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Book of Abstracts

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Invited speakers

Artemis Alexiadou

The syntax of nominalization revisited

Leibniz-Zentrums Allgemeine Sprachwissenschaft & Humboldt-Universität zu Berlin

In this talk, I will discuss two issues within syntactic approaches to nominalization, focusing on Grimshaw's (1990) complex event nominals (CENs), that are currently controversially discussed. The first one concerns the question of whether the derivation of CENs is phrasal as opposed to involving complex head formation. The second one concerns the question of whether CENs may have the same transitive structure found in the verbal domain as opposed to being intransitive. Approaching these issues will shed light on the nature of nominalization process itself, the operations that may create complex objects in the syntax more generally and the cross-linguistic variation found in this domain.

Alberto Hijazo-Gascón

Motion events and conceptual transfer in a second language

Universidad de Zaragoza

Motion is a crucial conceptual domain. We all describe how we and other entities move, but languages may differ in how they encode semantic components in motion events. According to Talmy's (1991) semantic typology, verb-framed languages, e.g. Spanish, tend to encode the semantic component of Path (including the direction and trajectory of the movement) in the main verb of the event: Sale corriendo 's/he exits running'. Satellite-framed languages, however, tend to encode Path out of the main verb, in a so-called "satellite": She runs out, with a more frequent inclusion of the Manner component in the main verb. Slobin (1996) shows how these typological differences impact other areas, such as discourse, and the speakers' rhetorical style. Motion has been identified as one of the areas that are very likely to be a source of conceptual transfer in the acquisition of a new language (Jarvis and Pavlenko 2008). Some aspects of motion seem particularly challenging for learners, even for advanced students (Cadierno 2017). For example, in Spanish as a second language, the use of deictic verbs (venir 'come' and traer 'bring') or caused motion events (meter 'put in', dejar 'put on', etc.) (Hijazo-Gascón 2021). Previous studies show how explicit instruction of the semantic contrasts between the students' L1 and L2 are beneficial to the acquisition of the target language and prevent negative transfer. Working with these contrasts through mediation activities can be particularly interesting, as they would also foster the development of students' plurilingual competence.

Andrea Pešková

Intonation acquisition in L2: Patterns, insights, and challenges

Freie Universität Berlin

There is a certain paradox in the acquisition of intonation in a second language (L2): while some scholars claim that intonation is very difficult, if not impossible, for L2 adult speakers to acquire, anecdotal evidence suggests that it is a feature of language we can pick up rapidly when learning a new language or dialect. This apparent contradiction raises the question of which features of L2 intonation are learned and which are not, and why this is the case. In this talk, I will explore the patterns of intonation in L2 prosody, highlighting both the insights gained from recent research and the challenges encountered by learners. Through empirical data collected from learners of various Romance languages (L2), I will show how L1 influences prosodic features in L2, affecting learners' ability to produce intonation accurately. The findings will shed light on the implications for language instruction and offer strategies to enhance teaching methodologies. Additionally, I will discuss future research directions in understanding L2 intonation, aiming to connect theoretical insights with practical applications in language learning.

Presentations

(in alphabetical order according to the last name of the first author)

Genericity, pluractionality, restrictors and indefinites in Czech: two experiments ^aPetr Biskup, ^bMojmír Dočekal, ^cThomas Kissel, ^dAnna Woideová

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Introduction. Despite its long research history, the nature of generic statements still lacks an empirically adequate theory that accounts for the interaction of genericity with other scope operators. We present new experimental data from Czech, showing that generic sentences containing a predicate with the habitual/generic *-va-* interact with indefinite NPs differently than pluractional sentences with iterative morphology. Our findings have consequences for theories of genericity in Slavic languages (Filip and Carlson (1997), Filip (2017), Biskup (2024)) and in general (Krifka et al. (1995), Ferreira (2016), Van Geenhoven (2001), Van Geenhoven (2004)). Theories of genericity either derive it from iterativity (Ferreira (2016) a.o.) or argue that it is a separate operator (Filip and Carlson (1997)). It has been argued (Kuhn and Aristodemo (2017)) that pluractionals can only have a narrow scope with respect to plain indefinite objects. Our research question is: do generic sentences (with *-va-*) allow wide scope interpretations of genericity operator with respect to indefinite objects?

Experiments. The first experiment studied the interaction between generic and pluractional sentences with indefinite NPs. Participants judged the acceptability of sentences with indefinite NPs in contexts strongly favoring the narrow scope of the indefinite (see table below) using a 7-point Likert scale (7=best, 1=worst). There were 3 conditions (PERF, PLUR, GEN): baseline (1) with a semelfactive verb and a universal quantifier over times, pluractional (2a) with iterative morphology, and generic (2b) with the generic morpheme *-va-*. There were 9 experimental items (1x3 conditions) and 9 fillers. 118 participants took part in the first experiment (online in L-Rex). In a follow-up study (experiment 2), we tested the influence of the presence of the restrictor (following Boneh and Doron (2013)) as the factor improving the acceptability of genericity with indefinites (in English: *Mary smokes a cigarette {< after dinner/#}*). Experiment 2 had three conditions, two of which were the same as in experiment 1 ((1) and (2-b)), plus a third one with an explicit restrictor, as in (3). For the sake of space, we focus on experiment 1.

(1)	Petr každý den chyt-nu-l jednu ryb	1.	(3)	Petr po ránu	
	Petr every day catch-SEM-3SG one fish			Petr on morning	
	'Petr caught one fish every day.'			chyt-á-va-l	jednu rybu.
(2)	Petr {a.chyt-a-l/b.chyt-á-va-l} je	dnu rybu.		catch-á-GEN-3s	G one fish
	Petr catch-ITER.3SG/catch-á-GEN-3SG or	ne fish		'Peter caught one	e fish in the morn-
	'Peter caught one fish (repeatedly)/(regular	cly).'		ing.'	

Results and discussion. 98 participants passed the fillers. We analyzed the results using a Bayesian hierarchical model (R Core Team (2024), Goodrich et al. (2023)) with one independent variable (verb with conditions PERF, PLUR, GEN) and random intercepts for participants and items (GEN was the reference level). The differences between the baseline and the other two conditions are credibly different (see Figure 1): PERF was 3.5 points better than GEN, Bayes factor (BF) in favor of the existence of the difference: 4.71e+21 (extreme evidence); PLUR was 0.8 points worse than GEN, BF: 366 (also extreme evidence). The experimental results show that generic sentences with -va- can have a wide scope with respect to indefinites. In contrast, pluractional sentences with only the iterative suffix are much less likely to do so. We interpret this finding as: the marker -va- is a generic operator that can be formalized as a modalized universal quantifier (operator in the sense of Kuhn and Aristodemo (2017); modalized UQ after Greenberg (2007)) - see formalization (4), while the iterative morphology is a pluractional filter (in the sense of Kuhn and Aristodemo (2017)) which restricts the denotation to plural set of (catching) events but doesn't sum events like universal quantifiers, see (5). We conclude that generic sentences with the suffix -va contain an operator distinct from the iterative operator/filter (at least in languages with an overt generic marker). The level of acceptability of genericity with indefinites is positively influenced by the presence of a restrictor, as indicated by the results of experiment 2 (see Figure 2).

Keywords: genericity, pluractionality, indefinites, experimental semantics, Czech

Day	Fish
Monday	Salmon
Tuesday	Trout
Wednesday	Carp
Thursday	Catfish
Friday	Tuna
Saturday	Mackerel
Sunday	Bass

- (4) $\forall w'[w'Rw_0 \rightarrow \forall t[day^{Xday}(t) \rightarrow \exists y[fish(y) \land \#fish = 1 \land catch(t, Peter, y, w'))]]]$
- (5) $\llbracket VP \rrbracket =^* \lambda t' \exists y [fish(y) \land \# fish = 1 \land catch(t', y)] \land \# t' > 1$



Figure 1: Results of the experiment 1



Figure 2: Results of the experiment 2

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(Extra)syllabic consonants in Czech: An experimental study

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Background. Like vowels, syllabic consonants form sonority peaks that project syllable nuclei (Rubach and Booij 1992; Selkirk 1984; Zec 1995). Cross-linguistically, the most common syllabic consonants are liquids (Bell 1978), which always have non-syllabic counterparts within a given language. Non-syllabic liquids (L) do not constitute sonority peaks and are instead syllabified as onsets. In addition to nuclear L and onset L, there are also extrasyllabic L, which form sonority peaks but do not occupy nuclear positions (Rubach and Booij 1992; Scheer 2008). Extrasyllabic L thus exhibit phonological characteristics of both syllabic L (by forming sonority peaks) and onset L (by not functioning as nuclei).

Aim. If extrasyllabic L constitute a distinct phonological category, an open question is whether this distinction is also reflected in phonetics. Given the three-way classification (syllabic L – extrasyllabic L – onset L), we hypothesize that the phonetic differences between syllabic and onset liquids will be more pronounced than the differences between either of these categories and extrasyllabic L. We test this hypothesis on Czech, a language in which all three categories are attested: onset L ([r]á.na 'wound', [1]á.va 'lava'; v[r]a.ta 'gate', h[1]a.va 'head'), word-initial extrasyllabic L ([r]va.la '(she) tore', [1]ha.la '(she) lied'), and syllabic L (v[r].hat 'to throw', h[1].tat 'to gulp').

Experiment. To test our hypothesis, we conducted a production experiment with 15 native Czech speakers. We compiled a dataset of 50 items, each representing one of the three phonological types of L. Each item was read twice by each speaker, yielding a total of 1 500 recorded tokens. The recordings were processed using the Praat software (Boersma and Weenink 2022). Building on existing phonetic analyses of different phonological types of L in Czech (Hůrková and Hlaváč 1981; Šimáčková 2004; Machač 2017); Machač and Zíková 2020) and in other languages, including Slovak (Pouplier and Beňuš 2009), English (Toft 2002), and Tashlhiyt (Fougeron and Ridouane 2008), we examine the following phonetic properties of onset, extrasyllabic, and syllabic L: (i) duration and formant values (for both Ls), (ii) intensity (for the lateral), (iii) number of voice pulses in the trill and duration of vocalic elements (for the trill).

Results: duration. Figure 1 summarises the duration data. Our mixed effects model predicting log-transformed durations showed that while extrasyllabic and syllabic L did not differ between each other ($\beta = -0.022$, SE = 0.05, df = 28.12, t = -0.44, p = 0.664), they differed significantly from onset L ($\beta = -0.098$, SE = 0.02, df = 26.52, t = -4.26, p < 0.001***). This indicates that when a lateral forms a sonority peak, its duration is longer than when it occurs in onset. This supports the Strict CV model (Scheer 2008), which posits that extrasyllabic and syllabic sonorants span two skeletal slots, whereas their non-syllabic counterparts are linked to a single skeletal position within onsets.

Keywords: syllabic liquid; extrasyllabic liquid; Czech; production experiment



Figure 1: Mean duration of liquids by word type with their associated SEs

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Anglophones' and Francophones' Acquisition of the Indicative-Subjunctive Distinction

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Several works have dealt with the difficulty of the indicative-subjunctive distinction when acquiring Spanish as a second or foreign language (E2L) (Collentine 2010, 2014, a.m.o.). The acquisition of mood distinctions involves several areas of linguistics such as morphophonology, semantics and pragmatics. To approach the acquisition of interface phenomena, several authors have resorted to concepts of complexity and computational costs, assuming that language processing becomes more complex as the necessary connections between the different modules of grammar become more complex (Sorace, 2004; Serratrice, 2005; Borgonovo et al., 2006; Montrul, 2004). When acquiring modal distinctions, learners must not only acquire the morphology, but also the treatment of subordinate clauses (syntactic processing), and simultaneously process in their working memory the complex syntax and the semantic/pragmatic relations that exist between the main clause and the subordinate clause. Indeed, the results of Masery and Fuentes (2014) and Iverson et al (2008) reveal that learners, even at advanced stages of acquisition, are less successful in epistemic contexts (based on categories of knowledge) where syntax and discourse intersect (syntax-pragmatic interface) and where a predicate X of the principal accepts a Y or Z mode in the subordinate (1). In fact, this is contrary to the deontic modality (based on categories of norm, necessity and/or obligation) which is essentially syntactic where a predicate X of the principal requires a mode Y in the subordinate (2).

(1)	a. Pedro	no	cree	que	Juan	se ha ido	/	se haya ido
	Pedro	no	believe	that	Juan	left (IND)	/	left (SUBJ)
	Pedro does r	not belie	ve that J	uan has	left (Ind	icative) / has lef	ft (Subju	nctive)

b. Es necesario que vengas is necessary that come (2SG.SUBJ) It is necessary for you to come

We work within the framework of generative formal linguistics. For the purposes of our study, 47 predicates were selected. We constructed a scale representing a continuum of the degree of the speaker's commitment to the truth value of subordinate complement propositions where said commitment is either total, partial or absent. In this scale, we included the factive/non-factive distinction presented by Kiparsky et al (1970); the assertion/presupposition distinction of Hooper and Terrell (1974); the assertion/presupposition distinction of Givon (1994); and the ordering source of evaluation contexts of Giorgi and Pianessi (1997).

155 learners completed a three-task test that measured their Spanish proficiency level and their ability to choose the right mood in subordinate complement clauses. Namely, 73 Anglophone learners (12 intermediate, 37 advanced-intermediate and 24 advanced) and 82 Francophone learners (19 intermediate, 44 advanced-intermediate and 19 advanced). Their scores were compared to those of a control group of 26 native speakers.

The data was analyzed using SPSS software. We used MANOVA (Multivariate Analysis of Variance) tests in a two-factor analysis of variance to check if the L1 and language level, or the L1 interacting with the level had a significant effect on the variables studied, i.e. the predicates governing either the indicative or the subjunctive. Post Hoc mean comparisons with Sheffe corrections were made because not all samples were the same size. The samples were checked for normality using the kurtosis test.

There were no correlations between the learners' native language and their acquisition of mood selection, even though the semantic and pragmatic information is expressed by different morphological and syntactic means in French and English. However, there is a positive correlation with their level of Spanish. Our results also show that the degree of difficulty of acquisition of the epistemic predicates increases when they are in the intermediate zone of a continuum of the degree of the speaker's commitment, an area whose extent is difficult to seize by the learner.

Keywords: Spanish Subjunctive; Acquisition; Interfaces

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The role of predictability in reanalysis of garden-path sentences

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Research question: Surprisal of the disambiguating region (DR) cannot successfully predict the processing slow-down in garden-path sentences (GPs) (Huang et al. 2024), suggesting that factors beyond simple unpredictability of the current word influence the disambiguation difficulty. For example, frequency and plausibility of the initial misanalysis of the ambiguous region (AR) were shown to influence both reaction times (RTs) and the response accuracy (RA) (Trueswell et al. 1994, Qian et al. 2018). We assume that GPs will be more difficult to process when: a) the initial misanalysis is more frequent and more predictable, and b) the correct analysis is less frequent and less predictable, since both play a crucial role in reanalysis.

Method: We collected RTs and RA for a wide range of Czech GPs (11 types with 6 items each, all sentences were matched for length but differed in their syntactic structure and/or semantic properties of the misanalysis/correct analysis) in an online self-paced reading experiment (n=295). The question always targeted the initial misanalysis. We used 4 measures of frequency/predictability: a) a cloze task (n=115), where we calculated the proportion of responses consistent with the initial misanalysis and the correct analysis for each GPs; b) surprisal, where we used the CzeGPT-2 model to calculate the surprisal values of the AR in the GP condition (representing the misanalysis), the AR in the non-GP condition (representing the correct analysis), and the DR; c) absolute frequency, calculated as the number of occurrences of a subcategorization frame of a specific verb consistent with the initial misanalysis and the correct analysis using Intercorp v16ud; d) relative frequency, calculated from the absolute frequency data as a proportion of occurrences consistent with the initial misanalysis in relation to all the occurrences of the specific verb lemma.

Results & analysis: We documented clear differences in RTs and RA between the gp and non-gp condition for all sentence types, with clear differences in effect sizes. In order to establish the best predictor for RA, we ran 9 separate glmer models with the measures mentioned above as predictors (see Fig. 1 for the model predictions), and then compared the models with AIC. We then repeated the process for RTs on the DR and spillover region. There was a significant interaction (p<0.05) between ambiguity and cloze scores for misanalysis and correct analysis for both RA and RTs on the spillover region. The cloze task scores were also the best predictors for both RA and RTs according to AIC, followed by surprisal. Models based on the correct analysis generally outperformed models based on the misanalysis.

Discussion: Our results suggest that the difficulty of the GP cannot be explained by the surprisal of the disambiguating region alone, because comprehenders also need to reassess the ambiguous region at this point – they need to inhibit the initial misanalysis and look for the correct one. When the correct analysis is unpredictable, it is more difficult to be discovered and maintained, leading to higher RTs and lower RA. On the other hand, predictable and frequent misanalyses are more difficult to abandon, causing an opposite effect.



Fig.1: Model predictions for response accuracy. Cloze Cor = cloze task results for correct analysis, Cloze Mis = cloze task results for misanalysis; Fabs Cor = absolute frequency of correct analysis, Fabs Mis = absolute frequency of misanalysis, Frel Cor = relative frequency of correct analysis, Frel Mis = relative frequency of misanalysis; Surprisal Ambig = surprisal of the ambiguous region in the gp condition (consistent with the misanalysis), Surprisal Cor = surprisal of the ambiguous region in the non-gp condition (consistent with the correct analysis), Surprisal Disambig = surprisal of the disambiguating region. * = p < 0.05, *** = p < 0.001

Keywords: sentence processing, garden-path sentences, reanalysis, surprisal, frequency

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Trubetzkoy's phonostylistics as another kind of indexicality: Notes on the history of functional linguistics and phonology

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Contemporary variationist studies in linguistics, especially when conceived within a, broadly speaking, sociolinguistic framework often resort to the term *indexicality*. The conceptual content of such term, however, is also very broad, and it encompasses, or at least heavily relates to, the notions of register and style (Moore 2020, and also the works of e.g. Eckert 2019). The use of the term indexicality, at least in U.S. linguistics, is tightly linked to a Peircean semiotic framework as introduced first by R. Jakobson and later developed by M. Silverstein (importantly, this paper is not concerned with *indexicality* in the sense of Jakobson's *shifters*, or, in the sense of *deixis*). Nevertheless, the concept as such, under a different heading, can be also found in a foundational work of structural-functional linguistics, namely the Grundzüge der Phonologie of N. Trubetzkoy. In Trubetzkoy (1939, 17 ff.) there is a distinction between phonology and phonostylistics (Lautstilistik) based on the different functions performed by the sounds of speech: phonostylistics being concerned with the expressive function (Kungdabefunktion) of speech sounds; to wit, everything in the sounds that serves to characterize an individual speaker. The recognition of such function was certainly not the merit of Trubetzkoy, but the delimitation of the object of phonology, and of linguistics, by means of recognizing such function did constitute an important step for structural-functional linguistics in all the very different ways it was developed, from Saussure to the Prague Linguistic Circle.

This presentation will then look at what were the consequences, in structural linguistics after Trubetzkoy, of drawing such distinction between different functions of sounds and of conceiving the study of phonology as the set of features, of sounds, that fulfill a representative, or communicative, function (Darstellungfunktion). The impact of this distinction will be explored in the works of three French-speaking linguists (of different nationalities): André Martinet, Éric Buyssens and Luis Prieto. The first French translation of Trubetzkoy, by J. Cantineau, appeared in 1949. Even though all the three mentioned linguists read Trubetzkov directly in German, the importance of the French translation lies in matters of terminology: Trubetzkoy spoke of the expressive function as including "symptoms" (Symptome) or "marks" (Merkmale) which were rendered in French, precisely, as indices (Trubetzkoy 1970 [1949], 16, 18, 29). This lead French speaking linguists, at least the ones with which this paper deal, to explore the notion of *indice* (which could be translated as 'indication', not 'index') and to build a typology of them that could, eventually, inform phonology and, above all, a functional semiotics (properly a sémiologie, in the Saussurean sense of the word). The analysis of the reception of Trubetzkov in these linguists will show that structural-functional linguistics, and its corresponding theory of signs, operated with a notion of indexicality that was epistemologically different from the Peircean one, yet still useful for variationist, and sociolinguistically oriented, studies, mainly in three respects: (i) the relationships between phonetics and phonology (under the guise of *parole* and *langue*); (ii) the emergence of socio-cultural linguistic norms; and (iii) an explicit link between phonological and semiotic explanations of language's sound patterns.

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Reading Tiramisu in Czech and English: Robust Processing Speed Differences in Translation Equivalent Stimuli

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Background: Crosslinguistic studies on sentence comprehension using carefully matched translation-equivalent stimuli are rare in contemporary psycholinguistics. A recent study (Chromý et al. 2023) revealed intriguing differences in agreement attraction effects between Czech and English. Upon closer examination, however, another interesting pattern emerged: native English readers processed individual words significantly faster in their language than Czech readers did in theirs. The present study aimed to further investigate this phenomenon.

Method: We created 70 pairs of translation-equivalent sentences (Table 1), matched in length in words between Czech and English. These sentences included words that have identical graphical forms in both languages (e.g., tiramisu or Robert). While some of these words were declinable in Czech, meaning they exhibited distinctive inflectional paradigms with varying endings for different cases, others were indeclinable, retaining the same form regardless of case. Native speakers of Czech (N=176) and English (N=176) read these sentences, along with 48 fillers, in a self-paced reading task using a moving-window presentation. After each sentence, participants answered a yes-no comprehension question. Reaction times (RTs) for individual words served as the dependent variable, while the independent variables were language, word length (in characters), and declinability in Czech.

Results: A linear mixed-effects model with language and word length as fixed effects, and participant and item as random effects, revealed significant effects for both factors and their interaction (Figure 1). Specifically, (i) English words were processed more quickly than Czech words, (ii) longer words took more time to process, and (iii) the effect of word length was more pronounced for Czech. In a model focusing on identical words across the two languages, we found a main effect of language (English was faster) and an interaction between language and declinability (declinable words were processed more slowly in Czech than indeclinable ones; Figure 2).

Discussion: The results show robust differences in RTs between English and Czech. We argue that these differences are driven by the greater morphological complexity (i.e. efficiency) of Czech compared to English (Sadeniemi et al. 2008), which increases the cognitive load (i.e., prior) on Czech speakers even when processing identical words.

Table 1: Item example.

Moje	teta	obvykle	pije	Bordeaux	a	další	francouzská	vína.
My	aunt	usually	drinks	Bordeaux	and	other	French	wines.

Figure 1: Predicted RTs from the linear mixed-effects model targeting the effects of language and word length.



Figure 2: Predicted RTs from the linear mixed-effects model targeting the effects of language and declinability in Czech.



Keywords: language processing; comprehension; crosslinguistic differences; reading

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Punctuated movement facilitates (multi-)clausal pied-piping in Albanian

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Introduction: I analyze configurations in Albanian involving dramatic clausal displacement. All data is from fieldwork with a native speaker of the little-analyzed Gheg dialect of Albanian, spoken in and around Kosovo. Albanian constitutes a distinct branch of the Indo-European family, and like many languages in this group, it has *wh*-movement. In Albanian, *wh*-movement from an embedded clause can extract just the *wh*-phrase (1a), or the entire embedded CP that contains it (1b):

- (1) 'What does Fortesa think that Qendresa stole?'
 - a. Qka₁ po kuiton Fortesa [(se) Qendresa ka vjedh t₁]?
 What thinks Fortesa that Qendresa has stolen
 - b. [**Qka**₁ (se) **Qendresa ka vjedh** t_1]₂ po kuiton Fortesa t_2 ? what that Qendresa has stolen thinks Fortesa

I argue that this pied-piping is fed by successive-cyclic movement through/to the edge of the embedded CP—something expected if CPs are *phases* (Chomsky 2000, 2001, a.o.). I show that this analysis also correctly predicts massive multi-clausal pied-piping in Albanian.

Data: In Albanian, clausal pied-piping is possible with all *wh*-phrases and for all forms of A-bar movement. Though word order in Albanian is flexible (Joseph 2018), by default it is SVO. In clausal pied-piping examples like (1b), the object moves to the front of the displaced embedded clause. Fronting the embedded clause without moving the *wh*-phrase to its edge is unacceptable (2):

(2) [(√Qvar torte) se Fortesa e don (*qvar torte)] ti kuiton?
(What cake) that Fortesa like (what cake) you think?
'What cake do you think Fortesa would like?'

Strikingly, when there are two embedded CPs, it is possible to pied-pipe the lowest CP to the front of the intermediate CP, and then pied-pipe them together to the edge of the first:

(3) $[_{CP3} [_{CP2} [_{CP1} Qfar torte osht e mir]_1 fmit kan me than <math>t_1]_2$ po kuiton Fortesa $t_2]$? Which cake is good kids will say thinks Fortesa 'Which cake does fortes think that the kids will say is good?'

Analysis: If CP is a phase, *wh*-extraction from an embedded clause as in (1a) must involve movement to the specifier of the embedded clause before movement into the main clause. I propose that after such intermediate movement to the embedded clause's specifier, in Albanian it is possible to instead pied-pipe the entire embedded clause with the *wh*-phrase to the specifier of the main clause, as we saw in (1b), schematized in (4):

(4) $[_{CP1} [_{CP2} WH C ... t_{WH}] C ... t_{CP2}]$

Since this clausal pied-piping is fed by movement of the *wh*-phrase to the specifier of the pied-piped CP, the *wh*-phrase must be initial within that CP (2). See Arregi (2003) for similar phenomena in Basque, and Heck (2009) for analogous (non-clausal) pied-piping patterns in other languages.

Importantly, we can derive examples like (3) by recursively performing the same operations: the *wh*-phrase moves to the specifier of the lowest CP, then pied-pipes that CP to the edge of the intermediate one, and finally pied-pipes both of those lower CPs to the edge of the main clause. **Extensions**: I go on to show that this analysis naturally explains a variety of related word order possibilities in Albanian. I also address the cross-linguistic variation in clausal pied-piping, which is attested in languages like Albanian and Basque, but is banned in many others.

Keywords: syntax, movement, successive-cyclicity, pied-piping, Albanian

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Motion construal in Kaqchikel

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From a cognitive linguistics perspective, meaning incorporates both conceptual content and a particular way of construing that content (Langacker, 2008). Due to Leonard Talmy's (1975, 1985, 1991, 2000) intriguing proposal that languages fall into two types , S(atellite)-framed languages and V(erb)-framed languages, with respect to how they encode directed and manner of motion the conceptual domain of motion events has received much more attention than almost any other type of event attention. The classification has been expanded by (Slobin 2004b: 249; see also Slobin & Hoiting 1994, Zlatev & Yangklang 2004) and now E(quipollently)-framed languages which encompass languages in which path and manner are expressed by equivalent grammatical forms, for instance by means of serial verb constructions in which one verb encodes manner and another one or more that encode path. Further, recent typological research has shown that that associated motion is a grammatical category whereby motion is expressed by verbal affixes, particles or auxiliaries. In languages having the grammatical category of associated motion associated motion is neatly distinguished from purposive motion.

This paper will explore motion events in Kaqchikel, a Mayan language of the K'ichean branch spoken in the Western highlands of Guatemala in the vein of this research. Kaqchikel is a S(atellite)-framed language whereby directionals consistently express Path information except for two verbs meaning 'come' / 'arrive' that have conflated direction in the verb. Manner by contrast, is, to a limited extent expressed by the motion verb itself (*b'iyin* 'walk', *anin* 'run', *xik'an* 'fly', *muxan* 'swim') or, more frequently as an adjunct clause in the incompletive aspect preceding the motion verb.

 Nib'uq'ub'ut 	xb'iyin.
n-ǿ -b'uq'ub'ut	x-ǿ-b'iyin
IPFV-3SG.ABS-bent.over	PFv-3SG.ABS-walk
'He/she walked bent over.'	

Kaqchikel does not have verb compounding (or serial verbs?) except for complex predicates involving associated motion which can be distinguished from purposive motion.

(2) Xojb'ewa'

x-oj-b'e-wa' CPL-1PL.ABS-go-eat 'We went to eat.'

(3) xeb'eruk'ama'

x-e-b'e-ru-k'am-a CPL-3PL.ABS-go-3SG.ERG-bring-?

'He/she went to bring them.'

Associated motion in Kaqchikel does not fit into the category of associated motion but has a dedicated equipollent construction whereby associated motion and the main verb are expressed by means of a verbal compound (or serial verb).

Kaqchikel is hence a S(atellite)-framed language with respect to the expression of path and It an E(quipollently)-framed language with respect to the expression of associated motion.

The data presented in this talk stem from conversations I have had with native speakers and stories that I have been told. In order to get a complete picture of the phenomenon I have also elicited data.

Keywords: Mayan languages, directional particles; S(atellite)-framed languages; E(quipollently)framed languages, associated motion

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The effects of Complex PPs on Manner of the Motion verbs: the case of Basque approximative and terminative

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Basque is a verb-framed language (Ibarretxe-Antuñano 2004; Slobin 2006), in which location or movement is encoded by the main verb, and manner is expressed by a peripheral adverb (Talmy 2000). This adverb is marked by the pluractional/modal suffix *-ka* (Berro 2015). The present study has a dual purpose. First, I argue that Manner of the Motion verbs (e.g. *ibili* 'walk', *dantzatu* 'dance') fail to license bare Goal PPs, whereas their path reading is fulfilled when a scale or a boundary is introduced.

- (1) a. Sare *hondartza-ra / hondartza-ra-ntz / hondartza-ra-ino ibili da ordu bete-z.
 Sare beach-ALL / beach-ALL-SCAL / beach-ALL-TERM walk is hour full-INS
 'Sare walked *to / towards / up to the beach for an hour'
 - b. Sare hondartza-**ra** / hondartza-**ra arte** joan da. Sare beach-ALL / beach-ALL-SCAL / beach-ALL-TERM go is 'Sare went *to / towards / up to the beach.'

As shown in (1a) a Manner of the Motion verb does not permit monotransitional Goal PPs lexicalized by the allative *-ra* 'to', whereas Path verbs as *joan* 'go' permit them (1b). Predicates such as *ibili* 'walk' (1a), *dantzatu* 'dance' are never telic and limited to non-finite events (Levin & Rappaport 2013), therefore, incompatible with completed transitions.

In stark contrast, approximative Complex PPs are morphologically composed forms (*-ra* allative + *antz* scalar suffix) and denote an ongoing event, not a completed transition. In the same vein, terminative PPs, *-raino* and *-ra arte* (the latter having extended from temporal to spatial readings in Western varieties), also allow non-finite interpretations, since they are used to denote the endpoint of a durative event, licensing iterative readings. This unrestriction has been associated with Scale and Bound forming more complex structures than Goals (Pantcheva 2011; Romeu 2014). Basque data supports previous evidence from Romance languages (Romeu 2014 for Spanish, *bailar *a/hacia la puerta* 'dance to/towards the door'; Sarda 2019 for French, *marcher *à/vers/jusqu'à la plage* 'walk to/towards/up to the beach'; Real-Puigdollers 2024 for Catalan, *ballar *a/fins a la porta* 'dance to/up to the door').

While Manner of the Motion verbs can occur when a boundary-crossing takes place (2a), they are typically replaced by Path verbs, with manner being expressed peripherally (2b), consistent with what the boundary-crossing constraint (Slobin & Hoiting 1994) predicts for V-framed languages.

- (2) a. Amaia etxe *barne-**ra** / barne-**ra-ntz** / barne-**ra-ino** ibili da ordu bete-z. Amaia house inside-ALL / inside-ALL-SCAL / inside-ALL-TERM walk is hour full-INS 'Amaia walked inside / towards inside / up to inside the house'
 - b. Amaia etxe barne-ra / barne-raino **sartu** da **oin-(e)z** / **korri-ka**. Amaia house inside-ALL / inside-ALL-TERM enter is foot-INS / run-KA 'Amaia has entered inside the house on foot / running.'

Second, I point that only Place PPs (3a) and Goal PPs suffixed by a 'hither-tither' cumulative/scalar suffix -ka (3b) license for iterative readings, where placement changes but locative relation is permanent (\hat{a} la Aurnague 2011).

- (3) a. Jon baso-**an** ibili da ordu bete-z eta beste ordu bete-z ibili-ko da. Jon forest-INE walk is hour full-INS and another hour full-INS walk-FUT is 'Jon walked in the forest for an hour and will walk for another hour.'
 - b. Jon ha-ra-hon-a-**ka** ibili da urte bete-z / *urte bete-an. Jon there-ALL-here-ALL-KA walk is year full-INS / year full-INE 'Jon wandered back and forth for a year / *in a year.'

In sum, Basque Manner of the Motion verbs block a Path reading with bare Goal PPs. However, adding a scalar, cumulative, or delimiting suffix enables the PP to express a Path in non-finite environments. Taken together, Basque data suggest that for a Path reading with Manner of the Motion verbs, the PP cannot denote a completed transition.

Keywords: Manner of the Motion, Basque adpositions, Path, Telicity.

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Neural speech tracking in a multilingual cocktail party: Does language identity matter?

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What enables listeners to selectively attend to and comprehend a single talker in a multitalker environment? Research suggests that the brain tracks most robustly and accurately the attended speech stream (target) while attenuating its tracking of the other, unattended, speech streams (maskers; Kaufman & Golumbic, 2023). The robustness and accuracy of neural speech tracking can be measured with the EEG (electroencephalography) as the brain's oscillatory activity that aligns with the attended speech stream.

The aim of this study is to examine whether language similarity and its familiarity to the listener influence the accuracy of neural speech tracking in a multilingual cocktail party environment. We consider the two types of masking proposed in the literature: (1) acoustic masking, which occurs when the acoustic properties of the attended and unattended speech streams overlap, and (2) informational masking, which arises when the messages conveyed by the attended and unattended streams interfere. Acoustic masking should be stronger when the target and masker are identical or similar languages. Informational masking should be stronger when both the target and masker languages are familiar to the listener and reduced when the masker language is unfamiliar.

The premise is that the brain will track the attended speech stream more robustly than the unattended speech stream. The hypothesis addressing acoustic masking is that the more dissimilar the masker language is from the target language, the better is the tracking of the target speech. The hypothesis addressing information masking is that tracking of the target will be better in cases of unfamiliar masker. To test these hypotheses, we employ various language combinations Czech (L1, target and masker), English (proficient L2, target or masker), and Dutch (unfamiliar to listeners, masker); see Table 1. Note that English and Dutch were selected because they are rhythmical very similar (i.e. have same status of acoustic masking, White et al., 2012) but differ information-wise (familiar vs. unfamiliar to listeners).

The materials are 25-s podcast clips, narrated by male speakers. Participants (intended n = 40) are young, normal-hearing adults, native speakers of Czech with good proficiency in English (self-rated as B2 or better, according to the CEFR). Before the experiment, participants' L2 proficiency is assessed using LEXtale (Lemhöfer & Broersma, 2012). During the experiment, participants listen dichotically to two different podcasts and will be instructed to focus their attention only on one. Each participant will be exposed to four different language combinations (Table 1). EEG will be recorded throughout the experiment. MATLAB and its mTRF toolbox (Crosse et al., 2016) will be used to fit the temporal response function (TRF), a linear model that describes how stimulus features influence the neural response.

We predict that the L1 target will be tracked more robustly when the masker is a foreign language compared to when the masker is L1 (stronger acoustic and informational masking). In a masker environment of L2 (English), participants with lower L2 proficiency, experiencing less informational masking, should track their L1 more effectively than those with higher L2 proficiency. If L1 is the masker, neural tracking of target will be more robust if target is an L2 (less informational masking) than

if target is an L1 (more informational masking). Data collection is ongoing; results will be presented at the conference.

Keywords: neural speech tracking, cocktail party phenomenon, bilingualism, EEG

Target Language	Masker Language	Masker Type
Czech (L1)	Czech (L1)	Acoustic and informational
Czech (L1)	English (L2)	Informational (proficiency depending)
Czech (L1)	Dutch (Unknown)	None
English (L2)	Czech (L1)	Informational (proficiency depending)

TABLE 1. Language Combinations in the Experiment

Notes: Each participant will listen to these podcast pairs in a different order, with the target ear also counterbalanced across participants.

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Deictic motion inflection in Idi (Papua New Guinea, Pahoturi River family): Analysis of primary data and some implications from a typological point of view

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Background: Verbs in the Pahoturi River language Idi spoken in Papua New Guinea (see Evans et al. 2018) inflect for deictic motion, encoding a distinction between ventive motion (directed towards the deictic centre) and other types of motion (e.g. ventive *yitræmiu* 'bring here' vs. neutral *yetrameo* 'carry somewhere'). What is remarkable in comparison to other languages is the combination of an ego-centred frame of reference with a rather rigid location of the deictic centre (cf. Levinson 1996, Levinson & Wilkins 2006). In narratives, the deictic centre is standardly not shifted away from the narrator's location (the origo O), even when that location has no relevance to the story. For example, if a protagonist moves between two locations A and B, deictic inflection regularly reflects the orientation of the vector from A to B relative to the vector from A to O. We call this property **rigidity of the origo**.

Another respect in which Idi differs from English and other SAE languages is that a ventive form does not imply that the deictic centre is reached. In this respect Idi seems to behave like the Australian language Mparntwe Arrente as described by Wilkins & Hill (1995): if "[t]he motion path is anchored at place A and at place B", and "[i]t is a straight path oriented towards B, but also oriented towards the Deictic Center", "Mparntwe Arrente Speakers would insist on using the COME expression for this scene" (Wilkins & Hill 1995, 217/218). In such configurations (cf. (1)), Idi also uses the ventive form. In English and other European languages, a COME-verb cannot normally be used in such contexts without a shift of the origo (cf. (2)). Configurations of the type in (1) will be called **atelic ventive allatives**.

(1) 0	B ←	А	(possible in Idi with ventive inflection, not possible with English come)
(2) O	0'←	А	(possible with English come: shift of the deictic centre)

One of the conclusions made by Wilkins & Hill (1995) is that they challenge the universality of a COME vs. GO opposition, and that "languages vary at the lexical semantic level as to what is entailed by these expressions, as well as differing as to what constitutes the prototype and categorial structure for such expressions" (Wilkins & Hill 1995, 247).

While Wilkins & Hill (1995) focus on the semantics and pragmatics of the verbs themselves, we investigate the location of the deictic centre serving as the basis of the use of deictic inflection. In a first step, we study the empirical facts, addressing RQ1:

RQ1 What location constitutes the origo, under what conditions, for the interpretation of deictic motion inflection in Idi, and how rigid is the choice of a location?

Approach, methods and data: The following primary data was gathered in fieldwork:

• unguided narratives

- elicitation using visual stimuli (Ishibashi et al. 2006)
- narratives based on a story-telling task (San Roque et al. 2012)
- storyboards (Vuillermet 2013)
- cloze experiments

Results: Our results, based on a variety of methods, show that speakers tend to not shift the deictic centre as long as the orientation of a path can be identified relative to the physical origo. In the absence of such a relationship, the deictic centre seems to shift to the primary centre of empathy, e.g. the main protagonist, often the storyteller. Data from our storytelling task moreover suggest that the "home base" (Fillmore 1971) plays a prominent role in the use of deictic inflection.

Based on our results for motion inflection in Idi we will address the more general RQ2:

RQ2 Is there a general connection between a **rigid origo** and **atelic ventive allatives** across languages?

While not being able to address RQ2 systematically, we will present some preliminary evidence based on the hypothesis that the existence of atelic ventive allatives is a precondition for rigid origos. Atelic ventive allatives allow the speaker to maintain the deictic centre and still be precise in locating motion in space. Moreover, we hypothesize that languages like Idi use other means of indicating (a)telicity in motion. In the case of Idi, telicity is encoded in the verb itself.

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Immediate Recall, Later Word Recognition, and Information Congruency in Reading and Listening Comprehension

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Background: Recent studies [1,2] have documented systematic differences in the extent to what readers recall certain types of information immediately after reading a sentence. For example, information conveyed by direct objects tends to be recalled significantly better than information conveyed by temporal or locative adjuncts. This can be interpreted as a selective attention process [3]. The present study examines immediate recall of information conveyed by agents and locative adjuncts in Czech (Loc) and how it is influenced by adjunct congruency [4,5]. Moreover, in two of our experiments, later word recognition is examined [5].

Method: First, predictability of Loc in combination with 57 transitive verbs was normed (N=115 Czech speakers). 24 of these combinations were then used for creating stimuli for further experiments. Four reading experiments were conducted using a self-paced reading paradigm with whole sentences appearing at once for experiments 1 and 5 and with sentences presented word-by-word for experiments 2 and 6. Once the sentence disappeared, an open-ended question was shown targeting either the agent (Who did it?), or the Loc (Where did it happen?). Additionally, experiments 5 and 6 were followed by a later word recognition task including a set of 48 agents and 48 Loc, half of which appeared in the experimental sentences and half was absent from them. Then, two listening experiments were conducted. The first one used stimuli audio-recorded by native speakers of Czech with flat intonation. For the second experiment, stimuli generated by an artificial intelligence were used. The open-ended questions were visually presented, and participants responded by typing. All experiments use the same 24 experimental items and 72 fillers and manipulate word order, information targeted by the comprehension question and Loc congruency (see Table 1).

Result: Fig. 1 shows the differences in recall accuracy between the conditions in all experiments. The nested logit mixed-effects model showed a general recall difference for listening experiments (but not for the reading ones): agents were recalled better than Loc. Moreover, the model yielded a significant effect of congruency for Loc recall in all experiments and for agent recall in experiment 1. Effect of position for agents was found in experiments 2 and 6: better recognition was observed for medial position. Results of the later word recognition task are illustrated in Fig. 2. A congruency effect was observed only for words that did not appear in the reading task. A question effect was found for both words from experimental items (Loc recognized more accurately) and words absent from the stimuli (agents recognized more accurately). Overall, participants demonstrated better recognition of words absent from the experimental stimuli compared to words present in them.

Discussion: Overall, the present experiments demonstrated a systematic advantage of congruent Loc in the immediate recall task. No congruency effect was found in the later word recognition task. In line with prior findings on Czech reading data [1,2], experiments involving spoken materials showed a tendency for better immediate recall of core information in sentences compared to accessory information. However, this effect was not replicated in reading.

Word order	Congruency	Sentence
ltvso	yes	V obchodě v neděli koupila Klára hrozně hezký pruhovaný tričko.
ltvso	no	V parku v neděli koupila Klára hrozně hezký pruhovaný tričko.
stvlo	yes	Klára v neděli koupila v obchodě hrozně hezký pruhovaný tričko.
stvlo	no	Klára v neděli koupila v parku hrozně hezký pruhovaný tričko.

Table 1: Item example. Word order values: Itvso = locative adjunct - temporal adjunct - verb - subject - object; stvlo = subject - temporal adjunct - verb - locative adjunct - object. Sentences have the same meaning and only differ in their word order and locative adjunct congruency: "Klára bought a really nice striped T-shirt in the store/in the park on Sunday."



Keywords: sentence processing; comprehension; memory; recall; retrieval

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Genericity as extenuation for PSIs under bare NPs: An experiment on Czech ^aRhiana Horovská and ^bMojmír Dočekal

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Background. Current theories of PSI (Polarity-Sensitive Items) licensing (Gajewski (2011), Chierchia (2013)) consider Negative Polarity Items (NPIs) unlicensed when in affirmative episodic statements. However, in generic sentences, NPIs are expected to be grammatical. It has been experimentally shown (for English: Gajewski and Hsieh (2014), Gajewski (2016); for Czech: Dočekal and Juřen (2023)) that the number of the head NP affects PSI licensing in definite NPs. Kadmon and Landman (1993) (K&L) point out the relation between genericity and free-choice *any* under indefinite NPs. However, the effect on potential indefinite licensors for PSIs has not been tested. To this end, we constructed an experiment testing the number of the head NP and the genericity/episodicity of the verb as factors in PSI licensing in Czech. We asked if speakers recognize generic statements as a boost for the acceptability of sentences with a weak PSI in the scope of an indefinite NP.

Experiment. We conducted an experiment in PCIbex on anonymous native speakers of Czech. The stimuli were all sentences with the PSI *sebemenší* ("the slightest"). We employed a 2×2 factorial design, controlling for number (sg/pl on the subject and predicate) and genericity (generic: the adverb *většinou* – "mostly" + habitual *-av-* morpheme in the predicate × episodic: the adverb *právě* – "just" + perfective predicate). Filler sentences were used as well. The participants rated the acceptability of the stimuli on a 1 (unacceptable) to 5 (acceptable) scale. We predicted that genericity would increase the acceptability as opposed to episodicity and that plural generic items would be rated higher than singular ones.

(1)a. Jasnovidky /c.Jasnovidka se (2)b.Jasnovidky /d.Jasnovidka se clairvoyant.F.PL /SG with clairvoyant.F.PL /SG with sebemenší známkou nadání většinou sebemenší známkou nadání právě slightest.INS hint.INS talent.GEN mostly slightest.INS hint.INS talent.GEN just vídávají/vídává smutnou budoucnost. uvidělv/uviděla smutnou budoucnost. see.HAB.3PL/3SG sad.ACC future.ACC see.PF.PST.3PL/3SG sad.ACC future.ACC 'Clairvoyants/A clairvoyant with the slight-'Clairvoyants/A clairvoyant with the slightest hint of talent see/-s a sad future most of est hint of talent have/-s just seen a sad futhe times.' ture.'

Results and discussion. The data were analyzed in a linear mixed model with sum contrast coding. Besides the fixed effects of number and genericity/episodicity, we included the random effects of participant and item and random slopes. The effect of the interaction between the fixed effects is: β , = 0.17, SE = 0.06, t = 2.85, $p < 0.01^*$; no other significant effects were detected. A control experiment showed that the results differ if no PSI is present. Genericity seems to improve the acceptability, but only in plural sentences. The distribution of data points is quite broad in each condition, and the effects of the variables are barely significant, so claims about genericity and plurality strengthening PSI licensors are tentative. We follow Gajewski's (2011) theory of weak PSI licensing: unlike strong NPIs, weak NPIs check their environment's downward entailing (DE) properties and ignore all non-at-issue components of meaning. The meaning of (1) is given in (3-a), where we follow the formalization of genericity from Greenberg (2007). The PSIs are in the scope of universally quantified $clairvoyant^{Xclairvoyant}(x)$; such an environment is anti-additive in its at-issue meaning, thus predicted to license weak PSIs. Our results (the interaction in Fig. 2) show that such licensing is possible only in generic sentences with plural subjects in Czech (unlike in English). We hypothesize that the cross-linguistic non-alignment follows from the Slavic languages' preference (see Mueller-Reichau (2015) for Russian) for token denotation of singular indefinite subjects in non-episodic sentences. The singular subject in (1) is interpreted existentially (unlike in (3-a)), the universal quantification runs over the time argument, and the resulting interpretation is habitual - (3-b). Consequently, the PSIs are not licensed in such an environment.

Keywords: NPI, polarity sensitive items, genericity, linguistic experiment, Czech



But the second s

Figure 1: A bar plot of the conditions' ratings (with SEs). Left to right: pl episodic, pl generic, sg ep., sg gen.



(3) a. $\forall w'[w'Rw_0 \to \forall x[\text{clairvoyant}^{Xclairvoyant}(x) \to \text{see a sad future}(x, w'))]]$ b. $\forall w'[w'Rw_0 \to \exists x[clairvoyant(x) \land \forall t^{Xt} \to \text{see a sad future}(x, t, w'))]]]$

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Corroborating corpus data with elicited introspection data: A case study

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While popular, corpora come with disadvantages: They are *finite* samples of language (Hoffmann 2019: 17), whereas language is by definition *infinite* (Chomsky 1965: 6). This leads to the negative data problem ("just because a phenomenon cannot be found in a corpus, it cannot be concluded that it is ungrammatical" (Hoffmann 2011: 1)) and the **positive data problem** ("just because a construction appears in a corpus it does not automatically follow that it is grammatical" (Hoffmann 2011: 1)). I show how to corroborate findings from corpus studies with the Magnitude Estimation¹ (ME) method (Bard et al. 1996; Cowart 1997: 73-84, Hoffmann 2011, Hoffmann 2013), which features relative judgments as well as grammatical and ungrammatical fillers. I show this by example of *that*-complementizers in the English Comparative Correlative (CC) construction. The CC consists of two subclauses, C1 and C2 ([The more we get together]_{C1}, [the happier we'll be]_{C2}). That-complementizers are optional in C1 and have been claimed to be possible in C2 (2) in "colloquial registers" (den Dikken 2005: 402; see also Hoffmann 2019: 47). That-complementizers play an important role in debates about the syntactic relationship between C1 and C2. Proponents of a hypotactic analysis (e.g. den Dikken 2005; Borsley 2004) use that complementizers as proof of the subordinate status of C1. In corpus data, however, *that*-complementizers are extremely infrequent: In their 2,041-token BNC data set of comparative correlatives, Hoffmann et al. (2020) found just 29 C1 that-complementizers and two in C2. Any claims based on such sparse corpus evidence are therefore subject to the negative/positive data problems.

To address this issue, I collected grammaticality acceptability judgments from 37 L1 American English speakers and normalized them as *z*-scores. I used pen-and-paper questionnaires with 24 items, of which eight were test items. I tested all four possible conditions with *that* in C1 and C2, so that there were two test items per condition. Of the remaining 16 fillers/distracters, eight were grammatical and eight were ungrammatical, featuring word order and subject-verb agreement violations. The items were taken from corpus data and adjusted in length. A Latin squares design was employed, generating four material sets, so that each test item could be tested without any participant ever seeing the same sentence twice. Each material set was filled out by at least nine participants.

The data were tested for significance using mixed-effects models testing random intercepts and random slopes. Fig. 1 presents the results, including grammatical and ungrammatical filler means (error bars indicate standard errors). It shows the *z*-score means obtained for *that*-complementizers across C1 and C2, indicating that the presence of *that*-complementizers in C1 did not change participants' ratings significantly (this was confirmed by mixed-effects modeling). This suggests that they can indeed be considered acceptable in Present-day English. In contrast *that*-complementizers in C2 were rated significantly worse than the alternative. This could be explained by their restriction to colloquial speech (although the underlying reasons - i.e., register - have not been conclusively investigated yet). On a final note, my results show that *that*-complementizers in C2 can be considered acceptable, as well, since their *z*-score mean is much closer to the grammatical than the ungrammatical filler mean, with implications for

¹ As pointed out by an anonymous reviewer, the ME method has recently been critically scrutinized (e.g. Weskott and Fanselow 2011). However, others suggest that ME yields reliable results akin to other methods. Verhagen et al., for example, arrive at the conclusion that "ratings expressed on a Magnitude Estimation scale did not differ systematically from the ratings expressed on a Likert scale" (Verhagen et al. 2020: 61–62). Furthermore, in my own experience with conducting numerous ME, participants understood the procedure very quickly and did not report any notable challenges in understanding and applying the method.

analyses of the English CC as a hypotactic construction: If *that*-complementizers were indeed markers of subordination (cf. e.g. Borsley (2004) and den Dikken (2005)), *that* in C2 should have been clearly rated as closer to the ungrammatical filler mean, which under a hypotactic analysis functions as main clause.



Figure 1: Z-scores of that-complementizers across C1 and C2, n=37

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The Interplay of Manner and Place of Articulation in the Reduction of Voiceless Plateau Clusters in Greek Child Speech

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AIM OF THE STUDY: This study investigates the reduction (simplification) patterns of voiceless [STOP₁ STOP₂] plateau sonority clusters, specifically [pt] and [kt], in Greek child speech. It aims to identify the factors that drive cluster reduction toward either C_1 or C_2 .

In Standard Modern Greek (SMG), clusters of voiceless stops are considered of equal sonority, according to the language-specific sonority hierarchy proposed by Kappa (1995):

(1) $|STOP_{[-voice]}| < FRICATIVE_{[-voice]} < FRICATIVE_{[+voice]} < s < z < NASAL < LIQUID < GLIDE < VOWEL$

less sonorous

more sonorous

NOTE: The voiced STOPS [b], [d], [g] are derived from underlying /Np/, Nt/ /Nk/, respectively (e.g. Arvaniti and Jospeh 2000; Kappa1995, a. o.)

In this study, we investigate naturalistic speech data produced by eight (8) typically developing children acquiring Greek as first language (ages: 2;04.16–2;11.25, 4 boys (B) and 4 girls (G)). The participants are in the intermediate developmental phase; marked segments such as fricatives have emerged in their phonological systems. All children exhibit consistent patterns in the realization of target OBSTRUENT clusters. The following two observations are central:

- (i) The voiceless reversed sonority clusters [FRICATIVE₁STOP₂] (/ft/, /xt/, /st/, /sp/, sk/) and $[s_1FRICATIVE_2]$ (/sf/, /sx/) are reduced consistently (100%) to the less sonorous segment: STOP₂ and FRICATIVE₂, respectively.
- (ii) The voiced plateau sonority clusters consisting of [+cont] [FRIC₁ FRIC₂], such as [vð, yð, vγ], are reduced consistently (100%) to the segment with the more marked PLACE OF ARTICULATION (PoA), i.e. DORSAL [γ] or LABIAL [v]. This follows the *relative markedness hierarchy ranking* of POA features, DORSAL > LABIAL > CORONAL, in children's phonological grammars (Kappa 2024).

ANALYSIS: Reduction of [-continuant] voiceless plateau sonority clusters

Data in (2) and (3) demonstrate that all children fail to produce faithfully the target [-cont.] voiceless plateau clusters in either word-initial/stressed positions, i.e. in perceptually strong ones or word-internally. These clusters are reduced (ratio 100%) in all cases.

	Target (adult-like)	Child's output	Gloss	#Child [Age]
(2)	-cont [C _{1-Lab} C _{2-Co}	$_{\rm R}] \rightarrow {\rm C}_{2-{\rm CORONAL}}$		
	[pt]	\rightarrow [t]		#001B[2;05.01], #020G, #021G [2;11.19]
	a. eli'ko pt ero	eli'ko t elo	'helicopter	,
	b. ana pt iras	' t ila	'lighter'	
(3)	$-cont[C_{1-DOR}C_{2-COR}]$	$] \rightarrow C_{2-CORONAL}$		
	[kt]	\rightarrow [t]		#028B[2;04.21], #037G[2;11.01]
	a. kt i'niatros	t i'niato	'vet'	
	b. tra' kt er	ta' t e	'tractor'	

The above pattern shows that *sonority* does not account for the reduction of the clusters in (2) and (3), as C₁ and C₂ are of equal sonority. Moreover, *positional faithfulness* (Beckman 1998), which prioritizes preservation of segments in perceptually strong positions (word-initial or stressed syllables), also fails to explain the data. At first glance, one might posit that *contiguity* (van der Pas 2004) drives the reduction, as in Hebrew child speech, where initial segments in [STOP₁ STOP₂] clusters are deleted, e.g., /k₁t₂a'na/ \rightarrow [t₂a'na] 'small'; /p₁k₂ak/ \rightarrow [k₂ak] 'cork' (see Bloch 2011, 50). However, this is not the case in Greek. We argue instead that in the reduction of the target [-cont.] plateau sonority clusters [pt] and [kt], children systematically preserve the segment with the more harmonic PoA, namely, the unmarked CORONAL [t].

THEORETICAL IMPLICATIONS

This study builds on and extends the findings of Kappa (2024) offering a broader account of plateau sonority cluster reduction in child phonology. We propose that in children's phonological grammars, the latter reduction is systematically driven by the preservation of either an unmarked or marked for PoA segment, depending on the Manner of Articulation (MoA) of the cluster. More specifically, segment preservation is conditioned by the markedness of the MoA of the target cluster members, namely,

- in clusters unmarked for MoA, i.e., [-continuant] [STOP₁ STOP₂], the segment preserved is the one with the unmarked PoA, the CORONAL [t] (see examples 2 and 3).
- In contrast, in clusters marked for MoA, i.e., [+continuant] [FRIC₁ FRIC₂] such as [vð], [γð], and [vγ], the preserved segment is the one with the marked PoA, that is, DORSAL or LABIAL (see observation ii above).

The above asymmetry reflects a principled interaction between markedness constraints and input structure. The preservation of a segment is not solely determined by its individual markedness status but also by the relative markedness configuration of the cluster in terms of both PoA and MoA. This analysis provides a unified account of children's patterns in the reduction of both voiceless and voiced obstruent clusters with plateau sonority. The formal framework adopted is *Optimality Theory* (Prince and Smolensky 2004), which effectively models the interaction between segmental markedness and faithfulness constraints.

Keywords: phonological acquisition; plateau clusters; reduction; markedness

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Coronal palatalization gets [ftf.]*onger*: the case of *s*-retraction and coronal affrication in contemporary English

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In this talk I look at the selected instances of coronal palatalization [t d s z] > [t d s [3] found (mostly) in the speech of the younger generation in several contemporary varieties of English. The discussion encompasses three processes known in the literature as affrication: train [t[sem], dream [d_3i:m], sretraction: *street* [[t[Ji:t], *student* [[t[Ji:d]and palatalization: *this year* [d][jia.]. After introducing the essential facts, such as the context, targets, and triggers ([i] and [J]), I look into the data in more detail with the aim of proposing a unified account of the palatalization mechanisms. The analysis starts with a brief excursion into Middle English (ME) and Early Modern English (EModE) as it is suggested that a process that bears a direct responsibility for the palatalizations in Present-Day English (PDE) is the evolution of the ME diphthong [iu] > [ju:], e.g. EModE *issue* [Isju:] > PDE [I[u:] (Kijak 2023). It is pointed out, though, that the Minimality Hypothesis (Kaye 1995, Pöchtrager 2014) perspective adopted here excludes half of the cases of yod palatalization (mostly in unstressed positions) as already lexicalized historical relics, e.g. virtue ['vo:t[u:] and soldier ['sould30] (similarly to velar softening and spirantization, e.g. *electri*[k] - *electri*[s]ity, and *secre*[t] - *secre*[s]y, respectively). Since, however, yod palatalization in stressed positions and across word-boundaries, e.g. [t]uesday and $di[d_3] you$, is an ongoing tendency, the second half of the cases (undoubtedly external sandhi) must be recognized as an active phonological process, at least in the speech of individual speakers. Moreover, the cases of full palatalization in front of the rhotic - an innovation that is widely reported in the youth speech across varieties of English (Gylfadottir 2015) - seem to be a follow-up step, e.g. *train* [t[1em], *dream* [d31im], street [[t[sist], etc. The latter conclusion may be confirmed by the fact that s-retraction is also found before the yod-triggered affricates, e.g. *student* [[t[u:dənt] (Nicholas & Bailey 2018). Furthermore, since s-retraction is absent from the [spr]/[skr] clusters and occurs regularly only before [tr]/[dr] branching onsets, e.g. a[[t]1]onaut and the[3]e [d31]eams (cf. Janda & Joseph 2003), it is argued that it cannot be explained as a case of a gradient phonetic interpretation -a funny way of producing [s] in s+Cr. Moreover, contrary to some earlier proposals (e.g. Bridget et al. 2019 and Bailey et al. 2022), according to which the shift has already been accomplished in the speech of the younger generation in that what is [s] in the pronunciation of older speakers /s/= |A H| has already been phonologically restructured into $\left| f \right| = |I H|$, much the same as in the case of the aforementioned [dj] > [d3] in *soldier*, it is argued here that s-retraction is a synchronically active phonological process operating both morpheme-internally and in external sandhi, e.g. con[ft]uction, thi[f] [t]uck and the[3]e [d31]eams. Another conclusion drawn from the discussion is that both the rhotic and glide (in English) are specified for the palatal element |I| (see also Scheer 1999, 2004, van der Torre 2003) that predisposes them to trigger coronal full palatalization. Other questions addressed in this talk include the exclusion of labials and velars from the potential targets of full palatalization and the inability of front vowels to trigger coronal palatalization in PDE.

Keywords: s-retraction, affrication, coronals, Element Theory

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A Corpus-Based Analysis of Perfect Uses in Slavic and Baltic

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Recent studies on languages encoding perfect tenses suggest that they are subject to cross-linguistic variation (Migdalski 2006, van der Klis et al. 2022, Arkadiev&Wiemer 2020, Dahl 2021, Bertrand et al. 2022, Le Bruyn et al. 2022, de Swart 2022). We use a Translation Mining corpus-based approach (van der Klis et al. 2017) to systematize this variation in Baltic and Slavic by comparing the English (En) version of *Harry Potter and the Philosopher's Stone* with its translations in Bulgarian (Bg), Croatian (Cr), Latvian (Lv), Lithuanian (Lt), Macedonian (Mc) and Serbian (Sr). Our goal is to account for semantic and syntactic operations underlying the division of labor between perfect and past tenses in these languages.

Our novel corpus data evidence that En/Bg/Lv/Lt/Mc perfect (i) is incompatible with definite past time adverbials and sequence of events contexts, (ii) the current relevance of the result state of the past event denoted by present perfect is not cancelable and (iii) under the experiential reading, present perfect cannot be used with dead subjects (shown for English). Conversely, Cr/Sr use the perfect in the same contexts, suggesting that it evolved into a general past.

- (i) He found / *has found it a lot harder to concentrate on drills that afternoon.
- (ii) When he left / *has left the building at five o'clock, he was still so worried that he
- walked / *has walked straight into someone just outside the door.
- (iii) I lost / *have lost my keys but now I have found them.

(iv) Your father happened / *has happened to leave it in my possession. (the subject refers to Harry Potter's father, who is not longer alive at the time of speech)

Semantically, we argue that in En/Bg/Lv/Lt/Mc the aspectual head combines with the predicate of events in vP and it binds the event variable e introduced by the *l*-participle. The aspectual head also introduces a time variable t and establishes a relation between the temporal trace of the event $\tau(e)$ and t. The BE-aux values the tense feature on TP and it acts as retrospective aspect defined as $\lambda P \lambda t' \exists t : [t \leq t' \land P(t')]$ based on Pancheva&Zubizarreta 2023. BE-aux introduces another time variable t' specifying that t of AspP is anterior to or overlaps $t' (t \leq t')$. The time variable t' of the aux is located before, after or at the speech time t^* depending on the tense operating on it. The En/Bg/Lv/Lt/Mc aux is therefore interpreted as present, past or future, (depending on the value of tense) and the time of the event is anterior or overlaps t' of the aux (Tree 1).

In Cr/Sr, the BE-aux is devoid of the tense feature and is semantically deficient in that it is not acting as a retrospective aspect: the Cr/Sr perfect is therefore reinterpreted as general past: the tense head binds the time variable introduced by the AspP directly and it locates it relative to speech time or some other evaluation time (t*) either in the past, future or at the moment of speaking (Tree 2).



Keywords: corpus, perfect, Baltic, Slavic

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Encoding Complex Motion Events in Indigenous Languages of Latin America

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In this talk I will present a typology-based description of communicative strategies South Eastern Huastec (HSF), a Mayan language from Mexico, employs in its encoding of motion events. I argue that HSF possesses a system in which location as well as source and goal of a motion event are underspecified. In terms of Pantcheva (2010), HSF follows the logical permutation Location=Goal=Source, and has a unique marker *ti* that encodes both location and motion, and goal as well as source. HSF does not draw any distinction between these three functions of the domain of the spatial phrase (Location, Source, Goal).

This way of encoding spatial relationships is not uncommon: the pattern of syncretism for the lexicalisation of Location, Source and Goal, displayed by HSF is found in several languages, including Niger-Congo (Creissels 2006, Nikitina 2009), Mayan (Bohnemeyer and Stoltz 2006, Bohnemeyer and Brown 2007, Kondic 2013), Mapudungan (Wälchli and Zúñiga 2006).

Apart from this rare three-way full indifference (L=S=G) in its space encoding constructions. HSF as well as some other Latin American indigenous languages show absence of adpositions, directionals and gerunds, and possess the verbs of motion that have only one locative role. These traits lead to segmentation of complex motion events into multiple clauses, illustrated in the following example:

(1) Paablo kalej ti Tantoyuca, wat'ey ti Bitxow, ulich Mejiko.
Paablo kal-ej ti Tantoyuca wat'-ey ti Bitxow ul-ich Mejiko
Pablo exit-COM PREP Tantoyuca pass-COM PREP Chontla arrive-COM Mexico.City
Literally: Pablo left Tantoyuca, he passed Chontla, he arrived Mexico City.
Pablo went from Tantoyuca to Mexico City past Chontla.

I will present in detail this interesting and under-described way of segmenting complex motion events in HSF and compare it to some other Latin American indigenous languages. A particular attention will be paid to how this phenomenon is reflected in conceptual transfer to a second language. The analysis of the HSF segmenting complex motion events was done in terms of the Bohnemeyer at all. 2007 principles of event segmentation. The data for this study come from the field work undertaken by the author with HSF (2007-2017, Veracruz, Mexico), Huilliche (2015, Chile), and Mixe-Zoquean (2018-2024, Oaxaca, Mexico). In the elicitations of this data different visual stimuli were used, including pictures (Bowerman & Pederson 1992) and video clips of complex motion (Ishibashi et al. 2006), as well as a list of sentences compiled by the author.

Keywords: complex motion, Latin America, Maya

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Phonetic imitation of vowel quality by Czech learners of English: Effects of model speaker nativeness and L2 proficiency

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Speakers spontaneously adjust their pronunciation towards surrounding speech. These shifts occur when repeating heard words (Babel 2012) but also within conversations (Kim et al. 2011). They are influenced by social factors, such as speakers' conversational role (Pardo 2006). While phonetic imitation without doubt aids L2 speech learning, the effect of perceived model speaker nativeness remains unclear.

Twenty-four advanced Czech learners of English took part in a baseline–shadowing experiment. First, they read 48 English CVC words in isolation, one by one. Then they listened to a short English text recorded by one of two model speakers, either an American or a Czech learner, allowing them to notice the model speaker's (non-)native accent. Subsequently, the participants completed a word repetition (shadowing) task, pronouncing each word upon hearing it from the model. They repeated the same procedure with the other model speaker, with the order being counterbalanced. For this study, we analysed 20 words. We asked whether imitation of vowel quality occurred and whether it depended on the participants' L2 proficiency (measured by LexTALE; Lemhöfer and Broersma 2012) and the model speaker's (non-)native status.

Fig. 1 shows the raw mean values of the participants' baseline and shadowed productions alongside the model speakers' values for individual vowels. The data, pooled across participants and words, suggest considerable variability across vowels, as expected. However, if shifts towards model speaker (i.e. imitation of) V quality occurred, they appeared larger for the native than the Czech model (see I_{I} , $/\alpha$, /p, and $/\alpha$).

Using mixed-effects linear regression, we modelled normalised vowel height (F1–F0) and frontness (F2–F0) separately. Specifically, we modelled the difference between the participants' baseline and shadowed productions as a function of the model speaker's difference from the participants' baseline, the model's (non-)nativeness, and the participants' LexTALE. For both V height (Fig. 2) and frontness (Fig. 3), the models' distance from the participants' baseline was a strong predictor, indicating that imitation of V quality occurred during shadowing. However, as suggested also by the raw means in Fig. 1, the models' accent played a role. First, the model's frontness was approximated less when he was non-native (est. -0.089, SE = 0.039, t = -2.30, p = 0.0215; see the less positive fitted values for Czech in Fig. 3). Second, for height there was a triple interaction between the fixed effects (est. -0.0083, SE = 0.0026, t = -3.1766, p = 0.00155; see the differing slopes of the Czech regression lines for different LexTALE values in Fig. 2), such that when the model was Czech the participants with below-average LexTALE shifted from the baseline more that those with above-average LexTALE, suggesting a reluctance to imitate the non-native model in high-proficiency participants.

Our results indicate that Czech L2 learners of English imitate vowel height and frontness upon immediate exposure to a model speaker. Importantly, the imitation is attenuated when the model is non-native, especially in high-proficiency learners, suggesting a preference for imitating a native target-language model. This corroborates our earlier measurements of the imitation of L2 English vowel duration (Kopecký 2023) and supports evidence that phonetic convergence does occur in the L2 and that, although spontaneous and possibly subconscious, it is modulated by social factors such as the interlocutor's perceived nativeness.

Keywords: phonetic imitation, phonetic convergence, vowel quality, L2 pronunciation, Czech learners



Fig. 1: Plots of raw mean values of the participants' baseline and shadowed productions, and of the model speakers' values for individual vowels. Black label = baseline, colored label = model, colored text = shadowing.



Fig. 2: Plot of participants' fitted values for vowel height shifts (baseline to shadowing) as a function of the model speaker's values and participant's baseline differences, model accent, and LexTALE.



Fig. 3: Plot of participants' fitted values for vowel frontness shifts (baseline to shadowing) as a function of the model speaker's values and participant's baseline differences, and of model accent.

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Humanness in narrow syntax: Left branch extraction and argument structure

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Background It has been observed that left branch extraction (LBE), or subextraction more generally, is subject to a specific kind of syntactic intervention effect: while LBE from objects across overt subjects is possible, LBE from subjects across overt objects is less acceptable (Ko 2007 for Korean; Bondarenko & Davis 2021/BD for Russian). In previous work (unpublished) we have verified this generalization experimentally for Czech, too; see (1)/(2).

(1) a.	from obj	iect			b	b. <i>from subject</i>						
	Kterou	četla [t]	knihu]?			Která ji četla [t studentka]?						
	which	read b	oook			which it read student						
	'Which	book did s	he read?'			'Which student read it?'						
(2) a.	from obj	iect across	subject		t	b. from subject across object						
	Kterou	studentka	četla [t	knihu]?		* Která	knihu	četla [t	studentka]?			
	which	student	read	book		which	book	read	student			
	'Which	book did t	he student	read?'		'Which student read the book?'						

The gist of Ko's and BD's accounts which we adopt is that the derivation of (2b) is necessarily accompanied by one of two violations: either (i) a linearization conflict at *v*P and CP (relying on cyclic linearization; Fox & Pesetsky 2005) – at CP [which < book] holds, while at *v*P [book < which] does, the latter resulting from object-scrambling to the *v*P edge prior to LBE from the subject, or (ii) a locally unmotivated spec-to-spec movement (Ko 2007) of [which] at the *v*P edge (attempting to eschew the linearization conflict).

Contribution We use the intervention pattern to tap into the argument structure of predications involving a non-canonical alignment of syntactic function and humanness – non-human subjects and human objects – and thereby ask if and how humanness affects narrow syntax. We look at two classes of such predications: experiencer predicates, exemplified in (3a), and transitive predicates, (3b). In both cases, it has been noticed that humanness is an important determinant of constituent order in Slavic in the sense that human < non-human orders are preferred over "canonical" subject < object orders (Titov 2012; Velnić 2019; Jasinskaja & Šimík in press); to what extent this preference has a narrowly syntactic nature remains an open issue. Our experiments show that humanness does indeed affect narrow (first-phase) syntax, esp. in that it triggers obligatory scrambling of human object NPs to the vP edge; cf. (4b).

(3)	a.	Čtenáře	zaujala	kniha.	b.	Střelce	zasáhl	šíp.
		reader.ACC	engaged	book.NOM		shooter.ACC	hit	arrow.NOM
		'The book c	aught the re	eader's attention.'		'The arrow hi	it the sho	ooter.'
(4)	a.	[vP reader en	ngaged [VP V	/ book]]	b.	$[vP shooter_1]$	P arrow	hit [_{VP} V t ₁]]]

Experiments Our conclusion is supported by two naturalness rating experiments (one for each predicate type) manipulating (i) constituent order (S<O, O<S) and (ii) subject humanness (hum vs. nhum) for experiencer predicates and humanness order (hum<nhum, nhum<hum) for transitive predicates. *Results:* In transitive structures (Fig. 1), LBE from S across O is penalized independently of humanness, suggesting S<O base-generation (contra Titov 2012), and LBE from O across S is penalized if O is hum and S nhum, suggesting **obligatory humanness-related O scrambling prior to LBE**. In experiencer predicates (Fig. 2), it is LBE from O across S that is penalized (independently of S humanness),

suggesting O<S base-generation with S in VP, see (4a). Details of the experiments, including a statistical evaluation of the results (using cumulative link mixed models) will be provided in the talk.



Fig. 1: Rating of LBE in transitive predications

Fig. 2: Rating of LBE in experiencer predications

Keywords: syntax; argument structure; left branch extraction; word order; humanness

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NP2 copular agreement in presentational contexts

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Unlike predicational clauses, specificational and identificational copular clauses allow NP2 agreement in some languages (Moro 1991). Existing accounts argue that NP2, an individual, triggers agree because NP1 is not structurally accessible (Mikkelsen 2005, Romero 2005, Den Dikken 2006, Heycock 2012). The crosslinguistic variation is reduced to the feature composition of the probe (Béjar and Kahnemuyiopour 2017, 2018). These accounts predict that NP2 agreement languages should never allow NP1 agreement which is not borne out (Hartmann and Heycock 2018, 2019, 2020, 2022). We contribute to this discussion by a novel data from Czech and German presentational clauses, a class of identificational clauses (Higgins 1973, Mikkelsen 2005) we call classificatory. The data demonstrates that at least in some cases the NP2 agreement is mediated by an additional structural element (a situation pronoun in a topic position), and that this structure is available only in languages that allow a middlefield topic position. The agreement variability then reduces to locality and independent restrictions on topics.

Classificatory clauses display an unusual agreement and anaphoric behavior, (1): the copula can agree with NP1 or NP2, without any evidence of movement within the structure, and NP2 functions as a predicate, not an individual, irrespective of the agreement.

(1)	Tenhle	strom	byl/ byla	lípa.
	this	tree.m.sg	was.m.sg/ was.f.sg	linden tree.f.sg
	'This tr	ee was a linden	tree.' (e.g., while pointin	g at a tree stamp)

Moreover, the φ -features of an intra-sentential anaphor can match the φ -features of NP1 or NP2, even if NP2 does not denote an individual ((2) as a continuation of (1)).

(2)	(On)	byl vysoký/	(Ona)	byla	vysoká.
	(he)	was.m.sg tall.m.sg/	(she)	was.f.sg	tall.f.sg
	'It wa	s tall.'			

The variable agreement only arises when the copula intervenes between NP1 and NP2. When the copula precedes NP1, the copula must agree with NP1 and anaphoric agreement is only with NP1 [anaphoric data omitted].

(3)	Podle	mého	názoru, byl/ *byla	tenhle strom	lípa.		
	According_to	my	opinion was.m.sg/ *was.f.sg	this tree.m.sg	linden tree.f.sg		
	'In my opinion	, this tre	ee was a linden tree.'				

We argue that the agreement variability results from two underlying structures: (a) a regular predicational clause that gives rise to an obligatory NP1 agreement, and a presentational clause where the NP2 agreement is mediated by a covert presentational pronoun.

In the predicational structure, NP1 merges in the spec of the small clause and becomes the closest goal to v, the locus of ϕ -Agree, under most accounts.

The presentational structure includes an additional structural element that mediates agreement: a covert presentational pronoun (IT; Moltmann 2013), composed of a nominal part (unvalued φ) and a variable which gets bound by a topic situation – the individual denoted by NP1 merged in a Topic projection, above vP (e.g., Frey 2000). The denotation of the pronoun gets restricted by the predicative NP2 it agrees with in φ -features. Since IT forms a small clause with NP2, and NP1 only merges above v, IT is the closest goal, and v agrees with it, and reflexively with the φ of NP2. NP1 binds the variable in IT but cannot value v. When another element merges in TopP, NP1 must be merged lower, yielding NP1 agreement, (3).

Keywords: syntax, agreement, copular clauses, NP2 agreement, locality

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The impact of bidialectal input on children's perceptual adaptation to vowels in a nonnative language

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In a multilingual society, being able to adapt to novel accents is an indispensable communication skill. The topic of adaptation to L1 accents has been a explored in L1 acquisition research: children successfully recognize words in an unfamiliar L1 accent at 19 months (Johnson et al. 2022). In eight-year-olds, exposure to an unfamiliar L2 accent boosts word recognition for words heard previously in that accent (Hu 2020). We extend previous findings by examining L2 vowel adaptation by 5-6 year old children exposed to English in a non-immersive setting. We ask whether exposure to varying L2 accents enhances children's ability to adjust to the vowels ϵ , α in an unfamiliar L2 accent. This vowel contrast is difficult to acquire, Czech learners typically map both categories onto L1 [ϵ] (Šimáčková 2003).

Data was collected from 51 children with L2 experience (mean length of exposure = 2.5 years). Over two consecutive days, children watch three short animated videos in one of 3 conditions (randomly assigned between subjects). They feature two talkers with the same native accent (General British English, condition GBE); the same non-native accent in English with an $/\epsilon$, α / merger (Czech-accented English, condition CE); or talkers with different accents, one native and one non-native (one CE and one GBE talker, condition Multi). After exposure, a test video followed by a word recognition task is administered using stimuli from two talkers of unfamiliar native accents. The word recognition task features auditory presentation of two words: dissimilar words, members of a minimal pair produced contrastively (one with [ϵ], the other with [α]), or as homophones (both with [ϵ]). We model word identification accuracy using LMM with condition, trial type (dissimilar words, contrastive and homophone-like minimal pairs) and progress (responses given after training and after test).

Multi-accent input was not confirmed to enhance novel accent adaptation. Differences were found in how often the groups replayed sounds on the task: CE and GBE groups replayed minimal pairs more often than dissimilar words, the inverse pattern was found for the Multi group. All identified dissimilar words consistently above chance. Minimal pairs were not identified with above-chance accuracy at training by the GBE and Multi groups. Surprisingly, the CE group recognized minimal pair words with above chance accuracy, even though Czech talkers typically produce them as homophones (Šimáčková 2003). Acoustic analyses reveal no consistent cue differences between the stimuli, suggesting possible use of multiple cues to identify the words, or reliance on exemplar representation. This L1 benefit did not carry over onto test stimuli produced by native English talkers. No group showed above chance performance on minimal pair trials at test, suggesting that at this stage of L2 acquisition, children use variable categories that encompass both [ϵ] and [α] to process L2 speech.

Our learners exhibit equivalence classification of $/\varepsilon$, æ/ tokens (Flege et al. 2021), despite longterm exposure to native English. This view is compatible with the L1 adaptation account proposed by Kleinschmidt and Jaeger (2015): participants cannot fully exploit distributional learning because they hold strong beliefs about category characteristics. This leads to rigid categories, which require substantial evidence to adapt to new input. The quantity of input needed for reliable identification of minimal pairs by this population is not known. The L1 benefit displayed by the CE group may be caused by the congruence of talker and listener categories. **Keywords:** multi-accent input, non-immersion learners, child L2 acquisition, accent adaptation, vowel perception

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Figure 1: Predicted word identification accuracy scores at training (left) and test (right) for each condition on three trial types (fill for two dissimilar words, diff for minimal pairs where one member is produced with $[\varepsilon]$ and the other with $[\varpi]$, same for minimal pairs produced with $[\varepsilon]$ as homophones.



Figure 2: Predicted probability of replaying sounds on the word identification task, separately for dissimilar word trials and all minimal pair trials.

Templatic shortening of Czech possessor agreement markers

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Although traditionally labeled as adjectives, the category of the pre-nominal possessors -*ův/-in* (masculine/feminine) had been challenged (e. g. Kozánková 2015; Veselovská 1998, 2014). As this paper shows, one of the arguments for claiming that the possessor is not an adjective, which concerns the apparent difference in which agreement marker Czech "canonical" adjectives and possessors take (employed by Kozánková 2015) is only a surface-level illusion, with the apparent distinction being a result of (i) regular phonological processes and (ii) allomorphy.

(1a–1b) show the distinction in the agreement marker that adjectives vs. possessors take. In (1a), the two agreement markers differ in quality, while in (1b) they are identical in quality but differ in length. Distinctions of the former kind (1a) are attributable to allomorphy (ii), here modeled in the Nanosyntactic framework (Starke 2009, 2018). Assuming identical sequences of phi and case features appear on top of agreement controllers and targets (Caha 2023), exponents of morphemes of varying size (following Caha 2021, inter alia) will force the selection of different agreement markers without reference to the category of the target (this accounts for the observation that two anonymous reviewers point out, where in some cases, possessors show agreement markers identical to the adjectival ones).

- (1) Czech adjectival vs. possessor agreement (Kozánková 2015, 135)
 - a. matč -in- -y krásn -é boty
 mother POSS FEM.PL beautiful FEM.PL. shoe_{FEM.PL}
 "my mother's beautiful shoes"
 - b. bratr -ov- -i mal -í přátelé
 brother POSS MASC.PL little MASC.PL friend_{MASC.PL}
 "my brother's little friends"

The difference (1b) arises due to (i), under the assumption that certain categories in Czech constitute a template sensitive to the number of μ per category and its phonological domain (Scheer 2003; 2016, inter alia). This paper proposes that Czech possessors are maximally 2 μ long, including the AGR marker. This is supported by the behavior of the M SG NOM form of the possessor (2), which undergoes raising and lengthening of its vowel. As M SG NOM agreement is realized as the high front [i:] elsewhere (e. g. [mal-i:] "small-AGR"), the exponent of the M SG NOM is a floating [+high] feature which attaches to the underspecified masculine possessor /[+round/back]v/, resulting in the form /u:v/; with lengthening due to the templatic restriction.

(2) $bratr-\dot{u}v-\emptyset$ "brother-POSS-M.SG.NOM" ~ bratr-ov-a "brother-POSS-M.SG.ACC"

Supposing that exponents of other agreement markers (e. g. [1b], underlyingly /i:/) come already associated with a V segment, their features are not "stolen" by the possessor, but are shortened due to the bimoraic templatic restriction. If the agreement marker attaches instead to another adjective, the vowel is not shortened, as there is no templatic restriction for it to conform to. This accounts for the V-only AGR markers, where the V AGR on adjectives is always a long and of identical quality to the short V on possessors (3). Note that [ou] in (3b) corresponds to a long /u/ (Scheer 2003). Agreement markers containing a coda (SG.INS/PL.DAT $-\acute{ym}$, PL.LOC=GEN $-\acute{ych}$) or an additional syllable (PL.INS $-\acute{ymi}$) do not undergo templatic shortening—although the present paper cannot conclusively answer why, it does not constitute a problem for the analysis—their distinct segmental/syllabic makeup still strongly supports the strictly phonological account.

(3)	a.	Petr-ov-a	bouda,	dřevě-n-á	bouda
		Peter-POSS-AGR	hut,	wooden-ADJ-AG	R hut
	b.	<i>Petr-ov-u</i> Peter-POSS-AGR	<i>boudu,</i> hut,	<i>dřevě-n-ou</i> wooden-ADJ-AG	<i>boudu</i> R hut
	c.	Petr-ov-i	psi,	pěk-n-í	psi
		Petger-POSS-AGR	e dogs,	pretty-ADJ-AGR	dogs

Keywords: agreement, possessors, vowel length, templates, Czech

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Prosodic boundaries in L3 Spanish: comparing monolingually raised German and bilingual German-Turkish learners

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Our contribution addresses the question of how monolingually raised German and bilingual Turkish-German learners acquire the realization of prosodic boundaries in Spanish as a foreign language. Since Turkish prosodic words are realized with a final rise in the unmarked case (Kamalı 2011; İpek & Jun 2013), Turkish prosodic boundaries resemble those of most Spanish varieties, which typically show continuation rises from the last stressed syllable until the break (H-; Frota et al. 2007). In German, by contrast, ip boundaries tend to show the same F0 value as the most recent preceding peak (Grice et al. 2005: 67), i.e., incompleteness is signalled through a sustained pitch plateau (!H-).

In consequence, monolingual German learners must learn to convey incompleteness through ipfinal rises. Turkish-German learners, by contrast, should outperform monolinguals due to positive transfer from their heritage language. To test this, we analyse read data from 12 German-Turkish (3 m, 9 f) and 12 monolingual German (12 f) learners of Spanish in Germany (ages: 12–18) before and after the completion of a learning module, consisting of 8 learning units and focusing on different aspects of Spanish pronunciation (e.g., rhotics, VOT, and rhythm). The bilingual group received a version that highlighted the strong similarities Turkish presents with Spanish regarding these phenomena. While the realization of prosodic boundaries was not explicitly addressed, it can be supposed that the activation of the heritage language should further positive transfer to the target language.

The results from the recordings made before the intervention show that the German-like !H- is the dominant boundary tone in both groups (monolinguals: 51%, 239/468; bilinguals: 56%, 248/439). The second most frequent realization is the target-like continuation rise, H- (monolinguals: 48%, 224/468; bilinguals: 40%, 175/439). Consequently, these results at the group level do not indicate an advantage of the bilingual learners from the beginning, since they in fact perform in a slightly less target-like manner. It should be noted, however, that the individual learners in both groups differ significantly (11–78% of H-).

The analysis of the post-intervention recordings suggest that both groups benefit from pronunciation training, as the continuation rise is now the most frequent realization (monolinguals: 64%, 266/417; bilinguals: 60%, 204/338). Realizations of !H-, on the other hand, have dropped to 33% and 27% for monolinguals and bilinguals, respectively. However, monolinguals still perform somewhat more target-like overall. Interestingly, though, they have improved slightly more, catching up with their monolingual peers (increase of !H- by 20 vs 16 percentage points). Furthermore, the bilinguals have become much more fluent, reducing the number of ips produced by 23%. Nevertheless, the post-intervention results again point to significant individual variation. It will also be shown how boundary marking relates to other aspects of pronunciation addressed in the learning module. Interestingly, initial comparisons suggest that the best-performing bilinguals also showed positive transfer from Turkish regarding rhotic and VOT production (Gabriel et al. 2023; 2024), while those with poorer results mainly transferred from German. Thus, positive transfer from the heritage language only seems to occur only when it is sufficiently activated in the learning process.

Keywords: prosodic boundaries, L3 acquisition, Turkish as a heritage language, Spanish, German

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Working Memory and Speech Fluency in L1 Versus L2 Task-Oriented Dialogues

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The measurable aspects of speech fluency reflect the underlying cognitive processes of speech production. While previous studies (e.g. Gilabert 2004; Cooper 2020) provide insights into the specific links between speech fluency measures (e.g. pauses) and stages of speech production (e.g. macro- and microplanning or monitoring), it is still unclear how these links reflect speakers' cognitive capacity, such as working memory (WM) in L1 and L2 environment. Although previous studies on this matter show that WM determines reading fluency (e.g. Pae and Sevcik 2011; Ergül et al. 2022), the comparison of these mechanisms in L1 vs. L2 spontaneous speech deserves more attention as it might provide insights into similarities and differences in L1 and L2 cognitive processes and offer theoretical and pedagogical implications.

This study investigates the effect of WM on L1 and L2 speech fluency in task-oriented speech across three levels of cognitive demand (easy, medium, difficult). Twenty-four pairs of Slovak (SK) undergraduate students of English (EN) participated in a collaborative map-navigation game, producing 144 dialogues (24 pairs \times 3 levels of cognitive demand \times 2 languages [L1 SK, L2 EN]). The present study focuses on a subset of 48 recordings from participants who were willing to conduct a Jack and Jill memory test (Silas et al. 2022). The recordings were analyzed for silent pauses (between- and mid-clause), filled pauses, repetition rate (repetitions/second), and articulation rate (syllables/second). Linear mixed-effects regression was used to examine the effects of cognitive demand, language, WM, and their interactions on speech fluency measures.

Pooling over the two languages and three tasks, WM significantly affected repetition rate (p = 0.002) indicating that greater WM capacity implies more repetitions per second of speaking time; the average duration of mid-clause pauses (p = 0.018), and the average duration of filled pauses (p = 0.071) indicating that greater WM capacity implies shorter silent mid-clause and filled pauses. However, WM did not significantly influence between-clause pause duration, pause frequency, or articulation rate. These findings suggest that shorter WM capacity implies longer (but not more frequent) microplanning (reflected in silent mid-clause and filled pauses), but not longer or more frequent macroplanning (between-clause pauses).

Relating to the study's main aim, the interaction between language and WM was significant for the average duration of mid-clause pauses and repetition rate, where the effect was more pronounced in L2 than in L1 (p = 0.023 and p < 0.001 respectively). This suggests that both microplanning and monitoring stages are more sensitive to WM capacity in L2 than in L1.

These findings point to complex compensatory mechanisms in speech production, particularly in monitoring. The monitoring process, and consequently the production of repetitions, may function as a deliberate, conscious effort to clarify statements, reinforce meaning, and ensure successful communication. It seems that this strategy is employed more frequently by individuals with higher WM capacity and more in L2 compared to L1. These and other implications relating also to the significant effect of the interaction of cognitive demand and WM on the average duration of mid-clause pauses and repetition rate (see *Table 1* and *Fig. 1*) will be discussed.

Keywords: speech fluency, working memory, cognitive demand, L1 vs. L2 speech production

	fp_av_dur		btw_av_dur		mid_rate		mid_	av_dur	repet_rate	
	t	р	t	р	t	р	t	р	t	р
CD_D	-1.28	0.212	-0.54	0.593	-0.38	0.703	-2.16	0.039*	3.59	0.001**
LangSK	-1.48	0.150	-1.24	0.223	-2.39	0.024*	-2.82	0.008**	3.29	0.003**
WM	-1.88	0.071 [?]	-0.63	0.536	-1.52	0.171	-2.86	0.017*	3.90	0.001**
CD_D:LangSK	0.33	0.742	1.75	0.091 [?]	0.45	0.656	1.48	0.150	-2.19	0.036*
CD_D:WM	1.74	0.092 [?]	0.33	0.747	0.48	0.636	2.40	0.023*	-4.39	<0.001***
LangSK:WM	1.17	0.252	0.90	0.373	1.26	0.219	2.37	0.024*	-4.54	<0.001***
CD_D:LangSK :WM	0.02	0.981	-1.03	0.311	-0.41	0.688	-1.10	0.281	2.70	0.011*

Table 1 Summary of the effects of cognitive demand (CD – easy E, medium M, difficult D), language (Lang – Slovak [SK], English [EN]), and working memory (WM) on five measures of speech fluency: average duration of filled pauses (fp_av_dur), between-clause and mic-clause pauses (btw_av_dur, mid_av_dur); mid-clause pause rate (mid_rate); and repetition rate (repet_rate). EN and CD_E were baselines for comparison. Non-significant measures (fp_rate, btw_rate, articulation rate) are excluded. Left columns list t-values; right columns list p-values. Significant p-values are bolded (0.1[?], 0.05*, 0.01**, 0.001***). The table includes only those factors that significantly affected at least one of the measures.



Figure 1 Effects of working memory (WM) on speech fluency measures by task (easy - E, medium - M, difficult - D) and language (English – EN, Slovak – SK). The figure shows measures affected by the language*WM interaction: average duration of mid-clause pauses (seconds) and repetition rate (repetitions/second).

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English such and DP structure: an empirical reassessment

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Wood's seminal article (2002) is cited as a primary source on English *such* by subsequent literature on determiner phrase (DP) structure (e.g., Kallulli and Rothmayr 2008; Alexiadou 2014; Leu 2014, among others). We provide a reassessment of two key empirical claims made by Wood (2002) and its follow-ups (Wood and Vikner 2011; 2018). First, Wood et al. have claimed that doubling of the indefinite article with *such* (i.e., *a such a*[*n*] NP; e.g., 1a) is variably possible in unspecified dialects of English. Second, Wood et al. have claimed that the definite article is categorically impossible under *such* (i.e., *such the* NP; e.g., 1b). Utilizing four distinct methodologies, we cast significant doubt on both claims.

(1)	a in this country at [a such a crucial moment in world history].	[BNC: W_pop_lore]
	b. At our first visit, he was [such the optimist].	[COCA: BLOG]

The first method we employed is shared with Wood et al., namely searching in the British National Corpus (BNC, ~100 million words) and the Corpus of Contemporary American English (COCA, ~1.1 billion words). A second and related method was searching in the Movies Corpus (MC, ~200 million words), but additionally verifying the results by listening to the dialog in a subset of the films. The third method was a pilot survey of linguists who are native speakers of English, i.e., traditional acceptability judgements from trained informants. Our fourth and most novel method was to query Large Language Models (LLMs), since LLMs are not only a peculiar sort of corpus due to the massive amount of text they are trained on, but they also receive prescriptive and descriptive feedback from humans.

Our preliminary results, which will be further updated, suggest the following pair of conclusions. First, although *a such* a(n) NP does appear in written corpora, we were unable to identify a particular dialect (in any sense) wherein it is dispositively attested in speech; nor have we found any native speakers of English who accept this putative phenomenon. Thus, although doubled indefinite articles with *such* cannot be logically ruled out as a possibility, we think that written instances found in corpora are most likely transcription errors or 'typos', rather than genuinely grammatical attestations. Second, on the contrary, the definite article below *such* is acceptable to many, if not quite all, native speakers of English, and *such the* NP is indisputably attested in speech. The facts about English *such* in relation to (in)definite articles, therefore, appear to be the reverse of what has been claimed by Wood et al.

Specifically, we searched two corpora for the strings *a such* a(n) and *such the*, discarding irrelevant or ambiguous instances. In the BNC, this yielded 10 tokens of *a such* a(n); there were zero tokens of *such the*. In the COCA, we found 158 tokens of *a such* a(n); conversely, there were 86 tokens of *such the*. Additional details and statistics will be given in the presentation, but these corpus results are enough to argue that definite articles under *such* must be possible, at least in US English, upon precisely the same grounds that Wood et al. argued for the possibility of *such* with doubled indefinite articles.

In order to test the hypothesis that one or both patterns could be typos rather than grammatical variants, it is necessary to compare corpus transcriptions against the original recordings of speech. Since this is not possible with the BNC or COCA, we searched the MC, returning 29 tokens of *a such a*(*n*) and 34 of *such the*. However, when compared with the corresponding passages of dialog in a subset of 10 films for each string, none of the tokens of *a such a*(*n*) were in fact spoken by a native speaker, indicating that these corpora contained mistranscriptions of speech. In contrast, all of the tokens of *such the* in the verified subset were actually spoken as transcribed. Extrapolating these results to the BNC

and COCA, the tokens of doubled indefinite articles with *such* can be regarded with additional skepticism, but this should not extend to the tokens of *such* above the definite article.

In the pilot survey of acceptability judgements, for both methodological and logistical reasons, we only contacted trained linguists, including our co-author (Parrott), who are native speakers of UK or US English. Eight respondents so far have been presented with sentences from the corpus searches and asked to rate their acceptability on a three-point scale of 'Yes/Maybe/No'. To date, no one has accepted sentences with *a such a*(*n*) NP, while most, but not all, including speakers of both US and UK varieties, have accepted sentences with *such the* NP. Again, additional details will be provided in the presentation.

Finally, LLMs we have queried thus far totally reject sentences with *a such* a(n) NP, maintaining that they do not occur in any dialect or register. LLMs also reject sentences with *such the* NP, but they concede that *such the* NP may occur in "informal" or "casual" speech in US English. While LLM outputs cannot be regarded as conclusive data, their responses are methodologically interesting. Independent evidence from work under review shows that LLMs give prescriptive responses to documented language variation, although they descriptively acknowledge the attestation of variant forms.

Our findings all point toward *such the* NP as the attested variant form, and away from *a such a*(*n*) NP as even a possibility in English. There are evident implications for the structure of DPs, which we cannot fully explore here. However, the conclusion seems to us inescapable that theory development in this area has proceeded on inaccurate empirical premises. Data from a single source should be treated cautiously, especially written corpora that cannot be compared with speech; confirmation from multiple methodologies will allow confidence in the evidence adduced for theoretical argumentation.

Keywords: Acceptability judgements; Corpora; Large Language Models (LLM); Methodology; Syntax

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Is Prague Dependency Treebank Universal?¹

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An important application and promotion of an annotated corpus is its conversion into another formalism. The significance of such conversion has several aspects: (1) it can highlight differences in individual frameworks, (2) it can emphasize typological differences between languages in terms of their ability to incorporate or exclude specific linguistic phenomena, and (3) integration into various concepts demonstrates the robustness and universality of the chosen format. In our contribution, we aim to demonstrate the richness of linguistic annotation present in the Prague Dependency Treebanks (PDT), linking morphology, syntax, and semantics. This is evidenced, among other things, by the fact that the PDT data are used for conversions into various formal representations. The PDT annotation of discourse relations has been converted to the Penn Discourse Treebank format (Prasad et al. 2008; Mírovský et al. 2023). Tectogrammatical annotation serves as a basis for conversion into various semantic representations. Early examples include the formal-logical format Minimal Recursion Semantics (Copestake et al. 2005; Jakob et al. 2010). Most recently, the PDT data have been converted into the Uniform Meaning Representation (Van Gysel et al. 2021; Lopatková et al. 2024). Valency annotation has been utilized in the Universal PropBank (Jindal et al. 2022), following the model of the English Proposition Bank (Palmer et al. 2005). We cannot overlook the popular formalism of Universal Dependencies (UD, de Marneffe et al. 2021). The PDT data also contribute to extended UD projects: DeepUD (Droganova – Zeman 2019) or CorefUD (Nedoluzhko et al. 2022).

In our contribution, we will focus on the **conversion of the PDT corpora to the UD format**.² In 2024, the consolidated version PDT-C 2.0 (Hajič et al. 2024) was released. In addition to the pilot treebank, this version includes 3 other PDT corpora, all of which have undergone significant changes in surface syntax annotation, supplemented by complete manual annotation. We will provide a detailed description of the differences between the two formalisms (theoretical foundations, approaches to syntax, morphology, and semantics). Using specific examples (see Fig. 1) from various areas of language description (namely: part-of-speech classification, representation of function words, ellipsis, semantic-pragmatic expressions in the dependency structure; cf. Cecchini 2024, Osborne 2024), we will discuss how these differences can influence data interpretation or linguistic research (the loss of specific phenomena, conflicts during standardization, the adaptation of the format to new phenomena).

Keywords: conversion between formalisms; Prague Dependency Treebank; Universal Dependencies

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² The pilot PDT corpus was converted in 2018. The new extended version is planned to be converted in 2025.



Fig. 1. Representation of the sentence *Můžete to vysvětlit na příkladu?* at the syntax layer in PDT (left) and in the UD format (right). We can observe that the representations are nearly the same; the difference lies in the placement of the preposition *na*, which in UD is captured as dependent on the noun, whereas in PDT it is understood as an element that governs the noun case (an effect of inflectional Czech; cf. Osborne 2024).

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Slovenian diminutive adjectives and the adjectivizer -ast

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Background

Slovenian has multiple types of adjectives ending in *-ast*: *-ast* derives adjectives that indicate some property shared with their base noun (1), sometimes with an intervening adjectivizing suffix like *-en* (2), while *-k-ast* indicates a lower degree of the property in their base adjective (3).

(1) a	. biser-ov-in-a	(2)	a.	bakr-en	(3)	a.	krv-av
	pearl.OV-IN-NOM.SG			copper-EN			blood-AV
	'pearl (material)'			'made of copper, (occasionally)			'bloody, blood-related'
b.				copper-colored'			
	. biser-ov-in-ast		b.	bakr-en-ast		b.	krv-av-k-ast
	pearl. OV-IN-AST			copper-EN-AST			blood-AV-K-AST
	'made of pearl'			'copper-colored, (occasionally)			'slightly bloody'
				made of copper'			

Research into "multifunctional" affixes like *-ast* that combine with different categories to yield different (if related) meanings (e.g. Simonović and Mišmaš 2020; De Belder 2022) has distinguished three possibilities: distinct homophonous affixes (*accidental homophony*), one affix with distinct meanings (*allosemy*), or one affix with a unified meaning. We argue that *-ast* is the third case: it has a single meaning whose apparent differences in interpretation arise due to the different bases with which it merges. Our analysis includes the following components:

Diminutive -k

The -k in (3b) is the diminutive that attaches to nouns to indicate small size or expressive content (4).

(4) perut-k-awing-DIM-NOM.SG'small/cute wing'

Unlike in Czech diminutive adjectives, which are expressive (Vanden Wyngaerd et al. 2024), in Slovenian *-k-ast* adjectives *-k* has a purely scalar meaning: it identifies a low point on a scale related to the base. For bounded physical objects indicated by nouns like (4), this scale is size; for adjectives like (3), this scale is taken or coerced from the base.

The syntax of -k-ast

In Slovenian, like other Slavic languages, diminutives like -k are modifiers: they do not change the syntactic category or syntactic properties (e.g. gender) of their base (cf. Steriopolo 2008; Steriopolo et al. 2021). Thus, when -k attaches to an adjective, the resulting form (e.g. krvav-k- in (3b)) is syntactically adjectival. In both (2) and (3), then, -ast attaches to an adjectival base, while the base of -ast in (1) is a noun. In its categorial flexibility, -ast contrasts with the more common adjectivizer -en seen in (3a), which attaches to nouns but not adjectives.

The meaning of *-ast*

In all its uses, *-ast* creates adjectives that indicate a shared objective (usually physical) property with the base to which it attaches. When the base is adjectival, as in (2) and (3), its use is somewhat pleonastic: *-ast* indicates (one or more of) the properties picked out by the adjective itself. When the base is nominal, (1), *-ast* may indicate any salient physical property: composition, color, pattern, taste, etc.

Conclusion

Comparing *-ast* to other multifunctional affixes like Slovenian *-ov* (Simonović and Mišmaš 2020) shows that multifunctionality is not a uniform category. This paper demonstrates how careful study of individual affixes is needed to elucidate the different sources of multifunctionality, especially in understudied corners of derivational morphology like deadjectival adjectives (cf. Fábregas 2014).

Keywords: Slovenian, derivational morphology, adjectivizers, diminutives, multifunctionality

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Auxiliary Selection in Italian Motion Verbs: An Experiment in L2 Italian Classes in Czechia

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In recent decades, the integration of cognitive linguistics into L2 pedagogy has led to significant advancements in various areas, including the encoding of motion events. This study is part of a larger cognitive linguistic support project for the teaching of Italian as L2. Specifically, it examines the effectiveness of cognitive grammar-based teaching tools in facilitating the acquisition of auxiliary selection in Italian, an underexplored yet important area in its didactics and acquisition.

The selection of perfective auxiliaries with Italian motion verbs is influenced by the semantic properties of the verbs, namely agentivity and telicity (cf. Sorace 2000). Motion verbs are either unaccusatives selecting *essere* 'be' (e.g., *tornare* 'to return'), or unergatives selecting *avere* 'have' (e.g., *camminare* 'to walk'). In textbooks for teaching Italian, auxiliary selection often receives minimal attention, typically focusing on (in)transitivity. For motion verbs, this results in merely listing examples of verbs taking *essere* or *avere*. Since students encounter this issue early when learning the simple past tense *passato prossimo* (A1 level of CEFR), its acquisition can be challenging.

Russi (2023) proposed a teaching model based on Talmy's (2000) cognitivist approach, based on which auxiliary selection is deeply rooted in the way humans conceptualise reality, in this case motion events. She argues that motion verbs' semantic characteristics such as agentivity and telicity play a crucial role in auxiliary selection. These characteristics can be traced back to "image schemas", i.e. mental representations of motion events that influence the way speakers conceptualise and encode the events linguistically. According to Russi (2023; see also Mocciaro et al. 2024), the image schema approach can have important educational spin-offs.

On this background, a language support project for teaching L2 Italian has been developed at Masaryk University in Brno (Czech Republic). This poster presents partial results from an experiment that is part of this project, aiming to examine whether and to what extent the use of teaching tools based on cognitive grammar can facilitate the acquisition of auxiliary selection in Italian. The experimental class consisted of first-year Italian students divided into two groups (7 students in each group; 6 in the final test session). The experimental group used the cognitive grammar tool proposed by Russi (2023), while the control group used traditional materials. The target group included beginner students with Czech and Slovak as their L1, exposed to the *passato prossimo* for the first time. Next lesson, both groups took a test with sentences like *Mario è/ha tornato tardi* 'Mario is/have returned late' to evaluate the initial acquisition of auxiliary selection. The standard program continued and, after two weeks, a second fill-in-the-blank test was administered to assess whether the knowledge had been retained. A third test was administered four months later to assess long-term retention.

The results show that in the first test, the experimental group clearly outperformed the control group, particularly with motion verbs (e.g., 78.6% vs. 60.7% for motion unaccusatives; 91.4% vs. 68.6% for motion inergatives). The experimental group also led in overall accuracy for unaccusatives (73.6% vs. 61.5%) and inergatives (85.7% vs. 69.0%), while the control group performed slightly better with transitive verbs (83.3% vs. 73.8%). In the second test, results were more balanced: both groups performed equally on transitives (95.2%), and the experimental group maintained a small advantage with unaccusatives (74.5% vs. 71.4%). For inergatives, the control group slightly outperformed the experimental group overall (78.6% vs. 75.0%), with identical scores on motion verbs (57.1%). In the

third test, however, the early advantage of the experimental group observed in Test 1 was reversed: the control group outperformed the experimental group across all categories, with the sharpest contrast in motion unaccusatives (87.0% vs. 53.7%) and overall inergatives (80.6% vs. 63.9%).

These findings suggest that the cognitive grammar-based tool tested in this study may support the acquisition of auxiliary selection in the early stages of L2 Italian learning. However, the decline observed in the third test points to the need for continued reinforcement and may also reflect individual differences in learner engagement, rather than a lack of long-term effectiveness of the tool itself.

Keywords: Motion verbs, Auxiliary selection, Cognitive grammar, Second language acquisition, Italian L2

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Anti-agreement in Hungarian possessors and external possessors without possessor raising

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Hungarian demonstrates 'anti-agreement' phenomena with plural possessors. DP plural possessors bear plural morphemes but do not trigger agreement on the possessed noun, while 3.pl pronominal possessors have no plural morpheme but apparently do trigger agreement (see 1).

Den Dikken (1991) proposes that there is no plural agreement in either of these cases. Rather, the plural morpheme of the pronoun raises to noun, due to its lack of a DP layer. He uses this asymmetry to claim that external possessors can either be raised or externally generated, as such possessors are compatible with both patterns in (1). Raised DPs are consistent with (2a), whereas an externally generated possessor cooccur with an internal null resumptive pronoun, producing the pattern in (2b):

I argue against den Dikken's analysis of anti-agreement on the basis that other pronoun possessors trigger agreement while simultaneously having a plural form (see 3). Furthermore, we find exactly the same 'raised plural morpheme' used with the 3pl. pronoun in other contexts in which there is also a plural morpheme on the pronoun itself (4). I conclude that all pronoun possessors trigger agreement and propose:

- i) only NumP possessors check their features due to a category specific EPP feature on the agreement head, hence DPs never trigger agreement;
- the plural morpheme on the 3. pronoun is phonologically empty when licensed in the context of agreement similar to *pro*. However, as the morpheme cannot be focussed, it is never overt. This is restricted to 3. pronouns as only they have an independent suffix not incorporated into the pronoun itself.

I further propose that external possessors are always externally generated. The reason why we get optional agreement with external possessors is due to the empty resumptive pronoun having either a NumP or a DP status. Evidence for this comes from the fact that external pronoun possessors always trigger agreement (see 5), which I attribute to a uniformity condition: a pronoun can only be resumed by a NumP *pro* but a full DP can be resumed by either DP or NumP *pro* having both as part of its structural makeup.

Support for the proposal that all external possessors are externally generated comes from case theoretic considerations. External possessors are always dative, while internal possessors are either nominative or dative. This has been assumed to be because the possessor has to move through the dative position to its external position (Szabolcsi 1983). However, the fact that crosslinguistically external possessors tend to be dative (Cuervo, 2003), even in languages where internal possessors are not, suggests a specific external source for the case. Furthermore, an internally assigned dative case which is maintained under movement is not compatible with the simplest assumptions concerning case assignment (Newson and Szécsényi, 2024). According to this, case forms are determined in surface positions and therefore should not be uniformly dative. I propose that the external possessor is assigned an inherent case by the applicative head that introduces it. Inherent cases remain uniform, no matter what surface position the DP occupies.

1)	a.	а	nő-*(k)	kalap-ja/*juk
		the	woman-PL	hat-3S/*3PL
		'the	women's hat'	

- b. az ő-(*k) kalap-juk/*ja the 3.s hat-3PL/*3s 'their hat'
- 2) a. A fiúk-nak elveszett A fiúk-nak kalap-ja The boys-DAT got.lost the boys-DAT hat-3s 'The boys' hats got lost.'
 - b. A fiúk-nak₁ elveszett a *pro*₁ kalap-juk The boys-DAT got.lost the hat-3PL 'The boys' hats got lost.'

3)	а	az én		kalap-om a		а	mi	kalap-unk
		the	Ι	hat-1s		the	we	hat-1PL
		'my	hat'			'our	hat'	
	b	а	te	kalap-od	b'	а	ti	kalap-otok
		the	you	hat-2s		the	you.P	L hat-2PL
		'your hat'				'you	r hat'	

- 4) Ø-Nekik otthon kell marad-ni-uk
 3-DAT-PL at.home must stay-INF.-3PL.
 'They must stay at home.'
- 5) a A fiú-k-nak elveszett a [DP/NumP pro] kalap-ja/juk the boy-PL-DAT got.lost the hat-3PL 'The boys' hat got lost.'
 - b Ø-Neki elveszett a [NumP pro] kalap-juk/*ja 3- DAT-PL got.lost the hat-3PL 'Their hat got lost.'

Keywords: keyword 1; keyword 2; keyword 3 [give 3 to 5 relevant keywords]

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Monosyllabic truncated forms in child Greek

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The initial stage in typical prosodic development is the *sub-minimal word stage*, during which children truncate di-, tri- and multisyllabic targets to monosyllabic forms (e.g. Demuth & Fee, 1995; Adam 2002; Adam & Bat-El, 2008). At this stage, the preservation of the stressed or final syllable of the target word is the most commonly attested truncation pattern (e.g. Fikkert, 1994 for Dutch; Echols & Newport, 1992 for English; Adam, 2002 for Hebrew; Kappa, 2002; for Greek), suggesting that perceptual salience conditions children's truncations (e.g. Echols & Newport, 1992). This study examines longitudinal data from a typically developing Greek-speaking child who goes through the sub-minimal word stage (ages: 1;06-1;11, data collection: picture-naming and spontaneous speech, recordings: once a week) and argues that segmental and sonority factors contribute to syllable or segment selection.

Evidence that segmental factors influence the formation of monosyllabic truncations comes from truncation patterns of words containing the vowel [a]. The child of this study exhibits a preference for monosyllabic forms in which [a] occupies the nucleus. The vowel [a], contained in a target syllable, survives, regardless of whether it appears in an initial or non-initial syllable, and whether it is stressed or unstressed. The patterns are:

PATTERN 1 (Dominant: 87%): The syllable with the vowel [a] emerges in the monosyllabic truncation, regardless of whether it is initial or non-initial, stressed or unstressed (1a-d).

PATTERN 2 (Marginal: 13%): The vowel [a], contained in the target, survives, and together with an onset consonant from the target word composes the truncation (1e-f). Regarding the onset consonant, there appears to be a tendency for it to be an OBSTRUENT (e.g. [z], [k]) rather than a SONORANT (e.g. [l], [n]). The emergence of PATTERN 2 indicates that markedness and sonority factors influence the selection of the onset consonant since an OBSTRUENT is unmarked and less sonorous compared to a SONORANT. Consequently, the monosyllabic truncation, which consists of a CV syllable, tends to be unmarked and well-formed with respect to sonority (e.g. Clements 1990), as there is a sharp sonority rise from the onset to the nucleus.

Thus, two patterns satisfy the preference for monosyllabic truncations with [a] in the nucleus position. This study argues that these patterns reflect a case of '*conspiracy*' (Kisseberth 1970), as multiple strategies are used to satisfy the preference for monosyllabic forms with [a] in the peak position. It is further suggested that both patterns are explained in terms of sonority, as the child builds his outputs on the basis of [a], which is the most sonorous vowel in Greek (see Kappa 2016 and references therein).

The study suggests that the preference for preserving the vowel [a] in truncations may represent a possible acquisition path in Greek that may become available to a child during an early stage in prosodic development. In essence, the fact that this acquisition path is not common across children acquiring the same or different languages highlights the dynamic nature of phonological development and suggests that children may differ in their 'selection' of acquisition paths.

Keywords: truncations; monosyllabic forms, child Greek

Data

(1)	Target	Output	Gloss	Age
	Pattern 1			
(a)	pa .pú	pá	'grandfather'	1;06.15
(b)	sté. la	lá	'proper_name'	1;06.15
(c)	a. ma .lí.a	má	'proper_name'	1;09.04
(d)	má .θi.ma	má	'lesson'	1;09.04
	Pattern 2			
(e)	z ór.zi. a	zá	'proper_name'	1;11.09
(f)	ni. k ó.l a	ká	'proper_name'	1;11.09

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Iconicity in Serial Verb Constructions (SVCs) of Motion in Ch'orti' (Mayan)

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This research examines iconicity in the motion verbs in Ch'orti', a Mayan language spoken in Guatemala. Iconicity here means that morphemes appear in the order of the parts of the overall action being described. Although typologists have stated that serial verb constructions (SVCs) of motion are typically iconic (Aikhenvald and Dixon 2006), it is not clear how the iconicity of SVCs operates or how it might differ across languages. Single-verb clauses in Ch'orti' are not iconic since only one verb root is involved. However, serial verb constructions (SVCs) found in Ch'orti' texts allow for more complex events in single clauses, often expressing the sequence of the event, such as 'leave-walk-go (away)' or 'leave (from there)-run-come (here)'. In Ch'orti' such constructions are productive. Some verb sequences are more likely than others, but changing the order is often possible and alters the meaning. No markers of dependency occur on any of the verbs to indicate that one is the main verb and the others are subordinate. All verbs are finite and need not be contiguous.

Ground can refer to either the initial location (source) or the final one (goal) and is usually expressed with one of two general locative prepositions, *ta* and *tama*. The choice of *ta* indicates that Ground is perceived as a 'point', while the choice of *tama* signals that Ground is perceived as an 'enclosure' or a 'wide space'. However, it is the verb that determines the Path, while the preposition only establishes the *shape* of the Ground.

The present research examines the verb sequences found in the SVCs of Ch'orti' texts, as well as the way Ground occurs with respect to the verb sequences. SVCs with two Path verbs are usually iconic, as in *turn.around-come* or *rise-go*. SVCs with Manner verbs are sometimes iconic (e.g. *enter-kneel*) and sometimes less obviously iconic *descend-fall(out of control)*. Iconicity in SVCs can be enhanced by the expression of Ground, as in:

e	mut	lok'oy	tama	ukorolte'	tob'oy	ixin
the	bird	left	from	its cage	flew	go away

Iconicity becomes almost lexical when verbs appear together, as in:

k'a'pa	lok'oy	ajnyob'	ixinob'	mas	tichan	
finisih	leave	run	go	more	high	
'they comp	letely came out	running and goin	ng higher up'			(F4:136)

Ch'orti' single-verb motion constructions are clearly verb-framed under Talmy's dichotomy of verb-framed vs. satellite-framed (2000, 2007) since the verb roots indicate Path while the Ground is static. However, as Slobin (2006) and others (Zlatev and Yangklang 2004, Ameka and Essegbey 2013) have pointed out, SVCs may be best analyzed as forming a distinct group, since they do not fully fit under either type. Despite Talmy's claim (2009) that there is always a main verb in SVCs, thus making such constructions satellite-framed, this may not be the case.

Choosing one verb as the main verb in Ch'orti' is problematic since the verb sequence depends on iconicity. Other features, such as the expression of Ground(s), also affect the analysis.

Data for this research comes from the texts of Wisdom (1950), Fought (1972), Perez (1996), (Quizar 1994), and my ongoing work on the Ch'orti' language.

Keywords: Motion verbs, Serial verbs, Iconicity, Verb-framed vs. satellite-framed, Ch'orti' (Mayan)

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Changes of GIRBAS parameters and basic acoustic parameters of the voice of Czech patients undergoing external radiotherapy in the neck area

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In the last 20 years, there has been an increasing number of patients in the Czech Republic who had to undergo external radiotherapy in the neck area as a part of their curative treatment of oncological diseases. One of the side effects of this treatment may be a temporary or permanent change in the quality of the patients' voice and speech. In the paper, I will present a part of study focused on the research of the effect of external radiotherapy in the neck area on the voice and speech of Czech patients.

In the Czech environment, the change in the voice quality of patients undergoing external radiotherapy (RT) in the neck area using the GIRBAS method has not been perceptually evaluated yet. I used perceptual test to carry out the research by this method. I evaluate the quality of voice and speech on three recordings of spontaneous speech, reading text and sustained vowel /a/ of Czech patients (12 men 19-76 yo and 4 women 52-74 yo). I studied changes in GIRBAS parameters (Grade, Instability, Roughness, Breathiness, Asthenia, Strain) of the Czech patients' voices before RT, one month after the end of RT, half a year after the end of RT and one year after the end of RT. Each parameter is evaluated on 4 scale grades (from 0 to 3, where 0 means no damage and 3 means maximum possible damage).

For an objective evaluation of GIRBAS parameter values, I approached two doctors (phoniatricians) for the roles of a mentor and an opponent. With the first one I could discuss the values and consult my evaluation of GIRBAS parameters, the second doctor was my opponent of my evaluation. Independently of my evaluation, this phoniatrician evaluated the same recordings. The average value of my evaluation and the opponent's evaluation are the resulting values of GIRBAS parameters of this study. I chose this approach based on other international studies, which were focused on the evaluation of voice and speech quality using the GRBAS method (Karnell et al., 2007), or the extended GIRBAS method, which is a scale supplemented with parameter I – instability (irregularity of voice quality). To correctly evaluate the monitored parameters, a control group was created in addition to the group of patients undergoing RT treatment. Members of the control group were healthy Czech speakers (2 men 38-46 yo and 2 women 48-52 yo) who have never undergone any RT treatment and who have never had any diseases associated with voice and speech.

Radiotherapeutic treatment in the neck area affects instability of the voice (parameter I). For recordings made before RT respondents reach an average value of 0.66, with a distance of time after radiotherapy treatment, this parameter gradually increases (worsens), as in of recordings made 12 months after the end of RT has already reached an average value of 1.17. Other parameters R, B, A and S do not reach such a high average value. The second worst evaluated parameter is R (roughness, hoarseness), which achieves the highest average value of 0.78 for voice and speech recordings made by respondents a month after RT.

Czech patients	G	Ι	R	В	А	S
Before RT	0.84	0.66	0.58	0.04	0.02	0.18
1 month after RT	1.02	0.73	0.78	0.10	0.06	0.20
6 months after RT	1.31	1.05	0.71	0.01	0.02	0.23
12 months after RT	1.24	1.17	0.51	0.01	0.04	0.14
Control group	0.29	0.17	0.04	0.00	0.00	0.04

Table 1. Average values of GIRBAS parameters

The results indicate a reversibility or possible irreversibility of changes of voice quality in effect of RT treatment. From this point of view, it is possible to focus on parameters I – Instability and R – Roughness, where the largest changes occur, with parameter I appearing to be irreversible and parameter R to be reversible. With these values of GIRBAS parameters, I would like to open and elicit a discussion on the issue of voice rehabilitation of patients who have to undergo external radiotherapy in the neck area as a part of the treatment of their oncological disease.

In the second part of this paper, I will present changes in basic acoustic parameters (fundamental frequency, fundamental frequency contours, vowel space area) due to treatment with external radiotherapy in the neck area. Values also obtained from the recordings of the voice of Czech patients before RT, one month after the end of RT, half a year after the end of RT and one year after the end of RT will be presented. Changes in the values of the acoustic parameters examined before and with a time interval after RT indicate their possible reversibility.

Radiotherapy treatment resulted in a decrease in the fundamental frequency and a decrease in the vowel space area in all monitored Czech patients. Some international studies point to similar results of a decrease in the fundamental frequency due to RT (Bagherzadeh et al., 2022, Bibby et al., 2007, Fung & Yoo, 2001). For the contours of the fundamental frequency, there was a fluctuation in values in connection with RT. The contours of the fundamental frequency are non-smooth, intermittent and alternate around the average value. This irregularity is observed most often in recordings made one month after RT, but it also occurs in recordings made with a longer time interval after treatment. All these acoustic parameters appear to be partially reversible in the time perspective.

Keywords: radiotherapy; acoustic parameters changes; GIRBAS; voice quality; reversibility

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Holistic Spatial Semantics of the English Verb Come

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Our understanding of how languages encode motion has been significantly shaped by Leonard Talmy's influential typology of motion events (ME) into Satellite- and Verb-framed languages (Talmy 1985; 1991; 2000). Despite its undeniable utility, early reactions revealed problematic aspects of the typology (e.g. Aske, 1989; Slobin, 1996), ultimately leading to the addition of a third language type (D. I. Slobin 2004), as well as reinterpretation of the ME typology as scalar (Ibarretxe-Antuñano, 2009). More recent research has stressed the need to move beyond typology, focusing on intra-typological differences (e.g. Lewandowski, 2021), rely on cognitive basis (Beavers, Levin, and Wei Tham 2010), or interpreting the motion event in the Construction Grammar framework (Croft et al., 2010).

Previous research has focused primarily on verbs that fit within Talmy's two way typology. As a consequence, English verbs such as *come* and *go* have been neglected for their atypical conflation patterns (English prototypically uses Manner verbs that conflate Motion + Manner, e.g. *run*; *come* in contrast conflates Motion + Path). The goal of the present paper is to provide an in-depth analysis of the English verb *come*.

The paper adopts the Holistic Spatial Semantics (Zlatev et al. 2021). This approach distinguishes between Path (bounded translocation) and Direction (unbounded translocation), a vital criterion for analysing the deictic verb *come*. Importantly, HSS looks at ME constructions as a whole, and the goal is to describe empirical data instead of classifying languages as a certain type.

Using BNC (Kilgarriff et al., 2004; Kilgarriff et al., 2014), I retrieved a random sample of 350 concordance lines with the verb "come" and categorised them based on meaning. Three main groups are: physical motion ("come to my house"), metaphorical motion ("curses came soaring"), and constructions in which the motion meaning appears to be partially or fully absent ("when it comes to ...").

Using only the physical motion subgroup, the paper uses HSS to answer the following research questions: 1. What are the distribution and conflation patterns? 2. Is there a preference for Path or Direction expression? 3. Which ME constituent is profiled (Path - beginning, middle, end; Viewpoint-, Object-, or Geocentric Frame of Reference for Direction)?

Preliminary results show the following expression patterns:

Distribution:	Manner	come V-ing	come running
	Path	come PP	come to my house
	Path	<i>come</i> adverb	come in
	Direction	come adverb	come here
C C C		(1 / D' (' V 1	

Conflation: Motion + Path / Direction = Verb

Despite the flexibility of *come*, there are clear preferences in usage (e.g. preference for the Viewpointcentered Frame of Reference). The paper will address their frequency and ME component profiling (questions #2 and #3 are work in progress).

Since *come* is readily used in a variety of constructions and valency structures, it requires a case-by-case analysis. The results show the importance of going beyond lexical semantics and taking the meaning of the entire motion construction, as well as broader context into account.

Keywords: motion events; holistic spatial semantics; come; construction grammar.

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On the Subjectlessness in Siraya

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This paper investigates the subjectless or nominativeless constructions in Siraya, with special attention to the impersonal root clauses where the logical subject is genitive marked and no argument is promoted as the grammatical subject or nominative marked. Siraya subjectlessness was first reported in Shih et al. (2017) but hasn't been well studied. Siraya is a dormant Formosan language, once spoken mainly in Southwestern Taiwan, which is currently being revitalized. Our study is based on the 17th century Siraya translations of the Gospels according to St. Matthew and St. John.

Siraya nominativeless clauses are observed in the following contexts: pro drop, relativization, subject clauses, nominalization, adverbial clauses and root clauses. See (1-5).

(1) Pro drop

	ka	ru	nı-ara-	tın		ta	p1-p1tu		ki	pa'ul	ki
	and	when	PST-ta	ike-3SG	.GEN	NOM	RED-s	even	OBL	bread	OBL
	txing-a	apa] _i	ka	ru	ni-pa-t	a-tabli-en-tin ki la-lu-lulux				ılux	
	fish-al	SO	and	when	PST-C	AUS-inl	herit-PV	-3SG.G	EN OBI	RED-	RED-praise
	ni-pipi	i		ei	ka	ni-pixa	ı-an-tin			ei	ki
	PST-fragment [break]		and	PST-gi	ive-LV-3	3SG.GE	N		OBL		
	pa-ta-taw-taw'ux-an										
	NAV-RED-RED-narrate-LV [disciple				disciple]	1					
	'And l	he took <u>t</u>	he seve	n loaves	and the	fishes _i ,	and gav	e thank	s, and b	rake (tł	nem _i), and gave
	themi	to his di	sciples.	' (Mt.	15:36, K	JV)					
(2)	Relativ	ve clause	; Subje	ct clause	2						
	ina	ma-tak	ut	ta	imumi						
	NEG	AV-fea	ar	NOM	2PL						
	ka	ka-van	a-en-aw	r		<u>[ka</u>	k <m>i</m>	'im-kar	nu	ti	Yesus-an _i
	and	STAT-	know-P	V-1SG.	GEN	COMP	o <av>s</av>	seek-2Pl	L.NOM	DET	Jesus-LOC
	[ka	ni-p-u	-na-vav	arax-en	-atu			ei	RC SC		
	COM	P PST_C	AUS-M	OT-PA	R-cross-	PV-RES	•				
	COM	101-0					[h:al		maified	1 2 (1) 14	28.5 KIV
	·Fea	ar not ye	for I ki	10W <u> th</u> a	at ye see	<u>k Jesus</u> i	i, WIIICI	l _i was cl	utilieu	<u>]</u> . (MIL	20.3, KJV)
	·Fea	ar not ye	: for I ki	now <u> tha</u>	<u>it ye see</u>	<u>k Jesus</u> i	<u>i, WIIICI</u>	l <u>i was ci</u>	utilitu	<u>1</u> . (MIL.	20.3, KJV)
(3)	·Fea	ar not yes	: for I kı 1	10W <u> th</u>	<u>at ye see</u>	<u>k Jesus</u> i	i <u>, WIIICI</u>	l <u>i was ci</u>	utilitu	<u>]</u> . (Mit.	20.3, K J V)
(3)	·Fea Nomin tu	ar not yes nalization kidi	for I ki n kana	now <u> th</u>	ni-dilu	k Jesus i x	i <u>, willer</u> ta	ti	Yesus	<u>I</u> . (Mrt. ki	Yup-an
(3)	 Nominatu LOC 	ar not ye: nalizatior kidi time	: for I ki n kana COMF	now <u> th:</u> P.that	ni-dilu PST-le	k Jesus_i x ad	ta NOM	ti DET	Yesus Jesus	l. (Mr. ki OBL	Yup-an blow-LV p-u-
(3)	 <i>Nomin</i> tu LOC kwa 	ar not ye nalizatior kidi time	: for I kn n kana COMF	now <u> th:</u> P.that tu	ni-dilu PST-le pawla-	x ad pawlux	ta NOM	ti DET alay	Yesus Jesus	ki OBL ki	Yup-an blow-LV p-u-
(3)	 Nominatu Nominatu LOC kwa CAUS 	ar not yes aar not yes kidi time	for I kn kana COMI	now <u>tha</u> P.that tu LOC	ni-dilu PST-le pawla- RED-v	x ad pawlux vildernes	ta NOM 55	ti DET alay becaus	Yesus Jesus e	ki OBL ki OBL	Yup-an blow-LV p-u-
(3)	 Nomin tu LOC kwa CAUS rpung 	ar not yes aalizatior kidi time S-MOT-lo - ay	: for I ki kana COMI ocation ki	ow <u>th</u> : P.that tu LOC litu	ni-dilu PST-le pawla- RED-v [k <m></m>	x ad pawlux vildernes aw-eyr :	ta NOM SS aw]	ti DET alay becaus <u>tini-an</u>	Yesus Jesus e	ki OBL ki OBL	Yup-an blow-LV p-u-
(3)	 <i>Nomin</i>tu LOC kwa CAUS rpung tempt- 	ar not ye: aalizatior kidi time 3-MOT-lo 3-ay -LV.IRR	for I ki kana COMF cocation ki OBL	P.that tu LOC litu devil	ni-dilu PST-le pawla- RED-v [k <m> <av></av></m>	x ad pawlux vildernes • aw-eyra INCH-do	ta NOM ss aw] o.evil	ti DET alay becaus <u>tini-an</u> 3SG-L	Yesus Jesus e OC	ki OBL ki OBL	Yup-an blow-LV p-u-
(3)	 <i>Nomin</i>tu LOC kwa CAUS rpung tempt- 'Then 	ar not yes aalizatior kidi time S-MOT-lo S- A Y LV.IRR was Jesu	: for I ki kana COMF ocation ki OBL us led up	P.that tu LOC litu devil	ni-dilu PST-le pawla- RED-v [k<m< b="">> <av></av></m<>	x ad pawlux vildernes aw-eyr a INCH-do o the wi	ta NOM ss aw] o.evil lderness	ti DET alay becaus <u>tini-an</u> 3SG-L to be to	Yesus Jesus e OC empted	ki OBL ki OBL	Yup-an blow-LV p-u-
(3)	 *Fea Nominetu LOC kwa CAUS rpung tempt- 'Then KJV) 	ar not yes aalizatior kidi time S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-lo S-MOT-l	: for I ki kana COMF ocation ki OBL is led up	P.that tu LOC litu devil o of the S	ni-dilu PST-le pawla- RED-v [k <m> <av> Spirit int</av></m>	x ad pawlux vildernes aw-eyr INCH-do o the wi	ta NOM ss aw] derness	ti DET alay becaus <u>tini-an</u> 3SG-L to be to	Yesus Jesus e OC empted	ki OBL ki OBL OBL	Yup-an blow-LV p-u- evil.' (Mt. 4:1,

(4) Adverbial Clause

[iru	ka	kita-an	ti	Yesus	[<u>ki</u>	pa-ku	<u>'i-law-law-an</u>
when	COMP	look-LV	DET	Jesus	OBL	NAV-	gather-RED-many-LV
ki	ta'u] _{subj}	iect candidate		ni-m-a	dakun	tu	vukin
OBL	people			PST-A	V-clim	b LOC	mountain
'And [seeing <u>th</u>	e multitude	<u>s]</u> , he went	up into	a moun	tain'	(Mt. 5:1, KJV)
Nomin	ativeless	root clause					

ka	ni-ma-aw'ux	tini-an	ta	ma-batung	ki				
and	PST-AV-follow	3SG-LOC	NOM	AV-many	OBL				
ma-ku'	ma-ku'i-la-law-law								
AV-ga	ther-RED-RED-crowd [1	multitude]							
ka	ni-pa-da-rikax-tin		<u>neyni-</u>	ansubject candidate	tu	hina			
and	and PST-CAUS-RED-recover-3SG.GEN 2PL-LOC LOC there								
'And great multitudes followed him; and he healed them there.' (Mt. 19:2, KJV)									

Our findings concerning the nominativeless root clauses in Siraya are as follows. First, it is crosslinguistically common that nominative-marked DPs are (obligatorily) covert in the contexts of pro drop, relativization, and nominalization; besides, that the subject candidate *ki paku'ilawlawan ki ta'u* is not promoted might be accounted for by assuming the *iru ka* clause is reduced. However, an overt subject is (obligatorily) nominative-marked in finite clauses, especially root domain. In (5), the subject candidate of the NAV verb *nipadarikax* is not promoted and appears in oblique instead of nominative. Second, the logical subject must be human agent or experiencer. Third, all the nominativeless constructions occur in the Non-Actor Voice (NAV) context. Fourth, there are no constraints on the number and person of the logical subject. Hence, Siraya is typologically quite different in terms of impersonalization (Blevins 2003; Napoli 2013). Fifth, no restriction on TAM is observed. Lastly, the "impersonalized" verbs can be transitive or intransitive, unergative or unaccusative, dynamic or stative. Sixth, unlike most of the impersonals (Blevins 2003), the logical subject is not suppressed, as evidenced by the genitive form and binding. It is noteworthy that the NAV sentences are transitive in Formosan languages.

It is unclear how the syntactic operation of these nominativeless constructions is accounted for under the recent competing analyses proposed for the Philippine-type voice system, namely the Voice Agreement analysis (Holmer 1996; Chang 1997; Shih and Lin 2011), Case Agreement (Rackowski 2002; Rackowski & Richards 2005), the Ergativity analysis (Aldridge 2004, 2008, 2016) and A'-Agreement analysis (Chung 1994; Pearson 2005; Chen 2017, 2024). A new approach is needed.

Keywords: subjectless; impersonalization; nominativeless; demotion; promotion

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Semelfactives and iteratives as singulatives and collectives but in the verbal domain

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In formal semantic literature, not that much focus has been dedicated to the meaning of semelfactive predicates (but see Rothstein 2008, Štarkl et al. to appear) and the nature of their relationship with iteratives. This paper contributes to the study of the distinction by investigating properties of Slavic verbs with the suffix -NU (e.g., Smith 1997, Arsenijević 2006, Armoškaitė & Sherkina-Lieber 2008, Kagan 2008, 2010, Łazorczyk 2010, Taraldsen Medová & Wiland 2018, Wiland 2019, Kwapiszewski 2020, 2022, Biskup 2023, Milosavljević 2023, Štarkl et al. to appear). Specifically, we explore iterative interpretations of unprefixed imperfercitve -NU verbs in Ukrainian.

In many Slavic aspectual pairs, the imperfective verb involves a theme vowel (-A) and has the iterative interpretation (designating a plurality of events, often conceptualized in terms of series of repetitions), whereas the perfective form derived with the suffix -NU has the semelfactive meaning designating a singular very brief (punctual) event constituting a discrete instantaneous action, see (1).

(1) Ivan { stuk-a- v_{IPFV} / stuk-nu- v_{PFV} }.

Ivan knock-A-PST knock-NU-PST

'Ivan { knocked (repeatedly) / knocked (once) }.'

(Ukrainian)

While Taraldsen Medová & Wiland (2018) and Wiland (2019) argue for a containment relationship between semelfactives and degree achievements, we draw attention to the containment relationship between the semelfactive meaning and the iterative meaning. The evidence comes from Ukrainian imperfective verbs such as *hnuty*_{IPFV} 'to bend' and *mnuty*_{IPFV} 'to crumple' (compare, e.g., Polish *giąć*_{IPFV} 'to bend' ~ *gnie*_{IPFV} 'he bends'), which in contexts like (2) can get the iterative interpretation.

(2) Mynuloho roku naš cyrkovyj bohatyr h-nu-v_{IPFV} desiatky metalevyx prutiv i kožnoho razu last year our circus strongman bend-NU-PST tens metal rods and every time vyklykav zaxvat u hljadačiv.

he.caused admiration at spectators

'Last year, our circus strongman bended tens of metal rods and every time he caused spectators' admiration.' (Ukrainian)

To capture this phenomenon, we combine standard compositional semantics with a late-insertion model grounded in Nanosyntax (Starke 2009) and argue that -NU spells out a complex syntactico-semantic structure that involves both a semelfactive and an iterative head, whereas the internal iterative -A only the latter. We build on the proposals that -NU and -A are verbal number markers (Armoškaitė & Sherkina-Lieber 2008, Kagan 2008, 2010) and previous mereotopological research on singulatives and collectives in the nominal domain (Grimm 2012, Scontras 2014, Dočekal & Grimm 2021, Wągiel 2021, Wągiel & Shlikhutka 2023, Kagan 2024). Following recent proposals that extend mereotopology to events (Wągiel 2023, McNally 2024), we propose a semantic treatment of the iterative/semelfactive distinction akin to the collective/singulative one. -NU and -A are stored as Fig. 1 and 2, where the heads ITR and SMLF denote operations responsible for pluralization and individuation (modeled in

mereotopological terms as clustering and declustering), respectively. The competition between Fig. 1 and 2 explains the (non-)occurrence of iterative/semelfactive interpretations (Elsewhere Condition). **Keywords:** semelfactives; iteratives; singulatives; collectives; nanosyntax; mereotopology

Figures

Fig. 1 ITRP $\Leftrightarrow /a/$ ITR Fig. 2 SMLFP $\Leftrightarrow /nu/$ SMLF ITRP ITR

The Present Tense of Ukrainian verbs: A nanosyntactic account Nataliya Shvets

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Introduction. I analyse the present tense of Ukrainian verbs, zooming on 1sg and 3pl. In these two forms, the roots of two existing verb classes behave differently. While class 1 roots remain unchanged, class 2 roots undergo alternations. Do these alternations indicate root suppletion, or are they the result of palatalization (Bhat 1978)? The goal is to answer this question and to derive present tense forms of both classes using Nanosyntax (Starke 2009).

Data. Ukrainian verbs fall into two classes, marked by distinct vocalic suffixes in non-1sg forms. Class 1 has $-\varepsilon$ in 2sg and -u in 3pl, (1a), while class 2 has -e in 2sg and -a in 3pl, (1b). In 1sg, both classes share the suffix -u. (IPA transcription, with Cyrillic u, e and u transcribed as e, ε and \check{s} , respectively.)

- (1) a. plev- ε -š (2sg) \rightarrow plev-u (1sg) \rightarrow plev-u-tj (3pl) 'swim'
 - b. hotov-e-š $(2sg) \rightarrow hotovlj-u (1sg) \rightarrow hotovlj-a-tj (3pl) 'cook'$

The two classes differ in root behaviour. Class 1 roots remain unchanged throughout the present tense paradigm, as in (1a). In contrast, class 2 roots undergo alternation in 1sg and 3pl. In (1b), the root-final labials acquire an additional *l*-segment followed by *j*. Are these roots lexically stored (suppletion), or can they be phonologically predicted?

Palatalization. The analysis of class 2 verbs reveals that the alternation in 1sg and 3pl is systematic and productive. Labials consistently acquire an *l*-segment followed by *j*, while other root-final consonants show distinct patterns (Table 1). This indicates that the 1sg and 3pl roots are not suppletive, and that *l*-insertion results from palatalization. The *j* alone cannot trigger the *l*-insertion, as none is triggered elsewhere in the language. For example, there is no *l*-insertion in class 1 verbs: 1sg. *vj-u* 'twist'. This suggests the presence of a non-melodic palatalizer before *j*.

Crucially, root-final sibilants and dentals show a different pattern (Table 1): they change in 1sg but remain unchanged and are followed by *j* in 3pl. This indicates two distinct palatalizers, Δj in 1sg and $\wedge j$ in 3pl.

In 1sg, the Δj is followed by the suffix *-u*. This suffix also appears in 1sg of the other class, class 1, where it attaches directly to the root, (1a).

Table 1: Surface Palatalization patterns (Class 2)

Root-final	lsg	3pl
consonant	<i>∆+j</i>	∧+ <i>j</i>
р	+1+j	+1+j
b	+1+j	+1+j
m	+1+j	+1+j
v	+1+j	+1+j
s	š	+j
z	ž	+j
t	+š	+j
d	+ž	+j
r	+j	+j
n	+j	+j
1	+j	+j
š		
ž		

This indicates that -u is an independent morpheme and, therefore, the Δj is not bundled with it. As for the $\wedge j$, it is followed by -a in 3pl and is bundled with it, as there is no evidence to claim the opposite.

Thus, the two palatalizers are also structurally different: the Δj is a morpheme, while the $\wedge j$ is not. The underlying structure of class 2 verb is the following:

(2) hotov-e-š (2sg) \rightarrow hotovl- Δj -u (1sg) \rightarrow hotovl- $\wedge j$ a-tj (3pl) 'cook'

This analysis allows to identify the morphemes in class 2: 1sg. $\sqrt{2-\Delta j}$ -u and 3pl. $\sqrt{2-\Delta j}$ -tj. In class 1, roots remain unchanged, suggesting no palatalizer: 1sg. $\sqrt{1-u}$, 3pl. $\sqrt{1-u-tj}$.

Lexicalization. Since the exact number of morphemes is captured in both classes, the present tense forms can be derived. In Nanosyntax, each morpheme lexicalizes a specific amount of features. The correct pairing of roots and suffixes lexicalizes the full set of features of a functional sequence (fseq). Following Starke (2021), Starke et al. (2022) and Cortiula (2023), I use the simplified fseq for present tense forms:

(3)
$$\sqrt{Asp} > Mood > Ind > T > \# > Pl > \pi > prt > spker$$

Due to space limitations, I summarize in Table 2 the result of lexicalization for each morpheme in 1sg and 3pl of both classes. The difference between 1sg and 3pl is in person and number features. The 3pl is built on a singular feature (#) with additional plurality features (Pl), absent in the singular. Both 1sg and 3pl share a generic person feature (π), but only 1sg has participant (prt) and speaker (spker) features:

Table 2: Lexicalization (subset)



Conclusion. A detailed description of data reveals phonological facts which suggest a richer morphological situation in class 2 verbs. Two distinct palatalizers, Δj and $\wedge ja$, are responsible for root-final consonant alternations in 1sg and 3pl, respectively. In the talk, I further show how present tense forms of both classes can be derived from universal syntactic operations of Nanosyntax.

Keywords: Ukrainian verb classes; present tense; palatalization; Nanosyntax

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Prosody of non-native EFL teachers' student-directed-speech

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While prosody has been extensively studied in other domains of public speaking (e.g. Niebuhr et al. 2020), research on teacher prosody remains limited. One empirical study observes that experienced foreign-language teachers' student-directed speech (SDS), similarly to parents' infant-directed speech, is marked by adjustments including a slower articulation rate, frequent pausing, exaggerated emphasis, increased loudness, and increased pitch movement (Kuder, 2020). For non-native pre-service English teachers, adjustments of L2 speech prosody may present challenges (Volín et al. 2015). We investigate Czech EFL teacher-trainees' beliefs about, and abilities in, SDS via a questionnaire and acoustic analysis.

In the questionnaire, 40 trainees first rated the importance of phonetic and non-phonetic SDS features in on a five-point scale and then selected the phonetic adaptations they considered most relevant for younger students. Mixed-effects ordinal logistic regression revealed that phonetic features were rated as more important for SDS than non-phonetic features (e.g., writing spoken instructions on the board or using imperatives). Lively intonation and clear speech were highlighted as general SDS features and speaking tempo as particularly important in addressing younger classes.

An acoustic analysis of another 21 trainees' SDS productions was conducted to test for ageappropriate vocal adjustments, namely decreased tempo and a wider pitch range when addressing younger children. Before recording, the participants practised 2 sets of contextualised instructions (18 per set, 10 instructions repeated in both) with cues (verbal, visual) to the students' age. During data collection, the participants saw an instruction on a screen, then a photo of a classroom and then they addressed the students depicted. Three native trainees studying education at the University of Lincoln were recorded for comparison. Tempo and pitch range were modelled using mixed-effects linear regression. Results indicated that speech directed at younger students had a slower tempo and a wider pitch range. A separate model for pitch range using tempo as a predictor failed to show that trainees who adjusted for student age did so in both dimensions simultaneously.

Qualitative analyses based on audio-visual inspection of acoustic displays of utterances from individual trainees highlighted variability in the trainees' prosodic control. They also revealed the limitations of relying solely on pitch range as a measure of melodic control. The observed strategies for adjusting to the age of the audience included shifting the pitch level (setting the voice at a higher pitch when giving an instruction to younger students as compared to older ones), highlighting a prominent syllable by high versus low pitch (for the younger and older audience respectively) or contrasting final rising versus falling intonation. Individual trainees also differed in how well the melodic pattern of each utterance reflected its communicative function (e.g., attention-getting, encouraging, or just telling-what-to-do instruction).

In conclusion, we found that Czech EFL teacher-trainees are aware and capable of adjusting their phonetic output to student age but also display clear limitations of this ability, which underscores the need for fostering vocal training within foreign-language teacher education programs.

Keywords: EFL, student-directed speech, prosody, speech rate, pitch range

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The prosodic attachment of Czech clitics

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Background

Czech has clitics that cluster in "second position" after the first syntactic constituent:

(1) Právník mu ho zítra možná donese. lawyer him.DAT it.ACC tomorrow maybe bring.
'The lawyer will maybe bring it to him tomorrow.

These typically attach to a prosodic host, which may either preceding or following (Fried 1994). Prosodic and syntactic factors predict that clitics should prefer to attach leftward in sentences like (1). We test this prediction by comparing a perception experiment with an analogous study in Slovenian.

Clitics and stress

Czech has fixed initial stress. Though this has no reliable acoustic correlates (Skarnitzl and Eriksson 2017), the clitics in (1) seem unstressed by intuition. Fried (1999) reports examples of prosodic words beginning with unstressed proclitics, but rightward cliticization should nonetheless be dispreferred when clitics have the option of instead attaching leftward, as in (1).

Czech vs. Slovenian

In a perception experiment, Tabachnick et al. (2024) showed that in the Slovenian analogue of (1), clitics prefer to attach to the *following* word. Slovenian is more permissive than Czech of clitics after a large prosodic boundary, where they obligatorily attach rightward: in Slovenian, but not Czech, clitics appear after sentence-initial adjunct CPs, after clitic conjunctions in clause-internal coordination, and (optionally) sentence-initially in polar questions; similarly, Slovenian only allows strongly focused elements to intervene between clitic complementizers and other clitics, while Czech allows all topics to intervene (see also Franks and King 2000). If the languages' clitics (which behave quite similarly) are syntactically identical, this difference may be driven by their prosody (preferred attachment direction).

Experiment

Like Tabachnick et al. (2024), we assess listeners' prosodic parsing, assuming that beeps inserted into sentences are more likely to be perceived as being at prosodic boundaries (cf. Fodor and Bever 1965). If Czech clitics preferably attach to the *preceding* word, beeps should be perceived *after* the cluster (opposite from Slovenian). We compared prosodically neutral sentences like (1), where the clitics are not adjacent to a clause boundary, to sentences where clitics are preceded or followed by a clause boundary. 51 Czech-speaking participants each heard 60 target trials with beeps inside or within one syllable of the clitic cluster and indicated the beeps' perceived location (within or between syllables).

Results

In Figure 1, the perception of beeps in sentences like (1) are compared to sentences with prosodic breaks. Visually, the test conditions seem to pattern more like sentences with clause boundaries before the clitics

(i.e. clitics attach to the following word, as in Slovenian). However, this difference is not statistically robust: while the conditions with boundaries before and after clitics are significantly different from one another, none of the test conditions are consistently significantly different from either.



Figure 1: Comparison of experimental responses in test conditions (*prosodically neutral*) vs. others, with syllables labelled according to test condition sentence (1) and location of clitics highlighted (thick line = clause boundary, dashed line = possible prosodic word boundary)

Discussion

The lack of clear distinction between Czech and Slovenian—aligning with the finding of Polomská and Ziková (2025) that pronominal clitics are relatively prosodically unintegrated with preceding nominal and adverbial hosts—suggests that the differences described above are due to *syntax*, not prosody. For example, some of the differences would follow if Slovenian clitics may be in multiple positions that may not require preceding material (Marušič 2008), while Czech clitics are in a fixed position that (due to e.g. information structure) typically requires a preceding element (e.g. Kaspar 2016).

Keywords: Czech, clitics, perception experiment, prosody, Slovenian

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Nanosyntax and classifier semantics of complex numerical expressions in Polish

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The recent decade of research indicated the relevance of investigating the meaning and internal structure of various types of derivationally complex numerical expressions, especially in Slavic (e.g., Dočekal 2012, Caha 2013, 2017, Wagiel 2015, 2020, 2022, 2023, Wagiel & Dočekal 2018, Khrizman 2020, Dočekal & Grimm 2021, Molinari 2023; see also Ojeda 1997). Many of such expressions give rise to non-trivial semantic effects and show intriguing morphosyntactic idiosyncrasies. Building on previous results, I propose a unified system combining standard compositional semantics with a late-insertion model grounded in Nanosyntax (Starke 2009) that explains the structure and meaning of complex numerical expressions in Polish. I focus on the contribution of the suffix *-oj* in the forms corresponding to the numbers 2–3. The proposed approach assumes a universal classifier semantics for numerals.

Polish distinguishes between several types of numerical expressions, all of which are morphologically complex, as illustrated in (1)–(4), which all share the root \sqrt{tr} corresponding to the number 3.

(1)) trz-y	koty		BASIC	(3) tr-ój-k-a	studentów	GROUP
	√3-AF	F cats			$\sqrt{3}$ -AFF ₁ -AFF ₂ -INFI	students	
	'three o	cats'			'group of three stude	nts'	
	GEN: t	rz-ech, E	AT: trz-em,	INS: trz-ema	GEN: tr-ój-k-i, DAT	tr-ój-c-e, INS	: tr-ój-k-ą
(2)) tr-oj-e		ludzi	GENDERED	(4) tr-oj-ak-i	skutek	TAXONOMIC
	$\sqrt{3}$ -AF	F ₁ - AFF ₂	people		$\sqrt{3}$ -AFF ₁ -AFF ₂ -INFI	consequence	
	'three J	people (n	ale and fema	ale)'	'three kinds of conse	quence'	
	GEN: t	r-oj-ga, I	DAT: tr-oj-gı	ı, INS: tr-oj-gie	m GEN: tr-oj-aki-ego, I	DAT: tr-oj-aki-	emu

The basic numeral (1) consists of the root and the idiosyncratic marker -y, which encodes the numeral's ϕ -features. (1) counts unspecified entities (by default atomic singular objects). The gendered numeral (2) consists of the root, morpheme -oj and the idiosyncratic marker -e. The relevant use of (2) concerns enumerating heterogeneous groups of humans that involve both male and female individuals (Wagiel 2015). Finally, the group and taxonomic numeral (3)–(4) involve the root, -oj, the additional suffix -k / -ak and a regular inflectional marker. (3) is a collectivizer that shifts a plurality to a group, i.e., higher-order unit and (4) counts subkinds (Dočekal 2012, Wagiel 2015, Grimm & Dočekal 2021). Only the basic numeral (1) can be used in the arithmetical function in mathematical statements such as 'Three plus two equals five' (Rothstein 2017). The following generalizations in (5) can be formulated.

- (5) a. If \sqrt{tr} does not occur with -oj, the following inflectional marker is idiosyncratic (in the sense that the set of endings is not expected in the paradigm or does not appear elsewhere in grammar) (1).
 - b. If \sqrt{tr} occurs only with *-oj*, the following inflectional marker is idiosyncratic (2).
 - c. If \sqrt{tr} occurs with *-oj* and an additional affix, the following inflectional marker is regular (3)–(4).

To explain the data, I combine classifier semantics based on measure functions (Krifka 1989) with a standard nanosyntactic framework (Starke 2009). Building on Wagiel & Caha (2021), I assume that numeral expressions spell out complex syntactico-semantic structures including SCALE (an interval), NUM (a shift to the maximal number in that interval) and a CL head, which encodes a measure function dedicated to counting specific types of entities (potentially along with additional semantic operations).

I show how the structures in Fig. 1–6, where the arrow represents a pointer (a device that points to another lexical entry), capture the meaning/form correspondences and the generalizations in (5). **Keywords:** numerals; numerals; numerical expressions; classifier semantics; nanosyntax; measure functions

Figures





Fig. 2



Fig. 5

Fig. 3







Path, Deixis or Both? Slovenian motion prefixes under German contact

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In Slavic languages, verbs equivalent to English 'come' that express deictic motion, i.e. motion towards the speaker/hearer, are, by and large, formed with cognates of the inherited prefixes *do- or *pri- (cf. Serbian do-ci, Ukrainian pry-jty, Czech při-jít all roughly 'come'). Using data from a parallel corpus of translations, I show that the use of pri- with motion verb in Slovene strongly deviates from the inherited Slavic pattern. In other Slavic languages, the prefixes *pri- or *do- are used alongside a number of other prefixes such as *v- 'into', *vy-/*iz- 'out of', *na- 'onto', etc. to express various types of path of motion, e.g. Croatian iz-iti, Macedonian iz-leze or Czech vy-jit 'go out, exit'. In Slovene, in contrast, pri- and od- dominate in the preverbal slot to the almost complete exclusion of other prefixes and express deictic motion either towards (pri-) or away from (od-) the deictic center, i.e., the speaker/hearer.

The following example shows how the deictic orientation (here: toward the narrator) is given privileged expression in Slovene by the use of *pri*-. All other Slavic translation do not express the deictic perspective but use the prefixes *iz*- or *vy*- 'out of'; the Romance translations (not all shown here) use verbs that mean 'exit'. In other words, these languages give privileged expression to path, not deixis, which is left unmarked (see Matsumoto et al. 2017 why these two are distinct).

(1)	a)	Next second, Quirrell came hurrying out of the classroom straightening h	is turban.
	b)	Im nächsten Moment kam Quirrell [] aus dem Klassenzimmer gestürzt.	[German]
		in next moment came Quirell out.of the classroom hurry-PT	CPL
	c)	V sledujuščuju sekundu Belka toroplivo vy-šel iz klassa []	[Russian]
		In next second Quirell quickly out-went from classroom.	
	d)	Sledećeg trenutka, Kvirel iz-lete iz učionice	[Serbian]
		Next second Quirell out-ran from classroom.	
	e) '	V příštím okamžiku Quirrell spěšně vy-běhl z učebny []	[Czech]
		In next moment Quirell quickly out-ran from classroom.	
	f)	Un instant plus tard, il sortit en hâte de la salle en redressant son turban.	[French]
		one instant later, he went out in hurry from the room straightening his turban	
	g)	V naslednjem trenutku je [] pri-hitel iz učilnice.	[Slovene]
		in next moment AUX hither-hurried from classroom.	

(Rowling, Harry Potter 1, from ParaSol Corpus)

In contrast to Slavic and Romance, the Germanic languages, in this and many similar examples (see Waldenfels 2021), use a construction using *come* as a main predicate to express deixis (motion toward the speaker), a participle to express manner-of-motion (*running, gestürzt*) and a preposition (*out, aus*) to express path.

The Slovene pattern resembles the German or English construction in that it expresses deixis and manner-of-motion in the verbal slot by using the prefix *pri*-, towards the deictic center' with a motion verb (*-hitel* 'hurried') and expressing path solely by the preposition *iz* 'out of'.

Moreover, data from dictionaries and reference corpora show that in Slovene, the spatial prefixes have largely lost their function to show path with motion events. Rather, the prefix slot is specialized to convey deixis and express either motion towards (*pri-*) or from (*od-*) the deictic center. Path *strictu*

sensu is now primarily expressed by prepositions, or by new spatial particles (Giger 2004). A similar, but not as far-reaching, development is notable in Bosnian/Croatian/Serbian (see Filipovic 2007).

I argue that this is yet another outcome of German-Slovenian language contact (Reindl 2009) and that Slovene has evolved to give precedence to a deictic perspective due to pressure from German to express this category, triggering a reorganization of the Slavic system of verbal prefixes with motion verbs.

Keywords: Slavic languages; Motion verbs; Slovene; parallel corpora; deixis

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On the Grammatical Status of Bunun Infix <in>

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There has been a long-standing debate over the grammatical status of the TAM-related infix $\langle i(n) \rangle$ in Bunun, which is one of the Austronesian languages spoken in Taiwan. Four different analyses have been proposed, namely the Perfective Aspect analysis (Zeitoun et al. 1996, Zeitoun 2000, on Isbukun Bunun), the Past Tense analysis (He et al. 1986, Jeng 1977 on Takbanuaz Bunun, Li 1997, Huang 1997 and Chen & Jiang 2020 on Isbukun Bunun, Jeng 1999 on all the five dialects), the Inner Aspect analysis (Lin 2010 on Takituduh Bunun), and the Experiential Aspect analysis (Huang & Shih 2018).

It is argued in this study that the infix in question is an Experiential Perfect Aspect marker, which is in line with Huang & Shih's (2018) proposal. The arguments are as follows. First, a stative verb can be *in-* or *i*-infixed and retain its static reading, which is not expected under the Perfective Aspect analysis given that Perfective Aspect is eventive, providing boundedness with achievement of culmination (Bhat & Pancheva 2005). See (1a-b).

(1) a.	m <in>a-smuh</in>	а	saia		(habas)	
	<in>AV-fat</in>	NOM	3SG.N	OM	before	
	'He was fat (be	efore).'				
b.	ma< i> pa-ka-zi	ma		а	naia	
	AV <in>REC-</in>	NOM	3PL.NOM			
	'They (ever) lil	ked each	other.'			

Second, a reduplicated verb retains its imperfective reading after i(n)-infixation, which also falls beyond the scope of the Perfective Aspect analysis. Furthermore, an infixed reduplicated verb expresses repetition rather than continuation, as in (2a-b); similarly, a verb, cliticized by =ang, denotes an additive reading instead of a durative one, as in (3).

(2) a.	hi-h <in>anup</in>	а	tama	(habas)		
	RED- <in>hunt</in>	NOM	father	before		
	'Father used to hunt/*w	vas hunt	ing (befo	ore).'		(habitual reading only)
b.	a <i>n-da-dikus</i>	а	saia=s		busul	
	<in>carry-RED-hold</in>	NOM	3SG.N	OM=OBL	gun	
	'He used to hold a gun	with hir	n/*He w	as holding a gur	ı.'	(habitual reading only)
(3)	ma <i>ludah=ang</i>	a	saia=s		subali=tia	
	AV <in>beat=ADD</in>	NOM	3SG.N	OM=OBL	PN=DET.OBL	
	'He beat Subali in addi	tion to so	omeone	else/*He was stil	ll beating Subali.	' (additive reading only)

The afore-mentioned illicit progressive or durative readings cannot be accounted for under the Past Tense analysis since it is logically possible for a progressive or durative event to occur in the past.

Third, the infix $\langle i(n) \rangle$ can co-occur with the irrealis marker na=, which indicates that the infix in question is incompatible with a mood analysis, as shown in (4).

(4)	na= h ≤in> udan-an=ta	takna='i	luvus	а
	IRR=rain <in>rain-LV=1P.INCL</in>	yesterday=because	AV.wet	NOM
	daisah=an			
	yard=VIS.REM.NOM			

It might have rained here yesterday for the yard is wet.

Fourth, Inner Aspect Phrase is merged between vP and VP (MacDonald 2008, Travis 2010). On that account, if a morpheme is Inner Asp⁰ it is predicted by the Inner Aspect analysis to be surfaced closer than a light verb affix to the verbal root. However, as evidenced by the verb ma < i>pa-ka-zima in (1b), the infix <i> is inserted later than the Actor Voice prefix ma-, the reciprocal prefix pa- and the stative prefix ka-; in other words, the infix in question is merged higher than v^0 .

In contrast, Experiential Perfect Aspect expresses an event or a state which occurred prior to the moment of utterance, at least once, and which is repeatable (Comrie 1976, Smith 1997, Kroeger 2005). The anteriority covers what the Past Tense marker analysis accounts for. Besides, the repeatability accounts for the restricted interpretation of the above-mentioned infixed reduplicated and *ang*-cliticized verbs. What is more, Perfect Aspect is merged in the Outer Aspect Phrase domain, which takes vP as its complement.

Lastly, by scrutinizing the compositional readings brought about by the combinations of infix $\langle i(n) \rangle$ and the other aspect morphemes, a more articulated (Outer) AspP is proposed: (MoodP (na=) > TP >) [$_{OAspP}$ ExpP ($\langle in \rangle$) > PrfP (=in) > HabP/ProgP (RED), DurP (=ang)] (> vP > VP). See Table 1 for more details.

	Reduplication		Cliticization of =ang		Cliticization of =in	
	Habitual	Progressive	Additive	Durative	Perfect	
Infixation of $\langle i(n) \rangle$	YES	NO	YES	NO	YES	

Table 1. Co-occurrence of infix *<in>* and the other aspect markers

Keywords: cartography; experiential aspect; inner aspect; past tense; perfective aspect

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Partitives, Countability, and Syncretism in Czech Morphosyntax

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In Czech, there is a syncretism between pseudo-partitive and counting phrases. Partitive phrases (a piece of an apple) refer to a subset of a unit (Falco & Zamparelli 2019). Counting phrases (two apples) express the quantity of the counted items (Bultnick 2005). They can be subdivided into those denoting low (two apples) and high (fifty apples) quantity (Franks 1994). This paper investigates syncretism patterns in Czech, focusing on the structure of main nouns (i.e., apple above). The aim is to explain the systematic overlaps between nouns and the structural distinctions using Nanosyntax.

Consider (1–3) as examples of the systematic patterns. Czech data illustrate full syncretism in (1), partial syncretism in (2), but none in (3). The distribution of singular in pseudo-partitive phrases, and plural in counting phrases is shown. If counting phrases use the plural, why do the case markings in counting phrases differ? Following Harbour (2014), low-counting phrases are associated with a paucal suffix, while high-counting phrases use a plural suffix.

(1)	AAA		(2)	AAB		(3)	ABC	
a.	kus	[kop-iː]	a.	kus	[hruʃk-i]	a.	kus	[bana:n-u]
	piece.nom	spear.gen.sg		piece.nom	pear.gen.sg		piece.nom	banana.gen.sg
	'a piece of a spear'			'a piece of a pear'			'a piece of a banana'	
b.	dvě	[kop-iː]	b.	dvě	[hruʃk-i]	b.	dva	[bana:n-i]
	2.nom.n	spear.nom.pl		2.nom.f	pear.nom.pl		2.nom.m	banana.nom.pl
'two spears'				'two pears'			'two bananas'	
c.	pět	[kop- <mark>i</mark> ː]	c.	pět	[hru∫ek-Ø]	c.	pět	[bana:n-u:]
	5.nom	spear.gen.pl		5.nom	pear.gen.pl		5.nom	banana.gen.pl
	'five spears'			'five pears'			'five banana	s'

The data in the sample reveal three distinct syncretism patterns due to rich case allomorphy: (i) AAA, (1); (ii) AAB, (2); (iii) ABC, (3). The patterns are consistent with the *ABA constraint (Bobaljik 2012), prohibiting skipping intermediate forms in morphological hierarchies, particularly in the order partitive-paucal-plural. The paper aims to account for the general pattern by proposing a nesting structure of these categories using subextractions (Caha et al. 2023).

Three key questions arise: i) What syntactic and morphological features account for the observed syncretism? ii) How do the different patterns reflect structural? iii) How does the semantic distinction between paucal and plural numbers interact with the syntactic structure?

Nanosyntax is adopted to address these questions. It posits that syntactic structures are built from atomic features organized in a universal hierarchy (Caha et al. 2023, Starke 2009). Nanosyntax operates on the "one feature–one head" principle, wherein each syntactic head corresponds to a single semantic feature (Cinque & Rizzi 2008). To compare all the patterns, features MASS, CL(ASSIFIER), PAUC(AL), and QUANT(ITY) are adopted, being lexicalised by concrete case and number. The reason for choosing these four features instead of working with concrete categories of case and number is the ability to compare languages cross-linguistically. The MASS feature is contained in nouns in pseudo-partitive phrases, these nouns function as mass expressions as they lack a specified atomic layer (Borer 2005). If pseudo-partitives are similar to small mass nouns, counting phrases require a new syntactic head, CL, to render a mass noun countable (Caha 2022). This is also supported by classifier languages, where CL heads are mandatory when nouns are enumerated (Allan 1977). This, however, does not address the distinction between low- and high-counting phrases as paucal and plural appear in them. CL makes

nouns countable but does not bring the grammatical number, hence, following Pesetsky (2013), new features PAUC and QUANT are introduced, to differentiate these two types of phrases. The universal hierarchy of features can be seen at the top of the table, (4), (the lowest being NP and the highest QUANT). GEND, MASC and FEM represent gender (Corbett 1991), while CLASS helps to distinguish each paradigm (Janků 2022). (4) shows the proposed structure of Czech examples from (1)–(3). *Kop* contains only NP, GEND, and CLASS as it is neuter. The suffix *-i:* appears exclusively with neuters, thus it must contain GEND up to QUANT. *Hru/k* appears in the high-counting phrase, thus it includes all the features. The suffix *-i* appears with feminines and masculines, thus its structure begins in CLASS and ends in PAUC. *Bana:n* accommodates features up to CLASS (without FEM). The suffix *-u* contains MASC as it must be distinguished from *-i*. The suffix *-u:* is one feature bigger (QUANT) than *-i*.



Keywords: counting phrases; pseudo-partitive phrases; syncretism; nanosyntax

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