempchinsky 2009; Hill & Alboiu 2014)): Romance OC involves a full-fledged infinitive complement, with [-Agr] and PRO subjects, whereas Balkan OC involves a truncated subjunctive complement, with [+Agr] and raising lexical subjects (as in Hornstein 1999).

OR displays 4 types of complements in OC contexts; see (1), with the same matrix verb.

- (1) a. numai iscălitura învățasă de o făcea de-indicative  
only signature learned DE it made.IND.3  
'he only learned to sign his name' (Neculce {93})
- b. au început a învăța cărți a scrie a-infinitive  
has began to learn letters to write  
'he began to learn to write letters' (CM II {278})
- c. de oaste au învățatu să să grijască să-subjunctive  
of army has learned SUBJ REFL take.care.SUBJ.3  
'he learned to take care of the army' (Ureche {73})
- d. le-au învățat toate de covârșit de-supine  
them=has learned all DE improved.SUP  
'for she learned to improve everything' (Filerot {213})

Also, there is optional insertion of de (2); cartographic tests signal a split Fin for (2): Fin1-de [-finite]; Fin2 a/să [modal].

- (2) a. nu-i lasă de să se măhnească  
not-them let.3 DE SUBJ REFL sadden.SUBJ.3  
'he did not let them become sad' (Coresi EV {399})
- b. lăsă de a grăirea cu el  
let DE INF talk.INF with him  
'he stopped talking to him' (PO {55})

In (1)/(2), de-indicatives and să-subjunctives display the -T/+Agr of Balkan subjunctives; a-infinitives and de-supines display the -T/-Agr of Romance infinitives. The underlying structure, however, is set for the Balkan OC parameter across the board (FinP vs ForceP; raising vs PRO). Hence, tension arises between the OC parameter and the variation in the T/Agr parameters in OR, which we sum up as being the push-and-pull chain in (3).

- (3) [-T/+Agr] (indicative) > [-T/-Agr] (infin) > [-T/+Agr] (subjunct) > [-T/-Agr] (supine)

Analysis: (3) indicates a continuous pressure in the recycling of phi-features due to typological ambiguity. This pressure affects Fin (the only C head in OC in OR), which fluctuates from syncretic, in (1), to split, with two complementizers, in (2). Fin (Balkan paradigm) is forced to split in OR under pressure to project to ForceP (Romance paradigm), and to accommodate [-T, +/-Agr] (support comes from word order and cartographic tests).

Conclusion: the OC parameter is inflexible and constant, whereas the microparameters involved in the C/T/Agr feature system are gradient and unexclusive.

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### **Mathematical modeling of grammatical diversity supports the historical reality of formal syntax**

The Parametric Comparison Method (PCM, Longobardi and Guardiano 2009) uses syntactic parameters (Chomsky 1981, Baker 2001, Biberauer and Roberts 2012) to study phylogenetic relationships between languages. This method has already successfully generated phylogenies of Indo-European (IE) languages (Longobardi et al. 2013) which are competitive with those produced by the classical comparative method (Durie and Ross 1996), lexicostatistics (Dyen et al. 1992), or Bayesian phylogenetics (Bouckaert et al. 2012). A question raised by the PCM framework, and indeed by all these methods, is whether their conclusions about language relatedness are secure against chance similarities between languages (Bortolussi et al. 2011). As far as the PCM goes, using a randomly simulated distribution of parametric distances between languages (which are defined to range between 0 and 1), it is possible to perform statistical tests of the hypothesis that the distances observed in the real world are unlikely to arise by chance, and thus to motivate judgments of relatedness based on syntax.

We propose an algorithm to generate biologically possible languages, which allows us to prove the significance of the distances calculated by the PCM, thus validating the PCM as a method to formally study the relationship between languages and populations. The comparison of the distribution of actual language distances with the random distances generated by our algorithm reveals that real distances do not resemble random ones, and thus may contain useful phylogenetic information.

Fig. 1 demonstrates the difference between the actual language distances (green) and those generated by our algorithm (blue). This difference crucially remains even after removing from the dataset language pairs that are both drawn from the same family (red). This fact indicates that there is meaningful historical signal in these distances that goes beyond the level of recognized linguistic families. Further investigation uncovers that this historical signal is concentrated in Europe and northwestern Asia.

Fig. 2 shows the proportion of language pairs in our dataset that fall below a critical threshold (defined as the  $10^{-3}$  quantile of the random distribution). The highest degree of closeness is exhibited between Indo-European and its close geographic neighbors. On the other hand, there are no pairs below this threshold which involve the Sinitic, South American, or African languages in our sample.

These results confirm that syntactic parameters provide novel information for the study of the prehistory of human languages, which agrees with the outcomes of previous lexicon-based phylogenies or other independently known historical variables, and hints at the possibility of aiming toward a greater time depth, given that parameters are part of a universal faculty of language.

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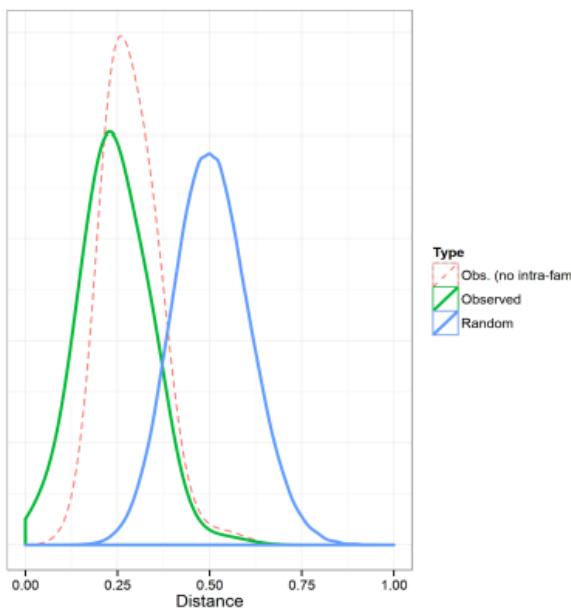


Fig. 1 - A kernel density plot showing the distribution of observed and randomly-generated distances.

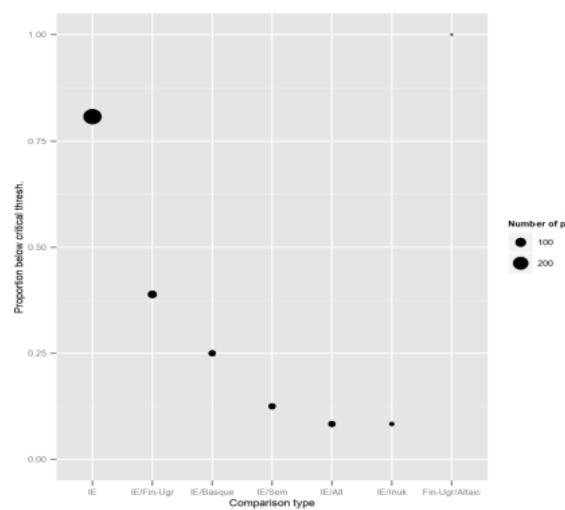


Fig. 2 - Pairs falling below our critical threshold. The position along the y-axis indicates the proportion calculated over the total number of pairs involving the families mentioned.

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### On the pro-drop parameter in diachrony. A comparison between the Old High German and the Middle Italian translations of Tatian's Diatessaron

In older stages of Italian and Old High German (OHG) null subjects are much more frequent in main than in embedded clauses. Benincà (1984) for Old Italian and Axel (2007) for OHG propose that null subjects are licensed syntactically by the movement of the finite verb to C° which is possible in main but not in embedded clauses. Schlachter (2012) claims for OHG that null subjects are a discourse phenomenon and are licensed by a Topic antecedent. By analysing the distribution of overt and null subjects in the OHG (c. 830) and the Middle Italian (MI, 14/15 century) Diatessaron, I show that in both languages the licensing and the interpretation of referential null subjects depend on both discourse and syntactic factors, which are similar, though not identical, to those licensing null subjects in present-day Italian (cf. Frascarelli 2007, 2014). I analyse the distribution of overt and null subjects in the first 10 chapters and in all main interrogative clauses of the text. Five contexts are distinguished according to clause type, and presence or absence of an overt subject in the Latin text.

Latin	OHG		MI	
	Overt	Null	Overt	Null
Main clauses with overt DP subject / subject pronoun (101)	101/101 (100%)	0/101 (0%)	99/101 (98%)	2/101 (2%)
Main clauses with null subject (54)	12/54 (13%)	42/54 (77%)	11/54 (20%)	43/54 (80%)
Main interrogative clauses with overt subject pronoun (56)	56/56 (100%)	0/56 (0%)	51/56 (91%)	5/56 (9%)
Main interrogative clauses with null subject (185)	132/185 (71%)	53/185 (28%)	112/185 (60%)	73/185 (39%)
Embedded clauses with null subjects (43)	42/43 (97%)	1/43 (3%)	32/43 (74%)	11/43 (25%)

The syntactic analysis does not account for the data since it predicts the distribution of null subjects to be similar in all main clauses (finite verb in C°), and OHG and MI not to differ from each other (but they differ in embedded clauses). They are not accounted for by the loan-syntax hypothesis either, since embedded clauses pattern *against* the Latin model in most of the cases. The conditions for the licensing and the interpretation of referential null subjects in OHG and MI are shown to be primarily dependent on information structure. Null subjects are licensed if a matching relation can be established between an Aboutness-Shift Topic (3 persons), or a logophoric operator (1,2 persons) in CP, and a null referential pronoun in TP, like in present-day Italian (cf. Frascarelli 2007, 2014). OHG and MI exhibit a more restrictive system than present-day Italian, one in which 1-2 person arguments and DPs can always count as intervener in the matching relation with pro (cf. Frascarelli 2014). The asymmetries found in embedded clauses follow from syntactic conditions, i.e. the lack of a TopicP in embedded clauses in OHG, but not in MI. The implications of these results for parametric theory in general, and for the idea that syntactic change follows from parameter resetting will be discussed.

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#### *There then and now*

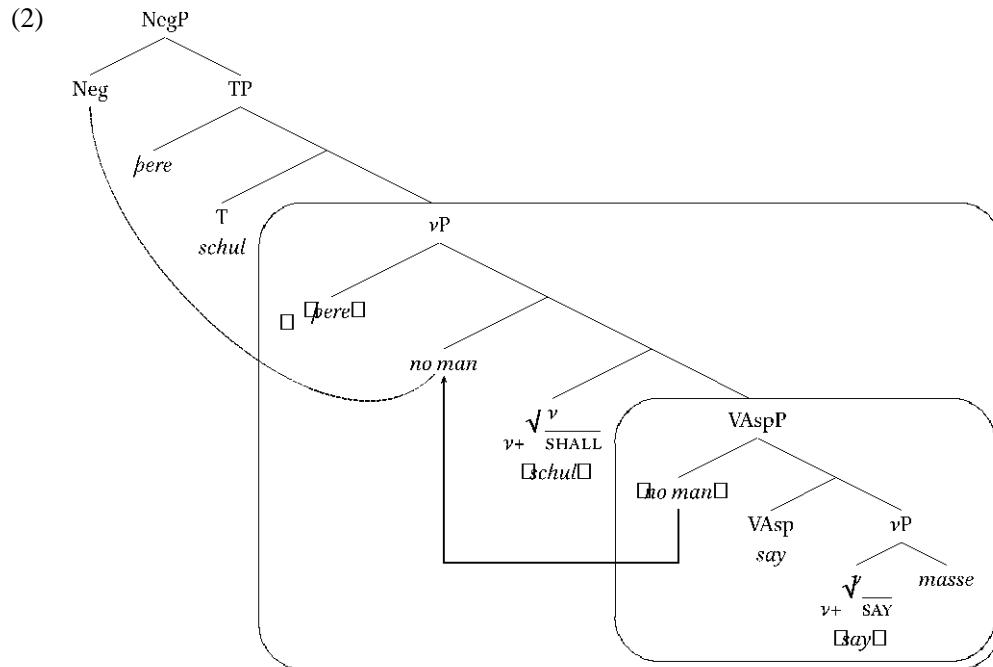
A major advance of generative syntax (Chomsky 2013: 38) has been a movement away from stipulating construction-specific properties toward more modular accounts—first via parameters, and later locating parametric variation in the (functional) lexicon. We look diachronically at English ‘presentational’ *there*, arguing that changes in its distribution from Middle and Early Modern to Present-Day English favour a low-merge analysis (e.g. Deal 2009) over a pure expletive approach (e.g. Chomsky 1981 et seq.). We examine *there*-clauses in the PPCHE since ME, first in transitive/unergative non-copular clauses. Strikingly, these transitive expletive constructions (TECs) arise only in late ME. They almost always contain both a modal and a negative associate (1), and disappear completely in the 16th C. This differs from TECs in modern Germanic languages, where expletive subjects are temporally and distributionally less restricted.

(1) *He ordeyned pere schul no man say masse before bat he had seid þe ters ...* (a1464: CMCAUPHR,52.616)

We claim, contra Tanaka (2000), that both the possibility of TECs and their restriction to modal negative contexts arise from a transitory combination of factors in the history of English. The first was the transition of modal verbs to Infl heads, which included a) the reduction of their complement from a full nonfinite clause to only an inner phase (cf. Wurmbrand's (2001) restructuring predicates), and b) the loss of the modals' ability to take a thematic external argument—by the end of ME, they were raising verbs. The second factor is that, at the relevant period, English was a Negative Concord language.

We assume that a) *There* merges in the same phasal domain as the associate, subsequently raising to check EPP of T (Deal 2009, Bjorkman and Cowper 2015); b) a head has at most one externally merged specifier (Sheehan 2013, Rezac n.d.); and c) prior to about 1780, Voice and Aspect in English shared a single syntactic projection, VAsp (Cowper and Hall 2013).

TECs are possible only when something triggers the movement of the external argument from VAspP below the modal to the specifier of the modal vP, permitting *there* to merge as a second spec,vP in the same phase as the associate (2). This trigger, we claim, was an upward probe from a Neg-word external argument, searching for a licensing Neg head. As long as modals were verbs, the Neg head in the matrix clause was inaccessible to a Neg-word in the lower clause, forcing the Neg-word to move to a higher phase.



The reanalysis of modals as Infl<sup>0</sup> in the early 16th C reduced the number of phase boundaries between spec,VAsp and the Neg head, removing the need for the Neg-word to move and eliminating the possibility of merging *there*. TECs thus disappeared from the language.

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#### Levels of grammar competition – a reflection based on the history of Portuguese

The notion of Competition of grammars proposed by Kroch (1989, 1994), has been extremely useful to conciliate the generativist view of grammar change as an abrupt phenomenon with the fact that, most of the time, grammar change appears as a long process over time in which new forms or structures gradually replace old ones.

However, there is no real consensus in the field, nor real debate in the literature, about the following issues: what is the relative status of the competing grammars, what are the grammatical objects involved in

grammar competition, and what is the role of grammar competition in language acquisition. My aim is to bring a contribution to this discussion based on empirical data drawn from the diachrony and synchrony of European and Brazilian Portuguese (respectively EP and BP).

I shall argue in favor of the following claims:

1. Gradual grammatical changes do not derive from the competition of two I-languages or pieces of I-language, i.e. parameter settings, but from the decreasing use over time of pieces of E-language that are not produced by the I-language of the speakers. This can produce failed changes, cf. for instance, in BP 19th century texts, the competition between V-cl and cl-V which mimics what happened in EP one century before. First V-cl seems to win the competition, and then fails (Pagotto 1992).

2. In the case of Primary Linguistic Data generated by conflicting grammars, I shall argue, following Roberts (2007), and against Yang (2002), that children select the more economical grammar compatible with the data instead of setting parameters on two or more different values. I shall propose, however, that children can learn more than one morphological realization for the same function (cf. in BP, the variation between 1. and 2.). This generates morphological variation that can be viewed as a kind of competition, whose output depends on the relative weights of the variants in the social environment. The crucial point, however, is that this does not entail the existence of two different grammars, each of one associated with a kind of morphological realization. Evidence for this claim is found in the fact that the variation between clitics and strong forms does not go hand by hand with the competition between a grammar with clitics and a grammar without clitics (what Yang's model would predict), but with the emergence of a new grammar of clitic placement, in which clitics are no longer adjoined to the inflected verb or auxiliary (as in 3b), but to the thematic verb (as in 3a).

1. Antes de deixar esse país te escrevi (before leaving this land CL2-wrote-1Sg)
2. E a você envio os mesmos bilhetes (and to you send-1Sg the same notes)
3. a. Como tinha [se comportado] de maneira correta... (BP)  
As had Cl3sg behaved of manner correct
- b. Como [se tinha] comportado de maneira correcta... (EP)  
As Cl3sg had behaved of manner correct  
'As he had behaved correctly ...'

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### Implications of the TP parameter for the degrammaticalization of clitics in Slavic

This paper explores the implications of the [ $\pm$ TP] parameter for the syntax of clitics. Specifically, we propose that the switch in the parameter setting into [-TP] triggers either a shift of verb-adjacent clitics into second position (2P) clitics or their reinterpretation as weak pronouns. We analyze this as an instance of degrammaticalization, a shift of a head ( $X^0$ ) to phrase (XP) (thus, a reversal of van Gelderen's grammaticalization ' $XP > X^0$ ', [2004]).

The empirical basis of the talk are Slavic languages, which show diverse pronominal cliticization patterns: Bulgarian and Macedonian have verb-adjacent clitics; Serbo-Croatian features 2P clitics; Polish has weak pronouns and East Slavic languages only display strong pronouns. However, Old Church Slavonic manuscripts show that verb-adjacent cliticization was predominant in early Slavic. We demonstrate that the loss of verb-adjacent clitics in Old Slavic was contemporaneous with the loss of past tense morphology (aorist and imperfect), which we analyze as the loss of TP. Once the TP projection was lost, verb-adjacent clitics that used to head-adjoin to  $T^0$  began to target specifiers in the extended functional VP projections, resulting in 2P cliticization. Notably, (Old) Polish, Old Russian, and Macedonian data suggest that verb-adjacent and 2P clitics may further shift into weak pronouns. They no longer exhibit distributional constraints such as 2P and verb-adjacency but display syntactic properties associated with XPs, rather than  $X^0$ -elements. Thus, the degrammaticalization of pronominal clitics involves the loss of a strict cluster ordering rule and an increase in scrambling possibilities. In the Slavic languages with clitics, while the dative clitic must precede the accusative clitic, weak pronouns permit both DAT-ACC and ACC-DAT orders (see (1) for Polish [Cetnarowska 2003]). Furthermore, weak pronouns may surface in positions inaccessible for clitics, e.g., as objects of prepositions (see (2a) for Old Russian and (2b) for Old Polish). Synchronously, the degrammaticalization of clitics is occurring in Macedonian, where recently some

speakers started to permit clitics clause-initially in the contexts of adjectival predicates and passive participles (3a) (Tomić 1997, Baerman and Billings 1998) and below second position (3b).

It is significant that all these phenomena have been accompanied or preceded by the impoverishment of tense distinctions in the respective languages. This correlation supports our claim that the degrammaticalization of clitics ( $X^0 > XP$ ) is triggered by the change in the TP parameter. It also speaks against the idea of the irreversibility of grammaticalization and universal directionality of language change.

- (1) Jan w końcu go jej /jej go/ oddał.  
Jan in end it<sub>ACC</sub> her<sub>DAT</sub> her<sub>DAT</sub> it<sub>ACC</sub> lend<sub>PTCP.MSG</sub>  
'Jan eventually returned it to her.' (P)
- (2) a. za **tę** golovy svoi sъkladyvaèmь  
for you<sub>ACC</sub> head<sub>ACC.PL</sub> own<sub>ACC.PL</sub> lay down<sub>1PL</sub>  
'We bow low to you.' (OR)
  - b. Sam, prawi, **przez** **mię** przysiągł jeśm  
He say<sub>AOR.3SG</sub> without me<sub>ACC</sub> swear<sub>PTCP.MSG</sub> be<sub>1SG</sub>  
'He said that he has sworn without me...' (OP)
- (3) a.% Si mu mil  
be<sub>2SG</sub> him<sub>DAT</sub> dear<sub>M.SG</sub>  
'He likes you.'
- b. Petko sekogaš mi e mil  
Petko always me<sub>DAT</sub> be<sub>3SG</sub> dear<sub>M.SG</sub>  
'Petko is always dear to me.' (Mac)

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### Parsing our way to parameters locally: insights from diachronic syntax

After 35 years focusing on parameters of variation we have little by way of a substantive theory of what in general constitutes a parameter, as discussed by Newmeyer 2004, Roberts & Holmberg 2010, Biberauer & Roberts 2006, Boeckx 2011, and many others. That failure is aggravated by (a) adopting a model of acquisition, standard from the earliest days of generative grammar, whereby a child converges on her mature I-language by evaluating I-languages against a corpus of data and selecting the one that is the most successful in generating those data GLOBALLY, and (b) focusing exclusively on properties of I-languages at the expense of E-language, often waved away as not an appropriate focus for theoreticians. The lack of success in understanding how parameters are set by children has led to lack of attention to language acquisition by proponents of Minimalist approaches and corresponding new attention to matters of biological evolution. If we can get a better idea of how parameters are set (following earlier work on this topic a generation ago, Lightfoot 1991), we will have a better idea of what parameters consist in.

An alternative to grammar evaluation would view children as, at the most basic level, born to parse and as postulating I-language structures triggered locally by particular elements of E-language as they parse what they hear (Lightfoot 2015). So new E-language, and only new E-language, would trigger new I-language structures; children understanding (and therefore parsing) new E-language often require new I-language elements. The range of available I-language structures would constitute the possibilities of parametric variation and we key particular aspects of E-language to particular elements of emerging I-languages, given that E-language and I-languages are quite different types of objects. Much of what has been seen as parametric variation can be viewed as differences in how the basic tree-building operations of Merge and

Project may differ within I-languages. The paper will illustrate this through discussion of some of the best understood instances of syntactic change.

Under this approach diachronic work has been insightful, where we have been lucky enough to be able to identify new I-languages (manifested by the obsolescence of some data and/or the introduction of new sentence-types) and prior shifts in language use (E-language) that may have triggered the new I-languages. Diachronic work has offered a good laboratory for investigating the relationship between new E-language properties and new I-language elements, alongside the laboratory of children exposed to unusually impoverished E-language (e.g. new creole speakers and deaf children born into hearing homes, Newport 1998, Singleton & Newport 2004), and going beyond their models in growing their I-languages.

This kind of variation that we see in language is unusual biologically and deserves coherent treatment. We describe it at two levels, as variation in I-languages and in the USE of particular I-languages, i.e. in E-language. The two types of variation are distinct but intertwined in syntactic change, which illuminates how I-languages may shift, i.e. how parameters are reset. When we attend to how new I-languages emerge and how they are triggered by new E-language, we will have clearer ideas about how I-languages may vary.

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### Parameters versus cartography in Benue-Kwa (Niger-Congo)

In Standard Yorùbá and also in Ògè of the adjacent Arìgìdì cluster, wh-words and other narrow focus items linearize at the left sentential edge. (For audio cf. [people.bu.edu/manfredi/AwosiraOge.html](http://people.bu.edu/manfredi/AwosiraOge.html).)

- (1)a. Kíni Bósè-é rà l'ójà ṽba? Yorùbá  
WH.thing B-SUFF buy at-market king  
'What is it that Bósè bought in King's Market?'
- b. Bàtà pupa ni Bósè-é rà l'ójà ṽba.  
shoe red be B-SUFF buy at-market king  
'What Bósè bought in King's Market is red shoes'
- (2)a. Mii Bósè dà úrùn àájá ṽba? Ògè  
WH.thing B buy at market king  
'What is it that Bósè bought in King's Market?'
- b. Íchóchọ bàtà ú-wòn Bósè dà úrùn àájá ṽba.  
red shoe it-is B buy at market king  
'What Bósè bought in King's Market is red shoes'

In cartographic syntax, such displacements converge on a 'criterial' checking-theoretic position of type Spec,CP/FocP (Rizzi 1997). For Yorùbá, however, Adésolá (2005) reports violations of *Superiority* (Kuno & Robinson 1972, 474) and *Weak Crossover* (Wasow 1972, 137) as in (3). The Ògè outcomes are in (4).

- (3)a. Kíni tani-í rà l'ójà ọba? Yorùbá  
       WH.thing WH.person-SUFF buy at-market king  
       ‘What is it that who bought in King’s Market?’ [\* in English]
- b. Tani ìyá rè-é fé.ràn?  
       WH.person mother 3S.GEN-SUFF like  
       ‘Whoi does {her/his}j mother love?’ [\* in English if *i=j*]
- (4)a. \*Mii nè dà úrùn àájá ọba? Ògè  
       WH.thing WH.person buy at market king
- b. Nè èyé và féhèn?  
       WH.person mother 3S.GEN like  
       ‘Whoi does {her/his}j mother love?’ [\* in English if *i=j*]

Adésolá gives a unified account of (3a) and (3b), holding “that the absence of superiority effects in Yorùbá is subsumed under the near absence of weak crossover effects” (2005, 22) and reducing this to a lexical parameter: the lack of interrogative *+wh* expressions (2005, 57, 239). Overt A-bar movement in Yorùbá is thus illusory: hypothesized absence of *+wh* interrogatives forces content questions into a more complex structure coindexing a base-generated nonspecific antecedent with a nominalized clause headed by a null operator. (1a) is accordingly analyzed as (5), treating the *ni* of (1b) as an inverse copula (Yusuf 1990) excorporated from *wh*-indefinites like *kíni* ‘what?’ and *tani* ‘who?’ (cf. *kiní* ‘something’, *eni* ‘some person’).

- (5) Kí ni [Opi Bósè-é rà ti l'oja ọba]? Yorùbá (cf. Adésolá 2005, 4)  
       WH.thing be B-SUFF buy at-market king  
       ‘What is it that Bósè bought in King’s Market?’

Although (5) achieves impressive coverage, it faces two puzzles:

- (i) Internal to Yorùbá: why don’t children use a cartographic analysis of (1a) assigning a *wh*- feature to *kíni* ‘what?’ (cf. Awóyalé 1985, Carstens 1985, Sónaiyà 1989, Bòdé 2004). In effect, what triggers the ‘no *wh*- words’ parameter?
- (ii) External to Yorùbá: why do Ògè children exclude multiple *wh* (4a) despite allowing WCO (4b)? In other words, if Ògè uses the null operator *à la* Yorùbá (5), why are its consequences more limited?

Consider two theories:

**(A) macroparameter plus cartography**

Adésolá’s one-parameter account of Yorùbá questions can exclude multiple *wh* in Ògè by stipulating that Ògè *wh*-words are base-generated in a high cartographic position, comparable to Igbo *kèdú* which Goldsmith (1981) assigns a dedicated templatic feature—root *E*. As with any criterial analysis of displacement, one templatic feature per linearization must be posited. A second problem is that (5), which fixes *ni* in second position of the sentence, can’t generalize to wide-scope, sentence-final *ni* (Awóyalé 1987, Adésolá 1997) without either *ad hoc* antisymmetric preposing of the whole sentential remnant, or accepting accidental homophony of two synonymous *nis* in complementary distribution.

**(B) interacting microparameters, no cartography**

If focus and questions share a veridical operator of *yes/no* polarity (Gleitman 1969, Cheng & Rooryck 2000), Yorùbá blocks this from scoping narrowly on arguments by an independent parameter: ‘early’ spellout of VP (Manfredi 2009). The *yes/no* operator can’t attract a subconstituent of the VP phase, therefore (non-echoic) narrow foci must merge above VP (cf. Aboh 2007). The separate fact that Yorùbá ‘high’ argument focus lacks a pragmatic entailment of exhaustive identification (Jones 2006) is inexpressible in cartography unless different ‘flavors’ of FocP proliferate. Yorùbá escapes antisuperiority by incorporating veridical *ni* into the question word, yielding equidistance. Ògè question words lack a counterpart of Yorùbá *ni*, cf. (4a), but Ògè still escapes WCO as in Yorùbá: its question words can’t merge before the polarity operator, forcing paratactic (5) as a last resort.

Both A and B predict nominalization of the focus remnant, as evidenced on multiple independent grounds in Yorùbá (Awóbùlúyì 1978). Diachronically, B allows the trivial scenario—speculative on present knowledge—that Ògè question words lost their *ni*-type polarity feature by phonetic erosion.

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### Language contact: alignment is lexical – UG consequences are not ‘parameter’-governed

We present two case studies involving language contact over an extended period of time – namely Albanian (Arberesh) varieties in Southern Italy, and Aromanian varieties spoken in Southern Albania. Note that Arberesh and Albanian diverge from a common variety, spoken around 1500 (the time of the migration), allowing us to detect the effects of contact for change.

*Arberesh causatives*: Albanian, which does not have an infinitive, embeds finite sentences under ‘make’. Arberesh employs the same finite embedding but aligns arguments on the Romance ‘faire-à’ pattern (Kayne 1975), cf. (1). Thus the lexical means available to Albanian and its varieties are deployed to maximize alignment with the language in contact, i.e. Italian. Marked agreement of the finite verb with oblique subjects ensues, a parameter independently attested (e.g. by some ergative languages like Nepali) – but not in either Romance or Albanian.

- (1) u bérë tē piçë krumishtinë bushtr-itë  
I made Prt drunk.3sg milk-the.Acc dog-the.Dat  
'I made the dog drink the milk' (I made that he.drinks the milk to the dog)

Furthermore at least in one Arberesh variety (Ginestra) agreement on the finite verb is however controlled by the Person of causer and causee – i.e. agreement with 3p is preferred over 1/2p independently of the thematic role, namely cause in (3) but causer in (2). Thus a UG pattern, namely inverse agreement (Aissen 1997 a.o.) emerges – which is extraneous to either of the input languages.

- (2)   vet bëta më/të folënë (3, 1/2)  
 he make me/you he.speaks  
 ‘He makes me/you speak’
- (3)   neira bëta folënë (1, 3)  
 we make he.speaks  
 ‘We make him speak’

*Aromanian linkers:* Preadjectival linkers represent a pragmatically marked possibility in Romanian (Dobrovie-Sorin and Giurgea 2013), but are obligatory in Albanian. Aromanian redeploys the demonstrative of Romanian as an obligatory preadjectival linker (Campos 2005). Pre-genitival linkers are present in all three languages. However in Romanian and in Albanian they agree with the head noun, cf. (4)-(5) – in Aromanian they agree with the genitive, as in (6), which is not attested in either input language and is typologically rare (Phillip 2012).

- (4)   două kămăş-i ale băiat-ului  
 two shirts-FPL LKR.FPL boy-the.M  
 ‘two shirts of the boy’
- (5)   libr-i i vajz-ës  
 book-the.M LNK.M girl-the.F  
 ‘the book of the girl’
- (6)   libr-a o fitsor-u/ali fet-i  
 book-the.F LNK.M boy-the.M/LNK.F girl-the.F  
 ‘the book of the boy/girl’

*Theoretical implications:* We analyze ‘faire-a’ causatives as an instance of obliquization of a transitive subject, of the type attested in aspectual splits (‘ergativity’), in main/embedded sentence splits (e.g. in Turkish), i.e. as a reflex of the nominalization of the sentence (Manzini-Savoia 2015). We analyze linkers as the free standing (‘clitic’) counterpart of agreement morphology (Franco-Manzini-Savoia 2014). Change results from existing lexical resources finding a new structural collocation (‘alignment’), in conditions of systematic bilingualism (‘contact’). Interestingly alignment produces outcomes absent from the input languages. Assuming that they correspond to necessary readjustments within UG, we note that they appear to be insensitive to macroparametric divides (inverse agreement, or inverse linkers), casting some doubts on the latter.

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#### On the nature of complementizers: insights from Italian subject relative clauses

This paper explores the syntactic status of complementizers in restrictive relative clauses by investigating standard and dialectal Italian varieties both synchronically and diachronically. In the spirit of much recent work on complementizers (Kayne 2008, Manzini and Savoia 2003, 2011), our general aim is to show that what we call complementizers are actually not C° heads but originate as modifiers of the internal relative dP head (cf. Cinque 2013).

The differences between complementizers and pronouns are the following (Kayne 1975):

- (1)   a. complementizer do not display case, pronouns do  
 b. complementizers do not display animacy distinctions, pronouns do  
 c. complementizers are not compatible with prepositions, pronouns are

We will show that the element *che* can display case, animacy as well as gender distinctions in Old Romance varieties (as shown by Old Ligurian, Old Piedmontese and Old Neapolitan *chi/che*). We will also show that what are generally defined as pronouns can avoid displaying agreement features (as Old Neapolitan *qual-*), a behaviour typical of complementizers.

We will then address the challenge as why prepositions can occur with *il quale*-relativizers but not with *che*-relativizers (property (1c)). We will propose a principled account for this difference, which we argue follow from the types of movements allowed in the DP. RCs on a PP require extraction (in a raising derivation) of the head noun out of a PP, namely movement through the edge of the DP. If the category

paired to the P is not a full DP, but a smaller category, which we label dP, the head noun cannot be extracted. This is the case when the internal head is paired with *che*, and hence movement of the NP is blocked. On the contrary, when the internal head is *il quale* + N, there is a full DP and the NP movement can occur.

This proposal can also capture the difference between modern and old Italian varieties, where the sequence prepositions+*che* is grammatical. The compatibility of *che* with prepositions is expected since Old Italian has an alternative way to mark D, i.e. NP-movement to Spec,DP as in (2), which is not allowed in Modern Italian.

- (2) *senza numero altro alcuno* → Mod. It. *senza alcun altro numero*  
 without number other any  
 ‘without any other number’ (Dante, VN cap. 29, par. 3)

In sum, we conclude that the Italian types *il quale* and *che* come in one single fashion, i.e. there exist no relative complementizers. Relativizers are part of the internal head and their different behavior can be accounted for in terms of (a) the syntactic category of the internal head, a dP in the case of *che + N*, and a DP in the case of *il quale + N*, (b) the movements allowed in the DP.

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## A new Perspective on Variation in German adjectival Inflection

Diachronic data from Old- (OHG) Middle- (MHG) and Early New High German (EarlyNHG) and newly collected data from contemporary Alemannic dialects provide evidence for a revision of the traditional view on German adjectival inflection as being governed by morpho-syntax. The most important observation is that in EarlyNHG as well as in the Alemannic dialects, uninflected (zero-marked) attributive adjectives occur in definite as well as in indefinite DPs – in addition to the well-known strong (pronominal) and weak endings. The variability thus has been kept and this casts immediate doubt on analyses like e.g. Demske (2001) who analyses EarlyNHG as a period of transition from a semantic (the distribution is dependent on the definite/indefinite status of the whole DP) to a morpho-syntactic distribution of adjectival inflection.

For Standard German (SG) there are two inflectional paradigms: a pronominal and a weak one. The distribution is generally analysed as morpho-syntactically determined because it depends on the inflection of the element preceding the adjective (e.g. Demske, 2001; Klein, 2007; Kovari, 1984):

<b>SG: pronominal</b>	<b>SG: weak</b>		
ein-zero schön-er.pronom a nice-nom.sg.masc garden	Garten	d-em schön-en.weak the-dat.sg.masc nice-weak garden	Garten
<b>Alemannic</b>			<b>Alemannic</b>
a schö-zero a nice garden	Garda	Dia kloi-zero the small spider	Spenn
<b>EarlyNHG</b>			<b>EarlyNHG</b>
Vielleicht hat der ain-zero klain-zero vertrawen zu mir Maybe has he a little trust to me		Darinn d-ie gantz-zero Comedi wird (...) In there the-nomsg.fem whole comedy is (...)	

In OHG the distribution is viewed as semantically determined because the weak ending occurs in definite and the strong in indefinite DPs. However, the situation in EarlyNHG and Alemannic makes obvious that the distribution is neither morpho-syntactically nor semantically determined, but shows that the strong and weak endings on adjectives must be analysed as allomorphs of the zero-inflection. Zero-inflection has the ‚broadest‘ distribution since the time of EarlyNHG and is analysed as the underlying form. Adjectival agreement is therefore a mere surface effect and any attempt to capture the variation with the help of parameters will eventually end in just listing the various possibilities (neglecting for the moment intra-speaker variation, which has been observed additionally).

If true, the proposed analysis has far reaching consequences for our design of the grammar. Since the observed variability cannot be explained in terms of (micro-)parameters, there are components which obviously neither contribute to the semantic interpretation nor reflect directly morpho-syntactic dependencies (if they seemingly do, this seems to be rather an effect of standardization which is reflected in normative grammars up to the 19th century, which allowed zero-inflection but were very inconsistent about the usage).

The question that will be discussed therefore at the end of the paper is whether this kind of variability could be subsumed under the notion of “third factor”, Chomsky (2005), in the sense of a “variational space” that cannot (or should not) be captured by principles due to the language faculty.

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#### **Second position parameters in (micro)variation and diachronic change: 2P and non-2P clitics in Greek**

Greek exhibits dialectal and diachronic variation with respect to the cliticization patterns of weak pronominal objects (henceforth *clitics*) (Pappas 2001, Condoravdi & Kiparsky 2001, Revithiadou 2008 a.o.). In certain dialects (e.g., Cypriot and Dodecanese), as well as in Medieval Greek, clitics precede the verb form when a preceding functional element (e.g., mood and negation particles, complementizers, etc.) is present in the clause, and follow it, otherwise. Since such clitics never surface in clause-initial position, they are commonly referred to as *second position (2P) clitics*. On the other hand, in Standard Modern Greek, clitics procliticize to verb forms, except from imperatives and gerunds to which they encliticize (*non-2P clitics*).

In this paper, we claim that this variation arises from the way the syntax-phonology interface processes the output of the syntactic operations involved in the derivation of clitic constructions (Bošković 2001, Franks 2000), in accordance with views that parametric variation is a property of the syntax-phonology interface and not of the computational system itself (Chomsky 2000 et seq., Boeckx 2011). More specifically, we propose that 2P and non-2P systems share the same syntactic derivation, in which the clitic moves from its first-merge position to a position in the functional layer of the clause creating a chain of clitic copies. By assuming that the linearization of chains, i.e. the decision upon which of the copies of the moving element will be pronounced, is a matter of the syntax-phonology interface (Bošković 2001, Richards 2010), we suggest that the different processing of the clitic chain at the syntax-phonology interface results in two distinct systems. The default strategy is that the highest clitic copy is pronounced, yielding a non-2P system. When this requirement is suspended and PF constraints (i.e. those that regulate the way the output is prosodized) take charge of linearization, a 2P system emerges. In contrast, in non-2P systems these PF constraints are superseded by a higher-ranked requirement which ignores prosodic considerations and blindly selects the highest clitic copy to be pronounced, thus resulting in the fixed pre-verbal position of clitics.

This approach gains further support from the way the two systems are diachronically related to each other. We argue that the transformation of the 2P system of Medieval Greek into the non-2P system of Standard

Modern Greek resulted from a change in the way the syntax-phonology interface came about to prosodically organize clitic constructions. More specifically, the grammaticalization processes that affected the status of certain preverbal functional elements (Horrocks 2010) caused prosodic patterns associated with 2P clitics to lose ground and, consequently, provided the basis for a prosodic reanalysis according to which preverbal clitics after a functional element were interpreted as being proclitics to the verb form. By generalizing the procliticization pattern to all clitic constructions, the actualization of this prosodic reanalysis eventually transformed the 2P system into the non-2P one, a process which is evident in transitional dialects with 2P and non-2P patterns (e.g. Kouvoikliotika).

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## WORKSHOP

### **Person and knowledge: from participant-role to epistemic marking**

#### *Convenors*

**Henrik Bergqvist** (Stockholm University), **Seppo Kittilä** (University of Helsinki) and **Lila San Roque** (Radboud University)

#### *Description*

The proposed workshop explores the grammatical and functional overlap between person marking and epistemic marking in language. This exploration crucially turns on the nature of both categories as related species of “shifters” (Jespersen 1922). As pointed out by Jakobson (1990 [1957]), the referential properties of certain categories typically associated with the verb, e.g. person and evidentiality, crucially draw on both the speech situation (speech event) and on the clause (narrated event). This dichotomy allows for an exploration of the intersection between semantics and pragmatics and is important to understanding the role that context plays in grammar.

The effect that changes to subject person have on the semantics of evidentials (as an instantiation of epistemic marking) has largely been viewed as a peripheral, pragmatic influence in the analysis of such forms (see Curnow 2002b, 2003). The proposed workshop conversely puts a focus on ‘person’ as “participant-role” (e.g., the speaker and addressee as agents, beneficiaries, etc.) and explores its relation to certain forms of epistemic marking that target the perception, involvement, participation, expectations, and attitudes of the speech participants. Our notion of “participant” has a (minimally) duplex role of referring to a participant of the speech situation as well as a participant of the clause. We explore the relationship between semantic and pragmatic meanings, for example, the possible development of a marker of agency into a marker of attitude, placing a focus on the speech situation. The development of epistemic marking systems from non-epistemic categories such as person is thus possible to connect to analyses of evidential systems as “illocutionary modifiers” (Faller 2002, Murray 2011) and to epistemic marking systems that operate at the level of the speech act (Bergqvist in press).

The workshop will address questions such as: what influence does the indexical-referential value of a person marker have on the resulting status of the epistemic marker (e.g. person, number, argument role)? Is the development from person to knowledge predictable with respect to the resulting meaning of a form? If forms make up a paradigm, what possible semantic contrasts are there? Does the development from person marker to epistemic marker entail an expected change in the grammatical status of a form?

Possible answers to these questions and the exploration of the issues sketched above will hopefully contribute to a nuanced perspective on shifters in language and the inter-relatedness of categories.

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**Henrik BERGQVIST** (Stockholm University) and **Seppo KITTILÄ** (University of Helsinki)

### Non-selected arguments as epistemic marking

The paper proposes an analysis of a sub-type of non-selected arguments called “attitude holder datives” (see Camilleri & Sadler 2012), as a form of epistemic marking. An example of an “attitude holder”-construction (AH) is the “ethical dative” in German:

German (Bosse et al. 2012: 1197)

- (1) Du sollst *mir* nicht wieder fernsehen!  
you shall me.DAT not again watch.television  
'You shall not watch TV again and I want this to come true.'

In (1), the speaker's attitude regarding the content of the proposition is signaled by the presence of the first person dative *mir*. While the ethical dative in German is restricted to directives and exclamations, this is not the case for other languages that feature comparable forms (see below).

The suggestion that non-selected arguments (e.g. ethical datives) may be considered as a form of evidential (*viz* a specific instance of epistemic marking) has been raised by e.g. Rooryck (2001), but a developed analysis of this suggestion remains to be formulated in detail. According to Bosse et al. (2012), AH-constructions are entirely “not-at-issue”, i.e. their meaning targets aspects of the speech situation and not the proposition as such. This analysis is supported by the syntactic projection of AH-constructions, the position of such constructions at the edge of the clause as “weak or clitic pronouns”, and a restriction to first and second person dative forms since the “attitude” in question is the speaker's, and/or the addressee's (Bosse et al. 2012: 1197-1198). A comparison to AH-constructions in languages such as Lebanese Arabic (Haddad 2013), Chechen (Molochieva 2012), Jaminjung (Schultze-Berndt & Faller 2009) and Kogi (Bergqvist forthcoming) confirms these observations, but also provides evidence for analyzing AH-forms as epistemic markers.

The paper traces the development from ‘participant role’ to ‘attitude holder’ and observes a development of other meanings/functions that include evidential and intersubjective notions, such as ‘perceptual access’ and ‘knowledge asymmetry’ (see Bergqvist 2012). The grammaticalization of person markers to signal aspects of the speech participant's attitudes may be viewed as a cline: on one end a marker has many of the properties associated with an argument of the verb, whereas on the other end it has lost these and instead functions as a form of evidential, sometimes with intersubjective shades of meaning, and sometimes paradigmatically related to other evidential forms.

The proposed analysis details the grammatical status of forms (as particles or lexemes), their referential properties (e.g. attitude, expectation, perception) and issues related to the notion of ‘viewpoint’/‘perspective’, which can be the speaker's, the addressee's or both speech participants'. As a

result, the paper adopts a wider notion of epistemic marking to encompass the attitudes and expectations of the speech participants concerning information/knowledge, a proposal that aligns with the “not-at-issue” (i.e. illocutionary) status of investigated forms, (see Bergqvist in press).

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**Scott DELANCEY** (University of Oregon)

### Evidentiality, Modality, Mirativity, and Personal Knowledge

The “effect that changes to subject person have on the semantics of evidentials” in the proposal for this workshop is the notorious interaction of some evidential categories with 1<sup>st</sup> person:

- 1)      *?I seem to be a Catholic.*
- 2)      *?I hear I work in an office.*

But we see similar effects with modality:

- 3)      *?I must be a Catholic.*
- 4)      *?I might work in an office.*

So the problem is associated with 1<sup>st</sup> person, not specifically with evidentiality.

Evidentiality, mirativity, and modality all show odd behavior with respect to 1<sup>st</sup> person statements, i.e. personal knowledge.

Currently we see the grammatical encoding of cognitive status of information as comprising modality, the encoding of truth status; evidentiality, the encoding of knowledge source, and, controversially, mirativity, the encoding of novelty status. First-person effects and related phenomena show that we need another category, that of knowledge type. This category is grammaticalized in Tibetic languages, which grammatically distinguish statements that represent generic, personal, and contingent knowledge. Generic knowledge is what everybody knows. Personal knowledge is what I know through being me. Contingent knowledge is what I wouldn’t know except for some evidential source, which could be direct, inferential, hearsay, whatever. Generally “knowledge source” is only relevant to contingent knowledge. Generic and personal don’t need a source specified. If there is an identifiable source, then the knowledge is not either of these types.

Data like (1-4) show that this can be generalized beyond Tibetic, and detected in English through interaction with grammaticalized modals and lexical modal/evidential expressions (*it seems, I hear, I guess*). It is odd to be asked for an evidential source or a modal evaluation of gnomic statements like:

- 5)      *France is in Europe.*
- 6)      *We don’t associate with those people.*

or statements about our individual existence in the world:

- 7) *I am a vegetarian.*  
 8) *My mother never loved me.*

This fundamentally distinguishes them from statements of contingent knowledge, acquired from the outside world through sense, inference or hearsay. Even in a language which requires that statements be evidentially (Tibetic) or modally (English) specified, it is only this last category of knowledge for which it is or can be required. If there is an identifiable information source, or a possibility of doubt, for a statement, then it is neither generic nor personal, but contingent. Information which is not part of either of these representation systems must come from some specifiable information source. This paper will show the relevance of personal knowledge as a covert category in English, by showing that, as exemplified in the examples above, certain types of statement concerning the speaker are odd or impossible with the grammaticalized modal category and with lexical expressions of evidential or mirative status.

**Simeon FLOYD, Elisabeth NORCLIFFE** (Max Planck Institute for Psycholinguistics)  
**and Lila SAN ROQUE** (Radboud University)

### Towards a typology of egophoric marking

Egophoric markers include morphemes and constructions that typically have meanings to do with direct personal knowledge of, involvement in, or evidence for, events. The usual distributional pattern for egophoric markers interacts with both speech act role and speech act type, as they are typically used when the subject is first person in a statement or second person in a question, contrasting with one or several non-egophoric forms that are used in other environments. These distinctive semantic features and distributional patterns were first described for verbal inflections and copulas in Tibeto-Burman languages (e.g., Hale 1980, Hargreaves 1991, DeLancey 1997, Tournadre 2008). Compellingly similar meanings and patterns have since been found in languages of the Caucasus (Criessels 2008), Mongolia (Slater 2003), Andean South America (Dickinson 2000; Curnow 2002; San Roque, Floyd and Norcliffe in press) and Highlands New Guinea (San Roque 2008, Loughnane 2009). However, to date, there have been no studies that systematically compare the typological characteristics of egophoric marking around the world.

Drawing from published sources and field materials, we present a first typological survey of egophoricity across languages, charting the similarities and differences in the formal expression and functional behavior of egophoric marking within and across areas and families., and noting related phenomena (for example, ‘private predicates’, the special marking of questions with second person subjects, et. alia) that are found around the globe.

Egophoric markers rarely co-occur with typical bound person-marking morphology. Structurally and semantically, egophoric markers often form part of or interact with evidential systems, and it has been argued that they should always be interpreted as a subtype of evidential marking. It has been widely proposed that the egophoric distributional pattern reflects a grammaticalized sensitivity to epistemic access in the speech situation, such that an egophoric marker picks out the speech act participant who has the highest epistemic authority concerning the information under discussion: speakers are in a privileged position to make assertions about their own experiences and actions; when addressees are asked about theirs, that epistemic privilege resides with them. However, we see very different degrees of pragmatic flexibility in egophoric marking across languages. For example, in some languages egophoric marking can be manipulated to express features such as volition and certainty, whereas in others the distribution of the relevant forms appears to be structurally determined.

We further discuss the extent to which it is possible to identify how the various instantiations of the phenomenon interact or overlap with other morphological systems (e.g., mirativity, first/non-first person marking, logophoric markers) in order to arrive at a better understanding of the breadth and boundaries of this intriguing linguistic category.

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### Interaction of person and evidentiality in Nakh-Daghestanian

In Nakh-Daghestanian languages, person marking and the marking of the information source interact in three ways: (i) first-person effect, (ii) egophoric marking, and (iii) 'interest to the hearer' marking.

First-person effect means that normally indirect evidentials cannot be used with first person arguments. If they are used, the reading must change and the first person argument is interpreted as unconscious or involuntary actor that only post factum got to know about his/her actions. Curnow (2003: 43) claims that this reading only arises in sentences with first person subjects. However, this does not seem to be the case for Nakh-Daghestanian.

Though person is not a common verbal category for languages of this family, there are a number of languages that are currently developing person marking (Axaxdərə Akhvakh, Creissels 2008; Mehweb Dargwa, Magometov 1982: 119-120, and Zakatal Avar, Saidova 2007) through the use of participles as heads of independent clauses. All these systems distinguish between two forms: participles are used in assertions with first person subject-like arguments and questions with second person subject-like arguments. In all other contexts the usual finite verb forms appear. Thus, the systems formally mark the fact that normally in assertions the speaker is the epistemic authority and in questions the addressee is the epistemic authority.

Third, Chechen and Ingush have phonologically reduced second person (and in Chechen even first person) pronouns in the dative and in Ingush also in the genitive that have morphosyntactic and semantic properties not typical for dative and genitive case (Nichols 2011: 280-283, Molochieva 2011: 244-248). The pronouns bear some similarity to ethical datives and have evolved from free non-argument benefactives (Molochieva & Nichols 2011). They are used to announce something new or important and unexpected for the hearer or the speaker or to indicate an important generalization that is known to both speaker and hearer but not in the hearer's immediate consciousness. By using these pronouns the speaker seeks confirmation of her/his assumptions from the speaker.

Taking a functional-descriptive approach, we will investigate use of the three constructions as evidential and/or epistemic markers and possible correlations with semantic roles such as agent or experiencer. In our analysis we will employ the typologies of Willett (1988), Aikhenvald (2004) and Plungian (2010) for assessing the various dimensions of evidentiality and the framework of Nuys (2001) and especially Boye (2012) for accounting for epistemic modality. The data that serves as the basis for the talk has mostly been gathered during fieldwork in Daghestan and Chechnya and will be complemented by examples from the literature.

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**Lila SAN ROQUE** (Radboud University)

### Exploring person, perception, and knowledge in first language acquisition

Person-marking morphology privileges the issue of who does what to whom, identifying, for example, that the speaker is the agent of a transitive verb. By contrast, egophoric and evidential morphology privilege the issue of who knows what and how, for example specifying that the speaker has visual knowledge of a situation. Despite their differences, almost all such structures are strongly tied to recognising the primary speech act roles of speaker and addressee in relation to the narrated event, for example, as actors, perceivers, or knowers. Children must learn how to comprehend and encode these roles appropriately in language, and grapple with the complex task of understanding their shifting nature, for example, that the I of one person's utterance is the you of another's (see, e.g., Rumsey 2003).

In this talk I review some aspects of the acquisition of more intensively studied shifter categories, such as free and bound personal pronominals (e.g., Tanz 1980), and compare this to what we are starting to learn about the acquisition of egophoric and evidential morphology (e.g., Aksu-Koç and Slobin 1986, Fitneva and Matsui 2009, San Roque and Schieffelin under review). I draw on secondary sources and on field data from Duna, an under-described language of New Guinea that has complex evidential and egophoric-like morphology. My exploration has a special focus on the insights offered by interrogatives, whereby both child and adult speakers can demonstrate understanding of the perceptual experience and knowledge of other people. This is seen, for example, in the appropriate choice of evidential markers in Duna questions, whereby a speaker selects the information source that s/he assumes (or purports to assume) the addressee has for the event (San Roque, Norcliffe and Floyd in press). I discuss how person-marking and knowledge-related morphemes show interesting differences between the deictic shifts that are required over question-answer pairs. For example, while person morphology may transform from second person in a question to first person in a response, egophoric and evidential morphology typically remains the same, reflecting the perspective of the self-same participant who is the addressee in one turn, and the speaker in the next. I suggest that question-answer pairs may be an especially problematic and important environment for the acquisition of person-related and knowledge-related morphology.

While our current knowledge is limited, further work on the acquisition of egophoric and evidential morphology has the potential to open a window on children's understanding of their interlocutor's mental states and give insight into the potentially parallel development of linguistic structure and theory of mind (e.g., de Villiers and Pyers 2002, de Rosnay et al. 2014). Close observation of language use in child-adult interaction may also tell us about contrastive cultural views on the 'opacity of other minds' (e.g., Rumsey and Robbins 2008, Schieffelin 1990).

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### **Typology of egophoric marking systems in Northwest China's Amdo Sprachbund**

Egophoric marking systems have been described in various languages of Northwest China's Amdo Sprachbund, including Tibetic, Mongolic, Turkic and Sinitic languages (see e.g. Sun 1993, Slater 2003, Janhunen et al 2008, Fried 2010, Åkerman 2012, Simon 2014, Sandman forthcoming). The core function of these systems is to index the participants in the speech situation. All the systems distinguish situations in which the speaker has been involved as a participant (ego) from those the speaker has not been part of (non-ego). Egophoric marking shows strong correlation with person, so that it is usually the first person in statements and second person in questions that is marked as the willful participant in the event or state. Despite their conceptual similarities, there are differences in how the different egophoric marking systems in the region relate to other epistemic and non-epistemic categories. In Amdo Tibetan and Wutun (Sinitic), participatory evidence (ego evidentiality) is part of an elaborate system of evidential marking, which also distinguishes other cross-linguistically more common types of information sources (including sensory evidence, inference and hearsay), while Mongolic and Turkic languages of the region have binary egophoric marking systems that only distinguish between the speaker's involvement vs. non-involvement in the situation. Moreover, in Amdo Tibetan and Wutun egophoric marking interacts with case marking. In my talk, I will present first comprehensive areal typology of the egophoric marking systems in the languages of Amdo Sprachbund. I will compare semantics and pragmatics of egophoric marking in six languages representing four different language families: Amdo Tibetan (Tibetic), Wutun (Sinitic), Mongghul (Mongolic), Mangghuer (Mongolic), Bonan (Mongolic) and Salar (Turkic). The data for my talk will come partly from published sources (reference grammars and journal articles on the relevant languages) and partly from my own field data on Wutun collected in Northwest China in between 2010 and 2013. The key question is how the different languages in the region have grammaticalized the relationship between person and evidence. Are there some systems where the core function of egophoric marking is biased towards epistemic marking as opposed to the systems where the core function of the category has evolved towards person marking? To what extent do the semantic effects related to changes of subject person for clauses marked with egophoric marking differ in languages of the region? My preliminary findings suggest that the core function of egophoric marking systems in the languages of the Amdo Sprachbund is biased towards epistemic marking rather than person marking and the languages of the region show remarkably similar semantic effects related to changes of subject person for clauses marked with egophoric marking (e.g. ego form with third person indicating a high degree of certainty on the part of the speaker). However, in systems like Amdo Tibetan and Wutun, it is possible to make more fine-grained distinctions in the epistemic perspective of the speaker (e.g. different degrees of awareness of the situation) than in binary systems found in Mongolic and Turkic languages.

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**Eva SCHULTZE-BERNDT and Martina FALLER** (University of Manchester)

**An inclusive pronoun as intersubjective evidential:  
shared access vs. primary access to knowledge**

This paper argues for the existence of a first person dual inclusive pronoun in intersubjective evidential function in Jaminjung, an Australian language of the Western Mirndi group. On the basis of detailed examination of corpus data, we show that this evidential pronoun is part of a rudimentary evidential paradigm, consisting of only two forms. The first, illustrated in (1), is an egophoric evidential in the sense of La Roque et al. (2012): it signals that the speaker claims epistemic authority for an assertion. In declaratives it is found in statements based on the speaker's current or past participation in an event as in (1), or (with first person participants only) in comments on the speaker's feelings or intentions. In questions, epistemic authority shifts to the addressee.

- (1)    ngarrgina-ni=biya        jayiny        yirr        gan-anthama  
       1SG:POSS-ERG=now    grandchild      pull        3SG>3SG-bring.IPFV  
       trailer-mij        warnda=ngarndi  
       trailer-with        grass=EGO.EVID  
       'my granddaughter was pulling along grass with a trailer (I can tell you since I was there).'

The second evidential is identical to the first person dual inclusive pronoun, *mindi*. It is invariably used to comment on (or ask a question about) a state of affairs that has just come to the speaker's attention. It is restricted to clauses with present tense marking, past tense marking (if, and only if, the result of the event is observable at speech time, as in (2)), or potential/future marking (if the imminent occurrence of an event can be inferred from events observable at speech time).

- (2)    digirrij=jung ga-rdba-ny=mindi \  
       die=RESTR 3SG-fall-PST=1+2EVID  
       '(The owl frightened the boy), and he fell down as if dead' (you and I can see) (from a Frog Story retelling; the picture shows the boy lying on the ground)

On the basis of this distribution we propose that =*mindi* is an intersubjective evidential indicating shared epistemic authority for a state of affairs which, crucially, is not yet part of the common ground of speaker and addressee. Shared direct evidence by both speaker and addressee at speech time is a necessary, but not a sufficient criterion for its use. Evidence comes from examples like (1) and (2). Both are in past tense but comment on pictures that at speech time are visible to both speaker and addressee – a photograph for (1), a page in a picture book for (2). The difference is that the speaker was a participant in the event she describes in (1), but is describing an unfamiliar visual stimulus in (2). Thus, contrary to what was claimed in earlier accounts, =*mindi* is not simply a marker of shared direct evidence, but of shared epistemic authority. Unlike e.g. in S. Conchucos Quechua (Hintz 2012), established shared knowledge remains unmarked in Jaminjung.

This study adds to cross-linguistic evidence for the existence of intersubjective evidentials indicating the source of evidence for the hearer, or evidence shared by speaker and hearer (e.g. Landaburu 2007, Bergqvist 2009, Gipper 2011, Hintz 2012, San Roque & Loughnane 2012). The 1+2 pronoun functions as a remarkably transparent marker of such intersubjectivity.

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**Manuel WIDMER** (University of Bern) and **Marius ZEMP** (Kobe City University of Foreign Studies)

### From syntactic to epistemic relations: the rise of conjunct/disjunct marking in Bunan

Widmer (2015b) argues that a number of Tibeto-Burman languages of the Himalayas bear witness to the transformation of person-agreement systems into conjunct/disjunct systems (first person > conjunct / third person > disjunct) and claims that the process is particularly well-documented in Bunan, a language belonging to the West Himalayish branch of the Tibeto-Burman language family. However, the article does not describe the mechanism of the reanalysis, nor discuss the functional motivation of the transformation. In our talk, we will address these issues and analyze the diachronic process from a functional-historical perspective based on the evidence from Bunan. The discussion will draw on contemporary Bunan data from personal fieldwork (Widmer 2015a) and historical Bunan data from the early 20<sup>th</sup> century (Francke 1909).

In a first part, we will argue that the prerequisites for the epistemization of person-agreement markers arise in reported-speech constructions. In languages that distinguish between direct and indirect speech constructions, reported events may be described by means of either a direct first-person form used by the original speaker (e.g. *She said, 'I eat meat.'*) or an indirect third-person form construed from the perspective of the current speaker (e.g. *She said (that) she eats meat.*). While the two verb forms merely convey differences of style in a ‘non-epistemic’ language like English, they may be epistemized as expressing an inside- and an outside-perspective, respectively, if the latter form starts to be construed from the perspective of the original speaker in analogy to the former. In this way, verbal endings cease to bear a syntactic relation to the subject of the clause and begin to bear an epistemic relation to the original speaker, which then assumes the role of the ‘assertor’ (Creissels 2008) or ‘epistemic source’ (Hargreaves 2005) with regard to the reported proposition. Once the innovative epistemic relation has become fully conventionalized in reported speech constructions, it may be extended to other grammatical contexts such as simple declarative clauses and gradually supersede the formerly established subject relation.

In a second part, we will consider the aforementioned process in a broader context. Drawing on historical Bunan data, we will show that Bunan already possessed a number of epistemically sensitive constructions in the beginning of the 20<sup>th</sup> century when the person agreement system was still in place. Based on that evidence, we will argue that the presence of such constructions facilitated the epistemization of person-agreement morphology. In addition, we will discuss how contact with Tibetan varieties may have influenced and shaped the emerging epistemic verbal system of Bunan.

The talk will thus offer an in-depth case study of a language in which the rise of epistemic marking can be reconstructed in detail and contribute to our understanding of the development and areal spread of epistemic systems in the Greater Himalayan region.

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**Maruis ZEMP, Manuel WIDMER and Fernando ZÚÑIGA** (University of Berne)

### Knowledge from a Himalayan perspective: a preliminary typology of conjunct/disjunct oppositions in Tibeto-Burman

In languages that display conjunct/disjunct oppositions (CDOs) (Hale 1980; Hargreaves 2005; Tournadre’s 2008 “egophoric” and Post’s 2013 “alterphoric”), events may only be represented by conjunct verb forms if the assertor (Creissels 2008; Hargreaves’s 2005 “epistemic source”) possesses privileged epistemic access with regard to the relevant events. Descriptive studies of languages with CDOs suggest that there is only a limited number of event types in which the assertor assumes such an epistemically privileged position.

Based on that assumption, we will develop a preliminary typology of CDOs based on the ones that have been attested in Tibeto-Burman languages of the Himalayan region.

Drawing on a cognitive approach propagated by DeLancey (1986), we will argue that there are three main types of events that can receive conjunct marking: (1) events that emanate from the assertor (e.g. willful actions), (2) events that affect the assertor in its entirety (e.g. uncontrolled motion) or take place within it (e.g. “endopathic” sensations, cf. Tournadre 2008), (3) and events that are directed towards the assertor (e.g. sensations of external stimuli). These three main types are further divided into a number of subtypes.

We will then demonstrate that depending on the origin of a CDO different event types are rendered accessible for conjunct marking. For instance, states (and habitual or generic events) that have been repeatedly witnessed in the past by the assertor to the extent that he feels safe in assuming that they are still ongoing at the moment of speaking (a subtype of (2)), are likely to be expressed by conjunct forms that originate from neutral indicative verb forms that were “epistemicized” as “factual” ones in contrast to a “testimonial” (in the sense of Hill 2013; for the evolution of such CDOs in Tibetan, cf. Zemp 2015). Conjunct forms that originate from 1st-person forms that were epistemicized in reported speech (cf. Widmer & Zemp 2015), however, clearly cannot represent such events in which the assertor was only involved as an observer.

We will also discuss a number of ways in which the conceptualization of such an event type may shift from the conjunct into the disjunct domain and vice versa. For instance, evidence from Purik-Tibetan shows that endopathic sensations were originally expressed by means of conjunct forms but shifted into the disjunct domain in analogy to other testimonials, as witnessed by most other dialects of Tibetan (cf. again Zemp 2015).

The Tibeto-Burman evidence suggests that the mentioned event types and types of access to knowledge form hierarchies that have implications for both the diachronic evolution and the synchronic manifestation of CDOs. These implications will eventually be tested against selected languages from other parts of the world.

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## WORKSHOP

### **Possession and ownership in the “LENCA” languages**

#### *Convenors*

**Irina Nevskaya and Lars Johanson**

#### *Description*

Complex system of ownership relations and the ways in which linguistic structures reflect cultural patterns, attitudes to possession and effects of their change have attracted the attention of Typological and Cognitive Linguistic relatively recently (Heine 1997; Aikhenvald 2000; Guéron 2007; Lichtenberk, Vaid, Hsin-Chin

2011; Aikhenvald and Dixon 2013; Nichols and Bickel 2013), although certain aspects of this topic have been reflected both in numerous grammar descriptions of individual languages and language groups, and in typological studies on existential, locative and possessive relations and corresponding constructions (e.g. Clark 1978; Arutjunova, Širjaev 1983; Bickel 1996; Danziger 1996; Serèdar et al. 1996, Nevskaya 1997, 2005, Landau 1999, Krasnoukhova 2011, etc.).

Possessive constructions vary depending on the nature of the Possessor, the Possessee and the Possessive relationship. They realize a set of recurrent core meanings: (i) ownership, (ii) whole-part relations, e.g. between a body or a plant and their parts, (iii) kinship, i.e. consanguineal and affinal relations, etc.

Many languages use essentially the same constructions for the core meanings. All combinations of the types are, however, found across the world's languages (see Aikhenvald and Dixon 2013). The degree to which possession is conceived as 'the same' differs from one society to another and is reflected in linguistic structures.

Possession can be expressed with **possessive noun phrases**. Some languages have dedicated phrase types that cover the core meanings. Others represent possessive meanings through more general associative noun phrases. The expression of possession can be viewed as a realization of a broader concept of association (see Aikhenvald and Dixon 2013), or as a metaphorical development of locational relations (Clark 1978; Serèdar et al. 1996, Nevskaya 1997, 2005).

Kinship possession and whole-part relationship reflect close links between Possessor and Possessee, the intimate relationship of 'inalienable possession' (e.g. Danziger 1996; Guéron 2007; Lichtenberk, Vaid, Hsin-Chin 2011). Culturally important objects may fall into this class. Some languages treat consanguineal kinship and sacred or treasured objects as inalienable. The semantic content varies, and the composition of the classes may change over time, e.g. when body part terms are grammaticalized as spatial relators (Nélémwa, Nanti, Moskona, Manambu, Likpe, Wandala). Nouns designating inalienably possessed items may have to take on special affixes to be used without a Possessor. Some languages possess 'depossessed' forms of inalienable nouns that cannot occur independently (Nichols and Bickel 2013; Aikhenvald and Dixon 2013).

A marker, affixed or independent, may be attached to the Possessor, the Possessee, or both. Possessor marking is typically achieved with a genitive. Possessee marking can be achieved with pertensive markers showing that the referent belongs to something or someone.

Possessive constructions can vary along a further set of parameters. The type of construction may depend on semantics of the Possessor. The prototypical Possessor is animate, human or otherwise high-ranking on the Nominal hierarchy, often expressed with a personal pronoun or a proper name.

Possessive relationships can be categorized in terms of controlability. Constructions may distinguish 'subjective' and 'objective' possession, i.e. relationships initiated with or without a Possessor's control. A number of languages distinguish permanent and temporary, e.g. borrowed, possession. Some distinguish past and non-past possession.

In a few languages, possession can be expressed through **verbal derivational affixes** attached to the Possessor. Possessive applicatives are valency-rearranging devices encoding a whole-part or other core Possessive relationships. The affix indicates that the Possessor has the status of an 'applied object' (Aikhenvald and Dixon 2013).

Possessive marking may have **additional meanings** not directly related to possession, e.g. the expression of subject, object, purpose, benefactives and locatives. The genitive sometimes shares the form with the dative, the case of purpose and beneficiary. It can mark objects of transitive verbs or share the form with an ergative.

Possessive relations can also be expressed beyond the noun phrase, in **clauses** with predicative structures involving verbs of ownership, existential copula constructions, locational constructions or verbless clauses. The choice may depend on the semantics or the discourse status of the Possessor and the Possessee and the Possessive relationship, on the Possessive relationship, often on parameters including definiteness, animacy and focus.

Most languages have dedicated ways of expressing predicative possession. With 'have' verbs, the Possessor is the subject and the Possessee is the object. Reversing the grammatical relations results in 'belong' verbs. The distinction is pragmatically based: 'have' constructions concern the Possessor, whereas 'belong' constructions concern the Possessee.

In possessive existential clauses with an intransitive verb 'to exist' the Possessor is marked as the topic while the Possessee functions as the subject and the only obligatory argument (Clark 1978). Copula clauses and verbless clauses can express relationships of identification and inclusion between Possessor and Possessee. A copula complement can be marked as one of location or accompaniment, similar to

associative marking ('being with something'). A further option is goal marking, typically by a dative. Features such as permanent versus temporary possession are more salient in predicative than in noun phrase structures. Predicative constructions are also sensitive to definiteness and focality of the Possessee and the Possessor as well as to temporary versus permanent distinctions.

**Constructions of external possession** (EPC) constitute a further cross-linguistically encountered structural and semantic type of possessive constructions. Person, animacy and definiteness of the modifier, the information structure of the sentence, the syntactic position of the head, the semantic type of the head and the semantic type of the verb, transitivity of the verb, affectedness of the head, the semantics of the head-modifier relation are relevant parameters for the choice of EPC over internal possession constructions marking possession in a nominal phrase by dedicated grammar means (Cienki 1993; Payne, Shibatani 1994).

The choice of constructions may reflect different **culturally anchored types of ownership**. The notions of what can be possessed and by whom differ widely across cultures. According to some world-views, certain important items cannot be owned but are treated as inalienably possessed, intrinsically linked to the Possessor. Totemic or symbolic ownership may be expressed differently from ownership of concrete items. As the societies change, formerly unownable entities may become a matter of property.

The proposed workshop will address these and related problems, especially in languages of Europe and Northern and Central Asia (LENCA). LENCA languages would 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. Because of typological similarity and areal influence, some may want to include Iranian, Tibeto-Burman, Dravidian and Austro-Asiatic languages in this broad field. Many LENCA languages are endangered. For these, it is typical that they are neither sufficiently documented, nor described; consequently, they could not be taken into consideration by recent typological investigations devoted to this topic.

In particular, the workshop will deal with the following questions:

- 1) Different semantic types of possession and ownership and their reflection in a language;
- 2) Inventories of possessive language means and rules of their choice;
- 3) Transposition of possessive means into other semantic fields.

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**Gilles AUTHIER (EPHE, Paris)**

### **Case-marked inalienability split in possessive NPs and its origin at the clause level**

The numerous spatial cases of East Caucasian generally tend to encroach on the functional domain of core argument marking. In the context of transfer predicates, recipients are typically marked for permanent versus non-permanent possession, with a dative case used for the former and a syncretic spatial case used for the latter. According to Daniel & al. (2009): dative vs. lative Recipients contrast 'give forever, offer' vs. 'give for a while, lend to someone, hand' types of situations, respectively [...]

In some much rarer instances, spatial cases can appear in NPs as genitives. Budugh, an East Caucasian language of the Lezgic branch, shares with other related languages the morphosemantic split between different kinds of recipients. It also shows a rare type of inalienability split on possessive NPs in which alienable and inalienable possessors are marked by different cases:

\*zo / za: q'il 'my head'  
vs \*za: / zo k'ant 'my knife'.

Kin terms are evenly distributed across both types, perhaps due to cultural biases (a wife can be repudiated, but not a husband, a father can exile his son, but not reversely):

za: ada 'my father', za: furi 'my husband'  
vs zo hedž 'my wife', zo dix 'my son'.

The two genitive forms (-a vs -o/u) have a strict complementary distribution determined by the (in)alienability of the possesum. This situation can be linked with the phenomenon of differential recipient marking.

Both these adnominal (genitive-like) cases in Budugh also have predicate-dependent, originally spatial functions, labelled inlocative (IN) and adlocative (AD) respectively. In NPs, possessors take the inlocative case when they depend on inalienable items (body-parts and other body-related types of possession, including part-whole relationship). The semantic shift from a lative case to a recipient marking function is a very common path of grammaticalization. Reflexes of the adlocative with its spatial meaning of 'location near/at' are also found in all Lezgic languages (except Udi), and in only a part of the domain has it undergone a metaphorical extension outside the spatial domain to mark higher animates in the role of non-permanent possessors in the valence frame of transfer predicates.

The adlocative case has not completely lost its spatial value, either essive or lative:

k'ul-džo	halma	šey-ri	da-d
house-AD	such	thing-PL	NEG-NPL
'In the house no such things exist.'			
furi	k'ul-džo	čağar-da	
man.NOM	house-AD	go.IPF-WHEN	
'When the man was nearing the house...'			

But with animates, a postposition bada 'near' governing the inlocative has to be used in the valence frames of position and movement verbs:

riž	*furo	/	fura	bada	čoğor-a:vi
girl(A)	man.AD		man.IN	near	A.go.IPF-PROG
'The girl is getting married'					

On higher animates, the adlocative also marks arguments as temporary recipients, and recipients are apparently rarely placed in focus position to the left of the verb:

q:unši-džir      adžgan      Ma:lla:-džu      yuts'u-ri  
neighbour      cauldron      mullah-AD      give-PRS  
‘The neighbour lends the cauldron to MULLAH.’

Rather, recipients typically occur to the left of the theme argument (the thing given):

vin      zo      k'ant      yiva-dži  
2.NOM 1.AD      knife      give-PERF  
‘You gave (for a while) the knife to me (adlocative)’.

Genitive cases are often found both in possessive NPs and at the clause level, as is the case in Azeri and some Daghestanian languages such as Avar or Lak. Consequently, in pre-Theme position, the Budugh adlocative case marker -o/u marks a nominal as a temporary recipient or possessor, dependent on a verb of giving or on a noun denoting an alienable referent respectively :

vin      [zo      k'ant]      yiva-dži  
2.NOM 1.AD      knife      give-PERF  
‘You gave my knife’ (?)

In non-transfer contexts, its use was extended to marking possessors of alienable items as a genitive case :

zin      [zo      k'ant]      eq'i-ra :vi  
1.NOM 1.AD      knife      sharpen-PROG  
‘I am sharpening my (adlocative) knife’.

Though differential recipient-marking is common in East Caucasian, only in Budugh does a clause-level case appear to have become NP internal, allowing for the expression of a contrast not only in the semantics of the transfer but between permanent and transitory possession in NPs.

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**Anna BUGAEVA** (National Institute for Japanese Language and Linguistics)

#### Possession and beyond: the polyfunctionality of the possessive construction in Ainu

Ainu (Northern Japan) is a critically endangered language spoken in the LENCA area. Though Ainu is an isolate, it shares many areal features with other LENCA languages, and the possessive construction (PC) is one of them. Ainu has a head-marking PC: the possessee is marked with possessive suffixes -hV or -V with (hV), which signify the form's bound status, and with one of the A series personal prefixes, which encode the person and number of the possessor (3-rd person is zero); thus the possessor NPs are commonly omitted (1).

This paper will investigate both (a) proper possessive functions of the Ainu PC and extended functions such as its use (b) in noun complement clauses (the head noun is marked as the possessee), and (c) on verbs as a nominalizing strategy (Sakhalin Ainu only). The nominalized verbal forms marked with possessive suffixes (c) are used in a wide range of presuppositional contexts and can have different functions, for example, in the sentence final position, they often form questions.

The PC proper (a) is used for inalienable possession only (1), (2a), while a different relative clause-based periphrastic construction with kor ‘have sth/sb is used for alienable possession. Importantly, the PC in Ainu is distinct from the attributive construction in which nouns are merely juxtaposed (2b); the latter does not necessarily imply possessive relations. According to Tamura (1988: 28), the PC is used when the possessor is definite, thus (2a) could have been “the skin of the bear which I killed yesterday” while (2b) is just “a bear skin”, but her analysis is not uncontroversial, cf. Satō (1997: 150-53), and the PC use needs to be investigated further. I suggest that what we observe in Ainu is the emergence of POSS → DEF grammaticalization of the possessive suffixes -hV or -V(hV) by extension of the associative anaphoric use (a bear ... its body) to a larger situation associative anaphoric use ((preserving food) ...the edible grass), as in (3) (there is no possessor in the close context) and, finally, to a non-associative anaphoric use, i.e. an article-like direct anaphoric use (your house...the house), as in (4). POSS → DEF grammaticalization is well-attested in the Uralic and Turkic languages of LENCA, but also elsewhere, e.g. in the Afroasiatic

languages (Völlmin 2009) and Yucatec Maya (Lehmann 1998). However, it is argued that the end in the continuum from POSS to DEF seems to be never reached (Fraurud 2001), so Ainu data will prove valuable for the further in-depth investigation of this problem.

- (1) (káni) ku=sapa-ha  
1SG 1SG.A=head-POSS  
'my head'
- (2a) kamuy rus-ihi (2b) kamuy rus  
bear fur-POSS bear fur  
'the bear's skin' 'bear skin'
- (3) hokure kunak kina-ha ne yak-ka...  
quickly hey grass-POSS COP if-even...  
e=kar kuni e=anu kuni p ne na.  
2SG.A=make must 2SG.A=leave must NR COP FIN  
'Hey, quickly! Preserve the grass (\*its/his grass) (and various food enough to eat for one year).' (T2 3)
- (4) e=cise-he or un a rpa wa inkar.  
2SG.A=house-POSS place ALL go.SG and look  
cise-he ka isam ruwe ne  
house-POSS even not.exist INF.EV COP  
'Try to go to your house! The house (\*your/its/his house) is missing!' (B 370)

#### Abbreviations

1/2/IND(efinite) person indexing, A =transitive subject, ALL =ablative, COP =copula, DEF = definite, FIN =final particle, GEN =genitive, INF.EV =inferential evidential, N =noun, PC =possessive construction, POSS =possessive, sb =somebody, SG =singular, sth =something, V =vowel.

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## Éva Ágnes CSATÓ (Uppsala University)

### A typological review of non-canonical possessives in Turkic

The talk will review non-canonical possessives (both noun phrases and clauses) expressing core meanings of possessive relations in Turkic. Some non-canonical patterns have specific semantic/discourse functions. Others have developed under influence of non-Turkic contact languages and are typical of particular linguistic areas.

In Turkic, canonical possessive noun phrases are based on a head noun marked by a possessive suffix. The possessor is a noun (phrase) in the genitive in pre-head position, e.g. Turkish *Ali'-nin arabası* [Ali-GEN car-POSS3SG] 'Ali's car' (Johanson 1998). The genitive possessor is syntactically free (Tietze 1958, Hayasi 1997). The construction may be discontinuous and the order of possessor and possessed may be reversed (Csató 2000, 2006). The canonical Ngen + Nposs order is changed to Nposs + Ngen order in Karaim.

Non-canonical possessive noun phrases deviate from this pattern by displaying no possessive marking on

the head noun, e.g. *biz-im Fatma* [we-GEN Fatma] ‘our Fatma’. The zero-marking of the head-noun in Turkish will be discussed in typological perspectives (Haiman 1983, Haspelmath 1999, Aikhenvald & Dixon 2013). In certain languages possessive marking and zero marking of the head noun is in free variation, e.g. in Karaim.

Canonical Turkic ‘have’-possessives are existential clauses, e.g. *Ali'-nin bir kalem-i var* [Ali-GEN a pen-POSS3SG existent] ‘Ali has a pen’. In locative possessive clauses, as e.g. Turkish *Ali'de bir kalem var* [Ali-LOC a pen existent] ‘Ali has a pen’, the possessor is assigned the locative and the possessed is zero-marked. This construction corresponds typologically to Slavic existential possessive constructions of the type *U menjə est' deti* [by I-GEN exist-3SG child-PL] ‘I have children’ and is frequently used in Turkic languages dominated by Slavonic (Nevskaya 1997). Colloquial Turkish manifests mixed properties of the canonical existential possessives and the locative ones, as e.g. *Ben-im böyle araba var* [I-GEN such car existent] ‘I have such a car’. The possessor is in the genitive, but the possessed is not marked. Irano-Turkic languages have copied Persian have-constructions onto Turkic existential patterns, thus creating a new type. Here the possessive suffix marks the predicate of the clause, var ‘existing’, e.g. *Ferraşband taraf-in-da gişlay var-imiş-dir* [Farrashband side-POSS3SG-LOC winter.pasture existent-POSS1PL-PARTICLE] ‘We have a winter pasture in Farrashband’ (Csató 2005).

To sum up: Turkic languages display a number of different types of possessives. An attempt will be made to define restrictions on variation.

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**Birsel KARAKOÇ** (Uppsala University)

### Predicative possession in Oghuz and Kipchak Turkic languages

The present talk aims at investigating the types of predicative possession in Oghuz and Kipchak Turkic languages from a comparative point of view. Following structures are found: (1) Structures involving the predicate adjective *var/bar* ‘existing’ (in negation, *yok* ‘non-existing’) exclusively express ‘static’ possessive relations in finite clauses, e.g. Turkish (*benim*) *kitabum var* [I-GEN book-POSS1SG existing] ‘I have a book’ [lit. (my) my book existing]. (2) Structures involving the plurifunctional copular verb (*b*)*ol*-can express ‘static’ or ‘dynamic’ possessive relations in finite/ nonfinite clauses, e.g. Noghay (*oniy*) *üš kedesi bolğan* [(s)he-GEN three son-POSS3SG be(come)-ASPECT] ‘(s)he had/got three sons.’ As seen, the possessor in these structures takes genitive marker while the possessee marking is achieved with an agreeing possessive suffix. As to type (1) the predicate adjective can take copular markers expressing tense/modality. In type (2) the verbal predication can contain various aspect/ tense/ modal markers. Note that the distinction ‘static’ versus ‘dynamic’ in copular clauses, as well as in possessive and existential predicates is made in Karakoç (2005). In the context of possession, this distinction basically corresponds to that of ‘owning’ versus ‘acquiring’ as given in Aikhenvald & Dixon (2013).

The language-specific peculiarities of these structures, as well as their cross-linguistic distribution have not yet been fully investigated from a comparative point of view. This talk intends to address the following questions: (1) Which patterns (morphosyntactic, semantic and/or discursive) can be found behind the language-specific distribution of these structures? (2) What can be observed concerning the factors triggering a diverse development of these structures? With respect to question (1) I will show that the given structures may indicate discourse-specific differences in some languages (Karakoç 2005). Concerning question (2) I will argue that language contact may impact on the development of the linguistic structures expressing predicative possession (Karakoç 2009). Based on the theoretical framework presented in Karakoç (e.g. 2005, 2009), and taking into consideration the new insights provided in Aikhenvald and Dixon (2013), the talk will analyse data gathered from different Oghuz and Kipchak Turkic languages.

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**Lidia Federica MAZZITELLI** (University of Bremen)

#### **We don't need anything but ownership: encoding predicative possession in Europe**

The object of the paper is the constructions employed to express predicative possession in the languages of Europe. Possession can be represented as a prototypically organised conceptual domain, where different possessive notions (different types of possessive relations) are found (Heine 1997). Several scholars agree on considering ownership the prototypical possessive notion (Miller and Johnson-Laird 1976; Heine 1997; Baron and Herslund 2001; Stassen 2009; contra Langacker 2000, 2009, who also included kinship and part-whole relations); other notions are inalienable possession, social possession, abstract possession, inanimate inalienable possession (part-whole relations) and inanimate abstract possession (adapted from Heine 1997: 234).

In this paper, I describe the strategies used to encode both ownership as well as non-prototypical possessive notions in a sample of 41 languages belonging to the Indo-European, Uralic, Northeast Caucasian and Northwest Caucasian families, plus Basque.

If classified along the constructions used to express ownership, the languages of my sample belong to different typological types, in that they may use the verb 'have' (as in English), a comitative construction (as in Welsh), a locative construction (as in Russian) or a genitive construction (as in Turkish) to this aim. My analysis shows that European languages tend to expand the use of the ownership construction (independently from its formal encoding) also to the expression of marginal possessive notions. Of the correlations typically recognised as having an influence on the linguistic encoding of possession - alienable/inalienable; animate/inanimate; presence/absence of control (Heine 1997; Stolz et al. 2008; Aikhenvald 2013) – only the last has a significant impact in the languages of my sample, at least in the field of predicative possession (while they are much more important in the field of adnominal possession; Stolz et al. 2008).

The alienability correlation does not play an important role: inalienable possessees (body parts and kinship relations) are treated as prototypical possessees and are given an ownership encoding in most of the analysed languages.

The animacy correlation is significant mostly when it concerns the possessor (inanimate possession), and specifically in the case of part-whole relations including spatial inclusion (as in the house has three rooms), which receive a non-possessive encoding in some languages. Human possessees (social possession), are always treated as canonical possessives.

The parameter 'control' has instead a crucial impact on the choice of the encoding. In experiential expressions like 'being hungry' or 'being cold', as well as in expressions of age, the experiencer has typically no control on his/her sensations: hence, a possessive encoding is keener to be disliked.

My analysis has also pointed out that though the presence of a verb 'have' is scattered throughout the continent, its core can be found in the centre of the continent (in particular in the Romance languages, but also in Dutch and German), where it is employed to express a wide range of notions. Languages which are at the periphery of this area tend to avoid using 'have' in some non-ownership functions, such as expressions of diseases (so in Icelandic, Belarusian, Lithuanian and Portuguese) and physical characteristics (Lithuanian, Belarusian).

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**Irina NEVSKAYA** (Frankfurt University)  
and **Saule TAZHIBAYEVA** (Eurasian National University)

**Genitive-Possessive nominal phrase as superlative marking  
for substantives in Turkic languages**

The proposed lecture deals with a very specific use of the so-called Genitive-Possessive noun phrase (NP) in Turkic languages. Its typical meaning is expressing possessive relations. It consists of two nominals; the first nominal expresses the possessor and is marked with the Genitive case affix while the second one, the possessee, is marked with a possessive affix co-referent with the possessor:

- (1) Kazakh: qız-dıň kitäb-i  
girl-Gen book-Poss3  
'the girl's book'

This construction is used to express various types of possessive relations: ownership as in (1), part-whole relation, kinship, etc. In case we encounter the same nominal as both components, while the first component also bears a marker of plurality, it expresses the relations 'one of a group', see (2).

- (2) Shor: qís-tar-dıň qız-ii  
girl-Pl-Gen girl-Poss3  
'one of the girls'

Noun phrases formally similar to the one in (2) can express the extreme degree of what the noun denotes, its ideal referent: the best warrior, the ideal lord and king (Type I), see (3) and (4). Semantically, these NPs express the superlative degree of an adjective: the cleverest, the most beautiful.

- (3) Kazakh: Qožabergen batır-lar-dıň batır-ii, qolbaš-ii.  
Npers warrior-Pl-Gen warrior-Poss3 general-Poss3  
'Qožabergen is a general, and the best warrior among all warriors.'
- (4) Khakas: Ol pig-ler-nıň Pig-ı, xaan-nar-nıň Xan-ı pol-ča ...  
he lord-Pl-Gen lord-Poss3 king-Pl-Gen king-Poss3 be-Prs  
'...he is the Lord of lords and King of kings...'  
(a Bible translation to Khakas)

Also substantivized adjectives can be used as both components of such NPs (Type II); see (5) and (6).

- (5) Kazakh: Astana – körikti-ler-dıň körikti-si.  
Nloci beautiful-Pl-Gen beautiful-Poss3  
'Astana is the most beautiful (city) among the beautiful ones.'
- (6) Kazakh: sulu-lar-dıň suluw-ı, mǐqtı-lar-dıň mǐqtı-sı  
beautiful-Pl-Gen beautiful-Poss3 strong-Pl-Gen strong-Poss3  
'the most beautiful of all, the strongest of all'

Similar NPs with the genitive case of their first components are found elsewhere in Eurasia (even if the prototypical possessee does not obligatory get possessive marking as in Turkic). They are encountered in the most ancient written sources in Semitic and Indo-European languages (Schäfer 1970), often as part of rulers' titles, or divine names (e.g. in the Bible or Koran texts), but also for expressing an ideal representation of the notion denoted by a noun.

The superlative NPs can be varied in their structure (see Nevskaya. In print). Without the genitive marking on the possessor, such Turkish constructions express elative semantics: anne-ler anne-si 'a real mother, a very good mother', güzel-ler güzel-i 'a genuine beauty, a very beautiful one'. In Kypchak and South Siberian Turkic, the elative semantics is characteristic for constructions where the possessor has genitive marking, but lacks the plural one: Shor alip-tiŋ alib-ii, Altai batır-dıŋ batır-ii, Kazakh batır-dıŋ batır-ii 'an embodiment of the warrior; a very good warrior', Shor alıy-dıŋ alıy-ii 'an extremely foolish one'. The origin of such constructions in Turkic is not quite clear:

- 1) they could have emerged spontaneously due to the inner stimuli of language development, or universal tendencies of semantic transition from "definite group – one of a group" relation to the relation "the whole group – an ideal representative";
- 2) they could be results of contacts of these languages with world religions and their sacred books (beginning with Buddhism and followed by Islam and Christianity). It is symptomatic that the superlative construction of Type I appears almost only in Bible translations in Siberian Turkic, with rare exceptions cited above.

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### Zakharia POURTSKHVANIDZE (Goethe University Frankfurt)

#### Possession Determined Using of Polite Copula in Georgian

This paper deals with the topic of semantic generalization of the Georgian verb stem -xl- ('accompany', 'escort', also 'pseudo-ownership') including special syntactic effect of using the generalized form as a copular verb in causal conjunction with different personal forms of a possessive pronoun.

We consider the following modern Georgian sentence:

- (1) scenars tan axlavs realobidan agebuli legenda.  
 scenar-s tan a-xl-av-s realob-idan ageb-ul-i legenda-ø  
 screenplay-DAT COMIT-VERS-accompany-TH-3SG reality-ADV taken-DER-NOM legend-NOM

The script is accompanied by a legend taken from (based on) reality.

The morphological analysis of the verb a-xl-av-s (V-accompany-TH-3SG) 'it is accompanied (by...)', but contextually (?) 'The script possesses the legend [...] is undoubtedly adequate. The semantic denotation of stem -xl- is used in Georgian as a basis for the derivation of similar meanings. From a historical perspective of the Georgian language, the stem -xl- is reduced to the original consonantal element -x-: a-x-al-i 'new'; a-x-lo 'closer'; \*a-x-(a)l-av □ a-xl-av 'accompany' with the connotation of ownership. The following example from Middle Georgian (12th century) verifies such a use of the stem -xl-:

- (2) igi marṭo gaþarula ma ar axlavs arca beri.  
 igi marṭo gaþarula ma-ø ar a-xl-av-s arca ber-i.  
 he alone flee3SG.EVID slave-NOM NEG VERS-accompany-TH-3SG NEG monk-NOM
- He seems to have fled alone, accompanied neither by a slave nor by a monk.  
 (Note: the companion is the slave, who is the 'property' of his owner).

The first sign of semantic generalization of the meaning 'accompany' viz. 'escort' is the derivation of the word moaxle 'servant', which possesses the stem -xl- (i.e. mo-a-xl-e).

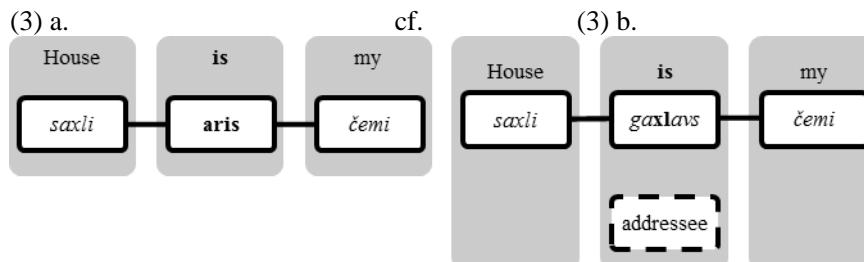
A query of the search item “.sbღვ3.\*” ([.axlav.\*]) in the Georgian Reference Corpus (ca. 130 million tokens) returns 15,387 KWICs. A cursory investigation of these contexts shows a perplexing fact: the absolute majority of the contexts use the stem -(a)-xl-(av)- without any of the meanings ‘accompany’, ‘escort’ or even ‘servant’. A syntactic analysis of these contexts clearly points to the use of the form -axlav- with the syntactic function of a copular verb in various grammatical instantiations, e.g.,

- (3) es čemi saxli gaxlavs.  
 es čem-i saxl-i g-a-xl-av-s.  
 that PossPr1Sg.NOM House-NOM.Sg 2SG-VERS-ROOT-TH-3SG  
 That (this) is my House.

In (3) gaxlavs is used as a copula. Actually, the meaning does not change when gaxlavs is replaced by the standard copular verb aris.

- (3) a. es čemi saxli aris. (3) b. es čemi saxli gaxlavs.  
 That is my House That is my House.

The use of gaxlavs as a copular verb simply restructures the syntactic architecture of the sentence. That is, the number of predicate-arguments increases through the insertion of an addressee.



The “new predicate-argument” is declared as the “owner” of the House (sic!) operated by using of the polite copula gaxlavit. Because of its not being a reality conform declaration, I use the term “pseudo-ownership” and underline the pragmatic method of speaker’s politeness strategy (face saving). The speaker, who is the real owner of the House, dissociates himself from own property and quasi cedes it to the addressee of the utterance.

The crucial question of the investigation is how the co-occurrence of the particular possessive pronouns and the polite allomorph of the copular verb in Georgian influence speaker’s decision to select a copula option. One of the hypotheses could be the causal correspondence between the first-person pronominal possession and polite copula whereas the third person possession expressed also by pronoun corresponds with the neutral copula.

The present paper verifies a complete picture of interrelation between possession and politeness based on the statistical method.

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**Monika RIND-PAWLOWSKI** (Goethe-Universität Frankfurt)

#### The functions of the genitive cases in Khinalug

Khinalug is a Nakh-Dagestanian language, which is only spoken in the village Khinalug in the North-East of Azerbaijan by approximately 2,300 people. It has an ergative system with a large number of cases. These comprise two genitives: *-i* and *-e*. The talk will analyze their functions on the basis of the corpus gathered during the DoBeS project “Documentation of Khinalug”, which mainly contains recordings of spontaneous speech of various genres, but also newly developed Khinalug literature and elicitations.

The form *-i* marks inalienable possession: *gadi sas* ‘the boy’s voice’ (DoBeS corpus 269:02-12-1). The genitive *-e*, on the other hand, marks alienable possession: *gade c’oa* ‘the boy’s house’ (DoBeS corpus

815:089) and can also fulfill a partitive function: *pxu gade sadum xi* ‘one of the three boys went’ (DoBeS corpus 219:022). The form *-e* can be realized only on nominals ending in a low vowel (Kibrik 1972:51). For those ending in a consonant or a high vowel, the alienable genitive formally equals the genitive *-i*. The latter morphologically coincides with the ergative *-i* (see Kibrik 1972:50) and with a locative-directive form *-i*, which has not yet been described in the grammar books so far. Evidence for this adverbial case *-i* can be found in the DoBeS corpus, e.g. *yir [...] birinži däfäsämä širvan-i lak-ui* ‘it was the first time that we [...] went to Širvan’.

An important function of the genitives is the formation of compound nouns: *mäid-e c’ol* ‘mountain goat’ (DoBeS corpus 246:10-48-6), *qabay-i ank* ‘forepaw’ (Ganieva 2001:39f). Khinalug has no productive morphemes to derive adjectives from nouns, so that it must apply genitive constructions in all cases where other languages would typically use adjektivization.

There is a range of secondary postpositions based on auxiliary nouns. Most of these are loans from Azeri, thus resembling the Azeri structure, but without the possessive, this category being absent in Khinalug: –GEN AUX.NOUN-CASE, applying the Khinalug case forms *-(I)r* (locative) and *-(I)lli* (ablative). Most of these govern the inalienable genitive (based on the auxiliary nouns *haqq+* ‘concern’, *ič+* ‘inside’, *qabay+* ‘front’, *dal+* ‘hind’, *üst+* ‘top’). Others require the alienable genitive (based on the auxiliary nouns *ara+* ‘intermediate space’, *dib+* ‘bottom’, *äváz* ‘substitute’).

Two non-loaned Khinalug secondary postpositions govern the inalienable genitive case: *gus* ‘on’ and *k’anič* ‘under’. Also these ones are based on auxiliary nouns (‘top’, ‘bottom’).

The postposition *görä* ‘because of’, loaned from the Azeri converb *gör-ä* ‘see-CVB’, requires the alienable genitive in Khinalug, even though it governs dative in Azeri: *hin-e görä* ‘therefore’ (DoBeS corpus 353:188).

A further research question to be discussed concerns the usage of the genitives in connection with abstract concepts, such as thoughts and imaginations, as well as emotions. Another research topic deals with the (non)adjustment of the genitive in connection with items that are used in contexts outside their typical definition of alienability: cut off body parts, fallen out hair, a baby before its birth, etc.

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**Fedor ROZHANSKIY and Elena MARKUS** (University of Tartu)

#### **Expressing possession in Votic**

The presentation analyzes ways of expressing possession in the nearly extinct Votic language. The research is based on the field data recorded by the authors during the last decade.

Votic used to mark possession with nominal possessive suffixes similarly to standard Finnish (cf. Toivonen 2000). However in Votic these markers started to disappear from everyday speech more than a century ago (cf. Ahlqvist 1856: 46–47, Ariste 1968: 57–58), and are completely absent from the contemporary language. Votic does not have special possessive pronouns but uses the genitive forms of personal pronouns instead. One might therefore claim that currently there are no special morphological means to mark possession in Votic.

At the same time, the language exhibits a wide use of predicative (internal and external) possessive constructions, employing first of all external locative cases: the adessive, allative, and ablative. In Votic, predicative possession is formed on the basis of the “location source schema” (as labelled by Heine (1997: 50–53); or the “locational possessive” pattern in Stassen’s typological model (Stassen 2009: 40–50)). For the allative, adessive and ablative, encoding spatial relations became secondary (in contemporary Votic, spatial relations are typically encoded with postpositional phrases), while encoding possession became a primary function.

The presentation will discuss competing internal and external possessive structures in contemporary Votic, cf. *tämä vetti minu vasara* ‘He took my.GEN hammer’ vs. *tämä vetti miłt vasara* ‘He took the hammer from me.ABL’. Another aspect to be addressed is the competition between the predicative possessive constructions marking the possessor with external locative cases and spatial constructions utilising internal locative cases, cf. *täll kōll eB ē akkuna* ‘This.ADESS house.ADESS has no roof’ vs. *täZ kōZ eB ē akkuna* ‘In this.INESS house.INESS there is no roof’.

Further we will discuss correlations between cases competing in predicative possessive constructions and the alternative ways of marking verbal arguments in constructions with subjectless modal verbs. With such modal verbs, the argument is typically encoded with the adessive (miłł piäB menn läfkase ‘I.ADESS have to go to the shop’), similarly to the closely related Estonian (Lindström & Tragel 2010: 375). However, in recent recordings we find some new alternatives, namely examples with the genitive and allative (minu ~ miłę piäB menn läfkase ‘I.GEN~ALL have to go to the shop’). These phenomena can probably be explained by contact-induced changes under the influence of the neighbouring Ingrian language and the dominating Russian language. Ingrian (a northern Finnic language) widely encodes the arguments with the genitive (hōmēn miun pittā mānnä linnā ‘Tomorrow I.GEN have to go to the city’), while Russian uses the dative (mne nuzhno idti ‘I.DAT have to go’) and this frame might have been calqued into Votic with the allative constructions.

While the use of a locative rather than the dative case for marking the external possessor in Russian is often attributed to the Finno-Ugric influence (cf. Haspelmath 1999: 123), in Votic we observe an opposite process of borrowing the dative case frame for encoding the verbal arguments in constructions semantically close to possessive.

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## WORKSHOP

### Pragmatics and Classical Languages

#### *Convenors*

**Camille Denizot** (Université de Paris-Nanterre) and **Olga Spevak** (Université de Toulouse 2)

#### *Description*

The pragmatic point of view is increasingly taken into account in classical studies. Theoretical contributions (Bolkestein in Herring 2000) and studies devoted to several specific issues from the last 30 years have made it clear that pragmatics is of great importance for our understanding of Latin and Greek (Pinkster 1990/1995; Rijksbaron et al. 1988; Risselada 1993; Dik 1995; Kroon 1995; Spevak 2010; Denizot 2011).

Latin and Greek share some characteristics with other ancient languages, especially the lack of native speakers preventing us from checking the results in a direct way. On the other hand, they cannot be said to be part of the growing movement of historical pragmatics (see Jucker and Taavitsainen 2010, Culpeper 2011). The corpora of Classical texts are distinctive in several respects: (a) Latin and Greek provide us with substantial texts encompassing various text types coming from various periods; (b) classical texts are mainly highly stylised literary texts, which implies considerations about stylistics (rhythmical or metrical prose, metrics in poetry). Such characteristics require a special methodology.

This workshop focuses on both linguistic and extra-linguistic parameters relevant for pragmatic studies: – Linguistic parameters: context, which is crucial for determining the information structure of a sentence; discourse structure indicated by particles and other discourse markers; genres and text types, including literary and non-literary texts (epigraphical documents); stylistic factors (metrical or rhythmical clausulae).

– Extra-linguistic parameters: shared knowledge; social context; cultural context.

Special attention is paid to contrastive studies between Latin and Greek.

### *Issues to address*

- (i) Methodology illustrated on moods and modality (Revuelta Puigdollers, Lambert);
- (ii) Constituent order phenomena (Cabrilana, Minon), using a contrastive approach (Torrego, de la Villa);
- (iii) Shared knowledge and its role in epic poems (Zeman);
- (iv) Discourse and pragmatic markers (Fedriani, George, Tronci, Crespo), using a contrastive approach (Allan, van Gils).

### *Goals of the workshop*

This workshop aims at stimulating the discussion of more general pragmatic issues concerning the classical languages in order to share the results of various investigations and draw conclusions of a more general concern. It has two goals: to address issues specific to these languages and to provide new insights into the pragmatic phenomena encountered. Additionally, this workshop focuses on a comparison of the results obtained for Latin and Greek and on methodological problems connected with pragmatics in these languages.

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**Rutger ALLAN** (Free University/ University of Amsterdam)

### **Confronting contrasts. An approach to adversative particles in Ancient Greek**

Ancient Greek abounds in discourse particles that express some form of contrast, such as *allá*, *atár*, *kaítoi*, *méntoi*, *mén* and the combination *mén ... dé*. Although a number of studies on individual adversative particles have appeared (e.g. Bassett 1997, Slings 1997, Wakker 1997), a contrastive analysis of the differences and similarities between the adversative particles in Ancient Greek is still lacking. Contrastive analyses of adversative markers in other languages are relatively scarce and only rarely based on corpus study (e.g. Fraser 1998, Blakemore 2000, Mauri 2008 and Mortier & Degand 2009). This paper aims to pin down the functional differences between the various adversative particles in Ancient Greek.

The approach I adopt draws on a number of developments in cognitive and functional linguistic theory: the insight that particles may operate at various levels of linguistic organisation (cf. Kroon 1995, Hengeveld & Mackenzie 2008), that particle use is sensitive to intersubjective coordination/alignment which pertains to the acknowledgement of the interlocutor's perspective and the establishment of a mutual common ground (Verhagen 2005, Dubois 2007) and, finally, that particles are the product of a diachronical process/grammaticalization (e.g. Traugott & Dasher 2002, Jucker & Taavitsainen 2010).

My analysis will be based on an examination of the occurrences of adversative particles in a corpus consisting of narrative (historiography) and dialogical texts (drama) from the 5<sup>th</sup> c. BCE. Distributional differences between the particles, such as the co-occurrence of negations, modal expressions, first and second person pronouns, differences in text types (narrative, argumentative, dialogical) and their (dis)preference to occur turn-initially, are used as indications of functional distinctions. A comparative aspect to the analysis will be provided by the paper ‘Confronting contrasts. An approach to adversative

particles in Latin', which is also submitted to the workshop and follows the same theoretical and methodological approach. Our comparative approach increases the cross-linguistic validity of the findings. I will argue that at least two functional dimensions are crucial to the analysis of Greek adversative particles: first, adversative particles differ from one another with regard to the hierarchical level (in terms of Kroon 1995 and Hengeveld & Mackenzie 2008) they operate on, and, second, particles differ with regard to the way they instruct the addressee to update the common ground (intersubjective coordination). Finally, I will argue that a diachronical perspective is indispensable to a description of Greek adversative particles since they all show a layering of co-existing older and newer, emerging, meanings.

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#### Concepción CABRILLANA (University of Santiago de Compostela)

#### Constituent Order in Directives with Latin Stative Verbs

The subject of this paper has received almost no attention to date. Studies exist on the constituent order in structures containing a verb like *sum* 'to be' (e.g., Marouzeau (1910), Warner (1980), Spevak (2004; 2010: 180-193)), and on the most frequent constituent ordering (especially the verbal constituent) in directives in general (Panhuis (1982: 68-72), Devine & Stephens (2006: 149, 164, 166), Bauer (2009: 276), Spevak (2010: 205-222)). Yet these two approaches have not thus far been combined as a means of looking specifically at the constituent order of directives with Latin stative verbs.

One of the many issues arising here is which factors influence most clearly and decisively the order of intervening constituents in constructions of existential statives and copulas with a directive function: (i) lexical-semantic factors: the special nature of the copula in most cases, thus reproducing the ordering patterns of declarative sentences; or (ii) pragmatic factors: patterns are present to some degree in directives, especially with non-stative and copular verbs.

This paper will consider constituent ordering in monovalent and bivalent constructions of two Latin stative verbs —*sum* 'to be' and *fio* 'to become'— when they appear in directive speech acts (with second and third persons of imperative and conjunctive tenses), assessing the degree of speaker-addressee interaction, plus other pragmatic factors. We will use Risselada's classification (1993: 48) of the different subtypes of directive speech acts based on the extent to which compliance with what the speaker expresses is obligatory, an especially original methodology, in that it relates pragmatic factors and speech act type.

In this sense, corpus selection is fundamental: comedy seems an appropriate choice, given the often high degree of interaction between participants during speech acts. However, the poetic form of these works —the comedies of Plautus and Terence— might in some cases have conditioned the ordering of constituents. That is why a comparison with other genres and literary epochs is suggestive here; thus, legal texts (Cicero: *Laws*) and didactic treatises (Cato and Columella: *On agriculture*; Pliny the Elder: *Natural history* 1-15), epistolography (Cicero: *Letters to Atticus*; Seneca the Younger: *Moral letters to Lucilius*) and speeches

reproduced by historians (Livy: *History* 1-10) all provide good points of contrast. These texts, then, will be used for analysis (222x), with the addition of one most singular work —Petronius: *Satyricon*—, with its fresh and immediate colloquial prose.

The findings are expected to reveal that tendencies in constituent patterns are more uniform when expressions are more prototypically directive, although not in a wholly scalar and proportional way. Hence, peculiarities or deviations observed in some subtypes of speech act will require specific explanations such as the following: the structure of “world-creation”, the kind of proposal being made, and the existence of expressions with different degrees of lexicalization, all emerge as some explanatory factors of such “deviations”. Furthermore, it is expected that the incidence of modality will be different in each case of monovalent and bivalent structures, given the difference not only in quantitative valency but also in semantic content.

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**Emilio CRESPO** (Universidad Autónoma de Madrid)

### **Pragmatics and Greek Particles: The Case of *kaí***

Although Classical Greek is one of the most intensively studied languages, there are at least two big issues for which bibliography is far from providing a relatively accepted answer: the order of words along the spoken or written chain and an up-to-date linguistic and not only merely translation-oriented account of the meaning of the so-called particles (*i.e.*, invariable words that, with diverse frequency, act as adverbial modifiers or as coordinators). This is probably due to the relatively recent interest for pragmatics applied to Classical languages.

Both adverbial and connective particles have in common the propensity of featuring senses that are closely linked to their contexts. Word order, syntactic distribution and pragmatic environment determine the semantic values of particles more deeply than that of other lexical units. In other words, their procedural (rather than conceptual) content heavily depends upon their insertion in a larger text.

Working along these lines, my presentation aims at describing the meaning of *kaí*, the most frequent word in Classical Greek. *Kaí* features the following general values: corresponsive ([both...] and) or non-corresponsive coordinator (‘and’); linking adverb: ‘also’; and focus adverb of addition: ‘also’; of scale: ‘even’; of particularization: ‘particularly’; and of emphasis: ‘actually’.

Such diversity can be drastically reduced through a closer look at the contexts that exclude, allow, favour, require or entail every value. Taking as my starting point the assumption that an account which acknowledges a single value to *kaí* is to be methodologically preferred (Schiffrin 2006), I will claim that several features in its syntactic, semantic and pragmatic environment restrict its single meaning and select one of its values. My method will closely look at the distribution of *kaí*. The data taken into account come from reference works and from a fresh reading of several Platonic dialogues.

The expected results include the following:

- a) Whereas *kaí* as a focus adverb of addition presupposes one or more alternatives to the element modified by the adverb, it does not presuppose any alternative as a linking adverb, but it just adds an explicit unit to what precedes it.
- b) When *kaí* appears in medial position of its clause, the presence or absence of two similar units within the clause determine whether *kaí* acts as a coordinator or as an adverb.

- c) When *kaí* occurs at the beginning of an independent clause or sentence, if a rule applies that requires the presence of a coordinating conjunction, then *kaí* is interpreted as a coordinator; but if not, it is understood as a focus adverb of addition or as a linking adverb of addition.
- d) In a combination of *kaí* and other particle at the beginning of a sentence, *kaí* is coordinator whenever the other particle is preparatory or adverbial, and adverbial if the other particle acts as a coordinator.
- e) As a coordinator, *kaí* can give rise to different semantic interpretations depending on the level on which their coordinates lie.

A similar approach could be applied to Latin *et*.

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**Jesús DE LA VILLA** (Universidad Autónoma de Madrid)

#### ***Res Gestae Divi Augusti. Pragmatic Structure and Word Order of the Greek translation***

Two main lines have been developed within the studies on pragmatics of Ancient Greek: analysis of word order (e.g. Dik 1995, 2007, Devine-Stephens 2005, Bakker 2009) and the identification of pragmatic markers (e.g. Slings 1997, Revuelta 1997, Polo 2006). Most of these studies, however, are based on literary texts. This paper aims at analyzing in pragmatic terms word order of a non-literary text: the Greek version of the facts of Emperor Augustus known as *Res Gestae Divi Augusti* (*RGDA*) 'The Deeds of the Divine Augustus' and taken to have been redacted by Augustus himself. This paper is parallel to the one entitled "*Res Gestae Divi Augusti. Pragmatic structure and Word Order of the Latin original*".

The main interest of this text is based on two characteristics: first, it is a narrative, but a non-literary text; second, it has always been considered a translation of the Latin original version. These two features allow our investigation a twofold approach: on the one hand, it is possible to make a description of the word order patterns of the Greek text compared with word order patterns proposed for literary texts. On the other hand, the Greek text can be compared with the Latin text.

The theoretical points of departure for the research are the proposals for Ancient Greek in Dik (1995, 2007) who envisages a general non-marked word order pattern for sentences as in (1):

- (1) Framing settings – Topic – Focus – Verb – Remainder

On this basis, it is possible to identify the regular and deviant patterns we can find in the Greek version of the *RGDA*. Two particular points seems of interest in this respect:

- 1) As the text is presented as a list of achievements made by Emperor Augustus, there is not much place for Topic continuity. So, in this text, the presence of 'New Topic' or 'Topic-Focus' elements seems to be more important than in other texts containing longer narrations, and this probably modifies the internal structure of the basic word order pattern.
- 2) The nature of post-verbal constituents, which are simply described as 'Reminder' in Dik's proposal, but that seem to offer a more complex role than previewed, at least in the Greek text.

We will show that the Greek text pushes to the last position constituents which are situated in other positions in the Latin text. Furthermore, we will address the question whether the postposition of an element comes from the existence of different pragmatic interests in the Latin and the Greek versions, or is it the result of different basic word order patterns in each language? It is just an example of the kind of phenomena that will be studied in this paper.

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**Chiara FEDRIANI** (University of Bergamo)

#### **Discourse and Pragmatic Markers in Plautus. Evidence from a socio-pragmatically annotated corpus**

The aim of this contribution is to illustrate the development and advantages of a socio-pragmatically annotated corpus comprising the Plautine comedies, which is currently under construction, and to reassess the status of some discourse and pragmatic markers in Latin comedy. My approach is therefore essentially functional and corpus-based.

I will firstly present the structure and the use of this corpus. Besides lemmatization and Part\_of\_Speech-tagging, the corpus comprises manually-annotated tags that provide information about pragmatic (or pragmatically-oriented) elements regarding: i) the sociolinguistic status of the speakers who use them (gender, age, social rank); ii) the type of Discourse Unit (interventions, acts, subacts: see Pons Bordería 2014) and Social Act (e.g., request, order, promise) they occur in; iii) the pragmatic functions of these elements, such as textual, modal, and interpersonal functions. Moreover, pragmatic elements are also tagged as for the position they occupy in the sentence, i.e., word order, in order to retrieve possible associations between their occurrence in the right or left periphery and their pragmatic or discursive function. The presentation of the corpus structure will be confronted with methodological issues that arose while designing such an electronic resource for a corpus language like Latin. This makes us deal with constraints such as i) lack of native speakers, ii) limited amount of data available, iii) the fact that data are closely bound to the written tradition, which is invariably subject to an influence of literacy (cf. Cuzzolin & Haverling 2009), and iv) metrical factors that are decisive in determining the choice and the position of words.

Secondly, drawing on some analyses based on this corpus, I will focus on functions, uses and distributions of two specific classes of deverbal elements. The first class represents the category of Discourse Markers, namely floor-yielding and turn-taking devices (e.g., *quid ais (tu)* ‘what are you saying?’, ‘tell me something’, *scin quid* ‘do you know what...’, *age* ‘come on’). The second class comprises Pragmatic Markers, namely politeness markers and hedges (cf. Adams 1984, Ferri 2008, Dutsch 2012; see Ghezzi & Molinelli 2014 on *quaeso* and *rogo* ‘please’); occasionally, I will provide comparative evidence from Ancient Greek. Besides describing the values of these markers, I will highlight their relationship with the discourse structure (e.g., the type of intervention and speech act they typically occur in), and sociolinguistic factors (including gender-dependent distributions and other socially-related divides). The study shows that clear correlations emerge from the data and that a corpus language like Latin permits both qualitative and quantitative inferences about pragmatic forms and functions, despite the raw frequencies available.

The originality of this research lies on the development of a socio-pragmatically annotated corpus that fills a gap for a dead language like Latin, for which the electronic resources available are mostly restricted to morpho-syntactic and lexical information. Once completed, the corpus will be freely available on the web

with the aim of enhancing networking between the scholars interested in data-oriented research on the pragmatics of Latin.

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**Coulter H. GEORGE** (University of Virginia)

### Subminimal pairs, context, and Ancient Greek particles

Ancient Greek particles remain poorly understood, as is only natural given the subtle ways in which they affect the meaning conveyed by their host clauses, not to mention the limited, static nature of the corpus. But the rise of pragmatics as a field has led to many advances, and this paper will show two approaches that can be applied successfully to understanding two different particles, in two different text types: *ára* in the epic poetry of Homer and *dé* in the historical prose of Herodotus. The first particle requires study because there is no consensus as to whether it marks that its host clause is a natural consequence of what precedes (“so, then”) or that it highlights an unexpected development (“Look!”) (Denniston 1954, Grimm 1962, Bakker 1993). The second particle is agreed to provide some sort of emphasis, but some say that it indicates that a statement is clearly true (Sicking & Van Ophuijsen 1993), others that it calls the addressee’s attention to the statement (Wakker 1997). In both cases, resolution of the issue depends on two chief methods: first, the collection of subminimal pairs; second, careful study of the immediate context of those pairs.

While true minimal pairs, in which two clauses differ only in the presence or absence of the particle in question, are vanishingly rare, the juxtaposition of similar clauses with and without the particle throws its function into greater relief than can be achieved simply by studying the former. That some recent commentaries (e.g. Graziosi & Haubold 2010) have greatly exaggerated the ability of *ára* to direct the Homeric audience’s gaze can be demonstrated through the study of clauses with the structurally important opening *autàr epeí* (“but when”): those with *ára* are no more vivid than those without. As for *dé*, it is especially common in Herodotus after the particle *mén* (“on the one hand”), a collocation that accounts for 391 out of the 1395 examples of the particle in the *Histories* (28%), frequently marking transitional sentences that summarize the previous material before moving on to the next section. Comparing *mén dé* clauses with those that use the similar combination *mén nun* reveals that the former are distinguished by containing less new information and by signposting more substantial breaks in the narrative—a much clearer distinction than can be seen in the subminimal pairs with and without *ára*, which often exhibit free variation.

Furthermore, in such contrastive studies, one must consider the immediate context: that *ára*-clauses often repeat a verb of the previous clause lends support to reading it as a consequential particle; that *dé*-clauses disproportionately occur with second-person and anaphoric pronouns is a sign that they both mark a statement as clearly true and draw in the addressee. Since a pragmatic minimal pair is an ideal that can never be attained in a real text, it is precisely such contextual factors as these that do the most to elucidate the function of such particles.

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**Frédéric LAMBERT** (Université Bordeaux Montaigne)

**How to do things with future**

The aim of this contribution is to explore the pragmatics of the simple future in Classical Greek. For, as surprising as it can seem, the pragmatic view on the grammatical future, and particularly on the Greek future, has hardly ever been tested empirically. The first meaning put forward by the ancient grammarians was the temporal one. However, since Magnien monograph (1912) on the Greek future, the main approach concerns modality. It is well known that Magnien proposed a unified account of the Greek future by having recourse to the modal “want”, every occurrence of a future being paraphrased by one personal form of “want” associated with the verb itself. This view was in keeping with the presumed desiderative etymological suffix \*se/o. Markopoulos’s much more recent book (2009) makes an interesting synthesis of the previous approaches, saying that “Future is a category spreading through both the domains of Tense and Modality”. More generally, the author refers to Tense-Aspect-Modality (TAM) as a whole, in which the three categories cannot be examined separately.

My aim here is to discuss instances of the future used as a means of manipulation of the addressee. As far as I know, this viewpoint is quite recent in linguistics. It is suggested for example by Douay & Roulland (2014) and, for contemporary French, by Azzopardi & Bres (2011/12). Even if future implies futurity and some modality, this does not mean that it can be restricted to these notions. The concept of “relevance” in Sperber and Wilson’s (1986) sense, in which a meaning is treated not in itself but as a clue, can be useful here, since it offers the possibility of taking into account both the temporal value of the future and its various levels of interpretation in a precise context. The role of context in this approach is particularly appropriate to the study of a dead language like Ancient Greek. I have tested it in Aristophanes’ *The Birds*, where the futures are very frequent; this is certainly imputable to the dramatic status of the text, a dialogue characterized by a high degree of tension. The preliminary results of my investigations on these grounds are the following: 1) almost all the occurrences in this text are in the first or second person, which signals that pragmatics is at work, insofar as interaction is at stake; 2) the compelling force of the future is projected at different levels: time -- either near or distant --, aspect (punctual, and therefore factual), modality (certainty), and finally, at a pragmatic level, when the co-utterer is forced to react to an event presented as necessary. Furthermore, my claim is that this sort of mapping is far from being restricted to a specific text written in Ancient Greek; it can be adapted not only to other types of texts in that language but also to other languages as well.

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**Rosemarie LÜHR** (Humboldt-Universität zu Berlin)

### The pragmatics of the postverbal position in Latin and Greek

While the literature offers a multitude of theories on the relation between information structure and word order in the left periphery of a sentence the right periphery has not yet been studied in detail. In this respect Ancient Greek comes into view. For nowadays the following order is assumed for simple declarative sentences:

TOPIC — FOCUS — VERB — REMAINDER

But as Matić (2003) has shown, postverbal positions may also have decisive pragmatic functions. Focus material as well as topic material can be placed at the end of the sentence (cf. Lühr 2008). The same holds for Latin, though in Latin verb end is considered as normal order. This paper primarily aims to make a comparison on the phrases which occur after the verb in sentence final position in these two languages. To scrutinize the factors related to information structure which promote, force, or prevent the realization of postverbal constituents also the preverbal positions have to be taken into account. For the TOPIC a distinction has to be made between continuing, shifting and contrastive TOPIC and for the FOCUS between new information and contrastive FOCUS (Haider 1993). For example, in Ancient Greek, the contrastive FOCUS, usually a narrow FOCUS, as well as the new information FOCUS, a wide FOCUS correlating with the neutral, unmarked FOCUS, is more often to be found in final position than in initial position. Cf. the following table with NIF = New Information Focus and CF = Contrastive Focus:

#### Focus position in Ancient Greek

Author	Homer	Thucydides	Isocrates	Plutarch Longus	total
initial NIF	12	18	3	8	45
initial CF	18	9	2	12	49
final NIF	23	56	18	30	130
final CF	33	27	32	23	127

In Ancient Greek also the high percentage of non-initial topics is noticeable: a total of 23%, whereby the sources seem to point towards an increase of such topics. The classification of an element as FOCUS or TOPIC in Greek and Latin is based on cumulative evidence such as saliency, givenness, definiteness vs. new information, contrast, negation (Jakobs 2001). The data comes from the projects “Information structure in Old Indo-European languages” and “Information structure in complex sentences” (sponsored by the Deutsche Forschungsgemeinschaft) including not only Latin and Greek but also Hittite and Old Indic. The language comparison will have the following impact on further research: Firstly, as Indo-European is supposed to be a representative of the SOV type, the investigation of the postverbal material possibly provides an answer to the question how the development to the prevailing SVO type in Greek happened. Secondly, contrastive TOPICS and FOCUSes play an important role in the present study, therefore, the contribution towards the determination of the pragmatic functions of preverbal and postverbal FOCUSes and TOPICS is not only relevant for the classical languages, but also for linguistics itself. It will help us understanding how the concept of contrastivity interacts with the position of information structural material in languages (cf. Haiman 1985).

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**Sophie MINON** (Université Lyon 3)

**Prominence gradation and discontinuity or How pragmatics together with rhythm condition Word order in ancient Greek prose**

Studies of word order in Thucydides and Plutarch have shown significant differences both in the placement of pragmatically salient constituents and in their aesthetic arrangements (Brenk 1992, Chiron 2010 and Minon 2015, forthcoming on July in next *REG*). Even in the most ancient prose-writers like Herodotus (*pace* Dik 1995) word order appears as more or less conditioned by the combination of two main factors: pragmatics and rhythm. I am thus currently working on developing a method of combining pragmatic and rhythmic modes of analysis, which should become indispensable as a hermeneutic tool to reconstruct the micro-poetics of prose, and especially literary aims of the authors. This method will have to be implemented to the 3 following levels: constituent-, member- (often divided themselves into sub-members), and period-level (Scheppers 2011), observing thus the structuration of the “oratorical diction” on which the prose-writing of the ancients is primarily based; our structuration based on syntax is not the most relevant for such a description.

The aim of my paper is twofold. Firstly, I propose a study of word order in a Greek epigraphical text written and displayed by the Athenians in their acropolis (405 BC) to honour the Samians by giving them the Athenian citizenship. I assume that in such a diplomatic language, word ordering was mainly conditioned by pragmatics, and very little by rhythm. Until now, word order in the epigraphic prose has almost never been focused on, with the exception of Wachter (1999) and his work on segmental engraved punctuation. Secondly, I will study word order in a text of the very elaborate prose of Thucydides (1.144.2-3: a part of the first speech the author attributes to Pericles, as another type of written speech). I aim to show, comparing both administrative and literary styles, how much the combination of a pragmatic and a rhythmic approach is useful in the study of literary prose: it allows not only to better define Thucydides’ style, but also to better understand Thucydides’ thought, by elucidating micro-hierarchization of his text.

I will thus compare both types of prose in three steps: 1. checking whether the salient initial and final positions, which were already relevant for ancient rhetoricians (Demetrios 39, Quintilian 9.4.67), apply to word order in the administrative prose too. 2. looking especially at the verb position since its common predicative function makes it often focus by itself or at least part of it, except when it marks another word as focus (Devine-Stephens 2000). 3. Looking at the placement of discontinuous elements and at different types of discontinuity (figure called “hyperbaton”, see Markovic 2006) with respect to pragmatics. 4. and, finally, checking whether both 5th century BC administrative and literary texts illustrate the so-called ‘harsh harmony’, which Dionysius of Halicarnassus characterizes in these words: *ereídesthai boulétaī tā onómata asphalōs kai stáseis lambánein iskhurás* (*On Composition* 22.1) ‘(this style) requires that words steady support each other and hold strong positions’. The main point will be to show how word order at three distinct levels (constituent, member, and period) differs according to whether the writer aims to solely inform or, as in the case of authors combining emphasis and rhythm, also to charm his addressees.

**Antonio R. REVUELTA PUIGDOLLERS** (Universidad Autónoma de Madrid)

**Methodology and pragmatic research in Classical Languages:  
The case of mood and modality in Ancient Greek**

The purpose of this paper is to discuss the difficulties of pragmatic research in a dead language. The reason for choosing mood, modality and speech acts is that these topics are central to pragmatic theory (Levinson 1983); the analysis of the Greek data from a pragmatic point of view can both improve our understanding of this phenomenon and illustrate some of the methodological problems of pragmatic research in a language without native speakers. In my paper, I will discuss among others the following methodological criteria:

- (1) Formal reflections (apart from morphological mood).
  - (a) Greek has two different negations, *ou* and *mé*, with a clear distribution according to speech acts. Whenever this distribution is altered, this change reflects a difference in illocutionary force.
  - (b) Some verbs are used in a regular way in order to introduce or underline the illocutionary force of speech acts: (i) *boúlei*/*boúlesthe* (‘do you want?’) appear in deontic interrogative sentences; (ii) *oíomai* (‘I think’) is used in mitigated declarative sentences; (iii) *eboulómēn* (‘I wanted’) introduces wishes; (iv) imperatives of movement verbs like *íthi*/*íte* (‘go’), *áge*/*ágete* (‘take’) reinforce directives.

- (c) Some (combinations of) particles appear in certain sentence types: *ē mén* appears in claims and oaths, whereas *eíthe/aíthe* (*gár*) marks sentences as wishes.
- (2) Comparative and typological parallels. There are cases where the Greek data follow or deviate from other languages: potential questions ('Could you ...?') are frequently used for conveying polite requests across languages; in contrast, according to grammars, Athenian Greek uses declarative potential sentences ('You could ...'). This difference should make us reconsider the traditional analysis of the Greek data.
- (3) The information provided by ancient grammarians.

The researched corpus contains works from the V-IV centuries BC (over 2.000.000 tokens), although examples are also taken from other periods in order to cover certain diachronic developments.

There is much previous work on these topics in Ancient Greek and Latin (e.g. on particles and discourse Kroon 1995 and Bakker&Wakker 2009, on mood Risselada 1993, Denizot 2011 and Riksbaron 2002); however, this paper is original in that it will present a general frame that combines our knowledge of many different areas in order to give a comprehensive account of mood and modality in a 'dead' language.

Apart from methodological conclusions, I will also propose some descriptive results as those depicted in the following table.

Sentence type	Prototypical illocutionary force	Secondary illocutionary force
Declarative	Assertion (ou)	
		⇒ Directive (strong order): (ou/mé) Future 'pro imperativo'
	Assertion: (ou) ὅφελον ('you should have')	⇒ Wish: (mé) ὅφελον ('I wish you had')
	Assertion: (ou) eboulómēn ('I wanted')	⇒ Wish: (mé) eboulómēn ('I wish you had')
	Assertion: poiésais án ('you could do X')	⇒ Polite request: poiésais án ('Do X, please')
Imperative	Directive	
Interrogative	Question	
	Question: ou + Future ('won't you do X?')	⇒ Mild assertion: oukoûn ('it's cold, isn't it?') ⇒ Directive (impatient order/request): ou (mé) + Future ('Do (not) X')
Desiderative	Wish	
Exclamative	Exclamative	Directive (request)

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**Esperanza TORREGO** (Universidad Autónoma de Madrid)

#### ***Res Gestae Diui Augusti. Pragmatic Structure and Word Order of the Latin original***

This paper, which is organized in parallel to the one entitled "Res gestae Diui Augusti. Pragmatic structure and Word Order of the Greek translation", has two aims: (i) to add to the research on Word Order (WO) in Latin the analysis of a non-literary text, and (ii) to give an adequate standard of comparation for the study

of WO in Latin and Greek. Both aims are very important for the investigation on pragmatic in Latin and Ancient Greek because they would cover two areas unattended so far. The major achievements on Latin and Greek WO show that WO is mostly conditioned by pragmatics (Pinkster 1995, Dik 1995, Devine-Stephens 2006, Spevak 2010). However, the fact that the corpus on which the research is based is mostly formed by literary texts conditions the results because of the factors of different quality –not only pragmatics- implied in the elaboration of literary texts (Spevak 2010: 285). On the other hand, a comparation between WO in Latin and Greek based on similar texts is still to be done.

The *Res Gestae Divi Augusti* (RGDA), ‘The Deeds of the Divine Augustus’ is a long inscription containing the political testament of the emperor Augustus. Its grammar is simple and lacks ‘literary elegance’ (Cooley 2009: 22), but the text is long enough (2655 words) as to assume that it cannot lack an elaborated pragmatic structure.

Its content is organised as a list of political and military achievements of emperor Augustus. Each chapter is ususally presented as a single piece of information. Most of them show a non marked WO, whose pragmatic structure could correspond to the schema proposed as general for several languages (Topic or Focus-Complements-Verb-Remainder). However, there are a number of chapters which exhibit a marked WO. I will concentrate mostly on them, focusing on clausal WO, mainly on what concerns first and last position. The questions I would like to answer are the following:

- i) How does Augustus distribute the information in cases where the WO is marked?
- ii) Is always the first position the position of the Topic?
- iii) If it is so, where does appear the focal information?
- iv) What is the pragmatic function of the constituents occupying the last position?

My expectations in this respect are that, given the relatively high movility of the pragmatic functions in Latin sentences, the organisation of the information choosen by the author is much dependent on the constituent appearing in the first position, which triggers the reorganization of the rest of the material, also the one included at the final position of the clause.

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**Liana TRONCI** (Università per Stranieri di Siena)

#### **On the distribution of some interactive/conclusive discourse markers in Plato’s *Theaetetus***

This paper focuses on discourse markers at the interface between pragmatics and syntax-semantics and proposes an analysis of the Greek particles *ára*, *oún*, *oukoún* and *toínun* as markers of turn-takings in Plato’s dialogues. The aim of this research is to correlate the discourse markers with the pragmatic and syntactic strategies used by speakers according to their different roles in the dialogue. Although Plato’s dialogues are fictional and literary works, they constitute a good test bed to analyse how two or more speakers interact, what discourse markers they use, and how they manage turn-taking.

Within the traditional view, the above-mentioned particles are regarded as semantically equivalent, because they express consequence or indicate a conclusion (“Folge oder Folgerung”, according to Kühner & Gerth 1904: §§542-544). However, they do not appear to be interchangeable and their distribution is uneven within the speech turns of dialogues: this means that they are not comparable from the points of view of syntax and pragmatics. Several studies have been dedicated to the discourse markers in Ancient Greek, mainly from the points of view of the semantics of particles and the discourse cohesion: besides the general description of Greek particles by Denniston (1934), see E. Bakker (1993) on *dé*, Basset (1997) on *allá* as turn-taking marker in Aristophanes’ *Ranae*, S. Bakker (2009) on the particles *oún* and *gár* in Plato’s dialogues, and Wakker (2009) on *oún* and *toínun* in the forensic speeches of Lysias.

This study approaches the topic of discourse markers, by investigating the correlation between discourse markers and syntactic-semantic constraints, on the one hand, and, on the other hand, speakers’ roles with

respect to argumentative function (for the general framework, see Ducrot 1972, Ducrot *et al.* 1980, Anscombe and Ducrot 1983, Moeschler 1995). As for syntactic-semantic constraints, I will consider (a) the order of discourse markers in the sentence, (b) the diverse syntactic structures used in speech acts (especially conditional sentences, questions, statements), (c) the polarity (affirmative/negative), and (d) the modality of sentences (cf. Dik 1997).

Data for this research are taken from Plato's *Theaetetus*: all tokens of the above-mentioned particles have been collected and analysed as regards their syntactic-semantic and pragmatic distribution, and their occurrence within the turn-takings of both Socrates and his addressee. As said above, the particles concerned here are not evenly distributed across turn-takings: for instance, the particle *oún* appears in the speech of both Socrates and Theaetetus, while *ára* occurs only once in the speech of Theaetetus and more than 55 times in that of Socrates.

I will show that (a) the distribution of these particles in turn-takings is due to different speech acts, which reflect the roles of Socrates and his addressee with respect to the discourse and its organization, (b) some particles preferably correlate with some syntactic structures (e.g. *ára* and *oún* are mostly used in conditional sentences), while other particles have mostly pragmatic function (e.g. *oukoún*, which is usually left out of the sentence, at the beginning of speech, and is used as a conclusive marker that links two speech acts).

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**Lidewij VAN GILS** (Vrije Universiteit Amsterdam)

#### **Confronting contrasts. An approach to adversative particles in Latin**

The use of adversative connectives to express different types of contrastive relations has been the object of pragmatic studies of the last decades (Anscombe & Ducrot 1977, van Dijk 1979, Blakemore 2000, Fraser 1998, Couper-Kuhlen & Kortmann 2000, Mortier & Degand 2009). A pragmatic approach to Latin discourse particles (Kroon 1995) has provided detailed analyses of the adversative connectives autem, at and vero. Since 1995, the study of discourse particles in Latin and Greek has continued to generate new insights (Rijksbaron 1997, Slings 1997, Allan 2007, Bakker & Wakker 2009, Schrickx 2011); it has confirmed and refined the relevance of semantic and pragmatic discourse levels from a more general point of view (see Lang 2000, Horn & Ward 2004, Nuyts 2004, Hengeveld & Mackenzie 2008, Langacker 2008). However, the most frequent adversative connective in Latin (*sed*) and Ancient Greek (*allá*) have not received much attention. This paper focuses on *sed* and is methodologically related to a paper on its Greek counterpart *allá* submitted for the same workshop (Confronting contrasts. An approach to adversative particles in Ancient Greek).

I will show that the pragmatic use of this adversative connective differs from the pragmatic uses of other adversative connectives (autem, at and vero) in terms of intersubjectivity (Verhagen 2005, Du Bois 2007, Kroon 2014). The results of this research fill the gap of a pragmatic description of the most frequent adversative particle in Latin.

Two Latin prose authors serve as a corpus (Cicero and Sallust, first century BC), with approximately 23.000 words, treating a similar subject (the conspiracy of Catilene). The rhetorical and especially the historiographical discourse about this major Roman conflict features a relatively high number of

adversative connectives (circa 500), half of which is represented by sed. The main goal of this paper is to provide a clear functional-discourse analysis of adversative connectives, and especially sed in Classical Latin.

Furthermore, the proposed paper relates adversative connectives to the contextual field of ‘shared knowledge’; adversative connectives, similar to and sometimes combined with negation, often highlight a contrast between expected and non-expected information. The proposed analysis of sed and other adversative connectives will be perceptive of the kind of shared knowledge that is presented. References to and implication of shared knowledge in Latin historical narratives have not yet received much attention, partly because linguistic parameters concerning adversative relations and negation lack a consistent treatment. The proposed analysis of the use of adversative connectives in Roman prose – parallel to the analysis of Greek material, as mentioned above – will enable us to start drawing such a consistent treatment based on general conclusions and, at the same time, it will help us to keep track of text or language specific aspects.

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**Sonja ZEMAN (LMU Munich)**

### **The grammar of truth: The linguistic conceptualization of shared knowledge in (semi-)oral epic poems**

One of the most discussed pragmatic factors that are supposed to leave its trace on the linguistic structure of historical languages has been seen in their oral predisposition. Yet it still remains an open question how to deal with the “conceptual” (Koch & Oesterreicher 1985) resp. “cognitive” orality (Fleischman 1990) of ancient *texts* in an adequate methodological and theoretical way. On the premise that cross-linguistic comparisons of epic oral poems are a suitable tool in order to investigate the relationship between pragmatic factors and their linguistic effects, the paper tackles this question by drawing a comparison between Homeric and Middle High German epic poems with respect to their different relationship towards orality and the linguistic conceptualization of shared knowledge. Specifically, I will focus on different

linguistic devices in their diachronic development that are commonly seen as characteristic for “semi-oral” poems of older stages of German such as the present tense, deictic particles, and formulaic meta-narrative devices (cf. Fleischman 1990). The overall aim of the paper is an essential theoretical modification of “orality” as a pragmatic key concept for investigations in historical stages of language in terms of shared knowledge, based on three analytical steps:

- First, a corpus-based investigation on the present tense, deictic particles, and their use in meta-narrative devices in Middle High German epic poems (1100–1400) constitutes the foundation for the separation of distinctive pragmatic factors which leave their trace on the linguistic structure. In this respect, the diachronic development of meta-narrative devices indicates that the linguistic shape of the stylised literary texts is not primarily triggered by medial aspects of orality, but rather by the pragmatic presupposition of a performance in a shared communicative space of singer and audience and its relationship to the story world.
- As a result, a simple dichotomy of “oral” vs. “written” breaks down, but instead has to be replaced with a more general approach of different pragmatic levels. With this aim in mind, I will propose a new finer-grained pragmatic model which considers both the different dimensions of “orality” and different dimensions of *common ground*, the latter comprising (i) the communicative situation (epic singer ↔ audience), (ii) the socio-pragmatic condition (e.g. “teller” ↔ the “told” / “tradition” ↔ “individual”; cf. Parry 1956) and (iii) the epistemological presupposition (“speaker” ↔ “reality”).
- Finally, I will contrast the findings for Middle High German with the Homeric tradition. By considering the specific conditions of oral tradition in the particular languages, it will become clear that the alignment of micro- and macro-linguistic analyses can offer us a methodological window on the relationship between linguistic structure and historic-cultural conditions – and hence a glimpse on the socio-cultural presupposition with regard to “reality” and “truth” as concepts which are historically variable (cf. Doane 1991, Bakker 2005, Kawashima 2008).

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## WORKSHOP

### Prominence in Pragmatics

#### *Convenors*

**Klaus von Heusinger** (Cologne), **Ken Turner** (Brighton), **Petra Schumacher** (Cologne)

#### *Description*

Text-level prominence has recently become a central issue in characterizing anaphora, coherence relations, implicature, and perspective. Even though prominence is used to account for various phenomena in these areas, a precise characterization needs further investigation.

We assume that prominence is a structural notion of discourse organization reflecting relations between individuals, events, etc. The most well-studied domain in this respect is reference to individuals. In this workshop, we will discuss the following closely related questions with regard to prominence in pragmatics: How is referential prominence expressed? Regarding text-level prominence, different aspects may engage in the management of referents. Most notably, variation in the realization of referential form has been discussed as an indication of prominence (covert, pronoun, full DP). Moreover, the referent's role in discourse structure (e.g. topicality, question under discussion) may affect referential prominence. From the perspective of multi-sentence structures, referential chain-building can be considered a core mechanism of managing prominence. In this respect, different kinds of prominence have been proposed depending for instance on locality or for pronoun production and comprehension.

What is the contribution of discourse structure to prominence? Background and foreground information as well as coherence relations have been used to characterize elements in the discourse structure. Free indirect discourse may provide further insights into prominence in discourse.

How is prominence realized? Prominence can be expressed by different linguistic means, e.g. prosody, word order, discourse structure. How are these markers used by interlocutors? And how do they interact with each other?

**Aria ADLI** (University of Cologne)

### Double topic chains and null subjects in Spanish

This paper analyzes topic chains in spontaneous speech dialogues. The chain-building property of topical elements is an essential mean for managing prominence on the discourse level, creating thematic coherence across sentences. Topic chains relate the sentential and the discourse aspect of information structure by extending the sentence-internal division between prominent and non-prominent information to the cross-sentential level, where we can distinguish between categorical sentences that continue a topic chain and those that begin a new topic chain.

This paper examines the role of the PERSON feature (Harley & Ritter, 2002) on chain-building. Our assumption is that prominence management differs according to the (non-)locality of the topical referent, i.e. according to [-local] or [+local] (Ritter & Wiltschko, 2009: 157): We assume that common assumptions on topic chains (Chafe, 1976; Reinhart, 1981; Brunetti, 2009) are plausible with 3rd person referents, but much less so with local persons: 1<sup>st</sup> and 2<sup>nd</sup> persons are never new referents in a dialogue situation (Sigurðsson, 2004 assumes that they can always serve as local antecedents). We therefore propose an analysis with *two parallel topic chains*: one local and one non-local chain.

This paper concentrates on topical overt and null subject pronouns in Spanish. We will show that a detailed analysis of topicality building on two chains allows us to understand hitherto unexplained variance with regard to the variation between sentences with realized subject pronouns (e.g. *yo canto esta canción* 'I sing this song') and their counterparts with zero subjects (e.g. *Ø canto esta canción* 'I sing this song').

The data is extracted from the *sgs* corpus (Adli, 2011), containing spontaneous speech of 54 European Spanish speakers. We have counted more than 3000 pronominal subject topics and more than 1000 topicless sentences. We conduct statistical analyses using ANOVAs for repeated measurements. The results show that the distinction between shift and familiar topics (Cameron, 1992; Frascarelli, 2007) is most salient in the nonlocal chain. Furthermore, we find a clear interaction effect between topic continuity and chain-switching (in the sense of a direct switch from the local to the nonlocal one or vice-versa): Topic continuity leads to a higher overt pronoun rate in a chain switching context (as expected, due to the referential distance). However, topic shift triggers a *lower* overt pronoun rate in a chain-switching context. We will show that a fine-grained analysis in which we analyze the interplay between topicality and givenness helps us to resolve this counterintuitive finding.

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**Mira ARIEL** (Tel Aviv University)

### Revisiting the typology of Conversational Implicatures

Pragmatic inferences are essential to understanding speakers' communicative intentions. Grice (1989) and many semanticists and pragmatists classify as some kind of implicature any interpretation not considered part of the core linguistic meaning. But haven't implicatures been asked to do too much? Conventional implicatures are better analyzed as linguistic meanings (Blakemore, 1987), and Sperber and Wilson (1986/1995) have removed Explicated inferences from the class of conversational implicatures. I will argue that the remaining "conversational implicatures" (PCI) are still not homogenous. Privileged Interactional Interpretation (PII) implicatures are almost as discourse-prominent as Explicatures (and linguistic meanings). Other conversational implicatures are not even speaker-intended (Background assumptions and Truth-Compatible Inferences, TCIs).

Consider the originally Hebrew examples in (1), which arguably implicate the respective inferences in (2) (the implicature trigger is marked in boldface):

1. a. Last Saturday night, Busaina Abu Ghanem was murdered, the tenth female victim in the family (Haaretz, 11.2.2014).
- b. R1: And Haim Getzl (= John Doe) who is a company director ((part omitted)) starts buying  
S: OK that's a criminal offense  
R3: So he has a mother-in-law.  
S: For this you go to jail (Originally Hebrew, Lotan, 1990: 16).
- c. The victim's house has no customary mourners' booth and no visitors appear (Haaretz, 11.2.2014).
- d. It is noon in the Ramle neighborhood of Juarish. The quiet streets belie the violence and terror looming over the women of the Abu Ghanem family. Last Saturday night, Busaina Abu Ghanem was murdered, the tenth female victim in the family. The quiet, which appears to reflect a routine day, conceals fear and repressed cries (Haaretz, 11.2.2014).
2. a. 'There is something strange and terribly wrong with this family'.  
b. 'Haim Getzl would illegally buy shares under his mother-in-law's name'.  
    c.i. 'It is customary to have a mourners' booth where visitors come to pay their respect to the dead'.  
    c.ii 'It is wrong to deny the murder victim the customary respect for the dead'.  
d. More Abu Ghanem women are likely to be murdered in the future.

I will argue that 2(a) is indeed a PCI. 2(b) is a PII implicature, which like PCI, is indirectly conveyed, but like explicated inferences, it constitutes the speaker's main discourse point. 2(c.i) is an implicated premise (for the PCI in c.ii), which I reclassify as a Background assumption (Searle, 1978). Background assumptions are derived by interlocutors, but they do not fall under the speaker's communicative intention. Finally, 2(d) is what I call Truth-Compatible Inference (TCI), which is plausibly true given the speaker's utterance, but crucially, not speaker-intended.

The various "implicatures" above carry different discourse statuses and pass different variants on Bach's (1994) Indirect Quote test that I will propose as diagnostic for each. PII implicatures are extremely prominent, whereas TCIs play no discourse role whatsoever. Background assumptions are crucial for utterance interpretations, but have no standing of their own. PCIs are secondary not only to explicit meanings, but also to explicated inferences and to PII implicatures.

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**Regine ECKARDT** (Universität Konstanz) and **Stefan HINTERWIMMER** (Universität zu Köln)  
**Prominent Protagonists**

Discourse semantics faces a rising interest in free indirect discourse, such as in (1).

- (1) *Tom sighed. The damned ghost in the attic was acting up again!*

A wide variety of analyses of free indirect discourse links the second sentence to an understood utterance context *c* where Tom is the speaker, and the time of speaking is at the reference time of the ongoing story (Schlenker 2004, Sharvit 2008, Eckardt 2014).

Little has been said so far about the pragmatic processes that allow us to accommodate such an utterance context. Study cases mostly consist of two-sentence textoids with one protagonist only, and hence this protagonist is the most prominent candidate to be the understood speaker/thinker in free indirect discourse. There is to date no research in the general factors that determine the most prominent protagonist at any point in discourse. A plausible starting hypothesis would be that the most prominent protagonist is determined in much the same manner as we determine possible antecedents in anaphor resolution. Yet, the reconstruction of utterance/thought contexts in free indirect discourse is much more limited than general anaphor resolution: for instance, free indirect discourse is not available in embedded contexts (conditionals, modals), whereas anaphors in embedded contexts are permissible and can refer to non-embedded antecedents (Kamp+Reyle 1993). But even in non-embedded contexts protagonists that are locally prominent enough (with respect to various scales such as ones related to syntactic position, grammatical function and thematic role) to be picked up by personal pronouns are not automatically available as understood speakers/thinkers in free indirect discourse: As soon as there is a protagonist that is globally (i.e. with respect to the entire discourse) more prominent in the sense of having been introduced earlier in the discourse and having been picked up repeatedly before, the latter protagonist is systematically preferred as the understood speaker/thinker. We show that if in addition to that the globally more prominent protagonist has been introduced by a referential DP (i.e. a proper name or definite description), while the locally prominent one is introduced by an indefinite DP, the latter is excluded from serving as the understood speaker/thinker in free indirect discourse, even if that was the only way to keep the discourse coherent. From these observations we conclude that only protagonists either functioning as discourse topics or ones that have the potential to become future discourse at the relevant point in discourse are available as authors of embedded contexts of utterance/thought. In our talk, we thus try to clarify the notion of discourse topic in light of various accessibility relations and notions of salience in discourse (Asher+Lascarides 2003). Finally, we briefly discuss a phenomenon further establishing the close link between discourse topicality and availability as the author of an embedded context of utterance/thought: the behaviour of German demonstrative pronouns, which have been claimed to avoid discourse topics by Bosch and Umbach (2006), and to avoid individuals functioning as the authors of embedded contexts of utterance/thought by Hinterwimmer and Bosch (to appear).

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**Bart GEURTS** (Radboud University Nijmegen)**Salience**

Notions of salience enter theories of communication in a great variety of ways. For example, it is commonly assumed that some referential expressions (e.g., certain pronouns) preferentially refer to salient discourse entities; that new information is more salient than old; that salient attributes are more likely to be selected for identifying a referent; that some of the meanings of a word may be more salient than others; and so on. It would seem that salience is a quite heterogeneous phenomenon. Apparently, salience imposes orderings on discourse entities, attributes, old and new information, and word meanings, among other things, and the factors that determine salience are bound to be manifold and different from case to case. In short, we are in need of a more general, unifying view.

One of the cornerstones of Lewis's (1969) celebrated analysis of convention goes under the name of "salience", too. Lewis introduces his notion as follows: "Salience in general is uniqueness of a coordination equilibrium in a preeminently conspicuous respect." (p. 38) As a definition, this will not do, if only because it is circular, but I do believe it is in the right spirit, most importantly because Lewis's conception of salience is quintessentially *social*: something is salient not just for an individual but for a group, and it is common knowledge among the group members that this is so. This explains how, in many different ways, salience enables coordination in general, and communication in particular. Lewis's notion is broad enough to subsume the various uses of salience listed above, and many more besides.

In contrast to Lewis's approach, the view on salience adopted by many semantic and pragmatic theories is individualistic. Such theories treat salience as a one-dimensional measure of prominence for an individual speaker or hearer. Thus understood, salience is a psychological concept. I will argue that, although social salience is the key notion for a theory of communication, the psychological notion is by no means irrelevant, as it grounds social salience, at least in part.

**Katharina HAUDE** (CNRS)**"Inherent" vs. "induced" referential prominence in Movima (isolate, lowland Bolivia)**

In Movima (isolate, lowland Bolivia), the arguments of a transitive clause are encoded according to their relative prominence of their referents. The argument with the more prominent referent is expressed by a constituent internal to the verb phrase (i.e. encliticized to the verb and obligatorily expressed), and the other one is expressed by a constituent external to the verb phrase (i.e. free, moveable and omittable). The arguments' semantic roles are indicated by verbal morphology: direct marking on the verb identifies the internal argument as the agent and the external one as the patient, while inverse marking on the verb indicates the reversed situation.

The term "prominence" as used above is understood in terms of inherent properties of the referents, which include the factors person (SAPs being treated as prominent rather than third persons) and animacy (animates being treated as prominent rather than inanimates), but also discourse status, i.e. the potential identifiability of a discourse referent in the hearer's mind (Chafe 1996; Lambrecht 1994). Accordingly, in Movima, the internal argument, i.e. the one with the inherently prominent referent, is typically an unstressed pronominal enclitic, while the external argument, if overtly expressed at all, is typically a noun phrase; in texts, referential continuity is usually reflected by the representation of the discourse topic as the internal constituent, with appropriate direct-inverse marking on the verbs indicating its semantic role.

At the same time, the external argument, which represents the inherently non-prominent referent, is the only one that is available for syntactic operations that enhance the identifiability of its referent: this argument can be relativized, fronted, or targeted by a wh-question. In contrast, for the internal argument to be fronted etc., a detransitivizing operation has to be applied. Thus, constructions which render a discourse referent prominent for information-structure purposes (called here "induced prominence") are reserved for the argument whose referent is inherently non-prominent.

This seems to be a paradoxical situation: syntactic subjects (defined as having exclusive access to particular syntactic operations; Keenan 1976, Bickel 2011) are normally conceived of as preferentially encoding inherently prominent entities (Aissen 1997). However, the above-mentioned properties that show the privileged syntactic status of the external argument in Movima all have in common that they help to identify a discourse referent that is not easily identifiable.

A functional explanation of this phenomenon may be found along the lines of foregrounding and backgrounding. An inherently prominent discourse referent is backgrounded (e.g. through expression as a pronominal enclitic) because it is assumed to be accessible in the addressee's mind; the inherently non-prominent referent, if of any relevance at all, is foregrounded through the expression with more linguistic material (NP, relative clause) or through particular focussing operations, all of which serve to establish the referent in the hearer's mind. In this way, the Movima data (stemming from an annotated corpus of over 130,000 words) contribute important insights to the discussion of the different facets of "prominence".

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**Hans KAMP** (University of Stuttgart)

### The Dictatorial Prominence of Openers

By Openers I understand sentences in a discourse or text that require continuation on pain of incoherence. Such sentences can take various forms. Among them are obvious cases such as 'Let me tell you something (else)', 'You have no idea what happened to me today', 'The following point needs to be stressed too'. But the topic of this talk is a special type of opener, which introduces a new individual or event without saying anything of interest about it. (Call such openers EIOs, for 'entity introducing openers'.) Some examples: 'I received an invitation for a conference this morning', 'When we perform the experiment at a temperature of less than 3 degrees Kelvin, we get a strikingly different result', 'I went to the bookstore this morning', 'I had a funny experience last night', 'I just had an idea'.

The point of an EIO is to make the individual or event it introduces available for significant comment. But what is significant and what insignificant comment? That depends on the content of the discourse or text and the context in which it is conducted or presented. No general definition of the distinction seems possible – the contents of discourses and texts and the interests of participants/intended readers are just too diverse to allow capturing in a simple formula. But assume such a distinction as given, i.e. that the following predicate 'Sign' is well-defined, where 'Sign(P,o,Sn,D,c)' says that P is a significant comment of o at the point Sn of the discourse D in context c. Then an EIO Sn+1, occurring at a point Sn in D and c, will be a sentence that can be represented in the form P(o), where o is a new individual or event introduced by Sn+1, and P the comment that Sn+1 predicates of that individual or event, and where 'Sign(P,o,Sn+1,D,c)' does not hold for i ≤ n. And if D contains this EIO at point Sn, then D will be incoherent unless Sn+1 is followed by a sentence (group) Sn+1 + j that provide comments P' of o such that Sign(P',o,Sn+1+j,D,c) does hold.

Being an EIO depends essentially on the context, discourse and position within the discourse in which a sentence occurs; the form of the sentence is only a necessary condition, not a sufficient one. Pretty much any sentence with the form of an EIO can be a significant answer to some question, and with that a significant contribution to some discourse. And in a dialogue, perceptions of what counts as a significant comment may diverge, as in this case:

A: 'I just had an idea'.

B (interrupting A before he can continue): 'YOU!! An IDEA!! I DON'T believe it.'

The notion of an opener, and of an EIO in particular, has connections with, and provides challenges for, a number of different approaches to the theory of discourse structure and discourse coherence, such as: SDRT, the QUD approach, Centering Theory and Inquisitive Semantics. Some of these will be discussed in the talk.

**Andrew KEHLER** (University of California, San Diego)  
 (joint work with Hannah Rohde)

### Prominence and Coherence in a Bayesian Theory of Pronoun Interpretation

#### Background and Study

A common wisdom in the pronoun literature is that a unified notion of entity prominence drives both production and interpretation. Kehler & Rohde (2013; see also Kehler et al. 2008), however, posit a Bayesian analysis whereby biases towards referents of pronouns ( $P(\text{referent/pronoun})$ ) are determined by combining the prior probability that a referent will get mentioned next ('next-mention' biases;  $P(\text{referent})$ ) and the likelihood that a pronoun will be used to mention that referent ( $P(\text{pronoun} / \text{referent})$ ). Crucially, the factors that condition these terms are different: Next-mention biases are determined primarily by semantic/pragmatic factors (e.g., coherence relations), whereas the production bias is sensitive primarily to information structure and grammatical role (e.g., favoring pronominalizing mentions of subject v. other referents; Rohde 2008, Fukumura & van Gompel 2010, Rohde & Kehler 2013). The model is therefore inconsistent with a unified notion of entity prominence that mediates production and interpretation. We examine the model using data from a passage completion task with a novel 2x2 relative clause (RC) x prompt type design (a-b). The RC manipulation utilizes the fact that RCs attached to direct objects can be inferred to provide explanations of the matrix event (Rohde et al. 2011).

- a. The boss fired the employee who was embezzling money. (He) \_\_\_\_\_
- b. The boss fired the employee who was hired early last year. (He) \_\_\_\_\_

Although not entailed, (a) invites the inference that the employee was fired *because* of the embezzling, whereas (b) lacks an analogous inference. The prompt either enforces pronominalization of the next-mentioned referent (pronoun prompt) or is unconstrained (free prompt). Participants (n=40) were given a context sentence per (a/b) along with gender-disambiguating pictures and asked to write a follow-on sentence (24 stimulus sets interleaved with 36 fillers). Target stimuli used object-biased implicit-causality (IC2) verbs with two same-gender referents. Outcomes were modeled using mixed-effects logistic regression.

#### Hypotheses and Results

Accounts of pronoun interpretation that appeal primarily to surface-level characteristics of the context find little to distinguish (a-b). The Bayesian analysis predicts a difference, however, based on an interconnected sequence of referential and coherence-driven interdependencies. First, it predicts fewer continuations that explain the context event in (a) than (b), since the RC in (a) already provides a cause. Second, since object-biased IC verbs impute causality to the object, a greater number of explanation continuations for (b) should lead to a greater number of first-mentions of the object. Third, the analysis predicts that rate of pronominalization in the free prompt conditions should not be similarly affected by the RC manipulation, and instead only by grammatical role. Finally, the RC and prompt manipulations are both expected to affect pronoun interpretation. All of these predictions were confirmed.

#### Conclusion

Pronoun interpretation biases are sensitive to the inference of implicit explanations whereas production biases are not. The results are therefore incompatible with a unified notion of prominence that underlies both pronoun production and interpretation, but instead reveals precisely the asymmetry predicted by the Bayesian analysis.

**Peter PAGIN** (Stockholm University)  
**Enrichment, Coherence, and Discourse Structure Abstract**

In an earlier work, I provided a new account of pragmatic enrichment, where I treated it as distinct from other primary pragmatic phenomena such as narrowing, loosening, and semantic shift. Building on the work of Jerry Hobbs (1985) and Andrew Kehler (2002) on coherence relations, I proposed that the role of enrichment, as opposed to the other phenomena, is to raise coherence. I suggested a five-step scale of strength of coherence relations, with no coherence at the bottom and necessity type coherence relations at the top. What is expressed by an utterance prior to factoring in the enrichment exhibits a weaker coherence relation between relevant elements than the corresponding relation after enrichment.

The relata in question can be the contents of the conjuncts in a conjunctive utterance. A well-known example from Robyn Carston (2004, p. 71):

- (1) a. He handed her the key and she opened the door.  
b. He handed her the key and she opened the door [with the key that he had handed her].

From (1a), prior to enrichment, with an anaphoric interpretation of the second conjunct pronoun, and a temporal interpretation that takes the second event to occur directly after the first, we have an intermediate degree of coherence. With the intuitive enrichment indicated in (1b) the degree of coherence is raised, because the first event is taken as causally making the second event possible.

Sometimes in discourse, and in particular in conjunctions, a causal connection enrichment is blocked by the possibility of a parallel reading, i.e. a coherence relation that holds when two content instantiate a common generic theme:

- (2) a. Mary embarrassed John, and Betty made fun of him.  
b. Mary embarrassed John, and Betty made fun of him [because of that].

Because (2a) already satisfies a parallel reading (two bad things happened to John), the causal enrichment in (2b) is not intuitive.

Interestingly, the choice between a causally relevant enrichment and a parallel reading sometimes depends on discourse structure:

- (3) a. Adam saw a bird and Bill wanted to buy it.  
b. Adam saw the bird and Bill wanted to buy it.

In (3a), it is intuitive to read into the sentence a causal connection between Adam's seeing the bird and Bill's wanting to buy it; typically one assumes that Bill learned about the bird from Adam. This effect does not arise in (3b). The reason seems to be that because of definite the in (3b), the bird is assumed familiar prior to both Adam's seeing and Bill's wanting, and therefore no causal connection is suggested, while because of the indefinite 'a' in (3a), the bird is assumed novel and therefore introduced by Adam's seeing. We get a causal connection in (3a) and a parallel reading in (3b).

The question that will be investigated is under what conditions the switch between definite and indefinite has this effect. Intentionality seems to play an important role.

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## Alice TER MEULEN (UnIGe)

### Presupposed and Asserted Content in Aspectual DPs

Aspectual DPs are scalar quantifiers describing a prominent or imminent change. This paper presents some core comparative English and Dutch data, advocating their semantic analysis, based on the strong analogy with the aspectual verbs and adverbs.

In Dutch (1a) and (1b) are both perfectly grammatical, where the ambiguous (1a) entails on one of its readings (1b) with *nog* scrambled to the IP edge. Both (1a) and (1b) describe a situation in which Maria may be seen, but no one has seen her yet, although someone may do so soon.

- 1) a. Niemand heeft Maria nog gezien.  
Nobody has Maria still seen.  
Nobody has seen Maria yet.  
b. Nog niemand heeft Maria gezien.  
Still nobody has Maria seen  
\*Not yet anybody has seen Maria.

However, (1a) may also describe a situation where anyone could have seen Maria after a contextually determined reference time, but no one did, and now the opportunity to see her is considered past. It is

unambiguously expressed in English by (2a) and in Dutch by a quantitative, purely VP-internal adverb *meer* in (2b).

- 2) a. Noone has seen Maria anymore.  
     b. Niemand heeft Maria meer gezien.  
         Nobody has Maria more seen

The indefinite DP *someone/iemand* in (3a) does not admit such an entailment of the aspectual DP in (3b).

- 3) a. Iemand heeft Maria nog (niet) gezien.  
         Somebody has Maria still (not) seen.  
         Somebody has still (not) seen Maria.  
     b. Nog iemand heeft Maria (niet) gezien.  
         Still somebody has Maria (not) seen.  
         Someone else has also (not) seen Maria.

In (3a) it is not presupposed that other people had seen Maria in the past, but it is asserted that someone has (not) seen her recently. In (3b) it is presupposed that someone had (not) seen Maria and it is asserted that someone else has (not) seen her later. Since only temporal and aspectual adverbs can occur at IP edge and subject clitics are optional, it is predicted that proper names cannot serve as aspectual DPs, where (4b) shows a left-dislocated informational topic DP with a demonstrative clitic.

- 4) a. Peter heeft Maria nog gezien.  
         P has M still seen.  
         Peter has still seen M.  
     b. Peter, DIE heeft Maria nog gezien.  
         Peter, dem pro has M still seen.  
         Peter, HE has still seen M  
     c. \*Nog Peter, die heeft Maria gezien.  
         Still Peter, dem pro has M seen.  
         \*Still Peter, he has seen M.

To conclude, a characteristic Dutch stylistic pattern with left-dislocated *nog* creates a contrastive topic, triggering subject/verb inversion and conveying prominently that the current state is soon over, to be terminated by the event described in the main clause.

- 5) Nog denkt hij dat Maria van hem houdt, maar dan komt haar brief.  
     Still thinks he that Maria of him loves, but then arrives her letter.  
     He is still thinking that Maria loves him, but then her letter arrives.

## WORKSHOP

### Shifting classes: Germanic strong and weak preterites and participles

#### *Convenors*

**Katrien Beuls** (Artificial Intelligence Lab, VUB), **Bernard De Clerck** (Ghent University), **Dirk Pijpops** (University of Leuven), **Freek Van de Velde** (University of Leuven)

#### *Description*

A conspicuous characteristic of Germanic languages is that they have two morphological strategies at their disposal to express the preterite. The oldest strategy is called the ‘strong’ inflection, and derives from the Proto-Indo-European aspectual ablaut system (English *sing ~ sang*). The ‘weak’ inflection, by contrast, is a diachronically innovative strategy in Germanic, and uses a dental suffix (English *work ~ worked*).

Most verbs take either the strong or the weak inflection, but the distribution is historically (as well as socio- and dialectally) in flux: over time, many verbs have shifted from strong to weak, or – less commonly – from weak to strong, or shift from one strong ablaut class to another, or from one weak class to another.

The Germanic strong and weak preterite formation has been the subject of numerous studies which have approached the issue from different angles (philological, acquisitional, comparative ...) (see, among others, Van Haeringen 1940, De Vriendt 1965, Seibold 1970, Tops 1974, Bybee & Slobin 1982, Bammesberger 1986, Pinker & Prince 1988, Van Coetsem 1990, Van Santen & Lalleman 1994, Hare & Elman 1995, Van Santen 1997, Kühne 1999, Nübling 2000, Pinker & Ulman 2002, Albright & Hayes 2003, Salverda 2006, Mailhammer 2006, 2007a,b, Nowak 2010, Vosters 2012, Heinze 2013, Knooihuizen & Strik 2014, Strik 2014).

The availability of large corpora in more recent approaches have allowed scholars to scale up the earlier findings. See, for instance, Lieberman et al. (2007) and Carroll et al. (2012) on the evolutionary dynamics of English and German verbs respectively, or Anderwald (2012a,b,c) and Cuskley et al. (2014), who set out to investigate the (ir)regularization of English verbs working with the 400M COHA Corpus. Second, new methods are currently being developed, which hold the potential to shed new light on the class-shifting whims of Germanic verbs. Agent-based modelling, an in-silico simulation of languages processes (Shoham & Layton-Brown 2009, Steels 2011), is currently applied to Germanic strong verbs, both in proof-of-concept stage (Pijpops et al. 2014) and in a more advanced fashion (Pugliese et al. 2014). Still, there is a significant gap between, on the one hand, the philological scrutiny of more ‘traditional’ scholars (past and present), who often work with limited datasets, but explore them in profound detail, and, on the other hand, the bird’s-eye perspective in the more recent ‘big data’ approaches, which have access to quantitatively more robust datasets, but perhaps inevitably gloss over many of the philological intricacies that haunt the verbal preterite morphology of Germanic. To date, the big data approaches have, for instance, not been overly concerned with the type frequency effect of ablaut class membership (see the critique in Carroll et al. 2012 on Lieberman et al. 2007), and often rely on a very crude distinction between regular weak inflection (*work ~ worked*) and irregular verbs, i.e. all the rest, both strong and irregular weak (*think, have* etc.). The time has come to bring researchers together to exchange methods and results that can help us to bridge the gap between different approaches.

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**Lieselotte ANDERWALD** (University of Kiel)

### Going from strength to strength – on the persistence of (certain) strong verbs in English

It is a truism of historical comparative Germanic linguistics that one of the hallmarks of Germanic languages, the existence of two types of past tense formations (strong vs. weak verbs) is being dissolved across all languages in favour of the historically innovative ‘weak’, i.e. regular verbs. While this trend has been explained in terms of type frequency, token frequency, analogy, ease of processing, ‘naturalness’, prescriptivism, or, in the case of English, a combination of these, helped along by language contact, it may be instructive to look at cases where specific groups of strong verbs survive intact, and show no sign of becoming weak.

In English, it is in particular past tense forms that cluster around CLING, SLING or STRING which seem to have served even as ‘attractors’ for other verbs, both historically (Wyld 1927), in non-standard varieties (Anderwald 2009, 2011), in colloquial American English today (Murray 1998), and in psycholinguistic experiments with nonce forms (Bybee and Moder 1983). In this talk, drawing on much earlier work, I will argue that factors like phonological schemas (in the sense of Bybee and Moder 1983) as well as higher, more abstract formal schemas (through type frequency) and thus essentially cognitive reasons can override

other effects (e.g. token frequency), and have in fact led to the remarkable resilience we observe in this group of verbs today.

Of particular interest will be the smaller sub-class around DRINK, RING, SING or SWIM. Here, historically, variation has been resolved in favour of past tense forms in <a>, rather than the (expected) <u>, most strikingly in SHRINK, which has shifted from categorical forms in <u> (*shrunk*), to categorical use of <a> (*shrank*). However, these <a>-forms are mainly found in writing, rather than in spoken language, and I will investigate whether prescriptive influence can be held responsible. Although quantitative investigations of my collection of 258 grammar books suggest no (Anderwald 2012), a careful qualitative analysis of comments by grammarians qualifies this picture somewhat, and reveals underlying ideologies that, as indicators of wider societal beliefs about language, at least suggest some ways of who changes the (English) language, and in which direction. Since this group of verbs exists in all Germanic languages in quite a similar form, it would be interesting to compare alternative directions of development, and alternative influences, on SING, DRINK and SWIM in the sister languages of English.

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**Bernard DE CLERCK and Klaar VANOPSTAL (Ghent University)**

#### **-t/-ed verb alternates in postcolonial varieties of English: accounting for inter- and intra-varietal parallels and differences**

The number of irregular verbs is gradually decreasing (Lieberman et al. 2007, *inter alia*) and synchronic variation shows increasing (though not systematic) preferences for regular over irregular endings in the conjugation of irregular verb classes which are listed with both possibilities (e.g. *burned* instead of *burnt*; *dreamed* instead of *dreamt*). These changes manifest themselves in native and postcolonial varieties of English (see De Clerck and Vanopstal 2015), but intra- and cross-varietal variation does not allow easy determination of the centre of gravity of change (Hundt 2009). In this paper, we will single out and chart the behavior of verbs that allow -ed/-t variation (including *burn*, *dream*, *dwell*, *kneel*, *lean*, *learn*, *leap*, *light*, *smell*, *spell*, *spill*, *spoil*) in a selection of the GloWbE-based varieties of postcolonial English. Based on multivariate analysis, it will be argued that attested patterns cannot be captured by inner-circle dependent concepts such colonial lag or colonial innovation, nor can they be accounted for by applying the developmental stages in Schneider’s (2007) evolutionary dynamic model. Instead, the results show that areal effects (Hickey 2012) have greater explanatory force and that intra-varietal variation on an individual verb level can only be accounted for by taking into account a set of different interplaying variables. Among others, the results show that there is no clear link with frequency (contra Lieberman et al. 2007), but that salience of change has an impact on retention of strong forms. Outliers, in their turn, indicate that other factors are at play as well, including register, ambiguity avoidance, the phonological features of the co-text and prescriptivism.

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**Jessica NOWAK** (University of Mainz)

**The past tense-debate from a diachronic point of view: regularization and irregularization of German verbs**

The so-called past tense-debate is usually hold from a rather synchronic and thus too one-sided perspective, relying on data from language acquisition, experiments with language impaired and/or nonlanguage-impaired individuals (e.g., elicitation tasks) as well as neurolinguistic methods (e.g., MRI). However, language models (single- and dual-mechanism ones) must not only explain synchronic but also diachronic facts. Thus, it is indispensable to consider language change to fully understand cognitive processes. The present talk addresses this debate from a diachronic point of view: Selected data from regularization and irregularization processes in the verbal system of German as documented, for example, in Werner (1987, 1989), Ronneberger-Sibold (1988) and Nübling (2000) will be drawn on to show that only a usage-based perspective on language can explain the diachronic facts. Special attention is paid to ablaut generalizations such as the analogical extension of the pattern *x-o-o* within German strong verbs from different ablaut classes (III-VI; e.g., Nowak 2010, forthcoming). This pattern originally stems from the 2<sup>nd</sup> Germanic ablaut class (e.g., *fliegen* – *flog* – *geflogen* ‘(to) fly’) and exhibits a uniform exponent of PAST TENSE (the *o*) which can be combined with several infinitive/present vowels (*x*). Interestingly, only low-frequency strong verbs acquired this simplified two-vowel pattern analogically (e.g., *heben* – *hub* – *gehaben* → *heben* – *hob* – *gehoben* ‘(to) heave’), whereas high-frequency ones maintained a more differentiated pattern (e.g., *helfen* – *half* – *geholfen* ‘(to) help’) or remained unchanged (e.g., *geben* – *gab* – *gegeben* ‘(to) give’). This correlation between frequency and analogical processes supports Bybee’s notion of lexical strength (corresponding to Langacker’s 1987 entrenchment), i.e., high-frequency words have stronger memory traces and thus are less affected by analogical processes. It is of particular concern to show that the adoption of *x-o-o* is a partial regularization process for “weakened” strong verbs and in some cases an intermediate stage towards the regular weak class (e.g., *bellen* – *ball* – *gebollen* → *boll* – *gebollen* → *bellte* – *gebellt* ‘(to) bark’), suggesting that there is no clear cut-off point between irregular and regular morphology, a view proposed amongst others by Bybee (e.g., 1995:432), Langacker (1987) and connectionist models (e.g., Rumelhart & McClelland 1986).

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**Dirk PIJPOPS** (University of Leuven), **Katrien BEULS** (Vrije Universiteit Brussel)  
and **Freek VAN DE VELDE** (University of Leuven)

**Fighting in broken formation. The competition between the Germanic strong ablaut classes and weak suffix inflection in an agent-based model.**

In present-day English, Dutch, and most of their Germanic siblings, the verbal weak inflection offers a well-established and regular strategy for forming the past tense. In contrast, the strong inflection seems to present no more than a diminishing rubble of vowel sub-rules and irregularities (Harbert 2007: 277). Still, things were once different. As an innovation specific to Proto-Germanic, the fledgling weak dental suffix had to compete with a sturdy strong ablaut-system inherited from Proto-Indo-European, which is assumed to have been both clearly regular and dominant in frequency (Bailey 1997: 8).

Earlier computational models of this competition have either focused exclusively on language acquisition (Rumelhart and McClelland 1986; Pinker and Prince 1988; Marcus et al. 1995; Taatgen and Anderson 2002), on the role of acquisition in language change when the weak inflection was already well-established (Hare and Elman 1995; Yang 2002), or have explicitly disregarded the regularity of the strong system (Colaïori et al. 2015; Pijpops and Beuls subm.). However, these models don't address how a nascent weak inflection could have possibly gained enough momentum to overthrow a both regular and dominant strong system.

To explain this enigma, several proposals have been put forward in the historical literature (Ball 1968: 164; Bailey 1997: 17). The first states that the dental suffix is in principle applicable to all verbs, while each separate strong vowel alternation is not. That is, the strong system presents a broken formation of several vowel alternations against a single dental suffix. The second holds that even as a whole, the strong system was not applicable to some particular verbs, which would then create a safe nest for the weak inflection to mature. The last posits that the regularity of the strong system was being undermined by sound changes, allowing the weak inflection to take advantage of the created irregularities.

To investigate whether these causes can indeed be responsible for the ascent of the weak inflection, an agent-based model was created in which the focus lies on language use rather than acquisition (cf. Croft 2000; Bybee 2010). The model has been integrated into the Babel2-framework (Loetzsch et al. 2008), and the competing constructions have been implemented in the Fluid Construction Grammar formalism (Steels 2011; van Trijp et al. 2012). The model's behavior showed that, in the long run, the first explanation alone already suffices to explain the rise of the weak inflection, even if each separate vowel alternation starts out more frequent than the weak inflection. This finding of course does not say that the second and third proposals did not help in creating more optimal conditions for the weak inflection to start its ascent. It does mean, however, that the disintegration of the strong system might be the result and subsequent catalyst rather than the original cause of the rise of the weak inflection. That is, perhaps both are related through a push chain, rather than a drag chain.

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**Julia SCHLÜTER** (University of Bamberg)

**Alternant forms of strong and weak verbs in English:  
The interplay between the principles of rhythmic alternation and morphological biuniqueness**

The present paper contributes a frequently neglected perspective on the question of why the strong verb inflection is still astonishingly resilient, or more precisely, why the past participle is even more tenacious than the preterite, thus posed by Baugh and Cable (2013: 160). To shed light on this question, the study investigates variant forms of three strong verbs (*drink, break, strike*) and two weak verbs (*knit, light*) in English, all of which happen to alternate between mono- and disyllabic forms:

- *Drunken*, the old past participle of the strong verb *drink*, has shed the -en-suffix in most contexts.
- The loss of *broken* in favour of *broke* set in somewhat later and reversed mid-way through.
- The past participle of the strong verb *strike* now alternates between the original strong form *stricken* and monosyllabic *struck* which, formerly restricted to the preterite, has been infiltrating the past participle function for centuries.
- Two participial variants of the weak verb *knit* have co-existed for many centuries: one with a contracted dental suffix (*knit*) and one with a syllabic allomorph (*knitted*).
- The contracted form *lit* of the weak verb *light* has persisted alongside the dominant regular form *lighted* and is now coming back, following a distinctive trajectory.

The paper argues that a significant portion of the distributional tendencies and changes can be explained with reference to the principle of rhythmic alternation (Selkirk 1984: 37), e.g. *he lít the róom* but *a líghted róom*. Moreover, the preference for alternating stressed and unstressed syllables can be shown to be highly context-sensitive (Schlüter 2005: 86–112), e.g. *a líghted róom* but *a dím-lít róom* or *an únlit róom*. However, if a syntactic function (such as attributive use) frequently recurs with a certain morphological alternant (in this case the disyllabic one), the rhythmically motivated distribution can congeal into a grammatically motivated one (e.g. *a drúnken sáilor*). Such a fixation ensures an ideal biunique form-function relationship, albeit at the expense of rhythmic flexibility. The five verbs under consideration balance rhythmic and syntactic preferences in different ways, and the balance has changed considerably over the past centuries.

The analysis of different syntactic and rhythmic contexts is based on extensive prose corpora (EEPF, ECF, NCF, EPD, the fiction components of the BNC and COHA) that allow us to trace fine-grained adaptive processes in the history of the alternant verb forms from Early Modern English to the major present-day varieties of British and American English. The data show that under certain circumstances, the avoidance of unrhythmic sequences can be the principal factor leading to the conservation of obsolescent verb forms or to the accelerated introduction of incoming ones, but that the rate of change can differ from one variety to the other.

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### Playful Analogy and Verbal Ablaut

Ablaut or vowel alternation has been the most salient feature of Germanic strong verbs for over two millennia. Despite its gradual decline in terms of overall type frequency, ablaut is still a prominent feature in the verb system of almost all present day Germanic languages. Some strong inflection patterns have even enjoyed a limited amount of productivity in various languages (see e.g. Van Haeringen 1940, Hogg 1988, Strik 2014).

This (semi-)productivity of strong inflection can be clearly seen in the area of playful or jocular language use, where strong forms may be used in jest to inflect verbs that are weak in the ‘neutral’ idiom. Examples include Dutch *gesnopen* for *gesnapt* ‘understood’, *gepepen* for *gepijpt* ‘given/received a blowjob’, and English *praught* for *preached* (Lederer 1989). Such forms indicate an awareness on the language user’s part of different forms of (potential) morphological productivity. We will present an overview of jocular ablaut forms from different Germanic languages to further illustrate this special kind of productivity. These forms will be gathered from a variety of sources: comedy sketches, humorous poetry, and playful linguistic endeavours (such as the German *Gesellschaft zur Stärkung der Verben*).

The gathered inflections will form the basis of a qualitative analysis of the types of analogy that are used in generating playful and jocular forms. While playful language use always relies in part on breaking standard linguistic rules (Cook 2000), the hypothesis is that the resulting forms are subject to a *different* set of rules, and not produced at random. We expect that the majority of playful ablaut forms will be formed according to a small subset of available inflection patterns, and that these patterns may correspond in part to historically productive patterns.

In addition to presenting a qualitative analysis jocular ablaut forms, we will apply analogical modelling to part of the data to see if these forms can be systematically explained on the basis of analogy with existing verb forms, or whether additional explanatory principles are needed. The study of inflection of nonce verbs in Dutch presented in Knooihuizen & Strik (2014) indicates that many forms can indeed be explained through direct analogy based on the present stem vowel, while others are better explained through higher-level product-oriented schemas.

Finally, although language play has been the subject of some general studies (see e.g. Crystal 1998, Cook 2000, Sherzer 2002), detailed studies of specific language play phenomena tied to theoretical linguistics are relatively rare (though see e.g. Kirshenblatt-Gimblett 1976). We hope that our analysis of verbal ablaut and jocular analogy will provide a much-needed (albeit modest) impulse to this field.

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**Freek VAN DE VELDE** and **Britta KESTEMONT** (University of Leuven)

### Using mixed-effects logistic regression to assess the determinants of regularisation of strong inflection in Dutch

Like other Germanic languages, Dutch synthetic preterite formations are categorized into strong vs. weak inflection. The latter is the historically more innovative and more productive strategy, and a long-term strong-to-weak drift can be observed in individual verbs. Still, the strong verb is remarkably resilient and is unlikely to be jettisoned anywhere soon (for Dutch in particular, see Van Haeringen 1940, Salverda 2006,

inter alia). This strong-to-weak drift has been called ‘regularisation’, even though this is somewhat of a misnomer, as the strong inflection was, and still is, marginally productive (Knooihuizen & Strik 2014). Previous studies have elucidated the effect of various factors, like frequency, ablaut class, and age of the language user on this ‘regularisation’ process (Schaerlaekens & Gillis 1987:143-146, 164; Van Santen & Lalleman 1994; Van Santen 1997; Vosters 2012), but usually these effects are studied one by one, without controlling for other variables at issue.

In this paper, we use a mixed-effect logistic regression analysis to measure the simultaneous impact of various relevant factors. Data are obtained through a survey with 782 Flemish high school students. We draw on a total of 33,734 datapoints of preterites and participles of Dutch verbs of which frequencies were established in the Corpus of Spoken Dutch. The results show several interaction effects between ablaut class, verb frequency, and age of the test subject, and as such issue a strong warning about across-the-board statements on the determinants of regularisation. Our results allow us to give a more fine-grained account of the differential weight of each of the effects.

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## WORKSHOP

### The nature of passives

#### *Convenors*

**Manuela Korth** and **Qingfeng Schwaderer** (University of Stuttgart)

#### *Description*

The traditional notion of passives incorporates some common characteristics, including agent suppression, object promotion, detransitivization of the main verb, and some modification of the main verb or verb phrase in comparison to its non-passive form (cf. *passive prototype* by Shibatani 1985, *basic passives* by Keenan / Dryer 2007, see also Abraham 2006 for a list of core characteristics of passivization). Beyond these, passives and passive-resembling constructions in the world’s languages display a great range of diversity in form and function (cf. Siewierska 1984 among others). This workshop aims at presenting up-to-date theoretical, experimental, typological, and diachronic approaches to forms and functions of passives and passive-resembling constructions, addressing especially the following topics.

The voice opposition between actives and passives, e.g. in English, focuses on the active agent. Its treatment in the derivation of the passive voice from the morphologically unmarked active voice is traditionally seen as the defining criterion of a passive construction: the agent of the underlying semantic relation is suppressed (or encoded as an oblique element) in the transformation, and at the same time, the patient or some other constituent is promoted to the prominent subject position. The validity of this view is to be examined based on cross-linguistic data in this workshop. In the German recipient passive, (1) below, for instance, the subject Paul does not occupy any argument slot of the verb *gewaschen* (participle of ‘wash’). In the Mandarin long passive, (2b) below, the agent *lǐsì* is expressed. Compared with *lǐsì* in the active sentence, (2a), it is apparently not marked as an oblique constituent.

- (1) *Paul bekommt die Haare gewaschen.* (German)  
 Paul.NOM get.3SG.PRS the.ACC.PL hair.ACC.PL wash.PTCP  
 ‘Paul gets the hair washed (by someone else).’
- (2) a. *lǐsì piàn le zhāngsān* (Mandarin)  
 Lisi fool PFV zhangsan  
 ‘Lisi fooled Zhangsan.’
- b. *zhāngsān bèi lǐsì piàn le*  
 zhangsan BEI Lisi fool PFV  
 ‘Zhangsan was fooled by Lisi.’

Do the constructions in (1) and (2) still count as passives, although they, at first glance, do not comply with the above-described criterion? Does this criterion match our intuitive understanding of passives in each language presented in the workshop? If not, which modifications can be proposed to capture our intuitions more appropriately; without being far less restrictive?

The suppression of the active agent in passivation results in detransitivization of the main verb, thus reducing its valence. In this respect, passives are closely related to other valence-reducing operations such as reflexive constructions, middle constructions, and subject omission. One may expect functional overlaps between them in one language and complementary distributions in another. Examinations on functional partitions of these valence-reducing means in a single language or a contrastive study may shed new light on our leading question about the nature of passives. Passives are function-wise ‘a fore- and backgrounding operation’ in Keenan and Dryer’s opinion, on a par with topicalizations and left-dislocations across the world’s languages. If the fore- and backgrounding of certain information is indeed central to the nature of passives, it has to be asked which grammatical means take the place of passives in the apparently passive-less languages (e.g. many Chadic languages, cf. Keenan / Dryer 2007). And do they operate on the information structure level? Philippine languages, too, may offer a particularly intriguing case study in this respect, as Philippine topicalization is claimed to be a voice expression itself (cf. Shibatani 1988a/b). It is also interesting to survey the question whether and how the information fore- and backgrounding encoded in passivization differ from the ‘normal’ topicalizations in the so-called topic-prominent languages such as Mandarin and Japanese and the word-order free languages such as Russian or German.

A closer look at the diachronic development of voice alternations in specific languages provides a further step to capture the nature of passives and passive-resembling constructions. The question arises which circumstances (e.g. lack of case morphology, lack of aspect marking) must be met, so that a language receives a new kind of passive construction or a passive construction at all. Are there some fundamental changes in language type, which result necessarily in the development of a passive construction? Next to diachronic changes, synchronic data shall be presented which cover grammaticalization processes in progress and are able to shed light on the characteristics of passive constructions, as well as on the conditions for the development of new passive constructions in a language. Last but not least, passives are said to be acquired later by children than the actives. Do young children then exploit any other means to present information in a comparable way?

It is well-known that languages can – and often do – have several formally distinct passive constructions, which also differ in their semantics, e.g. stative and eventive passives in Dutch and German, direct and indirect passives in Mandarin. This workshop intends to assemble as many different passive and passive-resembling constructions across the world’s languages as possible. The collection of the semantic relations they express shall lead to a tentative map of all the semantic relations that are closely related to passives, as they are expressed by means of passive and passive-resembling constructions in some languages. In-depth analyses regarding the grammatical structure and derivation and, if available, the historical development of these constructions shall explore the question as to whether certain language types hamper or promote the development of some semantic functions of passives by means of grammatical features and constraints.

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**Gemma BARBERÀ and Patricia CABREDO HOFHERR (CNRS / Paris 8)**

**Backgrounded agents in sign language: passives or impersonals?**

*Introduction*

Here we investigate the structure in (1) that has been analysed as a passive in American Sign Language (ASL) and Irish Sign Language (ISL) (Janzen et al. 2001; Kegl 1990; Saeed and Leeson 1999). In this construction for an agreeing verb the agent is left unexpressed with the verb agreeing with the body of the signer, which functions as the patient. Additionally, it involves role shift, a mechanism typical from signed languages where the signer adopts the role of a character of the story (marked by *rs* in 1).

- (1) *POLICEMAN* 3-HIT-1. (ASL)  
 \_\_\_\_\_  
 'The policeman got hit.'

Basing our evidence in Catalan Sign Language (LSC) and Italian Sign Language (LIS) data, we claim that semantically this structure is better analysed as impersonal reference, similar to constructions with unspecified agents (2).

- (2) *Al policia* Ø le pegaron.  
 'The policeman, they hit him.'

*Argumentation*

The target structure has restrictions that are not characteristic of passive constructions:

**(i) Semantic restrictions in the agent and the patient**

In (1) the grammatical subject has to be animate and unspecified. This restriction is shared with structures with unspecified agents (3). In LSC and LIS, the low referentiality is instantiated with a null argument and the location for the subject in the verb is established in a spatially marked location (4).

- (3) They lifted the chair.  
 (4) *MARIA* MEETING PREPARE CL.type-on-computer Ø 3<sub>ip.up</sub>-CONVENE-1. (LSC)  
 \_\_\_\_\_  
 'Maria was preparing for the meeting and they convened her.'

However, as (1) and (4) show, the patient also has to refer to an animate entity, which is expressed with co-occurring role shift – this additional restriction has to be explained independently as it does not apply to impersonal constructions as (3).

**(ii) No syntactic promotion of the object**

LIS uses a structured signing space for the localisation of the functions for subject and object: subjects are associated in the ipsilateral area (ip) and objects stand in the contralateral one (cl) (5) (Geraci 2013). However, in the target structure in LIS, the lateral consistency is kept and the object is not promoted to the ipsilateral area (6).

- (5) GIANNI<sub>ip</sub> CAT<sub>cl</sub> 3<sub>ip</sub>-STEP-ON-3<sub>cl</sub>. (LIS)  
 'Gianni stepped on a cat.'  
 \_\_\_\_\_  
 (6) CAT CL.limb-walk 3<sub>ip.up</sub>-STEP-ON-1<sub>cl</sub>. (LIS)  
 'A cat was walking and they stepped on it.'

**(iii) Transitivity is kept**

The structure includes either an agreement verb, where the movement goes from the location established for the subject to the location for the object (6), or a handling classifier, which incorporates an agentive external argument and an internal one (Benedicto and Brentari 2004) (7).

- (7) JOAN WALK STROLL 3<sub>ip,up</sub>-CL<sub>handl</sub> GUN-SHOOT-1. (LSC)  
 'While John was strolling along, they shot him.'

### Conclusion

This structure is more adequately analysed as a different information packaging that operates at the syntax-discourse level. Typologically this structure is better decomposed as constructions with a topicalised object, with the expression of the patient always co-occurring with a particular prosodic topic marking (raised eyebrows and a prosodic pause after the sign (8)).

- (8) JOAN<sub>cl'</sub> 3<sub>ip</sub>-SHOOT-1<sub>cl</sub> (LSC)  
 'John, they shot him.'

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### Passives and constructions that resemble passives

The aim of this paper is to provide the structural and semantic description of the Italian construction *vedersi* ‘to see oneself’ followed by the past participle of a transitive verb, as exemplified by (1):

- (1) Il presidente si vide costretto a dare le dimissioni  
 The president REFL see:PST:3SG force:PST.PTCPL to give:INF the resignation  
 “The president was forced/found himself forced to resign”

The meaning is close to the standard passive with the auxiliary *essere* ‘be’; there are, however, a number of semantic and pragmatic differences. The present case-study will be framed in the debate on forms and functions of passives and a broad comparative perspective will be adopted in the hope to shed some light on relationships among passives and passive-like constructions. It will be argued that the construction examined (hitherto little-described in grammars of Italian) is a real instance of passive because it complies with the main criteria commonly recognized in the notion of passive (Shibatani 1985, Siewierska 1984, Abraham 2006, Keenan and Dryer 2007). The subject, however, is negatively affected by the event described by the past participle. It will be argued that this “adversative” meaning originates in the passive construction itself, as a result of the contribution of the verb *vedere*, non-active and non-volitional, and the past participle. On a typological level it is noteworthy that a similar feature is found in so-called adversative passives in languages of South East Asia (Chinese *bèi* passive, Japanese *-are*-passives, Vietnamese passive with *bi* “suffer”: Shibatani 1994, Keenan and Dryer 2007:341).

To investigate the structural and semantic features of the construction, a corpus study of written and oral texts of Modern Italian was carried out. The data examined clearly show that the choice of the *vedersi*-passive is motivated by the specific perspective on the event taken by the speaker/writer. The specific features of the construction are: the aspectual meaning of ingressivity (see Lehmann, Pinto de Lima and Soares 2010 for a similar feature in Portuguese) and the development of pragmatically motivated inferences triggered by the context, a sort of double involvement which reflects a higher degree of subjectivity with respect to the more neutral *essere* ‘be’ and *venire* ‘come’ passives.

To answer the question on the way in which the new passive construction has come into being, a corpus of Italian texts from the 13th century has been explored. The diachronic analysis has allowed to sort out a number of occurrences which are *critical contexts* (Diewald 2002, Heine 2002, Mauri and Giacalone Ramat 2012), that open the way to the passive interpretation. From begin of the 19th century two new relevant features appear: *isolating contexts* which do not allow anymore the perceptive interpretation and non-human subjects: both are significant steps in the consolidation of the grammaticalization process. Taken together, these findings show that the *vedersi*-passive is only partially grammaticalized.

Interestingly, in Romance languages the passive construction with the verb ‘see’ is attested at a different pace of grammaticalization, French and Portuguese being ahead in the process.

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**Andra KALNAČA and Ilze LOKMANE** (University of Latvia)

#### Passive forms of the Latvian debititive: paradigm and functions

To express the meaning of necessity or obligation in Latvian, a distinct modal form the deb̄-itive is used. The debit̄-ive is formed combining the 3rd person present indicative with the prefix jā- and the auxiliary būt in the finite tense form:

- (1) Man ir jādara darbs.  
I.DAT be.AUX.PRS do.DEB work.NOM  
'I must do the work.'

The debit̄-ive has passive forms where the prefixed (by jā-) auxiliaries tikt ‘to get’ (indefinite forms) (example (2)) and būt ‘to be’ (perfect forms) (example (3)) combine with the passive participle which agrees with the semantic object or patient in gender and number (Kalnača 2013; Lokmane & Kalnača 2014):

- (2) Lūgumam ir jātieki pamatotam  
request.DAT.M be.AUX.PRS be.DEB corroborate.PTCP.DAT.M  
ar medicīnisko izziņu  
with medical.INS.F certificate.INS.F  
'The request must be corroborated with a medical certificate' ([www.google.lv](http://www.google.lv))
- (3) Līdz septembra vidum darbam  
by September.GEN.M middle.DAT.M work.DAT.M  
ir jābūt pādarītam  
be.AUX.PRS be.DEB do.PTCP.DAT.M  
'The work must allegedly be finished by the middle of September' ([www.diena.lv](http://www.diena.lv))

Until now the passive debitiv paradigm of Latvian has never been examined systematically. The literature is silent on the distribution of forms and how they map onto their active voice counterparts and generally either tends to discard the phenomenon as „very rare” (Mathiassen 1997, 137; Holvoet 2001; Hovoet& Grzybowska 2014) or omits it altogether (Endzelīns 1951; Paegle 2003). Yet, at present, passive debitiv seems to be quite common, especially in mass media and business texts. However, the formation of the passive debitiv is never included in discussions of parallel active and passive syntactic constructions.

Active debitiv constructions exhibit the following distribution: subject resp. agent in dative + finite auxiliary verb + debitiv lexical verb + patient in nominative, see example (1). There is no subject-predicate agreement in active debitiv constructions, as there is no way in which a subject in dative can determine the number and person of either auxiliary or lexical verbs.

The situation is different with passive debitiv constructions (patient in dative + finite auxiliary verb + debitiv auxiliary verb + passive past participle of lexical verb in dative), see examples (2)-(3). Here the patient in dative determines the case, gender and number of the passive past participle – a peculiar kind of noun-participle agreement that distinguishes passive debitiv constructions from all other varieties of passive found in Latvian. While passive debitiv constructions involve the same set of elements as so-called ordinary passive constructions, including a zero form agent and a patient functioning as a syntactic subject, their distributions are very dissimilar. Ordinary passive constructions used in the indicative mood, represent a common type of structural syntactic transformations shared by many languages (e. g., Klaiman 1991). Passive debitiv constructions, on the contrary, stand out as untypical of the passive voice in that they involve a patient in dative that requires the participle form of the lexical verb to agree with it in case, gender and number, see examples (2)-(3).

The passive debitiv forms show the distinction between dynamic and stative passive (in the sense of, e. g., Kiparsky 2002), this topic will also be discussed in the paper.

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#### Children's different way of forming a passive: Evidence from Dutch

Verbal passives come in later in acquisition than actives. Specifically, children have more difficulties understanding passives from psychological verbs (*love*) than from actional verbs (*kick*) (Maratsos-effect) (Maratsos et al. 1985). Second, children's early passives in production are overwhelmingly stative rather than eventive (Israel et al. 2000). Functionally, passives allow a speaker to fore- and background particular information (Keenan and Dryer 2007). The question that arises is what means children use to attain the same information-structural effect.

This paper explores the hypothesis that children use stative passives to fore- and background information: the eventive passive is acquired later (Borer and Wexler 1987); and so children's early produced passives are stative. Crucially, in interpretation this means that children use a stative passive structure/semantics even when presented with an eventive passive. This accounts *indirectly* for the Maratsos-effect; psychological passives do not make good stative passives and are therefore more problematic. This paper tests the hypothesis *directly* by studying children's interpretation of passives: do they assign eventive or

stative interpretations to unambiguously verbal/eventive passives?

Thirty 4- and 5-year-olds were tested on their interpretation of Dutch passives. Dutch is particularly interesting because it has two distinct passive constructions with a different semantics (Korth and Schwaderer 2014). Passives formed with ‘worden’ (become) are unambiguously eventive (*John wordt (\*on)geschoren* ‘John becomes (\*un)shaven’). In contrast, stative passives are formed with ‘zijn’ (be) (*John is (on)geschoren* ‘John is unshaven’) (Verrips 1996). As such, adults interpret ‘John becomes shaved’ as an event (shaving-John), but ‘John is shaved’ as a resultant-state passive (state such that a shaving-event took place on John) (see Kratzer 2012 for a formal semantics of resultant-state passives). The question is whether Dutch children interpret *become*-passives as events or states.

Two two-choice picture-selection tasks were performed. Experiment 1 investigated whether the Maratsos-effect holds in Dutch. As such, the child’s task was to select the picture showing the correct assignment of semantic roles (standard methodology). Experiment 2 tested children’s interpretation of *become* and *be*-passives by asking them to choose between a picture of the event vs. the resultant-state as being the correct interpretation of the spoken sentence (Gavarro & Parramon 2011). All verbs in Experiment 2 were activity verbs; they thus create acceptable resultant-state passives (Kratzer 2012).

A multi-level analysis for Experiment 1 showed that children indeed have more difficulties with psychological than actional passives ( $F=34.44, p<.001$ ). This effect is mainly present in the 4-year-olds, resulting in an effect of age ( $F=21.052, p<.001$ ). To our knowledge, this is the first experiment to demonstrate this effect in Dutch. Experiment 2 showed that 4-year-olds are at-chance in selecting results vs. events for *become*-passives, assigning resultant-state interpretations in 50% of the cases whereas for adults this is entirely out (0% resultant-state answers).

In conclusion, four-year-olds score at-chance on the interpretation of eventive passives, but much better on stative passives. This supports the hypothesis that stative passives precede eventive passives in acquisition. The results not only shed light on passives in acquisition, but also have implications for the structural nature of passives, we will discuss.

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### The Development of Passives and Non-canonical Case Marking in Historical Greek

The aim of this paper is to explore possible relationships between voice and non-canonical case marking in the diachrony of Greek, and their implications for the nature and development of passives.

Subjects of finite verbs in the accusative case are attested in papyri and other texts (Byzantine Greek chronicles) from the Early Byzantine period (5th-8th cent. AD). In these examples (see, for instance, Ex. 1a, b), DPs in the accusative are subjects of mediopassive finite verbs, and (in some of them) there is no agreement in number between the verbs and their subjects (Ex. 1b). Notice that pre-Byzantine Greek (Ancient and Koine Greek) has a system of three voices (voice morphological paradigms): active, middle and passive, but the middle and the passive morphology are distinguished only in the Future and Aorist tenses. Byzantine and post-Byzantine Greek do not distinguish between passive and middle forms even in the Future and Aorist tenses.

What we will propose is that the development of voice in Greek is correlated with the development from inherent to structural case. We will argue that the examples from Early Byzantine Greek represent a

transitional period with respect to voice and case assignment. In pre-Byzantine Greek, the accusative is inherent, with interpretable inner-aspectual features (see van Gelderen 2000, 2011, for English), there is no obligatory object agreement (cf. Baker & Vinokurova 2010), and the verb can be active or mediopassive with an accusative object. In Early Byzantine Greek, agreement is manifest on a functional category (Trans[itive] head) through obligatorily active suffixes at PF, mediopassive suffixes are ungrammatical with accusative objects, but the accusative can be assigned by rules of the inherent case marking. In post-Byzantine Greek, the accusative is assigned through agreement with the Trans head, agreement is manifest on that functional category through obligatorily active suffixes at PF, and the mediopassive suffixes are ungrammatical with accusative objects.

Examples:

- (1) a. *taftin tin epistolin eghrafi en Thmui*  
          this.ACC.SG ART.ACC.SG letter.ACC.SG write.MP.PST.PFV.3SG in Thmui  
          ‘This letter was written in Thmui.’ (P. Par. XVIII, ii, 18, 12, 3 (lip); Early Byzantine Greek)
- b. *ta metra ke tas jitnias*  
      ART.ACC.PL meter.ACC.PL and ART.ACC.PL adjoining-area.ACC.PL  
*dhia ton proktitikon tetakte*  
      by ART.GEN.PL previous-owner.GEN.PL define.MP.PRF.3SG  
          ‘The meters and the adjoining areas have been defined by the previous owners.’ (CPR 4, 9/10, 51/3p; Early Byzantine Greek)

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#### Promotion of prepositional complements in Scandinavian – the role of affectedness

The prototypical view of passives includes promotion of a direct object to subject. However, examples where this criterion is not met in a literal sense are not rare among languages. Thus, the subject position can be occupied by other constituents, e.g. by the indirect object. In other cases, the semantic relation of the subject and the verbal predicate is absent, e.g. when the subject is expletive as is the case in an impersonal passive (passive with intransitive verbs). In our presentation, we will focus on the so-called prepositional passive, also termed pseudo-passive, i.e. passive where a complement of a preposition is promoted to subject position, as illustrated with an English example (1).

- (1) This bed has been slept in. (Ward et al. 2002:1446)  
 (2) # The river was slept beside.

Based on data from mainland Scandinavian languages, we will address the question what kind of prepositional complements are promoted to subject position in actual language use, and what kind of relation the constituent has to the predicate of the sentence.

The prepositional passives in English are constrained by a notion of affectedness (Anderson 1977: 373f., Bolinger 1977). The passive sentence is only perceived as felicitous if the passive VP expresses a significant property or a change in a significant property of the subject-referent (Ward et al. 2002:1466f.), see the contrast between (1) and (2). For English, this is often illustrated by examples of physical affectedness, as in (1). In the Scandinavian data, a large proportion of the examples instead involve psychological or mental affectedness, as shown in (3)–(5). Note that (3) is interpreted metaphorically.

- (3) Vi er vant til at **blive trådt på.** (Da.)  
      we are used to INF become trodden on  
      ‘We are used to being trodden on.’
- (4) Hun er lei av å ikke bli **trodd på.** (No.)  
      she is tired of INF not become believed on  
      ‘She is tired of not being believed in.’

- (5) Jag begär ändå att bli lyssnad på.  
*I request still INF become listened on*  
 ‘I still request to be listened to.’

The investigation is based on large written language corpora of Danish, Norwegian and Swedish. In addition to the overall cross-language comparison, our investigation reveals systematic differences between the languages in the use of prepositional passives with the morphological (*s*-passive) and the periphrastic passive (*bli*(*ve*)-passive). The languages differ both in terms of the frequency of the construction, the types of predicates used and the syntactic construction. Moreover, we show that the promoted subjects in mainland Scandinavian are true syntactic subjects and not topics in impersonal constructions, as Maling & Zaenen (1985) have proposed for Icelandic.

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#### The inherent ambiguity of impersonal passives

Although the *passive* is one of the most scrutinized constructions across varying theoretical and typological perspectives, some subtypes consistently pose categorization problems. Based on historical and synchronic data from Icelandic, Irish, Polish and Ukrainian, we argue that so-called “impersonal passives” are in principle syntactically ambiguous, and can be interpreted either as canonical passives with an “empty” [e] subject, or as impersonal actives with a null unspecified human subject (see also Haspelmath 1990, who observes that “...intransitive desubjectives are indistinguishable from passives of intransitive verbs”).

Transitive “non-promotional” passives are a key example. The syntactic properties of the Ukrainian *-no/to* construction (cf. Maling & Sigurjónsdóttir 2002) show that even constructions governing accusative objects may be categorized as impersonal passives, contra Haspelmath (1990:35) and Blevins (2003), *inter alia*. In this paper, we discuss the on-going development of a new Transitive Impersonal (NTI) construction in Icelandic, and compare the syntactic properties of the innovative Icelandic construction with the diachronic development of the Irish autonomous form and the Polish *-no/to* construction where the reanalysis has been completed. The NTI takes the form in (2); compare the standard passive illustrated in (1):

- (1) *Að lokum var stelpan valin í aðalhlutverkið*. (Standard passive)  
 at end was girl.the-NOM chosen-FEM in lead.role.the
- (2) *Að lokum var valið stelpuna í aðalhlutverkið*. (Transitive Impersonal)  
 at end was chosen-NEUT girl.the-ACC in lead.role.the

Note that the NTI in (2) could be translated as either (a) a passive, or (b) an active with an unspecified human subject.

- a. In the end, the girl was chosen for the lead role.
- b. In the end, they chose the girl for the lead role.

The proper analysis of the NTI has been the subject of lively debate in recent years, but there is no disagreement that a major syntactic innovation is taking place, and that the construction is rapidly gaining ground. This system-internal change is not the result of borrowing, nor is it the result of phonological change or morphological weakening.

Maling & Sigurjónsdóttir argue that the NTI in Icelandic is embarking on the same path towards a syntactically complete, active construction that has been completed for the Irish autonomous form (McCloskey 2007, Graver 2011) and the Polish *-no/to* construction (Kibort 2001, 2004) but unlike the Ukrainian *-no/to* construction (M&S 2002; Maling 1993, 2006; *inter alia*). The contrasting syntactic behavior of the *-no/to* construction in Polish vs. Ukrainian indicates that the readily observable data, e.g.

accusative case, under-determine the analysis; it is only by looking at a wider range of syntactic properties (e.g. unaccusative verbs, agentive *by*-phrases, reflexives and reciprocals) that we can determine whether the verb's agent argument is mapped onto a thematic subject position or onto a “demoted” subject oblique/adjunct. We agree with Haspelmath that “[t]he difference between passive and desubjective is of a syntactic rather than a semantic nature...” (Haspelmath 1990:58).

The historical dimension is significant; the syntactic behavior of such constructions can change over time, and the transition from impersonal passive to impersonal active can take many centuries to complete.

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Syntactic, semantic and pragmatic functions of the VIDERE passive in Romance languages

The object of my paper is the periphrastic passive constructions involving an auxiliarized form of the perception verb ‘see’ (Latin VIDERE) preceded by a reflexive pronoun and followed by a non-finite form (infinitive or participle) of the main verb:

- (1) French: Le ministre s'est vu insulter par des agriculteurs en colère ‘The minister was insulted by angry farmers’ (Riegel / Pellat / Rioul 2009: 742)
- (2) Catalan: El Garrotxa es veu superat per un bon Roser ‘The Garrotxa (team) was defeated by a good Roser (team)’ (internet [26/10/2014])
- (3) Spanish: Es el caso de la Policía Judicial, que [...] se ha visto reforzada durante los últimos meses [...] This is the case for the Judicial Police, which has been reinforced during the last months’ (Yllera 1999: 3431)

In comparison with other auxiliarized perception verbs in this type of construction, such as French ‘s’entendre’ ‘to hear (oneself)’ or Spanish sentirse ‘to feel/hear (oneself)’, the VIDERE verb seems to be more grammaticalized since it combines with inanimate subjects, too:

- (4) French: L’école s'est vu assigner de nouvelles missions ‘The school has been attributed new missions’ (Riegel / Pellat / Rioul 2009: 743)

The VIDERE passive may fulfill functions that Keenan and Dryer (2007: 328s) associate with ‘basic passives,’ where the non-passive form involves an agent subject, which is demoted, and a patient direct object, which is promoted in passivization:

(1') Le ministre s'est vu insulter par des agriculteurs en colère. < Des agriculteurs en colère ont insulté le ministre.

but it comes also close to what these authors call a ‘non-basic passive’ in that it allows passivization of ditransitive verbs where the theme (experiencer, recipient or ‘addressee’) indirect object can be promoted to subject position:

(3) Paul s'est vu décerner le premier prix par le jury ‘Paul was awarded the first price by the jury’ < Le jury a décerné le premier prix à Paul.

Apart from this primarily syntactic function, there are additional properties attributed to the VIDERE passive: (1.) The verbal action is marked as (more) dynamic in the VIDERE passive construction. In the case of the French ‘se voir’ + inf. construction, this dynamic character may be underlined by the use of the infinitive of the main verb. (2.) If the referent promoted to subject position in the VIDERE passive sentence is [+human], s/he is generally felt to be a mere observer who is totally powerless with regard to the action that is affecting her/him; (3.) The event described by the main verb in a VIDERE passive construction is often read as occurring surprisingly and unexpectedly for the theme subject referent; thus, the VIDERE passive tends to acquire a modal function akin to mirativity.

In my paper, these different approaches to the functionalities of the VIDERE passive construction in Romance will be discussed in the light of empirical data collected from oral, written and internet corpora.

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### An OT analysis of the comprehension and production of active and passive questions

In Dutch and German, wh-questions about the second argument of the verb can be formulated as object questions (1) or passive questions (2). When do speakers use which form? And is this form always interpreted correctly by listeners?

- |     |   |            |                             |
|-----|---|------------|-----------------------------|
| (1) | Welchen <sub>ACC</sub> Schüler                              | ignoriert  | der <sub>NOM</sub> Lehrer?  |
|     | Which <sub>ACC</sub> pupil                                  | ignores    | the <sub>NOM</sub> teacher? |
| (2) | Welcher Schüler wird von dem Lehrer                         | ignoriert? |                             |
|     | Which <sub>NOM</sub> pupil is by the <sub>DAT</sub> teacher | ignored?   |                             |

Research often focuses on either comprehension or production of active or passive voice. In this study, we present an Optimality Theory analysis that allows us to describe patterns of comprehension and patterns of production of active and passive questions in the same model addressing aspects such as: word order, subject-hood, topic, verb agreement and case. The analysis makes the following predictions: the optimal interpretation for sentences like (1) and (2) is an interpretation in which *Schüler* is the semantic object. During the processing of a sentence the interpretation can change and intermediate interpretations can be predicted. For example, in object questions with ambiguous case morphology (3) and in passive questions the intermediate interpretation (before the verb) is driven by word order (i.e., first noun phrase interpreted as subject), as no other information is available yet.

- |     |  |  |
|-----|--|--|
| (3) | Welche Schülerin ignorieren die Lehrerinnen?                                     |  |
|     | Which <sub>AMB</sub> pupil ignore <sub>PLURAL</sub> the <sub>AMB</sub> teachers? |  |

Thus, the intermediate interpretation differs from the final interpretation. With respect to production, a meaning in which *Schüler* is the questioned element and semantic object leads to two potential forms, namely an object question (as in 1) or a passive question (as in 2).

The predictions made by this analysis are tested in an eye-tracking comprehension task and an elicited production task with German adults and children. Eye-tracking allows us to determine interpretational preferences during the sentence until the final interpretation. We tested passive questions and subject and object questions, disambiguated by case and/or verb agreement. Both German adults and children (7-10

year olds) show a strong subject-first bias for object questions not disambiguated by case on the first NP and for passive questions. That is, initially their eye-gaze is driven to the interpretation in which the wh-element is the agent. Furthermore the presence or absence of case on the second NP results in different gaze patterns for children but not for adults. Regarding production, children have a strong preference for the passive form, while adults' productions depend on the availability of morphosyntactic cues such as case marking, i.e. when case marking is not distinguishing between accusative and nominative case (e.g. feminine NPs), a passive question is preferred over an object question.

The results are in line with the predictions of the model. Listeners' interpretations are incrementally optimized by which word order plays a strong role in intermediate interpretations. The model predicted both forms (object questions and passive questions) to be produced by the speakers. The distribution of these forms for adults seems to depend on the availability of cues, while children overall preferably produce passive questions.

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### **Changes in the Passive in 20<sup>th</sup> Century American English**

This corpus-based paper focuses on the choice between two expressions of passive voice in English: the BE-passive and the so-called GET-passive, as in *he was fired* and *he got fired*. These two constructions differ in important ways. BE-passives are more typical of formal, written language, and are far more frequent than GET-passives, although the frequency of BE-passives has been declining recently (Leech 2004; Mair 2006; Pullum 2014). Passives with GET, on the other hand, while very infrequent, are increasing dramatically in written American English (Leech et al 2009; Nilsson 2012). However, previous studies (Leech et al 2009; Nilsson 2012) have shown that the important semantic restrictions on GET-passives, such as their tendency to be used with human subjects and in an adversative sense, still hold. This indicates that the growing preference for GET-passives cannot be explained in light of grammaticalization (Hopper & Traugott 2003). Against this background, my paper explores other reasons why GET might be employed instead of BE where both auxiliaries are theoretically possible. The 100-million-word TIME Magazine Corpus (Davies 2007) spans nine decades and its large size makes it a good resource for rare constructions such as the GET-passive. The corpus is admittedly quite limited in terms of the language it represents; i.e., only written, only American, and only from one publication. However, it is hoped that the colloquial nature of TIME Magazine, which has been notoriously informal since its inception in 1923 (Gibbs 1936; Grunwald 1983), might mean that the writing reflects the popular conventions of a given time period.

In my study, large, randomized samples of diachronic data from the TIME Magazine Corpus are analyzed with regard to additional factors that may trigger the selection of GET or BE. For the present study, the factors under consideration are the tense and aspect preferences of each construction, and also the situation type (akitionsart). The data reveal differences between GET and BE-passives, but also indicate some diachronic change for both passive constructions over the 20<sup>th</sup> century. While BE-passives show an association with past tense, GET-passives are more often used in the present tense. Furthermore, GET-passives are virtually never used in perfective aspect, but the use of the progressive with GET-passives increases over the century. The situation-type analysis, which follows Quirk et al (1985: 200–209), reveals trajectories for the two passives where they can almost be said to approach each other in distribution: as the GET-passive becomes less restricted to Transitional Acts, these increase with BE-passives. The opposite holds true for Accomplishments, which become less frequent with BE-passives and more frequent with GET-passives. As a final step, all examples that include a past participle that occurs with roughly equal frequency with both BE and GET in the data are examined qualitatively. I find that even with the same participle, the auxiliaries sometimes have different preferences regarding situation type.

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**How passive were the English in medieval times? The development of the recipient passive in Middle English as a possible case of contact-induced change**

Recent insights into the contact situation between English and French triggered by the Norman Conquest (1066) have revealed that for more than two centuries the two languages have been in such close contact that at some point bilingualism was at play (cf. Ingham, 2012). Whereas lexical borrowing in this situation is well described (e.g. Rothwell, 1983, Durkin, 2014), no study has so far 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. This transfer of argument structure in a contact situation is the general context of our talk. More precisely, we will focus on the development of the OE “dative” arguments (i.e. EXPERIENCER, RECIPIENT, BENEFACTIVE) and the question in how far contact with French played a role in the rise of new passive constructions in Middle English (ME) times.

By the middle of the fourteenth century dative case as a category was lost in ME, and as a consequence nominative and dative case could no longer be formally distinguished, and indirect objects without case marking in preverbal position were often reanalysed as subjects (cf. Allen, 1995, Denison, 1993). Despite the loss of the dative new types of passive arose that did not occur in OE, for example the indirect or recipient passive (RP) which is a frequent passive construction in Present-Day English (PDE):

- (1)     a.     *Presents were given to Mary (by Tom).* ⇒ direct passive  
        b.     *Mary was given presents (by Tom).* ⇒ indirect/recipient passive

Allen (1995: 394f) states that in the fourteenth century the odd example of an RP occurs but she also notes that clear recipient passives “are not numerous” (394). She argues against the idea that RPs occur with a specific subset of verbs and favours the explanation that bare objects following the verbs were reinterpreted as direct objects. Strikingly, she brings in French influence by observing that the assignment of the EXPERIENCER to the direct object was quite common with French loans that came into English at that time which can be seen in the use of recipient clausal ditransitive passives with *command*, *defend* (‘to prohibit’), and *suffer* (‘to allow’) by authors like Chaucer who didn’t seem to have used this construction formerly:

- (2)     *This child I am commanded for to take*  
        ‘I am ordered to take this child’  
        (Ch. E.Cl.532 [=Allen’s example (272)])

Based on corpora for Old French (OF), Old and Middle English, and crucially on direct translations of OF texts (for example the ME text Ayenbite of Inwyt, Morris 1866) we will investigate the effect of borrowing of these new verbs on the rise and development of RP in English from a syntactic and semantic point of view: first, did the borrowing of these OF verbs which required a to object lead to the reanalysis from indirect to direct object because they were analysed as intransitive in English? Second, could this reanalysis have resulted in lexical diffusion, i.e. in an overall change of those semantic verb classes allowing for RP?

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**René VAN DEN BERG (SIL International)**

**Passive participles and nominalised passives in Muna (Sulawesi, Indonesia)**

Muna is a Western Austronesian language spoken in southeast Sulawesi, Indonesia. Muna is rich in verbal morphology, both inflectional and derivational. Inflectional morphology covers agreement for subject, direct object and indirect object on verbs, and possessor agreement on nouns. Derivational morphology encompasses several valency-changing operations (e.g. causatives, applicatives, transitivising, detransitivising) as well as nominalisations. Basic word order is VS in intransitive clauses and SVO in transitive clauses. A grammar and a dictionary are available for the language (van den Berg 1989, van den Berg and La Ode Sidu 1996).

There is no prototypical passive in Muna used in simple clauses to promote the patient and suppress the agent. In order to accomplish that purpose, the language uses OVS word order without any special morphology. This paper ignores that construction, but focusses instead on two real passive constructions, both of which are non-typical.

The first passive construction is marked by *ne-* and is limited to relative clauses. The passive verb is a non-finite form referred to as a passive participle, while the optional agent is expressed as a possessor suffix. This is illustrated in (1), a simple active clause, and in (2), which contains a relative clause (in brackets).

- (1) *Ina-ku              no-tofa              bhetra-no.*  
       mother-1SG.POSS    3SG.SU.REAL-wash sarong-3SG.POSS  
       'My mother is washing her sarong(s).'

- (2) *Bhetra    [ne-tofa-ku              rangkowine]    no-neu-mo.*  
       sarong    PASS.PART-wash-1SG.POSS   morning              3SG.SU.REAL-dry-PERF

'The sarong [that was washed by me this morning] is now dry.'

The second passive construction is marked by *ti-* on finite transitive verbs and typically encodes accidental or non-volitional states of affairs, as illustrated in (3).

- (3) *Bhangka-ku    no-ti-bhalongko              no-kantibha-e              kawea.*  
       boat-1SG.POSS    3SG.SU.REAL-ACC.PASS-turn.upside.down    3SG.SU.REAL-hit-3SG.OBJ   wind  
       'My boat capsized when the wind hit it.'

The *ti-* passive also occurs in *ka-...-ha* nominalisations, as in (4). This type of nominalisation can refer to time, place, instrument or reason.

- (4) *Ka-ti-feka-mate-ha-no-mo.*  
       NMLZ-ACC.PASS-CAUS-die-NMLZ-3SG.POSS-PERF  
       'And that is the reason he was killed.'

This paper discusses the syntax and semantics of the two passive constructions from a broad typological perspective (Keenan and Dryer 2007; Dixon 2010) by exploring the following questions based on data from a large corpus of Muna texts:

- What are the morphological and syntactic features of the *ne*-passive? How does this passive fit in a typology of passive participles?
- What is the exact semantics of the *ti*-passive?
- What is the structure and function of the nominalised passive? How are arguments expressed in active and passive nominalisations? How does the Muna nominalised passive fit in a typology of passive nominalisations?
- What is the origin of the two passive constructions? Especially, how can the *ne*-passive be related to the Proto-Austronesian perfective patient voice marker\*-*in*-, with which it is cognate? What changes have taken place and how can the current syntactic restriction be accounted for?

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**Alexandra VYDRINA (LLACAN, CNRS)**

**Unmarked decreasing derivations and lexical semantics**

The argument realization is defined to a large extent by the lexical meaning of the verb. Thus, it is important to single out the relevant components of the lexical meaning and to explain why they are connected to certain templates of argument realization.

Kakabe, an underdescribed and endangered Mande language spoken in Guinea, is characterized by extensive ambitransitivity among verbal lexemes. It has anticausative lability like the English verbs break (tr./intr.).

The Central dialect of Kakabe (CK) also has a very regular unmarked passive: all transitive verbs can be used intransitively so that the surviving argument is the theme without any change in the form of the verb. The original direct object goes to the clause-initial subject position:

- (1)     Músa báti nìngéè kànkà  
Moussa PRF cow steal  
'Mousa has stolen the cow'.
- (2)     nìngéè báti kànkà  
cow PRF steal  
'The cow has been stolen'.

Interestingly, the morphologically unmarked passive is very rare cross-linguistically, but common within the family of Mande languages. Nevertheless, even in the literature on Mande languages this phenomenon was not described until recently (Cresseils 2009; Cobbinah & Lüpke 2012). What makes the Kakabe data even more interesting is that in the Northern Kakabe dialect (NK), there is a morphological passive, marked by the suffix -ma, instead of lability:

- (3)     nìngéè báti kànkà-ma  
cow PRF steal-PASS  
'The cow has been stolen'.

As contrasted to passive lability, the morphological passive it is common cross-linguistically but there is no other Mande language with a passive marker apart from CK.

An attempt will be provided to explain the distribution of lability, both passive and anticausative in the verbal lexicon of CK and NK. In CK verbs are divided into two classes with respect to transitivity: 1) intransitive verbs, e.g. fáte 'boil'; jéle 'laugh' and 2) ambitransitive verbs, comprising the overwhelming majority of verbal lexemes, e.g. bìntan 'burn (tr./intr.)'; fítan 'sweep / be swept'. In NK the second class is split into two: verbs like bìntan 'burn (tr./intr.)' are labile whereas verbs like fítan 'sweep' are strictly transitive, i.e. they require the passive suffix -ma in order to be used intransitively. As has been shown on the example of English (Levin & Rappaport 1998), verbs that contain agent-oriented components in their meaning, for example, a specified manner of action, cannot be labile.

The analysis of the data has shown that the boundary between anticausative and intransitive verbs can be defined in terms of semantic spontaneity as described in Haspelmath (1993); Comrie (2006) and Letuchiy (2012). The parameter of spontaneity proves to be very useful especially in the case of CK. The spontaneity scale allows giving a general account of verbal transitivity in the lexicon; it explains both the distribution of anticausative and the passive lability. It will also be shown that the exact direction, in which the spontaneity scale operates in the language with respect to lability, depends on whether the language belongs to transitivizing or detransitivizing type in terms of (Nichols, Peterson & Barnes 2004).

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**Mirjam ZUMSTEIN** (University of Cambridge)

### Can word order in periphrastic passives matter? A case study with Old Church Slavonic data

As a „missionary language” associated mainly with the translation of religious texts from Greek prototypes in the 9<sup>th</sup>/10<sup>th</sup> century, Old Church Slavonic (OCS) naturally shares many traits with (Koine) Greek. But it also exhibits a lot of interesting peculiarities not found in Greek. One of them concerns word order, especially in periphrastic passive and passive-like structures.

It has been shown by Pancheva (2008) that in OCS both Aux-Part and Part-Aux orders are attested (cf. examples 1 and 2).

- |     |   |           |                       |                   |             |           |
|-----|---|-----------|-----------------------|-------------------|-------------|-----------|
| (1) | <i>rečeno</i>                                   | <i>že</i> | <i>bystv</i>          | <i>(éppréθη)</i>  | <i>δέ</i> ) |           |
|     | say-PPSTP.NOM.SG.N                              | but       | be-AOR2.3SG           | say- AOR.PASS.3SG | but         |           |
|     | 'but it has been said...' (CM, Mt 5:31)         |           |                       |                   |             |           |
| (2) | <i>bě</i>                                       | <i>že</i> | <i>napisano</i>       | <i>ois</i>        | <i>(iñv</i> | <i>δέ</i> |
|     | be-AOR1.3SG                                     | but       | write- PPSTP.NOM.SG.N | Jesus             | be-IMPF.3SG | but       |
|     | <i>γεγραμένον</i>                               |           |                       |                   |             |           |
|     | write- PPFP.NOM.SG.N                            |           |                       |                   |             |           |
|     | 'but there was written Jesus...' (CM, Jh 19:19) |           |                       |                   |             |           |

If all different kinds of participles are taken into account, the distribution between the two word order types in OCS is almost equal (Aux-Part, 212/59%, Part-Aux 150/41%, cf. Pancheva 2008: 7), while in the Modern Bulgarian translation of the gospels the Aux-Part order clearly prevails (according to Pancheva (2008: 7) it is found in 97% of all examples). According to Pancheva, the coexistence of two word order patterns in OCS is indicative of a change in the head-directionality of TP, still under way at the time in question (10<sup>th</sup> c.).

In my talk I will show that the distribution of the two word order patterns in OCS is not as random as it may seem at first glance. When we split the data into smaller subsets (according to the types of participles and the different tense forms of the copula/auxiliary 'to be') and analyse them separately, it becomes evident that certain combinations of participles and the copula/auxiliary show a clear preference for postposition of the latter, while in others *byti* almost exclusively occurs in preposition.

I will argue that the two patterns mark the difference between so-called dynamic passives (with *byti* in postposition, cf. ex. 1) and resultative constructions (cf. Nedjalkov & Jaxontov 1988: 6; with *byti* in preposition, cf. ex. 2) respectively and discuss this unusual marking strategy from a typological perspective.

The research is carried out using data from the morphologically and syntactically annotated TOROT corpus (<https://nestor.uit.no/>). I will analyse both the Gospel texts Pancheva is using for the sake of comparability (*Codex Marianus*, 11<sup>th</sup> c.) and the *Codex Suprasliensis* (the largest extant OCS manuscript, 11<sup>th</sup> c.), which is said to differ from the Gospel texts in many respects.

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# WORKSHOP

## The sociolinguistics of Kurdish

*Convenors*

**Margreet Dorleijn and Michiel Leezenberg** (University of Amsterdam)

*Description*

The fact that the Kurds are the largest nation in the world without a state of their own has given rise to a number of distinctive, and possibly unique, sociolinguistic features of their language. This panel aims at exploring some of these, and invites scholars working on Kurdish sociolinguistics to submit proposals concerning their research.

The new states that emerged after World War had different strategies of dealing with their Kurdish population groups, ranging from repression and assimilation to literization and standardization. In early Soviet Armenia, which only had a minute Kurdish minority, the Kurmanji dialect was developed into a fully functional medium for education, printing, and broadcasting in the late 1920s and early 1930s. The fledgling republic of Turkey, by contrast, pursued the most radically repressive policy, banning the public and private use of Kurdish in 1925; this ban remained in place until the 1990s, and its effects can still be seen today. In Iraq, a Southern dialect of Kurdish became an official language during the British mandate period; subsequent Iraqi regimes have not been able to undo or revert this official recognition of Kurdish. Remarkably, however, the present-day Kurdish Regional Government, which has had a constitutionally recognized autonomous status since 2005, has thus far largely refrained from formulating, let alone pursuing, any substantial linguistic policies. In Iran, Kurdish can be studied at universities, and books of Kurdish poetry can be published; but the use of Kurdish in elementary education and in administration has not been allowed.

Given these varying policies, the actual use of Kurdish is subject to a number of constraining factors. Although many Kurds dream of a unified and independent Kurdish state with a unified language, at the same time, there is considerable resistance from speakers of different dialects against proposals to create and impose a unified spoken and written variety. Given this situation, an explicitly sociolinguistic approach towards the diversity of the linguistic situation of the Kurds is bound to yield fruitful insights. For example, the persistence of variability and contestation of attempts at standardization may be fruitfully employed by having recourse to some of the more recent approaches in sociolinguistics that question long-held assumptions. Thus, Peter Trudgill's recent 'sociolinguistic typology', (2011) which provides an alternative against the assumption of the equicomplexity of languages, or Jens Norman Jorgensen's model of 'polylanguaging' (Jorgensen et al. 2011) which provides an alternative for the structuralist belief in languages as ultimately impenetrable holistic structures, and other recent approaches seem to offer fruitful ideas when dealing with standardisation in the linguistically diverse area that Kurdistan is.

Other topics for discussion include, but are not exhausted by, language contact, not only with the official languages of the states in which Kurds live (Turkish, Modern Standard Arabic, Persian), but also with locally spoken vernaculars of neighbouring peoples, like Armenian, Syriac, and dialectal Arabic; and by Kurdish linguistic 'superdiversity', i.e., the emergence of new varieties and blends of different languages spoken by Kurds, exemplified perhaps most visibly in Kurdish hiphop, which have emerged especially but not exclusively in emigration settings outside the Middle East. Pursuing such and other questions, we hope to help in calling more attention to the distinct trajectory of Kurdish and its speakers, not only in the Middle East, but in the present-day globalized world and media landscape at large.

Thus, questions that may be addressed in individual papers include (but are not restricted to) the following:

- What is the prestige of Kurdish dialects among its speakers?
- What is the actual vitality (in terms of actual usage) of Kurdish dialects among its speakers?
- What is the impact of recent political changes and political turbulence on language policy in the area?
- What is the extent of intra-dialect variation? And what is the prestige of the pertaining varieties?
- What is the role, status and (mutual) influence of other languages spoken in the Kurdish region?
- Are new contact varieties emerging and if so, what is their status?
- What is the status, prestige and vitality of Kurdish among Kurds in the diaspora?

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**Katharina BRIZIC** (Berkeley Language Center)

**Justice from god, agency from earth: Multilingual biographies from Kurdistan**

‘We have a vineyard at the top of the village’, this is how a female refugee from South-Eastern Turkey introduces her village’s fertility to the interviewer. ‘And there is a fig tree up there. If only I could go there, sit down under the tree and take it all in’: in this key narration within the woman’s life story told in Kurdish, her village has survived in beauty. Yet in fact the village is long gone. Following accusations of collaboration with the PKK, it was destroyed by the Turkish military. From the soft initial tone, and from the village’s opulence ‘given by god’, the narrator’s voice rises to a rhythmic staccato, strongly accented prosody and a wide, dramatic pitch range describing violence and guilt: the village’s destruction, ‘unjustified before god’.

Refusing to use any Kurdish, a second female refugee narrates her life story in Turkish. She starts with a long and myth-like tale proving that she is of non-Kurdish, yet unknown origin. Emotionless descriptions of male domestic violence follow. Simultaneously, experienced unjust accusations of political violence, i.e. terrorism, are passed on and re-ascribed to the family’s males. - At the core of the biographical story, the register changes radically: this life story, too, has a key narration. We are now told the emotional story of the narrator’s mother. It is the mother, a female, who withstands domestic and political violence, thus embodying the myth of Non-Kurdishness in flesh and blood and language. Content and shape make this brief unit a key ethnopoetic event (Hymes 1996), with lines, stanzas, chorus, and of gentle, emotional beauty: a poem singing of the mother, and of liberation from ‘origin’.

These two life stories, examples from a larger corpus of multilingual biographies from Turkey, the Balkans and Austria, provide insight into the enormously wide range of narrative identities (cf. De Fina & Georgakopoulou 2012, Lucius-Hoehe & Deppermann 2002) in the context of political conflict, war, displacement, and struggle for equality. While in the first case justice comes from god, in the second it comes from earth and from a human being. While in the first case ‘origin’ means ‘beauty’ and ‘fertility’, the second reinterprets ‘origin’ as ‘guilt’, denying the fluidity of a multilingual (Kurmanji-Zaza-Turkish-Arabic) identity in favor of (Non-Kurdish) essentialism.

Interactional-narrative (Lucius-Hoehe & Deppermann 2002), discourse (Lanza 2012) and ethnopoetic analyses (Hymes 1996) of the multiple biographies in my corpus are applied to show the linguistic modelling of an ethno-political conflict’s dynamics. In this way, I am trying to reconstruct the emergence of differences and/or similarities of narrative approaches to the conflict at stake. Differences and – above all – similarities are of particular interest, as I am concerned with the question whether and how the emergence of ‘collective’ approaches can be reconstructed; how macropolitics and individual life stories interact; and what a sociolinguistic approach can thus contribute to family language-policy studies (Lanza 2007) as well as studies on inequality, peace and conflict.

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**Margreet DORLEIJN** (University of Amsterdam)

**Bottom-Up Language Policy in Diyarbakir vs Style in Urban Youth Languages in Western Europe: similar strategies?**

In this talk, data from Multilingual Urban Youth Speech Styles (MUYSS) in western European metropolises will be compared with Kurmanji data that were collected by the author in Diyarbakir during the period between 1989-1992. It will be argued that, despite the widely differing social and sociolinguistic circumstances between MUYSS now, and Kurmanji as spoken in Diyarbakir back then, there may be unexpected but important commonalities:

1. Both MUYSS users today and Diyarbakir speakers of Kurmanji then operate/operated in a ‘normative vacuum’: there are no clear standards as to what a MUYSS should look like, neither was there a clear norm for Standard Kurmanji available to Kurmanji-(‘semi’)-speakers of Diyarbakir back then. To be precise: a description of and some texts in standard Kurmanji did exist at the time, but this material was not available/accessible to speakers of Diyarbakir Kurmanji because of the strict and repressive language policy of the Turkish government.

2. Both in western European urban multilingual neighbourhoods as well as in Diyarbakir the need is and was felt to create a variety in which a specific identity could be expressed: respectively an Urban, sophisticated, multiethnic identity in Europe and a Kurdish identity in Diyarbakir.

The central question addressed in this talk is therefore:

Does the absence of a clear linguistic standard in two diverse linguistic circumstances lead to similar processes and strategies in creating ‘a variety of one’s own’?

Subquestions to be addressed are:

Which linguistic elements do speakers select for the construction of social meaning/of a style (and why those, and not others?)

Through which processes do linguistic items become part of a specific style?

To what extent are these similar in the two sociolinguistic situations?

To address these questions, spontaneous conversational data collected in Diyarbakir 25 years ago will be discussed from the perspective of recent sociolinguistic approaches, viz. ‘Polylanguaging’ (Jørgensen, 2011), and concepts from Linguistic Anthropology, viz. ‘Language ideologies (Silverstein 1979) and ‘Iconisation’. (Irvine and Gal, 2000; Irvine, 2001). The results will be compared with descriptions of MUYSS such as reported in Doran (2004); Nortier& Dorleijn (2008); Quist & Svendsen (2010), among others.

The ‘Polylanguaging’ approach has been designed to account for linguistic phenomena in multilingual urban centres. In poststructuralist sociolinguistic approaches such as polylanguaging, the central assumption is that speakers identity is constructed through, rather than reflected by language (contrary to the position in Variationist sociolinguistics, where variation is conceived of as being a passive reflection of broad and predetermined categories). It will be concluded that strategies are quite similar. Iconisation (Irvine and Gal, 2000; Irvine, 2001) is an important tool in both circumstances. It will be concluded that iconisation is a process that can be employed intentionally, and that polylanguaging is a sub-type of iconisation.

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**Songül GÜNDÖĞDU** (Boğaziçi University/Muş Alparslan University)

**Loss of Gender Distinction in Muş Kurmanji**

*Aim:* The current study aims to investigate two potential factors that may have triggered the loss of gender distinction in the Muş variety of Kurmanji Kurdish; (i) language contact with Armenian and Turkish, (ii) language internal grammatical change.

*Data:* The data used for this study was based on the spontaneous speech of seven native speakers of Kurmanji living in the Muş city (Turkey). The data was recorded via a voice recorder between 2011 and 2014 and it was transcribed based on the Bedirxan Alphabet (Bedirxan and Lescot 1997). The informants have different ages and educational backgrounds. Their ages are in between 21 and 73. Those who are below the age of fifty have either no education or just a five-year primary school education in a Turkish school and they are very fluent in Kurmanji, while the ones under the age of forty have a college or BA degree at a Turkish university and they show fluency in both languages.

*Findings:* The collected data has indicated that gender morphology, which is intermingled with the case, displays some deviations from the ‘Standard Kurmanji’ (Bedirxan and Lescot 1997, Haig 2004, Gündoğdu 2011) such that the gender distinction (feminine vs. masculine) is gradually being reduced to masculine hence being lost in the environment of *third person singular oblique pronouns, oblique demonstrative adjectives and indefinite suffix in Oblique and Ezafe constructions* in this variant.

Linguistic Context	Standard Kurmanji		extension of masculine form	Muş Kurmanji
	Fem.	Mas.		
Dem. Adj. in OBL	vê /wê	vî/wî		Masculine
3sg Pronoun in OBL	vê /wê	vî/wî		vî/wî
Indf. Sg. in OBL	-ekê	-ekî		vî/wî
Indf. sg. in Ezafe	-eke	-ekî		-ekî

There has been observed a slight distinction among the informants with respect to loss of gender distinction; those under the age of forty systematically generalize the masculine forms in all linguistics context (shown in the table above) whereas those above fifty occasionally alternate between the feminine and masculine forms in the context of *indefinite singular in Oblique and Ezafe constructions*. Nevertheless, all informants nearly always use only the masculine forms.

*Discussion and Analysis:* Considering the potential outcomes of language contact in a bilingual/multilingual speech community (Thomason 2001, Dorleijn 2006, Siemund 2008, Matras 2009), it has been proposed that Turkish and Armenian with which Muş Kurmanji has contact for a long time (Yuca 2011) may have initiated the loss of gender distinction process since neither of these languages has grammatical gender. Based on Elşik and Matras (2006), it is suggested that the differentiation in the gender system is regularized through extension in Muş Kurmanji, which in turn, leads to the loss of distinction between the feminine and masculine paradigms in this variant. On the other hand, some Iranian languages such as Persian, Parthian and Sorani Kurdish lost the inherited grammatical gender in due course while some others like Kurmanji Kurdish and Zazaki both retain this very archaic grammatical gender (MacKenzie 1954, Stilo 2009). Based on such a historical development of gender in Iranian languages, it is argued that Muş Kurmanji may have undergone a language internal change with respect to the gender system as other Iranian languages did, and this process may additionally be accelerated by language contact.

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**Khawlah KHANEKAH** (Salahaddin University) and **Badirkhan SINDI** (University of Baghdad)

**Towards Standardization: Filling Lexicon Gaps in  
Kurdish in the Kurdistan Region of Iraq (KRI)**

The establishment of KRI of Iraq in 1992 brought about rapid social, economic and political changes onto the Kurdish speaking community. Both the written and the spoken language are undergoing changes and the language is reshaping itself while responding to the demands of constant updating in order to face up to the global developmental needs.

Two factors are contributing in the ongoing transformation and reshaping of the language. The first factor is the unprecedented coming together of the speakers of the various Kurdish dialects and their coexistence in close proximity of each other and the second factor is the remarkable role that the media has been playing since almost all TV and radio channels in the KRI transmit in both major dialects intermittently. Within the process of the ongoing nation-building and institutionalization of the state organs, there has emerged a serious need to fill gaps within the Kurdish lexicon. This paper explores the development of functional words that are coming into existence as an outcome of current realities in the KRI. It does so through observing the 'Kurdish language' that is in use in current day Kurdistan as is exhibited by major newspapers (Khabat , Avro and Kurdistani Niwe), TV channels (Rudaw, KTV, Kurdsat) and in other vehicles of communication and literature within ministries and educational institutions.

In the absence of a functioning institution that oversees the introduction of direly needed vocabulary, the selection of newly coined words and idioms have been made in unsystematic manner and without cohesion. The paper intends to study cases of success and those of failure in the issuance of newly coined vocabulary and in the meantime explores mechanisms for the production of acceptable functional words and idioms. The methodology has been to rely on native speakers' easy comprehension of the new coinages and has resorted to frequent consultations with Kurdish linguists who are specialized in various fields of knowledge.

The aim is to find linguistically valid and active mechanisms that would help making successful selection of newly formed words keeping in mind the integrity and the originality of Kurdish language.

**Michiel LEEZENBERG** (Dept. of Philosophy, University of Amsterdam)

**Kurdish Hiphop between standardization and superdiversity**

The present-day flourishing of Kurdish-language cultural production suggests that public language use has a permanent potential for resisting sovereign power. Thus, Turkish state attempts at repressing the Kurdish language have had deep and enduring effects on the structure of spoken and written Kurdish, and on language usage and language attitudes among local Kurds; but they have ultimately proved unsuccessful. Today, the spoken and written use of Kurdish in Turkey flourishes as never before; but despite a clearly felt and often expressed need for unification, the variety of different forms and registers of Kurdish used has, if anything, only increased. In Iraq, Kurdish linguistic and cultural production has witnessed an explosion since the liberation from Baathist rule in 1991, and the consecration of an autonomous Kurdish region in the 2005 constitution. Not even the regional government, however, has been able to impose a unified and standardized language. This paper addresses some recent debates surrounding standardization among the Kurds, and discusses how the novel uses of Kurdish in hiphop both defies any attempt at standardization and reproduces nationalist assumptions about the need for a unified language.

Paradoxically, the opportunities provided by the emergence of a region under Kurdish control in Iraq and by international communication have only helped to reproduce enduring cultural and linguistic cleavages

between Iraq's and Turkey's Kurds. Equally paradoxically, increased transnational communication has, if anything, only strengthened regional sentiments. In Turkey, or Northern Kurdistan, an international conference on the Kurdish language held in Diyarbakir in March 2012 recommended both the creation of a unified national language and the cultivation and protection of the different dialects. In Iraqi Kurdistan, an appeal appeared in 2007, in which a number of Iraqi Kurdish writers and intellectuals called on regional president Barzani to pronounce the Sorani dialect of Sulaimaniya (written in the Arabic script) to the official language not only of the Kurdistan region but even of the Kurds living elsewhere. Opponents fiercely protested against the centralizing and authoritarian tendencies they saw in the proposal, or raised the practical problem that the Kurds in Turkey, being far greater in number than the Sorani-speaking Kurds in Iraq and Iran, were familiar neither with the Arabic script nor with the Southern dialect. In the end, no concrete steps towards further standardization were taken. Until today, the Kurdish regional government in Iraq does not even have an official language policy for the region under its control: several different varieties of Kurdish and several scripts are used in broadcasting and education.

The nationalist wish for standardization becomes especially problematic in the face of new linguistic complexities emerging as the result of globalization, as mediated by satellite TV and the internet. Especially, but not exclusively, in diaspora, one can witness the emergence of new varieties of Kurdish that appear to defy any attempt at governmental regulation. Hence, in conclusion, this paper will explore to what extent the new forms of Kurdish that can be found in Hiphop music, as created by Kurds both from Turkey and Iraq, and in part living in diaspora, display what has been called linguistic superdiversity, i.e., the blending of different registers and dialects of the same language and the hybridization between languages. This superdiversity contrasts not only with the - often explicit - Kurdish nationalist ideology of this music, but also with the increasingly vocal calls for linguistic purism and conservatism in the region.

**Mahsn MAJIDY** (Regents University London)

### **Use and attitudes to Arabic loanwords among Sorani Kurdish speakers**

The historical contact with Arabic has contributed to the continuous flow of loanwords into Kurdish. Furthermore, following the creation of the state of Iraq in 1920s and the annexation of southern Kurdistan into the new state, Arabic became the language of education and was taught at schools as a core subject (Abdullah 1980), contributing to a more extensive adoption of Arabic loanwords into Kurdish. The extent of Arabic influence and the presence of loanwords in Kurdish were received with mixed reactions among the Kurds, whose attitudes were usually shaped by political and ideological preferences (Hasanpoor 1999). In spite of this, the attitudes to Arabic loanwords have received little attention; even major works of Hasanpoor (1999) and Abdullah (1980) on contact included only minor notes on the attitudes towards loanwords.

After the recent socio-economic and political developments in southern Kurdistan, standardization, language planning, and purification of Kurdish have turned into a major topic. Therefore, Kurdish language attitudes merit special investigation especially for their importance in the process of standardization and purification (Irwin 2009). In addition, any attitudinal study contributes to subjective evaluations of the language variety and of the speakers, which is of great importance for standardization and planning (Myers-Scotton 2006). Hence, this study tries to address these gaps in knowledge of attitudes towards Arabic loanwords in Kurdish and explores the extent that social variables are affecting the use and the attitude of the speakers towards Arabic loanwords in spoken Sorani Kurdish.

This paper investigates the attitude of male and female Sorani speakers to Arabic loanwords in Kurdish. This is tested against theories of difference and cultural approach of language and gender, which propose that women and men tend to use different styles and different linguistic forms in their speech (Tannen 1993; Freed 2003; Coates 2004, 1993; Cameron 2005). It also supposes that speakers under 40 years of age are less tolerant to Arabic loanwords due to less exposure to Arabic. A matched guise method and a Likert scale-based questionnaire were used for collecting data. A 44-item questionnaire in the Kurdish language was distributed to over 120 participants who were mostly university students. The data was then analysed using Multivariate Analysis of Variance (MANOVA) and Univariate Analysis of Variance, as well as Tukey test in order to find significant differences between the groups of speakers. Previous work on gender-based differences in use of Arabic loanwords in Kurdish showed minor differences between male and female speakers (Majidy 2013), though the statistical analysis of the data of this paper did not report significant differences between male and female respondents. However, the data showed correlations

between attitudes and other demographic factors such as age, language skills, and whether the speakers studied Arabic as a subject in school.

Anne SCHLUTER (Marmara University)

**Kurdish and Turkish for Achieving Complementary Linguistic Purposes  
in Istanbul's Kurdish Workplaces**

The analysis of code choices to investigate power relations has a long history, especially as it pertains to Gumperz's (1982) notions of speech economies and verbal repertoires as well as Bourdieu's notions of symbolic capital and symbolic marketplace (1999, 2000). These perspectives on power and language become particularly salient in minority-majority language contact situations such as Kurdish-owned and operated workplaces in Istanbul. The current study investigated the translanguaging practices of Kurdish workers in eleven restaurants in Istanbul.

*Research Questions:* In analyzing Kurdish-Turkish bilingual workers' language choices across eight different pragmatic functions, in what ways does the use of Kurdish or Turkish help to shape the illocutionary force of the given utterances? How do these findings relate to workplace power relations?

*Approach:* The current study employed a mixed-method approach that consisted of transcript analysis and follow-up interviews.

*Method:* The study explored the language of forty Kurdish-Turkish bilingual migrants from the Southeast of Turkey in the context of the Istanbul eating establishment. Recordings of participants' interactions with their managers and co-workers during peak working hours were transcribed and analyzed. Eight important pragmatic functions emerged from these data, including complaints, commands, clarification requests, emphasis, personal engagement, joking, and flattery. The frequency with which participants chose to use Kurdish vs. Turkish to carry out these functions was evaluated. Follow-up interviews with managers and workers addressed the reasons for participants' language preferences in each context. Triangulation was achieved by consulting participants separately about interactions that they shared and checking their recreations of given utterances with the transcript data.

*Data:* Analysis of participants' language choices in complaints, commands, and personal engagement suggested a link between language choice and power. Complaints between co-workers that promoted solidarity took place mostly in Kurdish; managers' complaints to their workers that functioned as reproaches (and thus increased social distance) took place mostly in Turkish. In a similar way, commands that took place in Turkish were more frequently associated with authority, and the most common language of sincere personal engagement was Kurdish. These patterns were identified in the transcripts. Interviews with the participants supported these connections between Kurdish and solidarity, Turkish and heightened social distance.

*Results:* Based on the data summarized above, Kurdish was associated with collaboration in both worker-worker and worker-manager conversations. This link reflects the traditional relationship between the shared minority language and high rankings on the solidarity scale from the language attitudes literature (Cavallaro & Chin 2009). As is also predicted by this scale, Turkish (the dominant language) was associated with power-driven, one-sided communication: authoritarian managers were more likely to choose it for making face-threatening complaints and demands. These findings reflect deeply rooted connections between Turkish and authority that stem from a history of repressive language policy; furthermore, they are in line with Gumperz and Bourdieu-based predictions of managers' reproduction of the existing social hierarchy. These findings also point to participants' strategic use of Kurdish and Turkish to carry out complementary functions.

# WORKSHOP

## The syntax and semantics of numerals

### *Convenors*

**Marijke De Belder, Will Harwood, Dany Jaspers, Koen Roelandt, Jolijn Sonnaert, Tanja Temmerman, Jeroen van Craenenbroeck, Guido Vanden Wyngaerd** (KU Leuven)

### *Description*

Numerals raise a host of linguistic issues of a syntactic, morphological, and semantic nature. From a syntactic point of view, they sit on the divide between lexical and functional categories, and occupy a fixed position in the extended nominal projection. Morphologically, they often constitute a productive and fairly transparent category, but their categorial status remains under discussion: do they constitute a word class of their own, or are they nominal or adjectival in nature? Semantically, numerals are clearly akin to quantification in general, but at the same time they can differ from regular quantifiers in being more specific or precise in their denotation.

This workshop aims to bring together researchers working on the (morpho)syntax and semantics of numerals and numerical expressions. It will focus on questions including, but not limited to, the following:

### *The (morpho)syntax of numerals and numerical expressions*

Contributions on the syntax of numerals may relate to the following research questions:

- Are simplex numerals heads or phrases?
- Are numerals lexical or functional items?
- What is the category of numerals (cf. Stavrou & Terzi 2008)? Are they a class of their own or are they nouns or adjectives (Corbett 1978)?
- What is the syntactic structure of complex numerals (cf. Stavrou & Terzi 2008)?
- What is the syntactic structure of ordinals?
- What is the syntax of suppletion amongst ordinals (Barbiers 2007)?
- What is the syntactic status of the numeral *one* (Barbiers 2007, Borer 2005)?
- Which silent elements can be contained in numerical expressions (cf. Kayne 2005)?
- Are ordinals derived from cardinals?
- Do paucals have the same internal syntax as higher numbers?
- What is the syntax of vague numerical expressions (cf. Corver 2005)?
- Does the syntax of numerals occurring in the DP differ from the syntax of numerals used when counting items?
- What is the syntax of floating numeral quantifiers? (Miyagawa and Arikawa 2007)
- Is there a relation between ordinals and superlativity?
- Are degree expressions derived from numerals (cf. Corver 1997)?

### *The semantics of numerals and numerical expressions*

- What is the semantics of ‘vague’ or modified numerical expressions, such as *more than n*, *at least n*, *fewer than n*? Which part of their meaning follows from their semantics, and which part from general pragmatic principles, such as implicature? (Fox and Hackl 2006, Cummins, Sauerland and Solt 2012, Geurts and Nouwen 2007)
- What is the semantics of prepositional numerals, like *around ten* and *between ten and thirty*? (Corver and Zwarts 2006)
- What is the semantic difference--if any--between numerals and quantifiers like *some*, *all* or *both*?
- Is there a semantic relation between ordinals and superlativity?

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### Japanese Reduplicative Nominals and Numeral Quantifiers

Research of numeral quantifiers (NQs) has been advanced in Japanese linguistics for decades (Harada (1976), Miyagawa (1989), etc.), but there still remain mysteries uncovered in this field. The aim of this paper is to explore the syntactic/semantic relationship between NQs and reduplicative nominals (RNs), which has never been investigated in the literature.

Japanese is known to be a language without any obligatory plural morpheme, such as *-s* in English. But it may use some sorts of plural morphemes: *-tati*, *-domo*, and *-ra*, as shown in (1)

- (1) Zyuu nin-no gakusei (-tati)/ onnanoko(-ra)-ga yattekita.  
 ten CL-Gen student (-s)/ girl (-s)-Nom came  
 'Ten students/girls came.'

Although there is a certain pragmatic restriction on their attachment with nouns, they are somehow productive. Japanese, however, keeps another plural-formation process with much less productivity: reduplicative nominals, such as '*mura-mura* (village-village)', '*hito-bito* (person-person)', and '*hana-bana* (flower-flower)'. These special nominals are formed with repeating mono or bimoraic nouns.

One of the distinctive features of RNs is that they may co-occur with approximate numerals, but not with cardinal numerals, while ordinary nouns (i.e., '*ie* (house)') do not have such a restriction, as exemplified below.

- (2) a. Kawazoi-ni-wa suu-ken/ni-san zyu-kken/\*nizyuu-san-ken-no  
 river side-at-Top several-CL/twenty-thirty-CL/twenty-three-CL-Gen  
 ie-ie-ga tatte-iru.  
 house-house-Nom stand-be  
 'There are several/dozens of/twenty-three houses along the river.'"
- b. Kawazoi-ni-wa suu-ken/ni-san zyu-kken/nizyuu-san-ken-no  
 river-side-at-Top several-CL/twenty-thirty-CL/twenty-three-CL-Gen  
 ie-ga tatte-iru.  
 house-Nom stand-be

This behavior was described in the previous studies. (e.g., Kunihiro (1980)) But what research has missed is the existence of counterexamples, such as (3).

- (3) Sono mura-ni aru hati-zyuu-nana-ken-no ie-ie-o tyoosa-sita.  
 the village-in be eighty-seven-CL-Gen house-house-Acc survey-did  
 'We surveyed eighty seven houses in the village.'

Note that the cardinal NQ appears as a pre-modifier. More importantly the co-occurrence has much to do with interpretation: multiple event interpretation. In (3) the examinations were repeatedly made 87 times. On the other hand the co-occurrence cannot be allowed when the predicate expresses states like (2a). This means a cardinal NQ modifying an RN as in (3) quantifies over events denoted by a verbal predicate, which can straightforwardly explain the ungrammaticality in (2a) because there is no event the cardinal NQ quantifies over. This is parallel with Floating NQs, such as (4).

- (4) \*Uti-no doobutuen-de-wa kaba-ga mada san-too genki-da.  
 I-Gen zoo-at-Top hippo-Nom still three-CL healthy-be  
 'In our zoo, three hippos are still healthy.' (Nakanishi (2008))

Floating NQs cannot occur with predicates of permanent states as in (4). Furthermore, note that Floating NQs have only the distributive reading.

- (5) Gakusei-ga kinoo san-nin baiku-o nusunda.  
 Student-Nom yesterday three-CL bike-Acc stole  
 'Three students each stole a bike yesterday.'

It means that they are not NP-quantifiers, but VP-quantifiers in the sense of Dowty and Brodie (1984). That is, differently from the NP-quantifiers modifying the host noun directly, they are indirectly related to the host noun by modifying the predicate.

These observations tell us that Japanese RNs modified by cardinal quantifiers look like NP-quantifiers, but their real function is not to modify the host noun, but to modify the predicate. This reminds us of the metaphorical usage known as ‘transferred epithets’ as exemplified in (6).

- (6) I balanced a thoughtful lump of sugar on the teaspoon.

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## **English and Dutch ONEs**

This paper argues that the morphosyntax of numerals in English and Dutch can be derived from a shared underlying structure, roughly [DP [NumP [NP]]], despite the many differences between the two. These differences can be attributed to the presence of silent heads which require morphosyntactic licensing, and differences in the categorial status of the elements involved, in the spirit of Kayne (2005). We primarily look at the distribution of ONE and argue that both Dutch and English have an abstract noun HUMAN that can only be licensed by ONE in Num position. Moreover we provide evidence for an abstract head KIND that is an alternative realization of Num with a distinct semantic interpretation.

As is well-known, *one* in English can be both a numeral and a pronoun, as in: *There is one red one*. We also find *one* in *someone* and *everyone*, which have an obligatory [human] interpretation, but not in *\*many-one*. Dutch *één* ‘one’, by contrast, can only be a numeral. It can occur in *ieder-één* ‘everyone’ and *menig-éen* ‘many one’, for which a [human] interpretation is also obligatory, but there is no equivalent of *someone*.

We can explain these differences if we assume that an abstract noun HUMAN is obligatory in such cases and can only be licensed by ONE in Num (cf. Leu 2005 and Zimmermann 2011 for slightly different approaches). If this is true, then *many* and *menig* must be in different positions: English *many* patterns with numeral *one* and resides in Num, while Dutch *menig* is in D. When English *many* co-occurs with *one*, *many* occupies Num and therefore *one* can only be pronominal, i.e., in the N position. This leaves no position for the obligatory abstract noun HUMAN. With Dutch *menig* in D, the Num position is available for ONE, and the N position is available for HUMAN. This analysis is supported by the impossibility of plural inflection on *everyone* and *someone* (\**everyones*, \**someones*), the obligatoriness of plural inflection on *one* in *many (nice) ones*, and the possibility of quantitative *er* when *menig-een* is not in subject position: *Ik ken (er) menig-een* ‘I know many people.’ We relate the fact that Dutch does not have a (literal) counterpart of *someone* to another difference between the two languages, namely the impossibility of constructions like *the thirty-some words* in Dutch.

For the English construction *many a N* (as in *many a book*) we assume that *many* is in the D-domain while the article *a* is a realization of Num. Interestingly, the *many a N* construction involves quantification over

kinds, not over entities. The Middle Dutch suffix *-hande* has exactly the same property in combinations such as *velerhande*, *menigerhande*, *drieërhande*, *allerhande* etc. We argue that *hande* is another realization of Num and that numerals except ONE occur in its Spec. The fact that in most contexts *hande* has disappeared and DPs with numerals and quantifiers are ambiguous between a kind reading and a unit reading suggests that Dutch has an empty head corresponding to Middle Dutch *hande*. Since English shows the same ambiguity in the absence of a kind denoting head it will be argued, following Kayne, to have an empty kind denoting head as well.

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**Dominique BLOK** (Utrecht University)

#### Directional prepositions as numeral modifiers

In the recent literature on modified numerals, numeral modifiers are categorised into two classes. Class B modifiers, unlike class A modifiers, obligatorily give rise to ignorance effects: they are incompatible with speaker knowledge of the precise number under discussion (e.g. Nouwen, 2010). The semantic literature on modified numerals generally focuses on this classification without considering the wide array of syntactic categories that are represented within each class. On the basis of data from 15 different languages, I argue that directional prepositions such as *up to* still behave like directional prepositions when they are used as (class B) numeral modifiers. As a result, they have semantic properties that other numeral modifiers do not have. This is expected if one follows Corver and Zwarts (2006), who claim that prepositional numerals are full-fledged PPs. It also shows that the class A/B categorisation is too coarse. The syntactic category of a numeral modifier can affect its semantics, causing semantic differences within a class.

In all languages I studied, the upper bound of directional numeral modifiers (DNMs) is cancellable while their lower bound is not. This makes them the exact mirror image of other upper-bounded numeral modifiers such as *at most*. The defeasibility of the upper bound is shown in (1-a) while the fact that the lower bound cannot be cancelled is illustrated in (1-b).

- (1)     a. Peter is allowed to choose {up to / #at most} ten presents, perhaps even more.  
        b. {#Up to / At most} three students will show up to the lecture, if any.

This contrast is expected in an account where DNMs are said to retain their status as directional prepositions. As (2) demonstrates, the end-point of the path denoted by directional prepositions can also be cancelled.

- (2)     Harry ran all the way up to his house. I think he may even have gone on to run to the football field after that.

On the basis of these data, I argue that the lower bound of DNMs is entailed while their upper bound is merely implicated. I further claim that all class B numeral modifiers need a range of values to quantify over, which I show follows naturally from the data on ignorance effects (e.g. Geurts & Nouwen, 2007).

These two claims can account for four other contrasts between DNMs and other upper-bounded numeral modifiers that relate to monotonicity, NPI-licensing, interactions with negation and evaluative adverbs, and the so-called *bottom-of-the-scale effect*: while Schwarz, Buccola, and Hamilton (2012) claim that *up to* cannot modify the numeral at the bottom of the scale it quantifies over, I argue that this effect holds for all class B numeral modifiers and results from an interplay between the two claims I make. I formalise these ideas in degree semantics and inquisitive semantics.

This study shows that viewing DNMs as actual prepositions sheds light on their semantic and pragmatic properties. More generally, it illustrates that the form of numeral modifiers affects their meaning much more profoundly than previously thought. Crosslinguistic data support these claims.

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**Modified numerals, plurals, and boundedness**

Modified numerals like *fewer than four* present a challenge for theories of numerals and plurals. While (1) has the meaning (1a), (2) does not have the meaning (2a): (2a) incorrectly entails that at least some student(s) ate pizza and, worse, is consistent with groups of four or more students having eaten pizza (Van Benthem, 1986). Rather, (2b) is the correct meaning. By contrast, (3) has (3a), and not (3b), as its meaning (on one reading): (3) entails that at least some student(s) ate a whole pizza, and is consistent with other, larger groups of students having also eaten a whole pizza (Buccola 2015; Spector, 2014).

- (1) Four students ate pizza.
- a. A group of four students ate pizza.
- (2) Fewer than four students ate pizza.
- a. A group of fewer than four students ate pizza.
- b. No group of four or more students ate pizza.
- (3) Fewer than four students ate (managed to eat) a whole pizza.
- a. A group of fewer than four students ate a whole pizza.
- b. No group of four or more students ate a whole pizza.

The challenge is how to generate reading (2b), and not (2a), for (2), while also generating reading (3a), and not (3b), for (3). I provide a solution to one half of this challenge. I propose a way to generate both types of readings for both types of sentences, together with a pragmatic constraint that filters out the unattested reading (2a). The constraint is motivated by economy considerations: due to the distributivity of *ate pizza*, (3a) has the same meaning as a syntactically simpler sentence, e.g. *A student ate pizza*; hence, this reading is blocked, as the speaker would have used the simpler sentence to convey it. Due to the non-distributivity of *ate a whole pizza* (on its collective reading), no such equivalence arises for (3a), so (3a) is not blocked.

In addition, I explore the meanings of generalizing sentences with *fewer than*. I extend the proposal to generate, once again, more than one reading for such sentences and show that, once again, the unattested reading can be blocked due to the same economy constraint. For example, while (4), on its generalizing reading, has a meaning like (4a), (5), on its generalizing reading, has a meaning like (5b), not (5a). Crucially, (5a) entails that, in general, any individual student could eat that whole pizza. This meaning is too strong and is equivalent (under certain reasonable assumptions) to *Every student could eat that whole pizza*; hence, this reading is blocked, as the speaker would have used the simpler sentence to convey it.

- (4) Four students could eat that whole pizza.
- a. In general, any group of four students could eat that whole pizza.
- (5) Fewer than four students could eat that whole pizza.
- a. In general, any group of fewer than four students could eat that whole pizza.
- b. There is some  $n < 4$  such that, in general, any group of  $n$  students could eat that whole pizza.

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**A non-superlative semantics for ordinals**

The semantics of ordinal expressions has been neglected in the literature until very recently, and only a few concrete proposals have been put forward so far, most notably Bhatt (2006) and Sharvit (2010), and two unpublished handouts, Bhatt & Pancheva (2012) and Ivlieva & Podobryaev (2012). This state of affairs is quite surprising, especially given that related expressions such as superlatives have garnered decades of constant attention by formal linguists. Curiously, these previous studies all adapted the relatively well-understood syntax and semantics of superlatives for ordinals. This strategy is natural given initial motivation from certain similarities between the two types of expressions that the previous studies uncovered (absolute and comparative readings, focus-sensitivity, licensing of non-modal subject infinitival clauses). Following the footsteps of our predecessors, we take the similarities between ordinals and superlatives as our starting point. Yet, the present paper brings up a previously unnoticed contrast between ordinals and superlatives that points to a crucial difference between them. Specifically, we observe that unlike superlatives, ordinals do not give rise to ‘upstairs de dicto’ readings. Upstairs de dicto readings arise in sentences like ‘John wants to take the earliest train’ involving an intensional operator like want and a superlative phrase underneath it. The existence of these readings for superlatives is the crucial (and perhaps the only) evidence for movement of the superlative morpheme -est out of the local DP (Heim 1985, 1999, Szabolcsi 1986; see Sharvit & Stateva 2002 for a different view). Furthermore, this covert movement is not only a crucial step in deriving upstairs de dicto readings, but also gives a nice account of so-called ‘comparative readings’ in general, of which upstairs de dicto readings are a special kind. Straightforwardly adopting this idea to ordinals, Bhatt (2006), Bhatt & Pancheva (2012), and Ivlieva & Podobryaev (2012) propose that ordinals also can undergo the same covert movement. However, if so, they wrongly predict that, everything else being equal, ordinals should also give rise to upstairs de dicto readings. We observe that the corresponding sentence containing an ordinal ('John wants to take the first train') doesn't have an upstairs de dicto reading. This leads us to renounce the idea that ordinals and superlatives are alike in all respects. In particular, adopting the movement theory of superlatives, we propose that ordinals, unlike superlatives, are always interpreted in situ. As for their similarities pointed out by the previous studies, we claim that they all stem from the fact that both superlatives and ordinals refer to ‘comparison classes’ in the same manner, and develop a syntax and semantics of comparison classes.

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**Unification of Numeral Bases and Numeral Classifiers: Evidence from SMATTI**

The main purpose of this study is to provide evidence for the unification of numeral bases and numeral classifiers under the concept of *multiplicand*. The evidence comes from classifier languages in SMATTI, an acronym referring to six language groups in the world's foremost hot spot of classifier languages: Sinitic, Miao-Yao, Austro-Asiatic, Tai-Kadai, Tibeto-Burman, and Indo-Aryan.

Multiplication is employed in the numeral systems of most of the world's languages (Comrie 2011) and the structure of numerals can be schematized as ' $(n \times base) + m$ , where  $m < base$ ' (Comrie 2006). Typologically, the two possible orders between  $n$ , the multiplier, and  $base$ , the multiplicand, are both attested in languages: i.e., base-final, or [n base], and base-initial, or [base n] (Greenberg 1990[1978]:293). In classifiers languages, a classifier (C) or measure word (M) is used when a noun (N) is quantified by a numeral (Num). Mathematically, there are 6 possible orders, yet only 4 are attested: Num C/M N (e.g., Mandarin), N Num C/M (e.g., Thai), C/M Num N (e.g., Garo) and N C/M Num (e.g., Jingpho). Different approaches have been proposed for the syntactic structure of the classifier construction, e.g., Huang (1982), Tang (1990), Croft (1994:151), Lin (1997:419), and Hsieh (2008) argue for a unified left-branching structure, while others, e.g., Tang (2005), Cheng & Sybesma (1998, 1999), Borer (2005), Watanabe (2006), Huang *et al* (2009), right-branching. Yet, some syntactic accounts, e.g., Zhang (2011) and Li (2011), contend that both structures are required for C/M.

We follow the approach of Her & Hsieh (2010) and Her (2012) toward the syntax and semanticity of numeral classifiers, and propose that the syntactic structure of numerals and numeral classifiers are identical and left-branching. In essence, the function between Num and C/M is multiplication, regardless of

word order, where Num is a multiplier, and C/M, a multiplicand. While the value of a C is necessarily 1, e.g., in Chinese ‘*san duo meigui*’ (3 C rose) is exactly [[3×1] rose], that of an M can be anything except 1, thus numerical, e.g., ‘*san da meigui*’ (3 dozen rose) is [[3×12] rose], or non-numerical, e.g., ‘*san bang rou*’ (3 pound meat) is [[3×pound] meat] (Her 2012). The same function exists in a multiplicative numeral as [n×base], e.g., the value of ‘*san-bai*’ ‘300’ is [3×100].

A survey of 153 classifier languages in SMATTI, obtained from a database of 441 classifier languages in an on-going research project led by the first author, shows that multiplicative numerals are employed by all 153 classifier languages, supporting the universal co-existence of multiplicative bases and C/M in classifier languages. Moreover, the base-C/M synchronization in word order is also attested in 97%, or 148 languages, with only 5 exceptions. Our proposal is thus statistically highly significant. 129 out of 153, or 84%, are base-C/M-final, while 24 are base-C/M-initial. Interestingly, these 24 base-C/M-initial languages and the 5 exceptions are *exclusively* Tibeto-Burman. We shall attempt to explain such a linguistic landscape with the notions of typological clustering and also natural and political landscape (cf. Smith 2003).

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### The categorial status of numerals: Evidence from Polish and Serbian

Numerals show curious behavior, patterning sometimes with adjectives and sometimes with nouns (Corbett 1978). In this talk, we offer an account for the behavior of Serbian and Polish numerals, which follow trends observed in other Slavic languages in forming (at least) three numeral types with distinct patterns of case and agreement. We ask the question: what sort of category can define these numerals?

In both languages, numeral 1 behaves like a true adjective, agreeing with the quantified noun in phi-features and case (1). Numerals 5+ (5-19, 100) are invariant for gender, and obligatorily trigger default agreement (2). The languages differ most with regards to numerals 2, 3, and 4, which in Polish allow gender agreement with the quantified noun, and show verbal agreement with the numeral-noun complex (3). For Serbian, under certain accounts (Zlatić, 1997; Belić, 2008) numerals 2, 3, and 4 also show true adjectival and verbal agreement. These accounts assume a third number value for Serbian – dual/minor paucal. We show that previous accounts assuming dual/minor paucal lack empirical evidence and propose a novel approach for numerals 2, 3 and 4. Under our approach, these numerals do show gender agreement and allow for verbal agreement (4), but they also appear to have a gap for masculine gender which leads to certain quirks in how adjectival and verbal agreement is realized.

We adopt an analysis in which categories can be distinguished on the basis of their phi-feature specifications, where adjectives carry unvalued phi-features and nouns valued phi-features (Baker, 2003). Under this analysis, numeral 1 is an adjective, carrying unvalued number and gender (thereby showing full agreement with the quantified noun). Numerals 2, 3, and 4 fall into a category in between adjectives and nouns, carrying unvalued gender, but valued number; this allows us to account for the fact that they appear invariant for number, but show agreement for gender. Finally, numerals 5+ are defective nouns, carrying number, but lacking gender, resulting in the failure of syntactic agreement, hence triggering default verbal agreement. Despite the feature similarities, there are other differences between the numerals in these languages, which we will discuss in the talk itself. Our treatment of categories gives substance to Corbett’s (1978) generalization that the higher the numeral is, the more noun-like properties it possesses.

We conclude that languages do not necessarily have a single category of numeral, and that their ambiguous behavior can be modeled by decomposing the notion of category and considering specifically the properties of the numerals.

#### (1) POLISH

Jeden	ptak	spał.
one.NOM.M.SG	bird.NOM.M.SG	slept.M.SG
‘One bird slept.’		

#### SERBIAN

Jedna	ptica	je	spavalna.
one.NOM.F.SG	bird.NOM.F.SG	is	slept.F.SG
‘One bird slept.’			

## (2) POLISH

Pięć ptaków spało.  
 five bird.M.PL.GEN slept.N.SG  
 'Five birds slept.'

## SERBIAN

Pet ptica je spavalо.  
 five bird.F.PL.GEN is slept.N.SG  
 'Five birds slept.'

## (3) POLISH

Dwa ptaki spały.  
 two.NOM.M/N.PL bird.NOM.M.PL slept.NV.PL  
 'Two birds slept.'

## (4) SERBIAN

Dva dečaka su spavala.  
 two.NOM.N.PL boy.M.SG.GEN are slept.N.PL  
 'Two boys slept.'

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**Cadinals and measure phrases in Italian Sign Language**

Looking at both corpus data and elicited data, this paper analyzes: 1) the syntax of cardinal numerals in LIS; 2) the special case of measure phrases; and 3) the status of the sign ONE.

Previous literature (Bertone 2007, Branchini 2007, Brunelli 2011) claimed that cardinals are postnominal; recent corpus data (162 LIS signers) reveal that the majority of cardinals is prenominal.

Card>N 278/353 79%  
 N>Card 75/353 21%

Why do we observe such an important difference between elicited data and corpus data? In what respect is Card>N different from N>Card (and vice versa)?

In the study described in this paper, a quantitative and a qualitative approach have been combined with the purpose of capitalizing on the advantages of each approach.

The data for this study mainly come from a large population, namely 162 LIS signers (LIS corpus, Geraci et al. 2011). The annotated cardinals amount to 353 tokens (Mantovan & Geraci 2013). Additional data have been collected through picture-based narration tasks and elicitation of grammaticality judgments. Data annotation has been conducted by using the annotation software ELAN (Johnston & Crasborn, 2006). Deeper investigation of the distribution of cardinals in corpus data shows the presence of two special cases: the sign ONE (ambiguous between cardinal and indefinite determiner), and cardinals contained in Measure Phrases (always prenominal). Once these cases are removed, the distribution of cardinals becomes unexpectedly balanced.

Card>N 67/135 50%  
 N>Card 68/135 50%

New data suggest that the position of cardinals is influenced by the definite/indefinite character of the DP. Indefinite DPs allow both orders (i.e. Card>N / N>Card), whereas definite DPs only allow N>Card. (In)definiteness also show additional phonological, distributional, and semantic differences that we will present during the talk.

- (1) Indefinite DP a. TWO CHILD b. CHILD TWO ‘Two children’  
 (2) Definite DP a. \* TWO CHILD b. CHILD TWO ‘The two children’

Cardinals in LIS do not instantiate a unique morpho-syntactic category.

- 1) Following Cardinaletti & Giusti (2006), we treat cardinals in indefinite DPs as quantifiers occurring in a DP-external projection (QP), and cardinals in definite DPs as quantity adjectives occurring in a DP-internal projection (QuantP). Movement across quantity adjectives always takes place (2b), as with other adjectives, while movement across quantifiers is subject to variation (1a) vs. (1b).
- 2) In Measure Phrases, we take cardinal and measure nouns to form a complex element while the real head of the phrase is the lexical noun (LIS does not have PPs).
- 3) We provide evidence that the sign ONE is diachronically losing its status as indefinite determiner in favor of a pure “numeral” status.

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#### **Measure words, Plurality, and cross-linguistic variation**

The present study aims to explain why measure words in some languages (English, French, Hebrew) necessarily take an *-s* (*two bottles of milk* versus *\*two bottle of milk*) in other languages (Azeri, Persian, Ojibwe) measure words can surface in the singular (the equivalent of *two bottle of milk* is grammatical). If we assume *-s* in English-type languages is responsible for division in measure constructions (Borer 2005), we face the following puzzle: What is responsible for division in Azeri-type languages in the absence of the plural? We argue that, for a number of reasons, it cannot be the numeral (*two*) and propose that division is performed, in the absence of a plural, by measure words themselves (as in Chierchia 1998, Stavrou 2003, Acquaviva 2008, among others). We argue that whether or not plural marking appears on the measure word depends on a higher projection that expresses the counting function (distinct from the classifying/measuring function, Rothstein 2010b). Measure constructions thus provide evidence for the idea that, in addition to the dividing plural, we need a higher, counting plural, bolstering the hypothesis that the plural comes in many flavours (Acquaviva 2008, Harbour 2008, Wiltschko 2008, Butler 2012, Mathieu 2012, 2013, 2014). Thus the proposed structure for Azeri type languages will be as follow:

[#P two [DivP cup [NP sugar]]]

We argue that the Div<sup>0</sup> head can be occupied by the dividing plural (English-type languages, sound plurals in Arabic) or Chinese-type classifiers – Borer’s (2005) proposal – but also by singulative markers, diminutive markers, broken plurals (Mathieu 2012) and, as we argue in this study, measure words. The plural marker that appears on English measure words was argued to be a higher plural, distinct from the dividing plural that is generated under Div<sup>0</sup>. The higher plural is generated under #<sup>0</sup> in a counting projection.

In conclusion we argue that there exists, in addition to the dividing plural (Borer 2005), a counting plural whose function is not to divide, but as its name suggests, to count. The folk view that plurality is about

counting thus appears to be on the right track and cannot be completely ignored, even if we grant a dividing function to the plural as is done in Borer (2005) and elsewhere. Measure constructions are good illustrations of why we need a higher, counting, non-dividing plural, adding existing evidence to the claim that the plural is not one but many (Acquaviva 2008, Harbour 2008, 2012, Wiltschko 2008, Butler 2012, Mathieu 2012, 2013, 2014).

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### When cardinals agree (a catholic point of view)

Languages with plural marking vary in whether the NP following a cardinal higher than ‘one’ is obligatorily plural (English, etc., (1a)); obligatorily singular (Turkish, Hungarian, (1b)); or optionally singular or plural (Western Armenian, (1c)). Bale et al. 2011 relate singular marking on NPs combining with cardinals to the phenomenon of general number. However, their solution runs into a problem with Finnish and Welsh, which lack general number (2a), yet require the NP combining with a cardinal to be singular (2b).

- (1)    a.    two boys/\*boy
  - b.    *Turkish:*  
            iki            çocuk(\*-lar)  
            two            boy(\*-PL)
  - c.    *Western Armenian:*  
            yergu          dəgha(-ner)  
            two            boy(-PL)
- (2)    *Finnish:*
  - a.    Luin          kirjan/kirja.  
            read-1SG    book-ACC/PART  
            *I read a book/the book. (≠ I read (the) books)*
  - b.    kaksi          kirja/\*kirjoja.  
            two            book-PART/\*PL-PART

Following Ionin and Matushansky 2006, we analyze cardinals as non-intersective modifiers that combine with an atomic predicate to return a set of plural individuals. We propose that plural marking on NPs that combine with cardinals in languages like English results from agreement. Evidence comes from languages where plural agreement on the predicate and plural marking inside a numeral NP are conditioned by the same factors. In the Chadic language Miya (Schuh 1989, 1998), both plural marking in numeral NPs and

plural concord/agreement, but *not* regular plurals, are conditioned by animacy; Dutch numeral NPs headed by a measure noun fail to trigger plural agreement on the verb and do not show plural marking on the measure noun itself. The fact that plural cardinal NPs in both languages behave differently from regular plurals provides evidence that cardinals do not combine with plurals. Further support comes from measure NPs: without a cardinal, a plural measure noun has the “plural of abundance” interpretation (*liters of vodka*); this plural should be incompatible with lower cardinals (two is not a lot), so the grammaticality of “two liters” provides further evidence that the cardinal does not combine with a true plural. Finally, the optional plural marking with cardinals in Western Armenian (1c) correlates with specificity (Donabédian 1993, Sigler 1992, 1996), providing further evidence in favor of our analysis of plural marking as agreement.

We sketch out an analysis by appealing to Number and Mereology features (e.g., Sauerland and Elbourne 2002). Mereology can be valued as [aggregate] or else absent, while Number can be either valued as [plural] or absent. We hypothesize that the [aggregate] feature value entails plurality for NPs denoting in the *e* domain, such as *group*. We propose that cardinals higher than ‘one’, like group nouns, do not introduce the [plural] feature, but are specified [aggregate]; this allows us to explain the historical development of (some) higher cardinals from group and measure nouns. Plural agreement with cardinal-containing NPs (1a) is due to the [aggregate] feature on the cardinal. Following Matushansky and Ruys [to appear], we analyze singular agreement with cardinal-containing NPs as agreement failure, and suggest that the core property that cardinal-containing NPs that trigger default agreement have is that of non-individuation. We will show how this analysis applies to English, Russian, Dutch, and Western Armenian.

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Russian Numerals and Agreement Mismatches

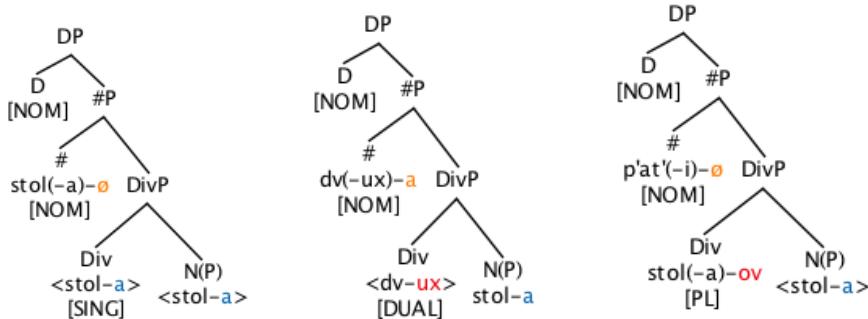
Pesetsky (2013) proposes that Russian cases are realizations of different syntactic categories. We use this hypothesis to analyze case and number mismatches in Russian noun phrases. As we see in (1), nouns and their adjectives agree in case and number when there is no numeral present, but when there is a paucal numeral (two, three or four), as in (2), there is a case and number mismatch, and when there is a non-paucal numeral (five and above), as in (3), there is only a case mismatch.

- (1)    Eti               poslednye      krasivye               stoly  
       These.NOM.PL last.NOM.PL beautiful.NOM.PL table.NOM.PL  
       ‘These last beautiful tables’
- (2)    Eti               poslednye      dva               krasivyx               stola  
       These.NOM.PL last.NOM.PL two.NOM     beautiful.GEN.PL table.GEN.SG  
       ‘These last two beautiful tables’
- (3)    Eti               poslednye      p’at’               krasivyx               stolov  
       These.NOM.PL last.NOM.PL five.NOM    beautiful.GEN.PL table.GEN.PL

‘These last five beautiful tables’

In Pesetsky’s system, different cases in Russian are realizations of different syntactic categories. Nouns enter the syntax with genitive case, as this is a realization of the N category. Nominative case comes from D; however, when a numeral is present, the numeral absorbs nominative case, blocking it from being passed onto the noun (as in (2) and (3) above). Pesetsky’s system is based on a simple model of the nominal extended projection, with only NP and DP projections; we provide an account that incorporates a modified version of Pesetsky’s system into Borer’s (2005) model of the nominal extended projection, in which plurality and quantifiers are distinct functional heads, in between NP and DP.

‘a/the table’ *stol*      ‘two tables’ *dva stola*      ‘five tables’ *p'at' stolov*



Our major contribution is proposing that the D only assigns nominative case as far as the # head. As a result, when there is no numeral present, we see nominative case on the noun, as it moves to this position. However, when there is a numeral present, such movement is blocked since it occupies this head, and the noun (and lower level adjectives) retains its genitive case. The difference between paucals and other numerals, then, is one of category. Paucals are instantiations of the number feature, and therefore merge in the Div head; thus, since the N merges as singular, it has no motivation to become plural, despite its obvious semantic plurality. However, since other numerals are of category #, the noun moves to the Div head, receiving the plural marking found there.

Additionally, we address the status of ordinal numerals. In Russian, they pattern as adjectives, but they merge at a higher point in the extended projection than most other adjectives. They are claimed to have the same status as adjectives like ‘last’ and ‘next’; thus, we claim that ordinals include not only numeral-derived adjectives, but also any adjectives denoting order (see *poslednye* ‘last’ in the examples above). Our analysis furthermore accounts for the fact that the case mismatches are not seen with these types of adjectives, as they merge as DP adjuncts and therefore always receive nominative case, regardless of the presence of a numeral.

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### Acquiring cardinals, ordinals and superlatives (but not in that order)

The expression *as easy as one, two, three* suggests that counting or using numerals is easy. However, studies have shown children slowly discover the exact meanings of cardinals *one* through *four* in a tiered fashion before becoming fully competent counters (e.g. Le Corre & Carey 2007). Though linguistic knowledge has been argued to play an important role in developing exact number (e.g. Carey 2009), most cardinal acquisition studies have been carried out with English-speaking children; whether (the timing of) this pattern holds for children acquiring other languages (such as Dutch) remains largely unexplored (but cf. Sarnecka et al. 2007; Li et al. 2003; Almoammer et al. 2013).

Even less well-studied is the acquisition of ordinals, and Dutch ordinal acquisition has not been investigated at all (e.g. Colomé & Noël 2012). Ordinals, formed in Dutch by adding *-de* or *-ste* to a cardinal (*vier-de* ‘fourth’, *acht-ste* ‘eighth’), are obviously built on and related to cardinals, but what makes them especially interesting is how they compare to superlative adjectives. Hurford (1987) and

Veselinova (1998) make cognitive-historical and typological claims in that respect. Barbiers (2007) argues Dutch *eer-ste* ‘first’ is, morphosyntactically speaking, a superlative rather than an ordinal. His tests would put indefinite ordinals *middel-ste* ‘middle-th/-est’ and *laatste* ‘last’ somewhere between definite ordinals and superlatives.

This study compares how cardinals, ordinals and the degrees of comparison are acquired in Dutch, focusing specifically on the patterns and timing of comprehension. This was tested by means of a so-called ‘Give-X’ task (or e.g. ‘Give-me’, ‘Give-a-number’, cf. most notably Wynn 1992, but also Colomé & Noël 2012; Condry & Spelke 2008; Huang et al. 2010; Le Corre et al. 2006; Li et al. 2003; Sarnecka & Gelman 2004; Sarnecka et al. 2007) in which 77 Dutch monolinguals aged 2;11–6;4 were asked to take certain objects out of a row, for example *eight banana’s, the third car, a ball that’s bigger*, and *the most blocks*. This was done for cardinals *one through four, eight and nine*, as well as their ordinal counterparts (*first – fourth, eighth, ninth*). The indefinite ordinals *middelste* ‘middle-th/-est’ and *laatste* ‘last’, and the degrees of comparison for five adjectives (*big, small, fat, long and many*) were tested as well.

The results suggest the tiered acquisition of cardinals found in e.g. English also holds for Dutch. This same piecemeal pattern does not, however, appear in ordinal acquisition. Instead, children in early stages of cardinal acquisition perform around floor-level on ordinals, whereas children in advanced cardinal-knower stages seem to acquire *eerste, tweede* and *vierde* (‘first’, ‘second’ and ‘fourth’) almost at once. Irregular *derde* ‘third’ and higher ordinals follow somewhat later. We will go into the role of morphology here, and discuss notable outcomes of indefinite ordinals. All participants perform well on the degrees of comparison, which shows that children understand superlatives before they have exact representations of ordinals. This is not only important in terms of a pathway in acquisition, but also in light of cognitive-historical claims.

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**Andreas PANKAU** (Goethe Universität, Frankfurt am Main)

### Prepositional Numerals are Modified Numerals: Evidence from German

The purpose of this talk is to provide three arguments from German which show that the constituent in bold print in (1) is not a prepositional numeral [cf. (2)] as claimed by Corver & Zwarts (2006), but an adverbial numeral, that is, a numeral lexically modified by an adverbial, [cf. (3)].

- (1) [DP **An die 100** Flüchtlinge] ertranken.  
*Approximately 100 refugees drowned.*
- (2) [DP [PP **an** [NumP die 100]] Flüchtlinge]
- (3) [DP [NumP [Adv **an die**] 100] Flüchtlinge]

First, although parentheticals can normally appear between a preposition and its complement [cf. (4)], this is impossible in cases such as (1), [cf. (5)].

- (4) Peter denkt **an** – glaube ich zumindestens – die Frauen.  
*Peter has in mind the women, I think.*
- (5) \* Peter hat **an** – glaube ich zumindestens – **die** 100 Frauen geküsst.  
*Peter kissed approximately 100 women, I think.*

Given the analysis in (2), this is unexpected because prepositional numerals are regular PPs. However, given the analysis in (3), this contrast is expected because the numeral is monolexical, and parentheticals cannot appear inside words.

Second, although numerals usually appear without case marking [cf. (6)], case marking shows up in nominal ellipsis [cf. (7)]. Importantly, this case marking is unaffected by the presence of *an die* [cf. (8)].

- (6) a. Peter traf<sub>ACC</sub> fünf(\*e) Frauen.  
b. Peter begegnete<sub>DAT</sub> fünf(\*en) Frauen.  
*Peter met five women.*
- (7) a. Ich traf<sub>ACC</sub> zehn Frauen, aber Peter nur **fünfe**.  
b. Ich begegnete<sub>DAT</sub> zehn Frauen, aber Peter nur **fünfen**.  
*I met ten women, but Peter only five.*
- (8) a. Ich traf<sub>ACC</sub> **an die** zehn Frauen, aber Peter nur **an die** **fünfe**.  
b. Ich begegnete<sub>DAT</sub> **an die** zehn Frauen, aber Peter nur **an die** **fünfen**.  
*I met around ten women, but Peter only approximately five.*

The generalization is that, *in nominal ellipsis, case marking on the numeral is determined by the verb*. This generalization poses a problem for the analysis in (2). The determiner *die* and the numeral form a constituent which is the argument of the preposition *an*. Crucially, *an* assigns accusative case. Therefore, case marking on the numeral is expected to be determined by the preposition, contrary what one finds. The analysis in (3) faces no such problem because modifiers never interact with case marking.

Third, Southern German varieties feature the DP ‘*n paar*’ as a modifier indicating the lower limit [cf. (9)].

- (9) Ich hab ‘**n paar** fünfzig Seiten gelesen.  
*I read approximately but not less than fifty pages.*

Under the analysis in (2), this is unexpected because ‘*n paar*’ is not a preposition but a DP. But the analysis in (3) predicts this because DPs can function as adverbials in German as well [cf. (10)].

- (10) Du musst **die nächste Kreuzung** abbiegen.  
*You must turn off the next crossroads.*

So whereas (10) contains a VP-internal DP-modifier, (9) contains a DP-internal DP-modifier. This parallelism is only captured by the analysis in (3) because it relies on the notion of modification, and not on the shape of the modifier.

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**Gertjan POSTMA** (Meertens Institute Amsterdam)

### The compositional nature of paucal number: Numerals in Dutch Paucal Constructions

In the literature, paucal morphological *forms*, e.g. the various nominal inflectional forms in Sursurunga (1), cf. Hutchisson (1986), and paucal syntactic *constructions* (as illustrated with the Russian (2)) are distinguished (Pesetsky 2009). In the former, special morphological forms carry the meaning of a paucal. In the latter, a specific “paucal” configuration only combines with certain low numerals: in Russian NUM+A.pl+Nsg only combines with the low cardinals (2-4). Corbett (2000) only calls the former paucal, discarding the latter in a note (op. cit.: 22). However, as paucal morphological constructions are often grammaticalized forms of specific (paucal) constructions with numerals (for instance the dual form the number two, the trial and the paucal from the number 3, and the plural from the number 4 (Corbett, op cit 21), it might be worth while to analyze paucal *constructions* in more detail, and see by what means these interact with semantic number. Pesetsky (2009) provides an analysis of a specific syntactic construction that is tied to a paucal reading, cf. (3a). In this paper we will study three thus far unnoticed paucal constructions in Dutch and confront these with Pesetsky’s proposal.

As a starting point we take the Portuguese inflectional form *uns*, i.e. one+plural ‘a few’ as a basis of the paucal. Apparently, the combination of a singular morpheme (+sg) combined with the plural smorpheme (+pl) gives rise to a paucal interpretation. In his study of Russian constructions, Pesetsky proposes the combination of a singular head + NUM which is remerged to a plural construction. Though there is a combination of singularity and plurality, the remerge does not do the job. We take that is not so much the remerger of the singular head that is relevant, but more the morphological incorporation in a complex plural head, that is the basis of paucality, as in (3b).

In this talk we present new data from a specific Dutch construction with a paucal reading. It concerns the construction in (5): a dummy *al* ‘all’+ numeral that selects a definite DP. This construction typically combines with low numbers (1-4). The counterpart without the definite article is typically used with higher numerals (above 20). The intermediate range (5-19) realizes the definite article optionally, with a slight difference in meaning (countability versus collectivity). We will analyze *alle* in the paucal construction (1-4) as surface form of underlying *al+de*, in which *de* is a remerged D from the lower DP. The spellout as *de* or  $\emptyset$  in the lower position is dependent on whether the DELETE part of the movement operation can be executed. If it forms a metrical foot with the numeral, it cannot be deleted (Nunes 2004, Schoorlemmer 2009). In this case, the merger of D+Num creates the context of paucal interpretation, according to (4). In the final part we will confront other Dutch paucal constructions, such as *wij tweeën* we.two.OBL/*wij drieën* ‘we three.OBL’/\**wij vijfen* ‘we five.OBL’/\**wij achten* ‘we eight.OBL’ and the dual construction *wij tweetjes* ‘we two.DIM/*wijdrietjes* ‘we three.DIM’/\**wij viertjes* ‘we four.DIM’/etc to a similar analysis.

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## WORKSHOP

### Theoretical and experimental approaches to the procedural and conceptual meaning of tense, aspect and connectives

#### *Convenors*

**C. Grisot, J. Blochowiak and J. Moeschler** (University of Geneva)

#### *Description*

The conceptual/procedural distinction was introduced in Relevance Theory by Blakemore (1987) to explain the differences between content words and discourse connectives. The main arguments were that content words encode concepts that contribute to the proposition expressed by an utterance while the meaning of a discourse connective is better described in terms of constraints on the inferential phase of interpretation, as for instance within the Gricean notion of conventional implicature (Wilson and Sperber 1993). In a different semantic framework, procedural information has been explored as argumentative instructions for discourse connectives, however without a clear connection to a theory of pragmatic inferences (Ducrot et al. 1980). In another framework, discourse markers signal cognitive discourse relations (Sanders et al. 1992, 1993) and guide the hearer in the interpretation process, therefore facilitating the processing of the text following them (Sanders and Noordman 2000; Sanders 2005).

Numerous studies aim at defining conceptual and procedural distinction and at proposing qualitative discriminating features for the two types of content. The first attempts to define and characterize conceptual vs. procedural information include qualitative features such as *representational* vs. *computational* and *non-cancellable* vs. *cancellable*. One very significant contribution to the discussion is Sperber and Wilson's (1993, reprinted in Wilson and Sperber 2012) hypothesis of cognitive foundations of the distinction. They characterise conceptual vs. procedural information in terms such as *accessibility to consciousness* vs. *inaccessible to consciousness* (Wilson and Sperber 1993; Wilson 2011). These features of conceptual and procedural information find their roots, on the one hand, in the parallel that has been made between natural language and the 'language of thought' and, on the other hand, in the 'massive modularity hypothesis' (Sperber 2005; Carruthers 2006). De Saussure (2011) proposes a methodological criterion to distinguish between what is conceptual and what is procedural. In his words, an expression is procedural if it triggers specific inferences that cannot be predicted on the basis of a conceptual core to which general pragmatic inferences (loosening and narrowing) are applied. Escandell-Vidal and Leonetti (2011) propose *rigidity* as the major feature of procedural information. Their hypothesis is that conceptual information is flexible while procedural information is rigid. Curco (2011) argues that procedures are *context-insensitive*, *categorical*, *arbitrary* and *language-specific*. Moeschler et al. (2012) suggest that another feature of conceptual vs. procedural information is *easily translatable* vs. *translatable with difficulty*. Their suggestion is based on the assumption that conceptual information encoded by linguistic expressions is linked to conceptual representations, which are constituents of language of thought. As language of thought exists beyond specific languages, this should facilitate the translation from one language to another.

The description of conceptual and procedural information in these terms is without any doubt accurate and reflecting the linguistic and cognitive reality of language users. There are however two important limitations of the existent studies. The first is that they are purely theoretical and have not been tested experimentally. One of the very few exceptions is Zufferey (2014), who brought evidence from online (self-paced reading tasks) and offline (acceptability judgments tasks) experimentation that communication of given information is part of the procedural instructions conveyed by some connectives like the French *puisque*. The second limitation is that existing studies make use uniquely of qualitative features and lack quantitative and objective measures. One recent suggestion is Grisot and Moeschler (2014), who propose to use the Kappa statistical coefficient (Carletta 1996; Artstein and Poesio 2008) for measuring the inter-annotator agreement rate in experiments with linguistic judgment tasks. Their hypothesis is that, based on the existent qualitative features, judging conceptual information results in high rates of inter-annotator agreement whereas judging procedural information results in low rates of inter-annotator agreement (also Cartoni et al. 2013 for connectives in a cross-linguistic perspective).

One crucial question that arises and which can be answered only through experimental studies (on-line techniques such as ERP and eye-tracking) regards the brain's processing of linguistic expressions encoding procedural and/or conceptual information, as well as the types of inferences involved. Specifically, at this moment, we have no knowledge if these two types of information involve two different cognitive processes or the same cognitive process but different types of inferences. Conceptual information (assumed as easily accessible to consciousness) is expected to be processed faster than procedural information (assumed as inaccessible to consciousness). However, procedural information is described as facilitating the hearer's task by constraining the possible contextual assumptions and therefore, sentences containing procedural information are processed faster than sentences without it.

In this workshop, we would like therefore to bring together researchers interested in the conceptual/procedural distinction and who aim at investigating it from theoretical and empirical (corpus work, L1 and L2 acquisition, grammaticalization, on-line and offline experimentation) complementary perspectives. We suggest the following research questions:

1. What is the relation between conceptual and procedural information and which are the consequences and predictions of their theoretical descriptions in terms of cognitive processing?
2. If procedural meaning is language-specific, which are the constraints imposed by the semantics of particular languages? Are there other constraints (i.e. nonlanguage specific) on procedural information? Are there procedural universals?
3. What are the means that natural languages use when linguistic elements (tense, connectives, aspects) are not available (for example, encoding of temporal information in tenseless languages), and what is the impact of these strategies on cognitive processing?

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### Connectives: concepts, procedures or both?

There is an ongoing debate on what kind of meaning can be assigned to connectives.

Grice initially proposed to analyse the meaning of connectives in terms of conventional implicatures (Grice 1989), which boils down to the conceptual vision of connectives in Relevance Theory terms (cf. Wilson & Sperber 2012: 158). According to Grice in uttering a sentence with the connective ‘so’, the speaker performs a speech act of explaining (1).

- (1) a. It's raining so the grass is wet.

b. Conventional Implicature: The rain *explains* the wetness of the ground.

In the Relevance Theory development of Grice's thought, connectives are seen as having rather procedural meaning (Blakemore 1987, 2001). For instance, in Blakemore's approach the connective 'so' does not carry a concept of *explanation* but it rather encodes a procedure which indicates the second segment as a *conclusion* for the first one being an assumption (2).

- (2)     a. It's raining so the grass is wet.
- b. Procedural information: Treat 'The grass wet' as *conclusion* of 'It's raining'.

The aim of this contribution is to investigate the third option, i.e. the view that connectives have both conceptual and procedural meaning (see also Moeschler 2002, 2006, 2015). The model proposed here will explain in a uniformed framework the similarities and differences between synonymous uses of cognate connectives such as 'so' and 'because' (3).

- (3)     a. It's raining so the grass is wet.
- b. The grass is wet because it's raining.

The hypothesis is that connectives do have some minimal conceptual meaning which is restricted to the properties of relations they convey. As it will be demonstrated, both 'so' and 'because' serve to express pragmatically tuned reasonings. However, the conceptual difference between the two is that 'because' requires asymmetry while 'so' does not (cf. Blochowiak 2014). Regarding the procedural meaning of connectives, it corresponds to non-monotonic reasoning based on conceptual rules reflecting speaker's encyclopaedic knowledge about regularities in which the conceptual meaning imposes some constraints on its premises.

The crucial point of the analysis is to show (i) that the conceptual rules tacitly invoked as premises may have different logical forms (conditional or biconditional) as well as different linguistic status (semantic vs. pragmatic) and (ii) how they are used in the inferences with 'so' and 'because' (mainly via deductive, abductive and inductive operations).

The presented analysis can be extended to other connectives as it has the power to explain in a comprehensive framework different domains of uses of connectives in natural language (for instance, different domains of use as defined by Sweetser (1990)) as well as some well known puzzles related to the use of 'and' (for instance Horn's example and the puzzle of juxtaposed sentences (Carston 2002)).

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#### **Procedurality of TAME markers and connectives: not a unified picture.**

A common presupposed assumption about procedural markers, that is, linguistic items that do not (primarily) represent concepts but activate cognitive procedures (inferential routines) (cf. Blakemore 1987, 2007 ; Escandell-Vidal & al. 2011 *inter alia*), is that they delineate a border between classes of expressions that is also identifiable otherwise, through grammatical or functional criteria. Some works suggest that the

class of procedural expressions is the same as that of grammatical morphemes, or that linguistic expressions can be both procedural and conceptual (Moeschler 1998, 2002). Since Wilson & Sperber (1993), it is usually assumed that procedural expressions being not representational, their meaning is uneasy to explain or grasp and is particularly difficult to translate. De Saussure (2011) suggests that if the possible meanings of an expression cannot be predicted on the basis of a conceptual base together with general paths of inference, then only a specific procedure of inference has to be the case, hence the expression is procedural. Connectives as a class are the typical procedural expressions for the reason that they lead the hearer not to raise a representation but to perform something with representations (connecting P and Q in some specific way). However some connectives such as “because” seem easy to grasp intuitively and to translate as a concept (indicating causality in some basic sense).

Similarly, tenses do not encode a conceptual meaning such as ‘pastness’, ‘presentness’ or ‘futurity’, nor such as ‘punctuality’ or other aspectual properties of the eventuality, but rather instruct about the specific placement of coordinates (cf. Reichenbach 1947) onto the line of time. For this reason, the literature often considers them (primarily) procedural (for example Moeschler 1998, de Saussure 2003, 2011). Modal verbs on their side are also potentially coherent with this line of reasoning, for they demand to operate a modification of the way a proposition, which is under their semantic scope, is envisaged ; if so, one may suggest that they too encode a procedure. Yet at the same time modal verbs are clearly conceptual as they do encode semantic notions which are easy to grasp abstractly, such as possibility and necessity, and which suffice to explain, together with general paths of inference, all the modal meanings these verbs can gain in context.

In this talk, we will review several cases and hopefully suggest that procedurality does not strictly map onto linguistic classes and that it has rather to do with ways to handle information at the pragmatic level and in particular with how we disambiguate propositional and discursive contents.

Our data is provided by natural language utterances and we will refer to recent experimental work on French modal verbs in order to discuss, on the theoretical level, their polysemy (see Barbet 2013) ; our conclusion is that modal verbs are not procedural whereas tenses are, even when they ultimately lead to a modal or evidential meaning (for example with epistemic futures or with the French present perfect used to refer to a future state of affairs).

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**Jacqueline EVERS-VERMEUL and Ted SANDERS (UiL OTS, Utrecht University)**

### **Validating categories of causal connectives: Converging evidence from corpus-based research and experiments**

Several theories make an inventory of the kind of relations found in different types of discourse. Rhetorical Structure Theory (Mann & Thompson 1988; Taboada & Mann 2006) is among the most influential ones. Sanders and colleagues argue in favor of a cognitive approach to coherence (Sanders et al. 1992, 1993; Sanders & Spooren 2009): if coherence relations are part of the cognitive representation that a reader makes of a text, they should have a cognitive status.

In this paper we address the cognitive validation of three categories that are frequently used to describe causal connectives and coherence relations: Sweetser's (1990) domains of use:

- 1) content – describing real-world causal relations;
- 2) epistemic – describing argument-conclusion relations;
- 3) speech act – giving arguments for performing a speech act.

Our research question is:

How can results from corpus-based and experimental studies inform us about the categorization of causal connectives and coherence relations?

The general idea behind this approach is that different orders in the acquisition of specific domains and differences in the processing of these domains are windows on the cognitive categories that people use when producing causally related utterances.

We review evidence from corpus-based and experimental studies on the production and comprehension of connectives, focusing on positive causal relations in four languages: Dutch, English, German, and Chinese. First, we discuss results on connective acquisition by 2- to 4-year-olds (Evers-Vermeul & Sanders 2009, 2011; van Veen et al. 2014), using converging methodologies to investigate when children discover the three domains in the use of causal connectives. Second, we present experimental findings on the processing of causal coherence relations by adults (Canestrelli et al. 2013; Li 2014).

Experiments in which children had to describe causally related events, argue with, and instruct a hand puppet, revealed that even three-year-olds can produce causal connectives in all three domains. Longitudinal corpus-based studies show that children as young as 2;8 are able to produce causal connectives in the content and the speech-act domain, but that the epistemic domain is acquired later. This can be explained from children's development of a Theory of Mind. Furthermore, growth curve analyses in which children's language use is related to parental input reveal that context plays a crucial role in the production of domain types.

The processing results indicate that subjective epistemic relations take longer to process than objective content relations, probably because reasoning requires readers to set up and compare opinions in alternative mental spaces. A comparison of Dutch, English and Chinese data reveals that the 'processing instructions' provided by individual connectives, and especially their degree of specificity in terms of subjectivity plays an important role.

Our approach of using converging methodologies proves fruitful: corpus-based data show us children's earliest spontaneous use and enable us to track longitudinal developments; experiments enable us to control for context effects.

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**Cristina GRISOT** (University of Geneva)

### **The conceptual/procedural distinction: empirical perspectives and quantitative measures**

Since its proposal (Blakemore 1987) the conceptual/procedural distinction became a central issue in linguistic research, mainly at the semantics-pragmatics interface. Until recent years, researchers working

with this distinction agreed on some issues, such as: procedural information guides the interpretation process, linguistic expressions encode either procedural or conceptual information (for example, connectives and verbal tenses encode procedural information), as well as the numerous qualitative features identified for conceptual and procedural information (Blakemore 1987, 2001; Wilson and Sperber 1993; Nicolle 1998; Saussure 2003, 2011; Saussure and Morency 2012; Améños-Pons 2011 to name but a few). However, in the last few years, researchers renewed their interest in this distinction by searching empirical basis for the existent theoretical assumptions. Empirical evidence comes from corpus work in a cross-linguistic perspective, experimentation with online and offline tasks, diachrony and language acquisition (Zufferey 2012, 2014; Cartoni et al. 2013; Grisot and Moeschler 2014; Canestrelli et al. 2013). Due to this empirically oriented investigation, researches argue nowadays that linguistic expressions can encode both conceptual and procedural information, that procedural information constrains (i.e. disregards other possible interpretative paths) the interpretative process and that diachronically speaking, a linguistic expression can develop from fully conceptual to fully procedural (Wilson 2011; Blochowiak 2014). In this talk, I make two proposals.

Firstly, quantitative measures are needed, next to the existent qualitative features, to have a better and more objective understanding of the conceptual/procedural distinction and its application to linguistic expressions, such as connectives and verbal tenses among others. I suggest two quantitative measures: the Cohen Kappa coefficient measuring inter-annotator agreement (Carletta 1996, Artstein and Poesio 2008) and the quantity of cross-linguistic variation calculated in translation corpora.

The results of experiments with linguistic judgment tasks performed by two or more native speakers can be evaluated with the Kappa coefficient. It has values from 0 meaning lack of agreement other than expected to occur by chance to 1 signaling perfect agreement. Conceptual information results in consistent inter-annotator agreement and high Kappa values (linked by the notion of accessibility to consciousness for native speakers of an easily graspable intuitive concept) while procedural information results in inconsistent inter-annotator agreement and low Kappa values (procedural calculus depends on non-guaranteed pragmatic inferences). As for the second measure, conceptual information triggers little cross-linguistic variation while procedural information is source of important variation.

Secondly, I will argue and give concrete examples from corpus and experimental work, that verbal tenses encode both conceptual and procedural information. Specifically, I suggest that past ( $E < S$ ) vs. non-past distinction ( $E \geq R = S$ ) is of a conceptual nature. In an experiment, speakers identified with easiness instances of verbal tense expressing reference to past time (the preterit) and instances of a verbal tense expressing reference to non-past via  $R = S$  (the present perfect) with a Kappa value of 1. Moreover, when translated into three romance languages, the English preterit is translated in 87% of the cases through verbal tenses expressing past time and only in 5% of the cases though verbal tenses expressing non-past.

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**With or without procedural encoding: what is different?**

Relevance Theory claims the main function of procedural meaning is to guide the interpretative process (Blakemore 1987), and as a result, to reduce its cognitive load. The cognitive effects resulting in following procedural instructions is to balance the addition of linguistic items. In this respect, the communicative principle of relevance triggers the relevance heuristics: “follow a path of least effort” (Wilson & Sperber 2004). Conversely, the achievement of relevance is dependent on specific cognitive effects launched by procedural meaning. Relevance Theory predicts that these positive effects are either the addition of new information, the strengthening or the suppression of old information (Wilson & Sperber 1986).

This paper questions the difference in achieving relevance between discourse segments with and without procedural markers, as discourse connectives. (1) contrast with (2), but produce the same cognitive effects (3) and (4):

- (1) a. Abi pushed Axel. He fell.  
b. Axel fell. Abi pushed him.
- (2) a. Abi pushed Axel and he fell.  
b. Axel fell because Abi pushed him.
- (3) The event ABI PUSHED AXEL temporally precedes the event AXEL FELL
- (4) The event ABI PUSHED AXEL causes the event AXEL FELL

A fine-grained analysis of the role played by procedural information in the interpretation process will be proposed, to go beyond the current picture where procedural markers make discourse interpretation easier and provides as a result one of the three cognitive effects. Two claims are made.

1. It is assumed that connectives represent additional information explaining the difference between the treatment of a single vs. two discourse segments (Carston 2002). Another assumption is that connectives are complementary to conceptual information encoded in lexical items like ‘push’ and ‘fall’, which triggers a causal ‘push-fall’ rule (Lascarides & Asher 1993). I argue that connectives are more than additional and complementary information. My assumption is that connectives constrain the interpretative process, i.e. limit the interpretation process by disregarding unintended possible interpretations, and are predicted to occur when no sufficient clues are given to ensure the intended interpretation. When, connectives are redundant with conceptual information (2), their main function is the strengthening of contextual effects that could have been achieved without them.

2. The second claim is that these contextual effects are not *language* specific but rather *discourse marker* specific, i.e. they arise in the presence of discourse markers and there is no perfect cross-linguistic correspondence among them (Zufferey & Cartoni 2012). Moreover, their cognitive effects can be ranged into different types of inferential meaning. One challenge is to define the locus of semantic and pragmatic layers meanings between close connectives. In causal connectives like ‘parce que’ (‘because’), ‘donc’ (‘so’) and ‘et’ (‘and’), the differences do not lie in their causal meaning but in their semantic and pragmatic locus, like entailment, explicature, implicature (Moeschler 2015). As an example, the causal meaning is an

explicature (not defeasible) with ‘parce que’, and an implicature (defeasible) with ‘et’ and ‘donc’, whereas the set of entailments are not identical: P and Q for ‘parce que’ and ‘et’, only P for ‘donc’.

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#### Accessing procedural meaning: the impact of cross-linguistic differences and similarities for learners' ability to understand connectives and definite descriptions

Cross-linguistic studies of have demonstrated that while few one-to-one mappings can be established in the case of procedural expressions such as connectives (Pit, 2007; Zufferey & Cartoni, 2012), other procedural expressions like definite determiners seem to lend themselves to such mappings. On the one hand, differences between connectives occur at the levels of meaning, syntax and register. Because of these cross-linguistic differences, discourse connectives are a particularly difficult class of linguistic items to master for foreign language learners (e.g. Crewe, 1990; Müller, 2005). On the other hand, definite determiners across typologically close languages like German and English appear to call for identical processes in order to uniquely identify a referent (Ionin et al., 2012).

In theoretical descriptions of procedural meaning, one of the recurrent features discussed is the difficulty of consciously accessing it (Sperber & Wilson, 1993; Wilson, 2011). In this presentation, we will explore the consequences of this feature for the way procedural meaning develops in the mental lexicon of L2 learners. First, we will compare learners' ability to understand connectives in two types of tasks: on the one hand offline judgment tasks allowing participants to consciously reflect about their meaning, and on the other hand online reading experiments using self-paced reading and eye-tracking. We will focus on two cases of cross-linguistic differences: (1) connectives that are used with a broader semantic meaning in learners' L1 compared to their L2; (2) connectives with a meaning in L2 that is not lexicalized in L1. We will demonstrate that learners do implicitly integrate the procedural meaning of connectives in L2 during reading, even when it differs from L1 uses. In striking contrast, they have a poor ability to consciously evaluate the meaning of connectives in offline tasks (Zufferey et al, 2015). We conclude that learners' difficulties in offline tasks provide strong empirical grounds substantiating the claim that procedural meaning is not easily accessible to consciousness, and that learners' miscomprehension of connectives in these tasks is due to negative L1 transfer. With the second set of data, using a perspective-matching design (see Keysar et al. 1998), we will show that reference assignment for definite descriptions proves to be more difficult in L2 than in typologically similar L1 despite the possibility for positive transfer. In this case, we argue that the processing of procedural expressions in L2 is hampered - for both accuracy and response time - by the cognitive pressure imposed on the pragmatic disambiguation of reference in learners' interpretation (Foster-Cohen, 2004; Bugayong & Maillat, 2014). We conclude that both negative transfer effects and cognitive overload play an important role for learners' difficulties with procedural meaning in a foreign language.

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