FDSL 13

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Formal Description of Slavic Languages

University of Göttingen
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BOOK OF ABSTRACTS

conference venue
Alte Mensa, Wilhelmsplatz 3 (city center)

invited speakers
John Bailyn (Stony Brook University)
Catherine Rudin (Wayne State College)
Irina Sekerina (CUNY)
Duško Vitas (University of Belgrade)

workshops
– Semantics of Noun Phrases
organized by Ljudmila Geist (Stuttgart)
– Heritage Slavic Languages in Children and Adolescents
organized by Natalia Gagarina (Berlin)

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Invited Speakers

—— in order of appearance ——

Cost and intervention: a strong theory of weak islands

John Frederick Bailyn (Stony Brook University)

In this talk, I address certain problems in the analysis of weak islands that emerge within the feature-driven account of movement commonly assumed in recent syntactic theory. The puzzle involves the tension between Phase Theory (Chomsky 2001 etc.) with its assumed core PIC constraint (the Phase Impenetrability Condition) under which no feature can probe down inside the complement of a phase head, and the observation that basic wh-island effects are "mild", everything else being equal (hence their description as "weak" islands):

1)	a. ??Who do you wonder whether John knows *t* ?	(mild)
	b. *How do you wonder whether John fixed the car *t* ?	(severe)

Traditional theories attribute the mild deviance of (1a) to Subajcency (the "mild" constraint) and the severe deviance of (1b) to the Empty Category Principle, which in traditional form (Rizzi 1990), required that adjuncts, but not arguments, be antecedent governed. The problem is that the adjunct-argument asymmetry in (1) is entirely unexpected under current theories, which predict that all wh island extractions should be equally underivable, since the phase edge (intermediate SpecCP) is occupied (here by *whether*), and without accessing the edge, an element cannot be targeted for movement.

In this talk I motivate a theory that accounts for adjunct-argument asymmetries without recourse to any GB-era machinery. The account relies on a feature-based version of **intervention** (Rizzi 2004), on the one hand, and the **cost** of building additional edge positions for long distance extraction, on the other. I show that the theory successfully accounts for Scrambling / wh-movement asymmetries in Slavic as well as for the well-known indicative extraction ban found in Russian and Polish long-distance wh-movement.

Demonstratives and Definiteness: Multiple Determination in Balkan Slavic

Catherine Rudin (Wayne State College)

Multiple Determination constructions — nominal phrases with more than one marker of definiteness — raise numerous questions about the morphology, syntax, and semantics of definite DPs within and across languages. This talk focuses in particular on one instance of Multiple Determination, DPs containing a demonstrative plus one or more definite articles in colloquial Bulgarian and Macedonian, with implications for the study of Multiple Determination more generally. This type of Multiple Determination is not mere definiteness agreement; rather, the demonstrative and article each constitute an independent semantic and syntactic element. The distinctive meaning and usage of these constructions suggests a possibly-universal semantics for Demonstrative + Definite phrases. Multiple Determination constructions in the two Balkan Slavic languages are extremely similar, but differ in crucial details. In Bulgarian but not Macedonian a “doubling” article is limited to adjectives and other modifiers; in Macedonian nouns can also host the article. This distinction in which lexical categories can be definite-marked supports a more elaborated syntactic structure of DP in Bulgarian, containing an additional projection not present in Macedonian. Finally, a glance at other types of Multiple Determination in the Balkan languages (including Balkan Slavic) indicates a patchwork of appositive and non-appositive constructions; the existence of Multiple Determination has been considered a Balkanism, but the constructions involved are far from uniform.

Psycholinguistics, Experimental Syntax, and Syntactic Theory of Russian

Irina A. Sekerina
(The City University of New York)

Since the introduction of formal experimental methods to syntactic theory (Cowart, 1997; Schütze, 1996) implemented in experimental syntax (Myers, 2009; Sprouse et al., 2016), there is an ongoing debate about what experimental methods can tell us about syntactic theory. On the one hand, informal grammaticality judgments traditionally used in theoretical syntax are the necessary starting point for a systematic reflection on linguistic phenomena (Phillips, 2010). On the other, formal methods may be necessary to give us more precise and stable tools for developing the empirical basis of theories and thus significantly contribute to establishing these theories. However, a complete switch from informal judgments to formal experiments is costly in terms of time and money.

In this talk, I will explore a potential contribution of formal experimental data from adult participants to morphosyntactic theories by applying Sprouse's (2016) experimental syntax framework to Russian. In Study 1, *Wh-Movement vs. Scrambling*, I will compare a syntactic explanation of filler-gap dependencies with an explanation from another cognitive system. In Study 2, *Gender Prediction*, I will present online empirical evidence for restructuring of the category of grammatical gender in heritage Russian. Finally, in Study 3, *Genitive of Negation*, I will discuss preliminary data from a factorial design experiment with a large sample that investigates constraints on usage of the genitive of negation in modern Russian.

The formalization of Serbian: lexical resources and tools

Duško Vitas
University of Belgrade

In this presentation we will present the processing of texts/corpora in Serbian that are based on lexical recognition methods that are supported by Unitex/GramLab, a corpus processing suite. These methods use various types of morphological dictionaries; in more details, we will present the principles of the classification of inflected words, the formalisms of the production of morphological dictionaries of Serbian, the inflection of multi-word units and its formalization, the processing of derivational phenomena, and treatment of unknown words. The interface between these dictionaries and syntax is established through local grammars. Their use will be illustrated by examples of homography disambiguation with so-called ELAG grammars and by the recognition of some classes of nested named entities.

We will also briefly present corpora of contemporary Serbian, more specifically the aligned Serbian-Croatian literary corpus that is based on the ASPAC text collection. This corpus is used to investigate the statistical relevance of often listed discriminators of these two usus.

Workshop

Heritage Slavic Languages in Children and Adolescents

Wednesday, Dec 5

9:30-15:00

Taberna

– in alphabetical order –

Code-switching in French-Russian simultaneous bilingual acquisition (2;1 to 4;0)

Oksana Bailleul, PhD, Sorbonne Nouvelle University

Introduction

Recent research on bilingual acquisition has shown that young bilinguals have differents paths in the development of two distinct languages. At two-words stage some young bilinguals start to produce unilingual sentences in their both languages (De Houwer, 1990; Sinka & Schelletter, 1998; Deuchar & Muntz, 2003, etc.), while others use mixed utterances and simple syntactic structures in their weaker language (Schlyter, 1995; Lanza 1997; Deuchar & Quay, 2000; Serratrice, 2002; Jisa, 2000; Juan-Garau & Pérez-Vidal, 2000; Müller & Kupisch, 2003; Comeau *et al.,* 2007). Since bilingual children are exposed to two languages, they may receive less total exposure to each of their languages than monolingual children. Thus, unbalanced input may result in unbalanced proficiency, e.g. one language developing faster or slower than the other one (Lanza, 1997; Döpke, 1998; King & Fogle, 2013). The societal language can sometimes influence the weaker one and the child would use more mixed utterances in his/her heritage language on the level of vocabulary (content and function words, Deprez, 1994; Jisa, 2000), morphology (grammatical morphemes) and syntax (Schlyter, 1993; Quay, 2008).

Methodology

This study focuses on language acquisition of a bilingual child growing up in a French-Russian speaking family (French-speaking father and a Russian-speaking mother) and hears these two languages from her birth. The couple applies 'one parent - one language' principle. The child lives in France and has developed dominance in the societal language.

The child has been recorded during spontaneous and natural interaction with both of her parents for the period of two years (from 2;00 to 4;00). The corpora consist of 68 hours recordings and of 28 hours of transcriptions. The data was collected on weekly basis during dyadic and triadic natural 'parent - child' conversations in different contexts: picture-book reading, guided activity and a free play.

Results

The findings have shown a shift from dominant bilingualism to the harmonious use of both languages at the age of 3. At this age, the acquisition of Russian grammatical categories was characterised by a rapid growth. The shift from dominant bilingualism to the harmonious use of both languages was accompanied by the changes of the child's linguistic soundscape, the use of parental discourse strategies and input frequency in Russian.

Unilingual French and mixed utterances are frequent in the child's speech in 'mother-child' conversation from 2;1 to 2;11. Russian utterances were produced either as maternal-speech imitations or as response to her discourse strategies which aimed to question the child's knowledge of Russian (e.g. *requests to translate or to give a Russian equivalent of a French word*). In these 'dilingual conversations', Russian content words were more frequent in mixed utterances and function words appear in low proportions.

From 2;5 to 2;9, a progressive increase of Russian content words and a slow but stable expansion of function words were observed. At this age, the child produced a large proportion of mixed utterances within 'mother-child' interactions. By this age, mixed content and function words receive Russian-case markings (**Accusative**: *ex. "cherche rybku Camille" = ishet rybku Kamiy (Camille is looking for a fish), "a pour menia" = eto dlia menia (It's for me);* **Dative**: ex. *"kukle merci" = kukle spasibo (Thank you to the doll)*, **Genitive**: ex. *"ça y est **tshaya"** = bolshe net **tshaya**, There's no more tee).* Before these ages, Russian mixed elements were not inflected (*"a plein i yabloko" - mnogo yablok, at 2;3 (Ther's a lot of apples).* Thus, the bilingual child is sensitive to the morphological complexity of these distant languages

(French and Russian) and, despite low rates of Russian-unilingual utterances, the morphological aspects of Russian are being categorised.

From 3;0 to 4;0, a sudden switch to Russian language in 'mother-child' conversations was noted along with a rapid growth of grammatical categories in this language. This is accompanied by an important decrease of mixed utterances. At these ages, cross-linguistic transfers on the level of morphology and syntax in Russian-unilingual sentences appear. The child relies on the analytic features of French in the acquisition of synthetic aspects of Russian. Among these cross-linguistic influences, the child uses the Prepositional Case instead of the Instrumental Noun Case, double use of Subject Noun and Pronoun, Imperfective Aspects of the Verb instead of the Perfective Verbs, which are formed by inflexions or by a new verb stem, transfers of French productive verbs such as *faire (to do), mettre (to put)* instead of Russian specific action verbs, Plural marking of Collective Nouns.

The present study contributes to the comprehension of the acquisition process of two distinct grammatical systems by a bilingual child who hears these languages from birth. We also support the idea that bilingual children are sensitive to grammatical complexity of both languages from early ages and develop a common underlying proficiency, expressed in implicit metalinguistic knowledge that they apply in the acquisition of distinct grammars (Cummins, 1980).

Keywords: Bilingual simultaneous acquisition, French-Russian bilingual child, code-switching.

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Age of onset effects in the acquisition of null arguments in Polish and German as heritage languages

In heritage language research there is a debate whether heritage speakers who acquired both of their languages simultaneously differ with regard to their attainment in the heritage language from heritage speakers who acquired heritage and majority language sequentially in early childhood. Montrul (2008: 60) explicitly states that „[i]f language attrition occurs within early (pre-puberty) bilingualism, it will be more severe in simultaneous bilinguals (exposed to the two languages very early) than in sequential bilinguals (when the L1 was acquired before the L2)". Thus, attainment in the heritage language should be better with sequential than simultaneous bilinguals. A possible explanation for this claim has to do with the quantity of input heritage speaker receive in their home language. If both languages are acquired simultaneously, input is split up between the two languages from birth, thus leaving less space for the heritage language to develop before critical periods in language acquisition have come to a close. However, Kupisch (2013: 210) reacts to this claim by pointing to numerous studies on simultaneous bilinguals which show that they can successfully acquire linguistic properties in both of their languages, even if these properties differ.

In our paper we address this possible divide between the two types of heritage speakers by looking at data on the acquisition of null arguments in two heritage languages: German as a heritage language in Poland, and Polish as a heritage language in Germany. Both languages differ with regard to the property under investigation: Polish allows null subjects and objects to some extent (Pilarski 2013). Monolingual Polish children show a general preference for null arguments at an early age, but with increasing age they reach an adult-like level of omission (Święcicka 1993, Tryzna 2009). German, on the contrary, is a non-null subject and object language (Hong 1995). It allows omission of arguments only in topic positions. Monolingual German children, however, omit to some extent arguments in various positions (Jakubowicz et al. 1997). Once finite verbs are used productively, subject-drop decreases (Clahsen & Penke 1992).

As numerous studies have shown, null arguments can be considered a vulnerable domain in bilingual acquisition. The problems that bilinguals have when acquiring null subject (NSL) and null object (NOL) languages are mostly accounted for by the Interface Hypothesis (cf. Sorace et al. 2009): Thus, the choice between null and overt arguments requires the integration of syntactic and discourse-pragmatic knowledge which leads to processing problems in bilinguals. Studies on different NSLs revealed a tendency of bilinguals to overuse overt subject pronouns (Polinsky 1995). However, increased use of overt subjects has been found to occur mainly in young children (Schmitz et al. 2012), but not in older or adult heritage speakers of NSLs (Nagy 2015).

For our own research, we pursue the following research questions: (i) Is the representation and use of null arguments in early successive Polish and German heritage speakers similar to age-matched monolinguals of Polish and German, on the one hand, and/or is it similar to simultaneous bilingual heritage speakers of Polish/German, on the other? (ii) Can possible differences between heritage and monolingual speakers be accounted for in terms of cross-linguistic influence (e.g. overuse or prolonged use of argument omission in German heritage speakers growing up in Poland and/or overuse of overt subject pronouns in Polish heritage speakers in Germany)? Our main focus will be on attainment with regard to the investigated property at later stages of the acquisition of Polish and German as heritage languages.

Therefore, the study design includes the following groups which differ in age of onset of the acquisition of the respective majority language (n=10 for each group and heritage language, overall 80 children): (i) heritage speakers of Polish and German who acquired Polish and German simultaneously from birth, (ii) heritage speakers of Polish and German who started to acquire the majority language at age 3-4, (iii) heritage speakers of Polish and German who started to acquire the majority language at age 6-7, (iv) a control group of age-matched German and Polish monolingual children. Each child has been exposed to the majority language for 5 years, i.e. the age span of the investigated children ranges from 5 (simultaneous bilinguals) to 12 years (sequential bilinguals with age of onset of the majority language at 6-7 years). Simultaneous bilinguals and monolingual controls are divided into three age groups (5 year-olds, 8-9 year-olds and 11-12 year-olds) in order to allow for exposure-matched and age-matched comparisons.

Data were gathered in 2017 and 2018 using different experimental tasks: (i) a sentence repetition task, (ii) a forced choice task, (iii) an acceptability judgment task, (iv) a picture matching task and (v) an elicited narration based on a set of pictures (MAIN instrument, cf. Gagarina et al. 2012). We are still in the process of coding and analyzing the data, but a preliminary analysis of the data coded so far revealed no significant differences between the two groups of heritage speakers (i.e. simultaneous vs. early successive bilinguals) for each heritage language regarding the use of null/overt arguments. Thus, it seems to be the case that our results do not confirm the findings of Montrul (2008) for Spanish heritage speakers in the U.S. However, there seems to be an age effect with older heritage speakers performing more like the monolingual controls, which would be in line with similar findings on null subject use of heritage speakers of Romance languages in Germany (cf. Schmitz et al. 2012). These findings, however, will have to be verified after including all examined children in the analysis.

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The Polish dialect spoken by the inhabitants of Vershina (Irkutsk Oblast in Siberia) as a heritage language. On the example of the young generation's speech

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The village of Vershina (Rus. Вершина) was founded in Russia by voluntary settlers – peasants as well as workers and miners of peasant origin from Lesser Poland – in 1910. It is situated about 130 kilometres north of Irkutsk. Since the moment of the foundation, the inhabitants of Vershina have lived in a language island (i.e. an "internally structured settlement of a linguistic minority on a limited geographical area in the midst of a linguistically different majority"; Rosenberg 2005: 221). Most of the community members are bilingual. Although they acquired the language of the dominant group (Russian), it is still important for them to preserve the language of their ancestors (the Lesser Polish dialect). Their bilingualism is connected with diglossia (Głuszkowski 2011b; 2011a; 2012), which also affects their language choice and the phenomenon of code-switching and code-mixing (Głuszkowski 2012; 2015). Vershina has been attracting the attention of scholars, journalists, film makers, publicists for several decades. In the 21st century it has also been noticed by some celebrities and politicians, especially because of the 100th anniversary of the establishment of the settlement. However, the dialect of the Polish migrants has been thoroughly examined in only one comprehensive linguistic study so far (see Mitrenga-Ulitina 2015).

The Polish community has lost its former ethnocultural homogeneity. The last period in Vershina's history began after *perestroika* and the collapse of the Soviet Union in 1991. The political changes helped the inhabitants of Vershina to regain their minority rights: religious, institutional and educational in particular (cf. Masiarz 2016).

Nowadays all inhabitants of Vershina (of Polish origin) may be considered heritage speakers. However, their situation is specific because of several reasons:

a) their Polish is not the literary language, but the Lesser Polish dialect;
b) the dialect exists only in its spoken form;
c) the inhabitants of Vershina write in Polish with the aid of the Russian Cyrillic script;
d) in the 1990s they acquired the possibility to learn Polish in the local school, but it was the literary variety;
e) representatives of the youngest generation in mixed families tend to use Russian even in home-related domains.

Thus, the language situation of Vershina as a small language island (a dialect island) cannot be easily compared to the one faced by other heritage-speakers communities, e.g. the youngest generation of Poles in the UK or Turkish immigrants in Germany, not only because of the number of community members, but also because of the dialectal form of their heritage language.

The main aim of the paper is to characterise both the sociolinguistic specificity of young bilingual Vershinians and the structural features of their heritage language – the Polish dialect influenced by the Russian literary variety.

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Sensitivity to grammatical gender cues in the acquisition of heritage Russian

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Introduction The present study investigates whether Russian heritage speakers are able to predict gender based on phonological information. The Russian gender system is relatively transparent, i.e. the form of the noun typically predicts its gender, although certain types of nouns are opaque. Previous studies have found that the N gender is the most problematic, with American-Russian heritage speakers typically replacing it with F, and Norwegian-Russian bilinguals overusing M (Polinsky 2008, Rodina & Westergaard 2017).

Experiments We have carried out three experiments with German-Russian bilinguals (n=19, age range 4-8) and Russian monolinguals (n=87, age range 3-7). Experiments 1 and 2 elicited adjectival agreement with real and novel nouns, involving either a transparent gender cue, i.e. final non-palatal consonant (Mt), stressed *-a* (Ft), or stressed *-o* (Nt), or an opaque gender cue, i.e. unstressed vowel (F/N) or palatalized consonant (M/F); Table 1. The stimuli in Experiment 3 were NPs with familiar color adjectives and novel nouns with transparent cues that either matched or did not match the cues on the adjectives (cf. Karmiloff-Smith 1979); Table 2.

Results

1) There is cue-driven agreement patterns in the nonce-word experiment in all conditions – but significantly more defaulting to M than in monolinguals; Fig. 1.
2) Bilinguals default to M significantly less with real words than nonce words; Fig. 2.
3) Real nouns with the opaque M/F cue are more error-prone than nouns with transparent M and F, suggesting that transparent cues facilitate acquisition of gender features; Fig. 3.
4) N is most vulnerable in all experiments. Both mono- and bilinguals tend to overuse M (and not F) with N nouns. Possible explanations: M agreement is syntactically unmarked/underspecified; N is attracted to M rather than to F due to substantial paradigm overlap in oblique cases.
5) Both participant groups show preference for F in the opaque M/F condition (Fig. 1). Further investigation of this phenomenon based on Russian corpus data reveals that some palatalized endings are characteristic of F and others of M. On closer inspection, the test items in Experiment 1 (M/F condition) predominantly contain F cues. This finding suggests that both mono- and bilinguals are sensitive to even finer gender cues than what has been reported in the literature.
6) Adjective agreement plays a facilitating role in all gender match conditions in bilinguals, over and beyond the phonological cue on the noun itself. In the mismatch conditions (i.e. where the adjective and the nonce noun have different cues), bilinguals are more similar to younger monolinguals who use noun endings to predict gender more frequently than older children (who tend to use agreement) (Fig. 4-6). This indicates that acquisition proceeds from sensitivity to features on the noun itself to a higher sensitivity to gender agreement.

Conclusion Although German-Russian bilinguals exhibit significantly more defaulting to M across all nonce noun conditions than monolinguals, their differentiated use of adjectival agreement suggests that they are sensitive to formal gender cues. (493 words)

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Table 1. Experiment 2: Adjectives and novel nouns

	F-transparent (Ft)	M-transparent (Mt)	N-transparent (Nt)	F/N-opaque (F/N)	F/M-opaque (F/M)
Example	*kluvá*	*punip*	*garpó*	*prúz/ə/*	*dron'*

Table 2. Experiment 3: Adjectives and novel nouns, matched and mismatched cues

Gender match: Adj-Noun			Gender mismatch: Adj.-Noun					
MM	FF	NN	MF	MN	FM	FN	NM	NF

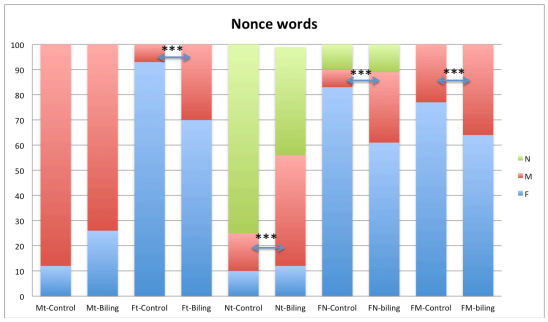

Fig. 1. Distribution of responses in Experiment 2 (Nonce words)

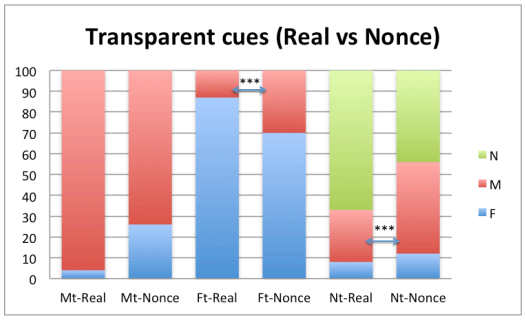

Fig. 2. Distribution of responses in transparent in Experiment 1 (Real words)

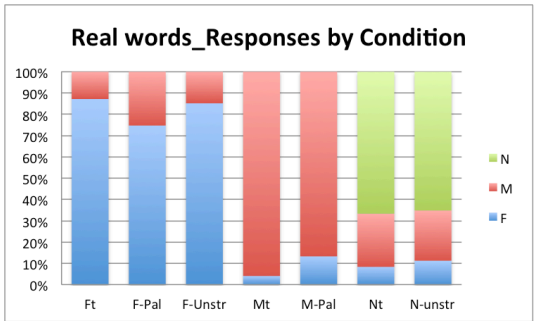

Fig. 3. Distribution of responses by cue type conditions, Experiments 1 and 2

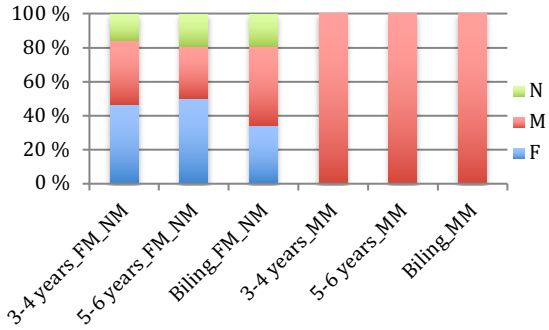

Fig. 4. Experiment 3: M nouns, matched/mismatched cues

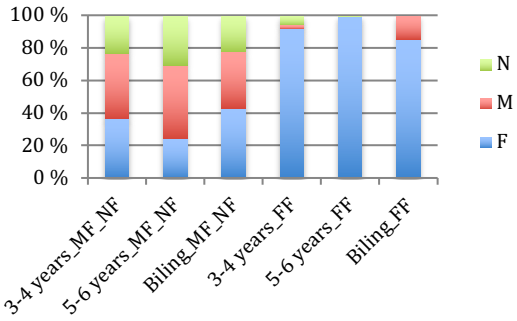

Fig. 5. Experiment 3: F nouns, matched/mismatched cue

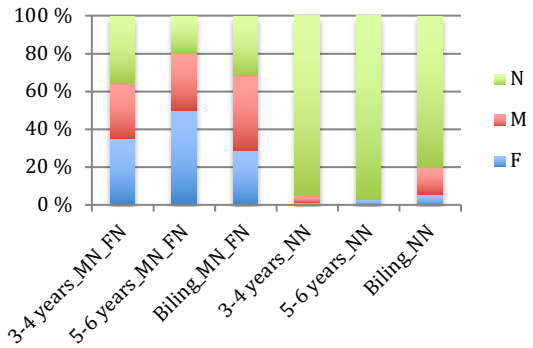

Fig. 6. Experiment 3: N nouns, matched/mismatched cue

(In)complete grammar: Insights from Heritage Bulgarian

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Heritage speakers are notorious for having tremendous variance within their populations- from very high proficiency cases where some registers may be affected, to so-called overhearers (Au et al. 2002). Specific linguistic features in the heritage language competence and use may be affected by factors, such as sociopolitical factors, language practices, such as input and use, or level of education, attitudes and beliefs. Heritage speakers may acquire a divergent grammar, if the input is only qualitatively different, or an incomplete grammar, if the input is also quantitatively impoverished (Sorace 2005). This also leads to the question of age of onset and degree of attainment, i.e. full acquisition vs. incomplete acquisition.

This paper contributes to the current discussion on the nature of grammar in Heritage languages by reporting unprecedented data from Heritage Bulgarian. We present results from an in-depth study of two Heritage Bulgarian children, whose dominant language is German. The children are siblings, a boy aged 4;9 and a girl aged 10;9. Prior to the experiments, we interviewed and recorded the children and their parents, who additionally filled in a detailed language-background questionnaire giving information about the language input and language practices of the children and of the family. Consequently, we examined the children's comprehension and production of Bulgarian by means of multiple measures in order to avoid task effects. The employed tasks were: Elicitation of narratives based on the so-called Frog Story design (Berman & Slobin 1994), a role-play situation to elicit spontaneous speech, sentence-picture matching, and elicited production and comprehension of narratives using the Multilingual Assessment Instrument for Narratives (MAIN) (Gagarina et al. 2012, 2015). We employed these multiple measures to test elicited oral production and auditory comprehension since if a heritage speaker's grammar deviates from the target grammar in terms of a particular grammatical property, this should be observed across different tasks. We refrained from written tests with the older child since heritage speakers do better in oral tasks which do not require metalinguistic reflection (Bowles 2011, Montrul et al. 2008).

The data is illuminative with respect to a number of properties of Heritage Bulgarian grammar in terms of lexis, morphology, and syntax. Generally, the children display more errors in morphology – overmarking, substitutions, use of full pronouns instead of clitics, hypercorrection, fossilized L1 errors, such as regularization of irregular morphological derivatives, e.g. in verb morphology – than in syntax. The errors in morphology partly parallel what can be found in the course of general linguistic development of monolinguals, though at a later stage (cf. Polinsky et al. 2010). Concerning syntax, the results show different transfer effects (between German and Bulgarian) with regards to the grammatical properties concerned. For example, the production of variable word order in Heritage Bulgarian seems unproblematic (see, however, Polinsky et al. 2010 for different results in Heritage Mandarin). The production of negation, i.e. the correct placement of the Bulgarian negative marker, is problematic and seems to be influenced by the syntactic properties of German negation. In the lexical domain, we find strong interference from German as the children produce a number of creative, novel compounds, which are not typical for Bulgarian, e.g. Bulgarian: *korabski kapitan* instead of *kapitan na korab*, German: *Schiffskapitän* "ship captain". Although some effects may be due to interference from German, not all of the deficient areas are exactly the ones where the two languages differ structurally. This could mean that some of the observable differences are the result of interference from German whereas others may follow from more general principles of language and change. The results are also discussed individually for the children showing that when compared to the older child, the younger child's performance is closer to the baseline.

Heritage Bulgarian differs notably from the baseline native Bulgarian in terms of lexical and morphological properties but less so in terms of syntax. These differences may have their roots in phenomena besides transfer from the dominant German language. Generally, it could be identified that Heritage Bulgarian displays some of the characteristic properties of other heritage languages: reduced complexity, lexical access difficulties, over-regularization, and fossilized L1 errors. On the basis of the investigation of Heritage Bulgarian, we can also conclude that morphology seems to be a more vulnerable domain than syntax.

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Heritage vs. monolingual acquisition of Russian: Diversity in timing and developmental paths?

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The Russian-speaking population in Germany is large and there are various possibilities of maintaining this home language (L1) across generations, including private and state bilingual kindergartens, schools, media, health services, etc. Such environmental possibilities together with the parental policy to maintain home language, in our case Russian, should lead to low diversity in bilingual acquisition path and timing. Still, some recent studies report that bilingual acquisition shows a higher level of diversity across children, in stark contrast to monolingual acquisition especially in the domains of lexicon and grammar, but not in discourse (Haman et al., 2017 on Polish-English bilinguals, Lindgren, 2018 on Turkish-/German-Swedish bilinguals). We aim to examine the diversity across monolingual and bilingual acquisition of Russian in this domain – discourse. Discourse is represented in our study by elicited narratives, in which macrostructure is analyzed; this domain is an interesting and less explored area for investigation because it is considered non-language specific and universal in nature (Liles, 1993), is less dependent on a child's language proficiency and on environment factors than other domains.

Macrostructure in narratives is traditionally evaluated via *story grammar* (Stein/Glenn, 1979), which is grounded in the global organization of the various components of a story and which constitutes the skeleton of a narrative (Heilmann et al. 2010; Trabasso et al. 1989). The present study is based on novel analyses, which consider two distinguished parts of macrostructure: Story Structure and Story Complexity. Here we report findings on Story Structure only. Story Structure was investigated using a quantitative measure which deals with the number of story grammar elements produced. This approach in our study is applied (a) to compare the overall macrostructure scores of monolinguals and bilinguals and (b) to determine the level of diversity across these groups.

Method. A monolingual Russian group of children (n=24, mean age 4;9), as well as a bilingual Russian-German (n=26, mean age 4;11) group were tested. Narratives were elicited via the *Multilingual Assessment Instrument for Narratives* (MAIN, Gagarina et al. 2012, 2015). This instrument contains theoretically-based pictorial stimuli, which are controlled for explicit picturing of each element of the story grammar, for the cognitive content of the single pictures and the whole story sequences, for cultural appropriateness, etc. Each elicited story was scored for Story Structure, the number of elements up to 17 points maximum.

Results. A correlation analysis of Story Structure elements showed that the monolingual group scored significantly higher than the bilingual group (Estimate=2.688, $p<.001$). Furthermore, bilingual children showed more diversity with a number of children performing at very now scores for Story Structure.

Discussion. The higher scores of the monolingual group at Story Structure might be due to the language support programs, which start at age three in the Kindergartens and aim at early development of narrative skills. The bilingual group's lower Story Structure scores and their larger scattering show the variability in the children's L1 narrative skills and can be interpreted by the impact of L1 family policy on general L1 development. Given that Story Structure at around age five is still actively developing, the results of our study support previous findings on the crucial role of L1 used at home on its development.

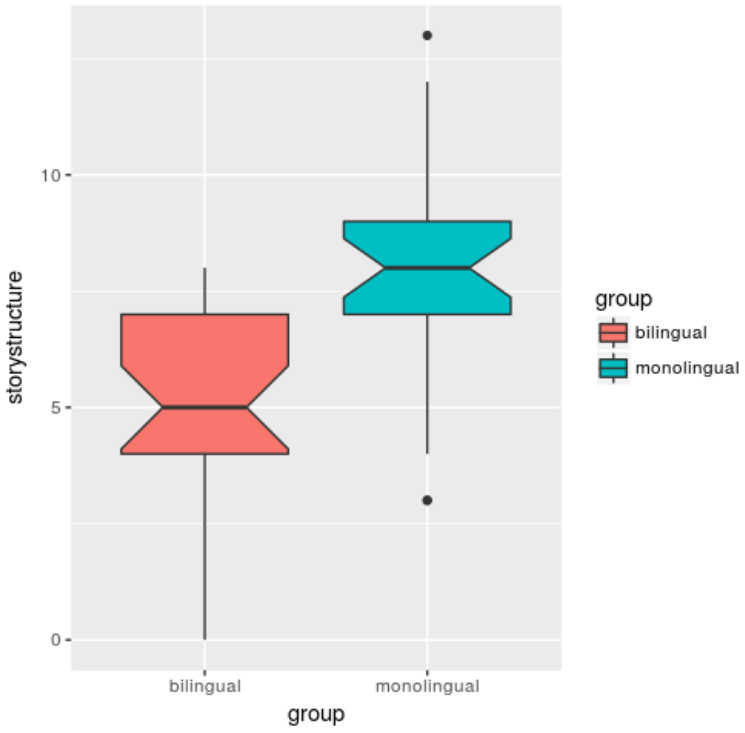

Figure: Means of the Story Structure Score, as achieved by the bilingual and the monolingual group.

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Transgenerational changes in the usage of word-formation by Russian heritage-speakers in Germany and Sweden

Our study deals with transgenerational language changes in multilingual situations, namely by the 1st and 2nd generations of Russian-speaking immigrants in Germany and Sweden. According to Fishman 2001, we define their Russian language as a heritage language (HL) – the language derived from the family background of immigrants. However, the present study focuses on the 2nd generation of heritage language speakers and presents their specifics in the word-formation acquisition in comparison with the 1st generation.

As is well-known, the status of the heritage language (HL) in the investigation of language acquisition and didactics is quite complicated. The reason for this is that a HL is neither L1 in the classical meaning nor L2 (cf. terminological overview in Polinsky/ Kagan 2007). This unsettled point is also relevant for our formal-linguistic study due to the observed co-existence of two mental grammars and lexicons in the same heritage language speaker, whereupon these two systems are organized and hierarchized in different ways in syntax, morphology, word-formation, and lexis (cf. observations in contact and colonial linguistics in Riehl 2004; Stolz et al. (eds.) 2015).

Although there is a substantial amount of research available on the *heritage language learner*s' lexis, it is not so easy to find studies related to word-formation in the Slavic heritage language acquisition (SLA). Our study is, therefore, targeted on the filling of this lacuna in the SLA research, beginning with a description and analysis of the word-formation strategies in early SLA.

In particular, we investigate the HL-acquisition of word-formation in Russian by the bilingual migrant children (2nd generation, $\Sigma = 30$) at the age of 9-11. This study is based on a corpus of linguistic data obtained by the different elicitation tasks (picture and process descriptions, storytelling and interviews).

Our hypothesis runs as following: The lexical resources of HL-learners at early stages (=1st generation) are small, but the communicative situations may still place such learners in a position where they must communicate in spite of their being at a loss for words. In such situations, learners resort to a number of different strategies, some of them based on (1) their L1 knowledge (= German or Swedish), some of them based on (2) their HL knowledge (= Russian), and some of them based on (c) their own creativity. Through more frequent use, the expressions used in these situations can even become part of the learner's mental lexicon.

Our aim is to describe these strategies in our special case of the SLA (we should change this term since it stands for Second Language Acquisition). Apart from the formal description of the concrete linguistic manifestations of different strategies, the study also investigates how morphology and lexis influence each other through word-formation strategies (cf. Vanhove et al (eds.) 2012). Finally, the comparison of the 1st and 2nd generations of Russian-speaking immigrants in Germany and Sweden might also provide evidences for language change in the multilingual settings (cf. Weinreich 1953) and shed light on such theoretical questions: How do two concurrent linguistic systems influence each other? What changes are instigated by the multilingual situation in formal grammar, lexicon, and language use?

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Workshop

Semantics of Noun Phrases

Thursday, Dec 6

10:30-18:00

Taberna

—— in alphabetical order ——

Uniqueness / maximality in Russian bare nominals

Olga Borik (UNED) & Daria Seres (UAB)

One of the general questions that arises with respect to languages without articles, like Russian, is whether a certain interpretation of bare nominals in argument position is the "default" one and the other ones are derived (cf. Dayal (2004): a definite interpretation as default vs. Heim (2011): an indefinite interpretation as default) or whether such nominals are ambiguous between a definite and an indefinite interpretation (Partee 1987, Chierchia 1998, Geist 2010).

Empirical facts from Russian show, contra Dayal (2004), that bare nominals (both singular and plural) in this language can be *bona fide* indefinites: they are able to take different scopes in opaque contexts, as in (1), to introduce discourse referents, they are found in existential constructions.

(1) Vasja xočet ženit'sja na norvežke,
Vasja wants marry on Norwegian
a. potomu čto oni krasivye.
b. no poke eščë ne poznakomil eë s roditeljami.
"Vasja wants to marry a Norwegian a. because they are beautiful."
b. but he hasn't introduced her to his parents yet."

Furthermore, two identical (except for the case marking) non-coreferential bare singulars are able to appear in the same sentence (cf. Carlson's (1977/1980) tests from indefiniteness), as illustrated in (2):

(2) Durak duraka vidit izdaleka.
Fool.NOM fool.ACC sees from afar

If an indefinite interpretation was not easily available for the bare nominal *durak* (fool) and a definite reading was the default one, the example would be predicted to be odd (cf. *The fool sees the fool from afar*).

Following Heim (2011), we claim that definiteness, which may also be expressed by bare nominals in Russian, is a cancellable implicature, which appears as a result of pragmatic strengthening of indefinites. The hypothesis that Russian bare nominals are semantically indefinte should make a prediction that uniqueness / maximality presupposition (cf. definiteness as uniqueness by Frege (1982), Russel (1905) Strawson (1950)) should not be inherent to them. This prediction is borne out as Russian bare nominals are not easily acceptable those contexts which suggest definiteness by uniqueness (cf. Lyons 1999).

(3) a. The house is mine.
b. #A house is mine.
(4) a. #Dom moj. (house.NOM mine)
b. Etot dom – moj. (this house.NOM mine)

(4a) shows that a bare nominal *dom* patterns with an indefinite in English (3b). However, the sentence is fine if the nominal is preceded by a demostrative.

Moreover, the following pair of examples shows the lack of uniqueness of the Russian bare nominal, used in the context that suggests uniqueness.

(5) *The author* of this book gave an interview. #The other author/#the second author/another author appeared in a TV show.
(6) *Avtor* etoj knigi dal intervju Novoj gazete. Drugoj avtor vystupil v ėfire Ėxa Moskvy.
author this.GEN book.GEN gave interview to NG. Another author appeared on radio 'EM'

We argue that the example in (6) also provides empirical evidence against the claim that bare nominals in Russian are semantically ambiguous between a definite and an indefinite interpretation. The default interpretation of the first subject in (6) without any continuation is likely to be interpreted as definite, although, as the full example shows, this 'definiteness', in contrast to English, does not presuppose uniqueness. Non-embedded presuppositions are generally not cancellable, so the results in (6) are unexpected if the subject of (6) is a 'true' English type definite. The uniqueness of the author is only an implicature in Russian, given that 'another author' can refer to another author of the same book. In English, however, the expression 'another author' in the second sentence can refer to another author of another book, so that the uniqueness of the subject of the first sentence cannot be cancelled.

These empirical facts suggest that the uniqueness effects, to the extent they exist in Russian, do not come from a hardcore semantic operation that define definiteness, because they are cancellable. However, the kind of definiteness expressed by bare nominals in Russian can be interpreted in terms of familiarity (Christophersen 1939; Heim 1982) or identifiability by the speaker and hearer (Lyons 1999). A special case of familiarity is anaphoricity (Heim 1982), when there is an antecedent provided by the previous context.

The *indefinite as default* hypothesis also got some empirical support from an experiment that we conducted in order to test the adequacy of bare plural nominals in preverbal and postverbal subject positions in contexts that suggest definiteness (anaphoricity or bridging contexts) or indefiniteness (absence of anaphoricity or bridging, discourse-new referents) of the NPs. It has been observed (as expected) that the participants favoured preverbal subjects in contexts suggesting their definiteness and postverbal subjects in context suggesting their indefiniteness. But additionally, and most relevant for this talk, it has also been observed that indefinite contexts (independently of their NPs position) have an overall superior adequacy compared to definite ones. This result is perfectly compatible with the hypothesis that bare nominals in Russian are default indefinites and, thus, are felicitous in a wider range of uses.

Other recent experimental findings (Šimík & Demian, in prep.) also support the *indefinite as default* hypothesis showing the absence of uniqueness/maximality presupposition in Russian bare nominals.

To conclude, we suggest the following interpretation of the data discussed in this abstract. In Heim's (2011) proposal, an indefinite interpretation is taken to be the default one for articleless nominal arguments. It does not impose any requirements on how many individuals must satisfy the common noun predicate: "the speaker may be aware of multiple instances or may be agnostic about the matter." This can explain why bare nominals interpreted indefinitely are more easily accepted by native speakers in different syntactic positions (cf. the results of the experiment: indefinites had overall higher acceptability judgments in any syntactic position).

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Czech binominal *each* and collective set predicates

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Background In this paper we address the interaction between collective numerals (CN) and determiner/binominal *each.* It was noticed in a literature (Dotlačil 2012b) that some types of collectives (collective set predicates following Winter's 2001 terminology) allow limited distributivity effects like the ability to license reciprocal anaphors (e.g. *Bill and Peter, together, carried the piano across each other's lawns*). Such data are not analyzable in the traditional approaches to pluralities and require frameworks interpreting expressions via sets of assignments (Brasoveanu 2008, Nouwen 2003, Dotlačil 2012b a.o.). We follow this trend and describe Czech data (collective interpretation of numerals and their interaction with determiner/binominal *each*) in the PCDRT framework of Dotlačil (2012a,b). Binominal *each* itself poses non-trivial questions for compositional approaches to natural language syntax and semantics and its interaction CN adds another layer of complexity. We argue that the essentially right PCDRT approach has to be enriched with syntactic analysis to deal with the puzzling Czech data.

Data Czech numerals have a distinctive subclass of the collective numerals (Dočekal 2012), which *ceteris paribus* enforce collective inferences: compare (1-a) (ordinary numeral *dva* 'two') vs. (1-b) (collective numeral *dvojice* 'twosome'), where the infelicity of the continuation in (1-b) signals the unavailability of distributive readings with CN; (1-b) has a collective inference: the two athletes worked together as a team. But even if the collective inference is a part of CN's meaning, they allow for some distributivity (in contrast to pure collectives); (2).

(1) a. **Dva** sportovci vyhráli 2 medaile, ✓první zlato a stříbro, druhý stříbro a bronz.
two athletes won 2 medals first gold & silver second silver & bronze
'Two athletes won 2 medals, the first one G & S, the second one S & B.'
b. **Dvojice** sportovců vyhrála 2 medaile, #první zlato a stříbro, druhý stříbro...

(2) **Dvojice /#Skupina** podezřelých zradila jeden druhého. (Intended:) 'The people within twosome group suspects.GEN betrayed one other.
the twosome / group of suspects betrayed one another.'

The puzzling pattern we aim to address is presented in (3): (3-a) has the expected collective reading but the determiner *each* in (3-b) allows distributive reading even with CN. But as (3-c) shows such a distributive reading is unavailable with binominal *each*. The grammaticality of (3-b) is to some extent expected after (2) but then unacceptability of (3-c) is surprising. Compare the perfectly grammatical (3-d) with cardinal numeral substituting the CN.

(3) a. **Dvojice** sportovců vyhrála 3 medaile. ***distributive**
twosome athletes.GEN won.SG.FEM 3 medals.
b. **Každý z dvojice** sportovců vyhrál 3 medaile. **✓distributive**
each of twosome.GEN athletes.GEN won.SG.MASC 3 medals
c. ***Dvojice** sportovců vyhrál(a) **každý/á** 3 medaile.
twosome athletes.GEN won.SG.MASC(FEM) each.SG.MASC/FEM 3 medals
d. **Dva** sportovci vyhráli **každý** 3 medaile. **✓distributive**
two athletes won.PL.MASC each.SG.MASC 3 medals

Analysis The core assumptions of our analysis are (i) Dotlačil's PCDRT and, for the case of (3-d), (ii) the structure shown in the figure below, involving the deletion of a definite NP anaphoric to the key (under partial matching with the key, modulo number); while the key controls agreement on the verb (and case-marking on 'each'), the deleted NP controls the number on 'each'; and (iii) the lexical entries for determiner and binominal *každý* 'each' listed in (4).

(4) a. $[\![\text{DET-každý}^{u_n}]\!] = \lambda P_{rt}\lambda Q_{rt}.\delta_{u_n}(P(u_n)) \wedge Q(u_n)$
b. $[\![\text{BINOM-každý}^{u_m}]\!] = \lambda v_r\lambda P_{rt}\lambda Q_{rt}.[u_m\ |] \wedge \delta_v(P(u_m)) \wedge Q(u_m)$

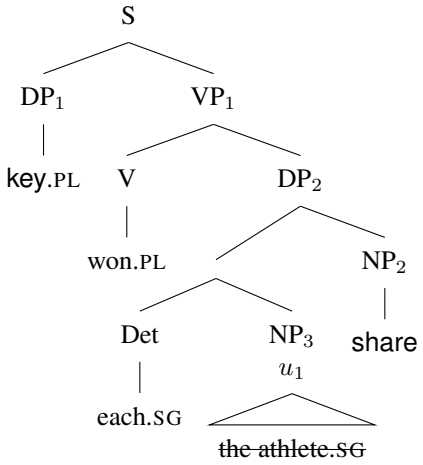
Analysis of (3-a): The subject 'twosome of athletes' ($\lambda Q_{rt}.[u_1|\#(u_1) = 2 \wedge \text{ATHLETES}\{u_1\}] \wedge Q(\bigcup u_1)$) selects the VP ($\lambda v_r[u_2|\#(u_2) = 2 \wedge \text{MEDALS}\{u_2\} \wedge \text{WIN}\{v, u_2\}]$), which results in (5). The only addition (to standard numerical conditions of PCDRT) is the collective inference stemming from the quantifier denotation of the CN, where the collective set satisfaction is required in the nuclear scope – the external argument in this case ($\text{WIN}\{\bigcup u_1, u_2\}$).

(5) $[u_1, u_2|\#(u_1) = 2 \wedge \text{ATHLETES}\{u_1\} \wedge \#(u_2) = 3 \wedge \text{MEDALS}\{u_2\} \wedge \text{WIN}\{\bigcup u_1, u_2\}]$

Analysis of (3-b): We propose that the preposition *z* 'from/of' turns predicates of groups to predicates of their parts – $\lambda P_{rt}\lambda v_r.[|v \subseteq P]$, thereby creating a property that can be selected by 'each'. The preposition operates on the predicative meaning of the CN (we follow the consensus in approaches to pluralities, where collectivity/distributivity always targets the predicates), with the collective inference targeting the CN itself ($\lambda w_r[|\#(w) = 2 \wedge \text{ATHLETES}\{\bigcup w\}]$). When the VP (as above) is selected by the quantificational subject ($\lambda Q_{rt}.[v|\delta_v([|\lambda v_r.[v \subseteq \lambda w_r[|\#(w) = 2 \wedge \text{ATHLETES}\{\bigcup w\}]]]) \wedge Q(v)$), we get (6).

(6) $[v, u_2|\text{ATHLETE}\{v\} \wedge \delta_v([|\lambda v_r.[v \subseteq \lambda w_r[|\#(w) = 2 \wedge \text{ATHLETES}\{\bigcup w\}]]]) \wedge \#(u_2) = 3 \wedge \text{MEDALS}\{u_2\} \wedge \text{WIN}\{v, u_2\}])]$

Analysis of (3-d): We argue that the syntax of Czech binominal *každý* 'each' is essentially the same as proposed by Dotlačil (2012a). That *každý* + the share form a constituent (as opposed to the floating Q *všichni* 'all' + direct object) is demonstrated in (7), where they have been fronted as a single unit. The difference to Dotlačil's analysis (to English *each*) is that the the anaphoricity of the Czech *každý* is represented in the syntax – by an NP that is anaphoric to the key and which is deleted under partial (modulo number) identity with the key. This NP (whose exact semantics will be provided in the talk) licenses the singular morphology on *každý*. The resulting meaning of the quantifier DP_2 is $\lambda Q_{rt}[u_2| \wedge \delta_{u_1}([u_2|\#(u_2) = 3 \wedge \text{MEDALS}\{u_2\}] \wedge Q(u_2)$ and the meaning of (3-d) as a whole is given in (8).



(7) [Každý /*Všichni 3 medaile] vyhráli jen čeští sportovci.
each.SG.MASC all.PL.MASC 3 medals won.PL only Czech athletes
(Intended:) 'Only the Czech athletes have (all) won (each) three medals.'

(8) $[u_1, u_2|\#(u_1) = 2 \wedge \text{ATHLETES}\{u_1\} \wedge \delta_{u_1}([\#(u_2) = 3 \wedge \text{MEDALS}\{u_2\}])] \wedge \text{WIN}\{u_1, u_2\}$

Analysis of (3-c): The reason behind the ungrammaticality of this example is that the subject and its scope impose conflicting requirements *qua* collectivity/distributivity: while the subject requires collectivity in its nuclear scope – (9-a), binominal *každý* (VP_1 node in (9-b)) dictates quantification over key's atoms.

(9) a. $[\![\text{DP}_1 \text{ of (3-c)}]\!] = \lambda Q_{rt}.[u_1|\#(u_1) = 2 \wedge \text{ATHLETES}\{u_1\}] \wedge Q(\bigcup u_1)$
b. $[\![\text{VP}_1 \text{ of (3-c)}]\!] = \lambda v_r[u_2|\delta_{u_1}([\#(u_2) = 3 \wedge \text{MEDALS}\{u_2\}]) \wedge \text{WIN}\{v, u_2\}]$

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Definite Kinds in Polish

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Though kind-reference and genericity both express generalizations about the world, there is a crucial linguistic and conceptual distinction between kind-referring nominals and generic sentences. While generics can take various forms and may include habituals such as *John smokes after dinner*, kind-reference is more restricted and refers directly to the abstract representation of a kind. One common test for reference to a kind is the subject's compatibility with kind-level predicates, e.g. *be extinct*, *be discovered, be invented*. Morphosyntactically, this distinction relies on the notion of NUMBER: a kind-referring subject is numberless whereas generic subjects may be singular or plural (following Borik and Espinal 2012, 2014; contra Dayal 2004). Within this framework, bare nouns denote properties of kinds, which must be bound by the iota operator to license direct reference to kinds. In English, the iota operator is encoded overtly via the definite determiner ((1). NUMBER is absent from the kind-denoting DP, because the role of NUMBER is instantiation, while kind-reference does not rely on instances of kinds (cf. B&E 2012:139: "all actualizers rely on the presence of NUMBER in morphology, syntax and semantics"). By contrast, reference to instances of kinds is built on NUMBER. Because there is no singular marker in English, numberless and singular DPs look alike ((2). Nonetheless, the existence of numberless nominals can be verified via linguistic tests for NUMBER, as illlustrated for Brazilian Portuguese ((3) and Polish ((4) below.

(1) The dodo is extinct. [$_{DP}$ the [$_{NP}$ dodo]] ⇝ $\iota x_k[\text{dodo}'(x_k)]$

(2) The owl hunts at night. [$_{DP}$ the [$_{NP}$ owl]] (*kind reference*)
or [$_{DP}$ the [$_{NumP}$ SG [$_{NP}$ owl]]] (*individual reference*)

(3) O professor tem livro. [$_{NP}$ livro]
'The professor has book' (i.e. has published, may be one or many books)

(4) Sebastian nosi krawat. [$_{NP}$ krawat]
'Sebastian wears tie' (i.e. it may always be the same tie or different ones)

Our claim is that Polish, a Slavic language without overt determiners, also encodes numberless definite kinds, following the pattern previously identified for English, Russian and Spanish (B&E 2012, 2014):

(5) Dodo wyginął. [$_{DP}$ $\emptyset_{DEF}$ [$_{NP}$ dodo]] ⇝ $\iota x_k[\text{dodo}'(x_k)]$
'Dodo went extinct'

Although Polish does not mark DEFINITENESS overtly, we assume the presence of a covert determiner in (5). We further assume that (covert) determiners are responsible for reference assignment (cf. Borer 2005, Pereltsvaig 2006). To illustrate, pronominal reference to determiner-less NPs is impossible (6), but when a demonstrative is present, the anaphoric pronoun is allowed (7). Crucially, kind-denoting nominals may also serve as pronominal antecedents (8), indicating that a covert determiner is present in these cases.

(6) #Jacek zbudował półkę na książki$_i$. Kupił je$_i$ przez internet.
Jack built shelf.ACC for books$_i$. He bought them$_i$ online

(7) Jacek$_j$ potrzebuje półki na te$_j$ książki$_i$. Kupił je$_i$ przez internet.
Jack$_j$ needs shelf.GEN for these$_j$ books$_i$. He bought them$_i$ online

(8) Wieloryb$_i$ wyginie, jeśli nie przestanie się na niego$_i$ polować.
Whale$_i$ will become extinct if not stop REFL for it$_i$ hunt

To show that the covert determiner in kind-referring DPs is DEFINITE and that it triggers a uniqueness presupposition, we present some evidence from object topicalization. As illustrated by the minimal pair in (9), there is a strong preference in Polish for fronted objects to be interpreted as definite and unique. Hence, (9a) is acceptable but (9b) is defective, since a typical car has exactly one steering wheel but as many as four tires. Seeing that kind-denoting nominals are perfectly felicitous in the same configuration (10), we conclude that their syntactic representation includes a DP projection headed by a covert definite determiner, which translates into the iota operator in the semantics, thus presupposing uniqueness.

(9) CONTEXT: Mary began to draw a picture of a car.

a.	Kierownicę	narysowała	jako	pierwszą.
	steering wheel.FEM.ACC	drew.3SG.FEM	as	first.FEM
b.	#Oponę	narysowała	jako	pierwszą.
	tire.FEM.ACC	drew.3SG.FEM	as	first.FEM

(10) Żarówkę wynalazł Tomasz Edison.
light bulb.FEM.ACC invented.3SG.MSC Thomas Edison

Although our Polish data is consistent with B&E's theory of kind-reference, it also points to some outstanding issues. Most significantly, the assumption that reference to kinds is derived via the application of the iota operator, which presupposes uniqueness, requires that bare nouns have exactly one kind in their extension. In other words, the kind WOODPECKER is in the denotation of $[_{\text{NP}}$ woodpecker] in English and $[_{\text{NP}}$ dzięcioł] in Polish, but the subkind BLACK WOODPECKER is not. Otherwise, the extension of $[_{\text{NP}}$ dzięcioł] would have no unique member for the iota operator to return as an output. Note that redefining iota as a maximality operator in the sense of Link (1983) does not solve the issue since there is no lattice structure defined on the domain of kinds in B&E (2012)'s theory.

While the assumption that bare nouns denote properties of unique kinds is not problematic on its own, it is incompatible with intersective analyses of kind modification proposed by McNally & Boleda (2004) for Catalan, B&E (2012) for Spanish, and Wągiel (2014) for Polish. The contradiction becomes apparent when we compare the translations below: (11) requires the predicate $woodpecker'$ to have the unique kind WOODPECKER in its extension, whereas (12) presupposes that BLACK WOODPECKER is also a member of $woodpecker'$.

(11) $[_{\text{DP}}\ \emptyset_{\text{DEF}}\ [_{\text{NP}}$ dzięcioł]] $\rightsquigarrow \iota x_k[woodpecker'(x_k)]$

(12) $[_{\text{DP}}\ \emptyset_{\text{DEF}}\ [_{\text{NP}}$ dzięcioł $[_{\text{AP}}$ czarny]]] $\rightsquigarrow \iota x_k[woodpecker'(x_k) \wedge black'(x_k)]$

We propose to address this inconsistency by rejecting an intersective semantics for modified kinds. Instead, we claim that postnominal adjectives in Polish are modifiers of properties of kinds, with the subkind-of relation SK holding between kinds and their subkinds. Given the denotation of the adjective in (13), the iota operator can now apply to the modified noun in (14) without giving rise to a theory-internal contradiction (15).

(13) $[_{\text{AP}}$ czarny] $\rightsquigarrow \lambda P \lambda x_{sk} \exists y_k[P(y_k) \wedge \text{SK}(y_k, x_{sk}) \wedge black'(x_{sk})]$

(14) $[_{\text{NP}}$ dzięcioł $[_{\text{AP}}$ czarny]] $\rightsquigarrow \lambda x_{sk} \exists y_k[woodpecker'(y_k) \wedge \text{R}(y_k, x_{sk}) \wedge black'(x_{sk})]$

(15) $[_{\text{DP}}\ \emptyset_{\text{DEF}}\ [_{\text{NP}}$ dzi. $[_{\text{AP}}$ czar.]]] $\rightsquigarrow \iota x_{sk} \exists y_k[woodpecker'(y_k) \wedge \text{R}(y_k, x_{sk}) \wedge black'(x_{sk})]$

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The Semantics of Prenominal Possessives in Russian.

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This paper will discuss prenominal possessives in Russian, like those in (1):

1. a. mamINa podruga
   mother.poss.F.SG friend.F.SG
   (my) mother's friend
   b. soldatOVo ružje
   soldier.poss.N.SG gun.N.SG
   the/a soldier's gun

Prenominal possessives are formed by attaching one of two suffixes *-in-* or *-ov-* to nouns as in (1). These denote animate objects: proper names (2a), kinship terms (2b), animal nouns (2c) and professions (2d) (as noted in Babyonyshev 1997):

2. a. vasina kniga
   vasja.poss.F.SG book.F.SG
   Vasja's book
   b. papin telefon
   father.poss.M.SG telephone
   father's telephone
   c. koškina igruška
   cat.poss.F.SG toy
   the cat's toy
   d. aktrisino platje
   actress.poss.N.SG dress
   the actress' dress

Prenominal possessives agree in gender, number and case with the head noun that always has a singular reference (Townsend 1980, Koptjevskaja-Tamm and Shmelev 1994):

3. a. papin/y kluč/i
   father.poss.M.SG/PL keys.M.SG/PL
   dad's key/s
   b. #roditeliny kluči
   parents.poss.PL keys.PL
   the parents' keys

Babyonyshev (1997) discusses the puzzling property of prenominal possessives, namely that they make reference to individual, the possessor, which can be the antecedent of a deictic pronoun (4):

4. tanin$_i$ košelek ležal na stole. Ona$_i$ opjat ego zabyla
   Tanya.poss.M.SG purse lay on table. She again him forgot
   Tanya's purse was lying on the table. She left it at home again.

She analyzes prenominal possessives as determiners with a nominal base that have undergone N-to-D raising, following Longobardi 1994 in assuming that the D position is associated with reference. I argue that prenominal possessives are adjectives and not determiners. Discussion about determiners in Russian is particularly difficult because in the absence of indefinite and definite articles, there are so few clear candidates for lexical determiners. However, the following data strongly suggests that prenominal possessives in Russian are adjectival.

A. Prenominal possessives agree with the head noun in number, gender and case:

5. a. sosedkinoj sobaki
   neighbor.poss.F.SG.GEN dog.F.SG.GEN
   the neighbor's dog
   b. sosedkinu sobaku
   neighbor.poss.F.SG.ACC dog.F.SG.ACC
   the neighbor's dog

B. Examples like (1) can be either definite or indefinite (data in talk).

C. They can permute with other adjectives – unlike quantifiers (*každyj* "every") but like 'indexical adjectives' *etot/eta/eto* "this":

6. a. mamina novaja rabota
   mom.poss.F.SG new job
   mom's new job
   b. novaja mamina rabota
   new mom.poss.F.SG job
   mom's new job
   c. každaja novaja rabota
   every new job
   d. #novaja každaja rabota
   new every job
   e. eta novaja kniga
   this new book
   f. novaja eta kniga
   new this book

D. They can be arguments of quantifiers (*každyj* "every")

7. každaja mamina rabota
   every mom.poss.F.SG job
   every mom's job

E. They can be sentential predicates, again unlike determiners (8a) vs. (8b):

8. a. gosti došli v komnatu. Eto byli petiny druzja
      guests entered in room. This were petja.poss.PL friends
      The guests entered the room. They were Petja's friends.
   b. gosti došli v komnatu. Eto byl *každyj drug
      guests entered in room. This was every friend
      The guests entered the room. This was *every friend

Landman (2003), argues that appearing in this position is evidence that a nominal is a predicate, using the contrast between *the guests were two boys* and *#the guests were every boy* to argue that *two* and *two guests* are predicates in English, and that *two* is an adjective.

F. Genitive of Negation. Given that it is so difficult to identify determiners in Russian, the most important argument comes from the interaction of prenominal possessives with the genitive of negation. It is well known that in Russian verbs under negation can take arguments in Accusative or Genitive case. (Timberlake 1975, Babby 1980, Neidle 1982). Genitive NPs get non-specific/indefinite interpretation, while Accusative NPs tend to be interpreted as specific/definite. Partee and Borschev (2004), Partee (2008), Kagan (2005, 2007, 2013) and Khrizman (2014) explain this semantic contrast by arguing that NPs in genitive case are predicative expressions at type <e,t>,while accusative NPs are arguments at type e or <<e,t>,t>. This makes a prediction: if prenominal possessives are determiners, they should head DPs at the argument type <<e,t>,t>, and should not occur in the genitive under the scope of negation. However, this is not the case. In (9a) *maminy sovety* is in the accusative and gets a specific interpretation at the argument type. It means "the pieces of advice that my mother gave me". The Genitive NP in (9b) gets a non-specific interpretation, the sentence roughly means "I did not listen to any pieces of advice that my mother gave me", as predicted by Partee (2008) and others. This strongly suggests that it cannot be an argument at type <<e,t>,t> since, as Partee shows, the non-specific interpretation follows from the fact that the genitive is a predicative NP. This means that the prenominal possessive is not a determiner, but an adjective which is part of the NP.

9. a. ja ne slušala maminy sovety
      I not listen mom.poss.PL.ACC advice.PL.ACC
      I did not listen to my mother's advice
   b. ja ne slušala maminyx sovetov
      I not listen mom.poss.PL.GEN advice.PL.GEN
      I did not listen to my mother's advice

As show in the talk, prenominal possessives also appear in genitive case in other positions which are argued to be predicative, e.g, the complement of *na-* and *po-* prefixed verbs (Filip 2004).

Semantics: Prenominal possessives are adjectival modifiers. We assume that the possessive morpheme expresses an operation, which maps individuals and a relation onto a predicate: *-in-/-ov-*: λyλRλx.R(x,y). This function first applies to an individual to form a prenominal possessive: *PetIN* "Petja's" – λRλx.R(x,p) that can straightforwardly combine with relational nouns, e.g. *mama* 'mother' to derive a predicate *Petina mama* "Petja's mother": λRλx.R(x,p) (λyλx.MOTHER(x,y))=λx.MOTHER(x,p). Sortal nouns undergo a meaning shift to a relational interpretation λx.CAR(x) → λyλx.POSS(x,y) ∧ CAR(x). This new relational noun combines with a prenominal possessive to derive a predicate that denotes a set of cars possessed by Petja - λRλx.R(x,p) (λyλx.POSS(x,y) ∧ CAR(x))= λx.POSS(x,p) ∧ CAR(x). What mechanisms are used to derive argumental readings from predicates will be discussed in the talk.

From Measures to Count Nouns: Complex Numerical Measure Nouns in Russian

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The Issue. Colloquial Russian uses **measure nouns,** morphologically complex nouns constructed out a numeral, measure unit and a nominal suffix *-ka* as in (1).

(1) a. **trex- litrov- ka** samogona
three^{GEN}-liter $^{GEN\ PL}$ *-ka* moonshine ^{GEN}
'a three-liter jar/bottle of moonshine'

b. **sto- grammov- ka** vodki
hundred^{NOM}-gram$^{GEN\ PL}$–*ka* vodka
'a 100-gram glass of vodka'

Measure nouns look like measure expressions such as *three liters* in *three liters of milk*, but while *three liters* expresses a measure property, these nouns denote objects (jars, bottles, glasses) which have these properties. They can be sortal nouns and can be modified by adjectives (2).

(2) taščit' napolnennye **pjati-litrov-ki** okazalos' ne v primer tjaželej pustyx
'It was incomparably harder to carry full five-liter (plastic) jars than empty ones.' [*Pjatno,* P.Kornev]

(2) shows that measure nouns are expressions of type <e,t>. (3a) shows these nouns are count predicates denoting atomic disjoint entities since they can be pluralized, modified by numerals and be antecedents of distributive operators. They cannot be used as adjectival modifiers of other nouns (3b) (though like other nouns they can be used appositively).

(3) a. (Pjat') trex-litrov-ok stojali odna na drugoj
'Five three-liter jars stood on top of each other.'

b. *trex- litrov- ka banka
three^{GEN}-liter $^{GEN\ PL}$ *-ka* jar

These container nouns are a subclass of a wider range of complex nouns built of expressions denoting measures in different dimensions and denoting salient objects which have the stated properties (e.g. power: *sto-vat-ka* 'a 100-watt bulb; time: *pjati-let-ka* 'a five-year project'). Furthermore, these nouns are used very productively. *Stogrammovka* in (1b) for example, may refer to a variety of objects which weigh 100 grams with the nature of the object being determined by context (e.g. a 100- ml bottle for perfume, an ultra-light coat, a ball (of yarn) etc..). I argue that (i) these nouns are not measure predicates but genuine count nouns at type <e,t> denoting objects with certain measure properties; (ii) they are derived via an operation which shifts measure predicates expressing measure properties into nouns denoting entities that have these properties; (iii) complex container nouns in (1) like other count container nouns (e.g. *glass*) are used as classifiers in both counting and measuring contexts.

Semantic interpretation. The *-ka* suffix in Russian is used to derive count nouns from lexical items of different syntactic categories including adjectives and nouns modified by numerals, or nominal measure phrases (NMPs) (cf. Vinogradov 1960). Measure nouns then could be formed either directly from NMPs used in pseudo partitives such as *sto gramm(ov)^{GEN} muki ^{GEN}* '100 grams of flour' or from complex measure adjectives, *e.g stogrammovye^{ADJ} jabloki* '100-gram apples' (arguments for either analysis are available; details in the talk).Both measure adjectives and NMPs have been analyzed as intersective predicate modifiers denoting measure properties (i.e. the property of having a measure value on a dimensional scale calibrated in certain units) to entities/sums of entities (4) (Rothstein 2011/2017, Landman 2016).

(4) a. ⟦hundred grams/hundred-gram⟧= λx. MEAS $_{WEIGHT\ GRAM}$(x)= 100
b. ⟦a hundred grams of flour⟧= λx. FLOUR(x) ∧ MEAS $_{WEIGHT\ GRAM}$(x)=100
The set of sums of flour that weigh 100 grams
c. ⟦a hundred -gram apple⟧= λx. APPLE(x) ∧ MEAS $_{WEIGHT\ GRAM}$(x)
The set of apples such that each weighs 100 grams

Measure nouns are then derived via a nominalization operation, expressed by the *-ka* suffix, which shifts intersective predicate modifiers expressing measure properties as in (4a) to count nouns (N_C) denoting objects which have these measure properties (5).

(5) a. $[\![\text{- ka}]\!] = \lambda P_{MEAS}\, \lambda x.\, N_C\,(x) \wedge P_{MEAS}\,(x)$

b. $[\![\text{stogrammovka}]\!] = \lambda P_{MEAS} \lambda x.N_C\,(x) \wedge P_{MEAS}(x)\,(\lambda x.\, P_{\text{WEIGHT GRAM}}\,(x)= 100)$

$= \lambda x.N_C\,(x) \wedge \text{MEAS}_{\text{WEIGHT GRAM}}\,(x) =100$

The set of contextually determined entities (e.g. jackets, yarn balls etc..) that weigh 100 grams

Such shifts are not un-known. Other intersective adjectives can shift from predicates expressing properties to nouns denoting individuals which have those properties, as for example in (6). The difference is that with measure modifiers this shift is overtly expressed through *-ka*.

(6) a. On vzroslyj celovek ^{SG} b. Nekotorye ^{PL} vzroslye ^{PL} vedut sebja kak deti

'He is a grown up person.' 'Some grown-up people behave as children.'

Container measure nouns. The analysis in (5) extends to container nouns as in (7). We assume that containers are objects with holes, as argued in Casati &Varzi 1999, and that these holes are themselves objects with properties.

(7) a. $[\![\text{stogrammovka}]\!] = \lambda x.\, N_{\text{CONTAINER}_c}\,(x) \wedge \text{MEAS}_{\text{VOL GRAM}}\,(\text{HOLE}(x))= 100$

The set of contextually determined containers whose volume is 100 grams[1]

b. $[\![\text{trexlitrovka}]\!] = \lambda x.\, N_{\text{CONTAINER}_c}\,(x) \wedge \text{MEAS}_{\text{VOL LITER}}\,(\text{HOLE}(x))= 3$

The set of contextually determined containers whose volume is 3 liters

Shifts from a measure interpretation to a container interpretation have been discussed in Khrizman et al. (2015) who show that lexical measures like *liter* shift to a container reading, e.g. in *I broke a liter of milk*. They argue that in such cases *liter* is reinterpreted as a container whose contents measure 1 liter in volume. I do not adopt this for measure nouns like (1), since unlike *liter* they have non-relational uses at type <e,t>, so the measure properties must apply to containers and not to contents.

Classifier uses. We argued that container measure nouns are count nouns at type <e,t>. It is known that count nouns denoting containers easily shift to a relational classifier interpretation (*He handed me a glass of wine)* and to a measure interpretation where the container indicates a unit of measure (*There are two glasses of wine in this stew.*) (cf. Rothstein 2011/17, P&B 2012, Landman 2004/16). If measure nouns are count container nouns, we correctly predict that they have both these uses. (8) illustrates a count container interpretation and (9) shows that they are used as *ad hoc* measure units in approximative contexts (cf. P&B 2012, Rothstein 2017). In (9) the speaker uses the noun to express that he estimates that the amount of the berries on the bush is the amount which would fill a stereotypical three-liter jar.

(8) kto-to razbil trexlitrovku^{ACC} meda ^{GEN}

'Someone broke a three-liter jar of honey.' http://shkolazhizni.ru/psychology/articles/57018/

(9) This raspberry bush is full of berries!

da, zdes' kak minimum odna polnaja trexlitrovka (jagod)

yes, here as minimum one full three-liter-ka^{GEN} berry $^{GEN\ PL}$

'Oh, yes there is at least one full three-liter jar of berries'

To sum up: Measure nouns in Russian are not measure expressions. They are count nouns denoting sets of objects derived from measure predicates. This work then brings further evidence for treating measure expressions like *three liters* as syntactic predicates as in Rothstein (2011/17) and extends this analysis to an entirely new domain of expressions.

[1] In Russian grams are sometimes used for volume, e.g. *sto gramm(ov) vodki* '100 grams of vodka'.

Maximal Interpretation of Nominal Phrases in Russian and its Implication for the NP/DP parameter

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Introduction. The literature on the structure of nominal phrases in articleless Slavic languages splits into two camps: DP vs. NP. Kagan and Pereltsvaig (2012) conclude that the DP layer exists even in Russian by considering the behaviors of adjectival modifiers. The aim of this paper is to show that maximal (exhaustive) interpretation of nominal phrases cannot be used to support the existence of DP in Russian. The maximal interpretation should be dealt with as a semantic problem and can be introduced even without DP.

Russian Possessives. In Russian, adjectival modifiers such as possessives can precede or follow numerals as shown in (1).

(1) a. pjat' Diminyx knig
five Dima's-GEN books
both: "Dima's five books"

b. Diminy pjat' knig
Dima's-NOM five books
(Kagan and Pereltsvaig 2012: 173)

The unmarked phrase (1a), where the possessive follows the numeral, is not interpreted maximally: Dima may have more than five books. Kagan and Pereltsvaig (2012) pointed out the possible alternative order (1b), where the possessive precedes the numeral. Unlike (1a), this phrase receives a maximal interpretation and presupposes that Dima has exactly five books. Kagan and Pereltsvaig (2012) insist that the maximal interpretation like in (1b) results since a possessive appears in a syntactic high position and that there is a projection responsible for maximality. They conclude that the high position in which the possessive can appear is located in the DP field.

Low Possessors. If the maximal interpretation results from the possessor's high position, the interpretation is predicted not to be found in the phrase where a genitive NP following a head noun is used as a possessor. It is because the adnominal genitives are supposed to be located at a lower position than a head (e.g. Bailyn 2012). The phrase (2) shows this type of configuration.

(2) pjat' knig Dimy
five books Dima-GEN
"Dima's five books/five of Dima's books"

The phrase (2) can be interpreted either maximally or non-maximally. In other words, it can be paraphrased with both (1a) and (1b). This fact suggests that it is not necessary to relate the maximal interpretation to the syntactic high position of a possessor.

Hypothesis. The maximal interpretation cannot be yielded by the classical semantics of definiteness (Fregean or Russellian definite). However, we can obtain the maximal interpretation of (1b) by using the semantics of definites shown in (3), which invokes maximality (Sharvy 1980).

(3) a. $[\![\text{DEF}]\!] = \lambda P : \exists x \forall y [\text{MAX}(P)(y) \leftrightarrow x = y].\ \iota x.\text{MAX}(P)(x)$
b. $\text{MAX}(P) := \lambda x.P(x) \wedge \neg\exists y[P(y) \wedge x < y]$

The LF in (3a) leads to the interpretation of the presupposition in (1b) since it picks up only a maximal plurality as a singleton ("$a \oplus b \oplus c \oplus d \oplus e$," each atom of which is a book in this case) by the function of the max operator (MAX). Thus we hypothesize that the contrast in interpretations between (1a) and (1b) can be reduced to the simple difference in definiteness with no relation to the syntactic position of the possessors.

Tests. To test the above-mentioned hypothesis, we can use the phenomena the "definiteness effect (DE)" and the "genitive of negation (GN)." The DE observed in English *there*

constructions exists also in Russian existential constructions (e.g. Paducheva 2000). As to GN, indefinite/non-specific NPs tend to receive the genitive case (e.g. Harves 2013). As shown in (4) and (5), (1b) cannot occur in either the existential or the GN constructions while (1a) can occur in both constructions with no problem.

(4) V knižnom škafu est' { pjat' Diminyx knig / # Diminy pjat' knig }.
in bookshelf be five Dima's-GEN books Dima's-NOM five books
"There are five of Dima's books on the bookshelf."

(5) Ivan ne čital { pjati Diminyx knig / # Diminyx pjati knig }.
Ivan NEG read [five Dima's books]-GEN [Dima's five books]-GEN
"Ivan did not read five of Dima's books."

These facts illustrated in (4) and (5) mean that (1b) is definite (and 1a is indefinite).

Implementation of Definiteness. It is possible to think that definiteness is encoded in semantics and we use a covert semantic operator "DEF" whose LF is (3). Generally, D(P) is assumed to be necessary to implement definiteness in nominal phrases in syntax, as a source of definiteness, since it is implemented through Agree with D (e.g. Koev 2011). However, under the operator analysis, even if the operator DEF exists in (narrow) syntax, nominal phrases can be derived without DP with no problem.

(6) [*X* [Diminy [*Y* [pjat' [*Z* kniga]]]]]

The operator can merge anywhere in syntax; that is, it can be located at *X, Y,* or *Z* in (6). However, the meaning is successfully computed only in the case where DEF is located at *X*. If DEF is at *Y* or *Z*, the phrase in question can be derived in syntax but it cannot be interpreted through the interface to semantics. The high position of DEF is caused not by syntax but by semantics. Accordingly, we can conclude that the top node of nominal phrases is different from the projection endowed with the special status in syntax, referred to as "DP."

Conclusion. Accepting the operator DEF on the highest position, the analysis of possessives by Partee and Borschev (1998) and the numeral-as-modifier analysis (e.g. Scontras 2013), the LF of (1b) is following in (7):

(7) $[\![(1b)]\!] = :\exists x \forall y[\text{MAX}(R(Dima)(y) \wedge BOOK(y) \wedge |y| = 5) \leftrightarrow x = y].$
$\iota x.\text{MAX}(R(Dima)(x) \wedge BOOK(x) \wedge |x| = 5)$

The LF in (7) correctly reflects the maximal presupposition. The contrast in interpretations between (1a) and (1b) can be reduced to the plain difference in definiteness. It is unnecessary to relate the maximal interpretation of (1b) to the possessor's high syntactic position. Thus the maximal interpretation of nominal phrases cannot be used to support the presence of DP in Russian and it remains a semantic matter. In other words, the interpretation can be semantically yielded without the syntactic special projection, DP.

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Main Session

—— in alphabetical order ——

World-relatives and their flavors

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Arguments have been provided that complement clauses (Arsenijević 2009a), conditional clauses (Arsenijević 2009b), as well as all other adverbial clauses (Arsenijević 2006) have an underlying structure of relative clauses: they are all derived by abstracting a constituent of the subordinate clause, thus turning it from a saturated expression into a one-place predicate, and all of them occur as restrictive or non-restrictive modifiers of a constituent in the matrix clause. Temporal clauses abstract over a temporal argument, spatial over a spatial, clauses of result/consequence over a degree, comparative clauses over a manner, property or degree. Four traditional classes of subordinate clauses end up with the same description: causal, conditional, purpose and concessive clauses on this approach all abstract away the set of worlds in which the subordinate clause is true, becoming thus a predicate over worlds, and modify the set of worlds in which the main clause is true.

(1) a. John stays late because he has a deadline.
(roughly: John stays late in the worlds in which he has a deadline, which include the actual world)
b. John will stay late if he has a deadline.
(roughly: John stays late in the worlds in which he has a deadline.)
c. John stayed late in order to meet the deadline.
(roughly: John stayed late in the actual world which desirably develops into a met-deadline-world.)
d. But he stayed late last week too, even though he had no deadline.
(roughly: He stayed late last week in the actual world which is a no-deadline world.)

This paper argues that indeed these 4 classes make one macro-class, and that the different flavors captured by the traditional division result from the interaction of a number of factors, including crucially: the item(s) occurring with(in) the conjunction (if any), the mood on the conjunction, the mood on the verb, and the temporal ordering between the eventualities in the subordinate and the matrix clause. On this view, causal and purpose clauses are exhaustive conditionals, causal and concessive clauses are factive, and purpose clauses are futurate and typically order worlds along the scale of desirability.

There is a long tradition that relates concessive clauses both with causal (unfulfilled cause) and with conditional clauses (unfulfilled condition), as clauses which express that the consequence holds in spite of the failure of cause/condition (König and Siemund 2000). Note that sentence (1d) is a natural response to the causal clause in (1a), to the conditional in (1b) and even to the purpose clause in (1c).

The fact that one and the same clause is a minimal pair with three other clause types already supports the view that all 4 types are better classified as one, as no other traditional clause type enters similar relations with any of them. Relying on Serbo-Croatian (S -C) data, I provide 3 additional arguments.

1. In S-C, each two of these 4 clause types share at least one conjunction, usually with a minimal opposition in one of the 4 factors listed above. In (2a-b), a conditional and a concessive are both introduced by the conjunction *ako* 'if', with an additional polarity item for the concessive, in (2c-d) a causal and a purpose clause are introduced by *zato* 'for that' + complementizer (an indicative one for causal and a subjunctive one for purpose clauses), and in (2e-f) a causal and a conditional clause are introduced by *kad* 'when', with a subjunctive verb in the conditional. This suggests that each two of these 4 clause types share a common semantic core, with a relatively small difference.

(2) a. Ako mu je eksperiment uspeo, Jovan će naručiti turu svima.
if him Aux experiment succeded J will order round all
'If his experiment was successful, Jovan will order a round for everyone.'
b. I-ako mu eksperiment nije uspeo, Jovan će naručiti turu svima.
even-if him experiment Neg-Aux succeded J will order round all
'Although his experiment wasn't successful, Jovan will order a round for everyone.'
c. Odustao je od treninga za-to što večera sa prijateljima.
gave_up Aux from training for-that CompIndic dines with friends
'He gave up the training because he's dining with his friends.'
d. Odustao je od treninga za-to da večera sa prijateljima.
gave_up Aux from training for-that CompSbjnc dines with friends
'He gave up the training in order to dine with his friends.'
e. Lako je pobediti, kad za vas navija sudija.
easy is win.Inf when for you.Pl cheers referee
'It is easy to win, considering that the referee favors you.'
f. Lako bi bilo pobediti, kad bi za vas navijao sudija.
easy AuxSbjnc been win.Inf when AuxSbjnc for you.Pl cheered referee
'It would be easy for you to win, if the referee would be favoring you.'

World-relatives and their flavors

Boban Arsenijević, University of Graz

2. All and only these 4 clause types can be characterized in terms of having an event- and/or a premise-level interpretation (Declerck and Reed 2001): e.g. (2a) has both these readings, (2c) only the event-level, and (2e) is a causal clause on the premise-level interpretation and a conditional on the event-level reading. This property straightforwardly derives from their nature of world-relatives.

3. Each of these 4 classes includes border-cases with one of the other three. The condition in (2a) can also be the cause, and the cause in (2e) can be seen as a premise-level condition (consider additionally that this sentence also has a purely conditional event-level interpretation), just like (3a). Similarly, the subordinate clause in (3b), even though introduced by *because*, has a reading on which it does not express a cause, but rather a fulfilled necessary condition. Conditional clauses like (3c) often express a reason, a meaning typical for causal clauses (in fact, a view can be defended that causal clauses only express reasons, never narrow causes). Finally, purpose clauses are futurate reasons: (3d) has a paraphrase where he opened the window because he finds the worlds in which the fly goes out desirable.

(3) a. Naravno da smo danas otišli na izlet, kad je vreme bilo lepo. *S-C*
naturally CompSbjnc Aux1Pl today gone on picnic when Aux weather been nice
'Of course we went on a picnic, as/considering_that the weather was nice.'
b. You entered just because someone left the door open.
c. If the lights are out, it's clear that Bill's sleeping.
d. He opened the window for the fly to go out.

Moreover, each of these classes has a number of sub-types, many of which are again border-cases between two classes (consider real, irreal, potential conditionals, *since*- and *because*- causal clauses, *although* and *even if* concessives).

I argue that these 4 clause types are well modelled as conditionals with a potential additional semantic specification. I discuss 4 factors which most directly contribute to this specification:

I Each of these clauses is introduced by a complementizer or a relative pronoun which is potentially joined by one or two additional items, such as the preposition *za* 'for' in *zato što* 'because', lit. 'for that which' and *zato da* 'in order to', lit. 'for that that', *u* 'in' in *ukoliko* 'if', lit. 'in how much', or the polarity item *i* 'even' in *iako* 'although', lit. 'even if'. I examine the compositional contribution of these items.

II S-C complementizers are marked for mood: *da* is subjunctive and *što* is indicative (Topolinska 1995). Considering that narrow conditionals and purpose clauses bear typical subjunctive semantics and causal clauses are strongly indicative, it is clear that this component plays a central role for the surface meaning. Minimal pairs regarding this property (such as (2c-d)) and its semantic contribution are examined.

III Purpose clauses and potential conditionals in S-C must involve verb forms with Abush's (1985) WOLL operator, while irreal conditionals are incompatible with them. At the same time, potential and irreal conditionals select matrix clauses whose predicates bear the WOLL operator. Minimal pairs along this dimension (such as (2e-f)) and the semantics of the four possible combinations of a matrix and a subordinate clause: ∅-∅, ∅-WOLL, WOLL-∅ and WOLL-WOLL are discussed in more detail.

IIII A related property is the temporal ordering between the epistemic evaluation times of the matrix and the subordinate clause: causal, conditional and concessive clauses are evaluated simultaneously with or before while purpose clauses are evaluated simultaneously with or after the matrix clause.

These four factors interact with each other: only the subjunctive complementizer is sensitive to the WOLL operator and clauses involving a WOLL operator must be epistemically evaluated after those without one, which narrows down the set of possible combinations. However, a number of additional factors, such as information structure, the construal or the height of attachment additionally expand it. Pragmatics, more precisely the frequency of contexts in which any particular combination is used, determines which of them will grammaticalize, which will be compositionally derived, and which combinations will be unattested or even ill-formed. I show how these factors result in different types of world-relatives, which are intuitively recognized as conditional, causal, concessive and purpose clauses.

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On the dual nature of wh-clauses: A view from locality

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Background In this talk we address the syntax and semantics of clausal arguments like (1) and adjuncts like (2) in sentence-initial position (a) and sentence-final position (b). All data come from Czech.

(1) a. **Co(koliv) mu dáš**, utratí.
what(ever) him give.2SG spends
'What(ever) you give him, he'll spend (it).'

b. Utratí, **co(koliv) mu dáš**.
spends what(ever) him give.2SG
'He'll spend what(ever) you give him.'

(2) b. **Když odejdeš**, budu smutný.
when/if leave.2SG will.be.1SG sad
'When/If you leave, I'll be sad.'

b. Budu smutný, **když odejdeš**.
will.be.1SG sad when/if leave.2SG
'I'll be sad when/if you leave.'

Note that it has been argued that at least certain clauses are dominated by NP; see e.g. Ross (1967), Chomsky (1973), Emonds (1976), Müller (1995); Alsina, Mohanan & Mohanan (2005) and that adverbial clauses are PPs (e.g. Haegeman 1984). It has been also argued that adverbial clauses can occur in different positions in the clause; see e.g. Iatridou (1991), Haegeman (2003) and Bhatt & Pancheva (2006) for conditionals.

Proposal We build on previous work (Iatridou 1994, Pancheva Izvorski 2000, Hirsch 2016) and argue that the pertinent wh-clauses have a dual syntactic and semantic nature. On one hand, they can function as (i) CONDITIONAL ANTECEDENTS, in which case they are **CPs** denoting a proposition (for (1a) the proposition 'you give him *x*' for any *x*; cf. Rawlins 2013 or Hirsch 2016 for a refined view involving propositional alternatives), restricting a modal or adverbial operator (OP) in the functional spine of the main clause / consequent, or as (ii) DEFINITE DESCRIPTIONS, in which case they are **NPs/DPs**, possibly embedded within a PP, denoting an entity restricted by the descriptive content of the clause (for (1b) the entity 'the thing that you give him'). As argued by Hirsch (2016), in some cases (esp. in the case of ever free relatives, exemplified by (1b) with 'ever') one clause fulfills both roles at the same time (by multidominance). Although this option cannot be principally excluded, tests with Condition C and bound variable pronouns (not shown here) suggest that the CP in its lower position is not syntactically visible/present. Therefore, we assume that a wh-clause fulfills only one of the two functions and the other one is fulfilled by a (covert or overt) coindexed pronominal of the appropriate type: proposition or entity, as in (3).

(3) i. [OP [$_{CP}$ **what(ever)$_{1/i}$ you give him t$_1$**]] he spends **e$_i$/it$_i$**
ii. [OP **p$_i$**] he spends [$_{NP}$ **what(ever)$_1$** [**you give him t$_1$**]$_i$]

Evidence Various arguments have been given in support of (something along the lines of) (3). We will summarize the existing evidence in the talk; here we concentrate on a previously unexplored prediction of (3), namely that left-peripheral wh-clauses, being CPs, should be at least partly transparent for A'-extraction (weak islands), while right-peripheral wh-clauses, being NPs (or PPs) should be strong islands for A'-extraction. This prediction is made if CPs and NPs are phases and movement from the edge of the adjunct CP to the edge of the dominating NP violates antilocality (Bošković 2015). The contrast in (4), adapted from Lešnerová & Oliva (2003), and in (6) suggests that this prediction is borne out.

(4) a. Chtěl bych být prezidentem, **který$_1$** [$_{CP}$ když **t$_1$** něco řekne], bude to mít váhu.
want SUBJ.1SG be president which.NOM when something says will it have respect

b. *Chtěl bych být prezidentem, **který$_1$** to bude mít váhu, [$_{NP}$ když něco **t$_1$** řekne].
want SUBJ.1SG be president which it will have respect when something says

'I'd like to be a president such that when he says something, it will have respect.'

There is evidence (i) that the relative pronoun *který* undergoes extraction in examples like (4a) and (6a) and (ii) that it targets a position in the matrix clause, CP_2 in (5) (contrary to what Heck (2008) or Grewendorf (2015) argue for comparable cases in (Bavarian) German) which is adjoined as a relative clause to the head noun. Thus, the pattern looks like (5).

(5) a. √ …[$_{NP}$ NP [$_{CP2}$ **whP$_1$** [$_{CP1}$ … **t$_1$**…]$_i$ V_{matrix} [$_{NP}$ N p_i]]] ~ (4a), (6a), see also ex. below

b. * …[$_{NP}$ NP [$_{CP2}$ **whP$_1$** V_{matrix} [$_{NP}$ NP [$_{CP1}$ … **t$_1$**…]]]] ~ (4b), (6b)

We will present several arguments supporting (i) and (ii). They are based on case-connectivity, the whP bears the case assigned within the adjunct; see (4a) and the purpose adjunct clause in (6a). Note that (4a) and (6a) show that the gap in the adjunct is not "parasitic" on a gap in the main clause.

(6) a. To je [$_{NP}$ řečník, [$_{CP2}$ **kterého**$_1$ [$_{CP1}$ abychom mohli pozvat **t$_1$**], musíme na to mít spoustu peněz]].
it is speaker.NOM which.ACC so.that could.1PL invite must.1PL for it have a.lot.of money
'This is a speaker such that we need a lot of money for inviting him.'

b.* To je [$_{NP}$ řečník, [$_{CP2}$ **kterého**$_1$ musíme mít spoustu peněz [$_{PP}$ na [$_{NP}$ to [$_{CP1}$ abychom mohli pozvat **t$_1$**]]]]].
it is speaker.NOM which.ACC must.1PL have a.lot.of money for it so.that could.1PL invite

Second, in order for the relative to be able to combine with its head (by predicate modification), the relative operator *kter-* must move to the edge of CP_2, not just CP_1. Further, reconstruction for reflexive binding is possible, as in (7), and some adverbs modifying the main clause (not the adjunct) can occur between the whP and the embedded complementizer, as shown by (8).

(7) [Kterou **svou$_i$** cennost]$_1$ říkali, že když si **Karel$_i$** uschová t_1, tak udělá nejlíp?
which his.REFL valuable said.PL that when REFL K. deposits so does best
'Which one of Karel's valuables is such that they said that if he deposits it, he'll do well?'

(8) To je ten [$_{NP}$ člověk, [$_{CP2}$ **který**$_1$ [**prý** / **vždycky** [$_{CP1}$ když **t$_1$** promluví], tak všichni ztichnou]]].
it is the man which allegedly always when speak.3SG so all fall.silent

a. 'This is the man such that, allegedly, / always when he begins to speak, all fall silent.'

b.* 'This is the man such that when he allegedly / always begins to speak, all fall silent.'

We will also show the extracted whP can move from the preposed adjunct to an even higher position and that Czech does not allow doubly filled COMP in relatives, in contrast to Bavarian.

Implications The proposal implies that the Adjunct Condition cannot be a general condition (contrary to e.g. Huang 1982, Uriagereka 1999, Stepanov 2007). In fact, richness of the clausal structure – presence of NP – brings about strong islandhood. Thus, at least some cases of adjunct islands can be reduced to complex NP island (and excluded by antilocality), like (4b) and (6b). Since the non-embedded, left-peripheral CPs are weak islands, they only block movement of certain elements, e.g. certain (non-referential) adjuncts operators; see (9).

(9) * To je způsob, **jak$_1$** [když opravíš auto **t$_1$**], zaručeně ti vydrží.
it is way how when repair.2SG car guaranteed you.DAT last
'It is a/the way such that if you repair your car that way, it will definitely last.'

Further, besides the argument that argumental clauses like free relatives/correlatives and adverbial clauses like temporals and conditionals are semanticaly present in two different positions, our analysis provides a support for the claim that adverbial clauses can merge in syntax in different clausal positions.

Does tense illusion exist? A contribution from an ERP study on the processing of future constructions in Polish

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The issue Experimental research on real-time sentence processing shows that the human parser is restricted by grammatical constraints at very early stages of analysis and can implement even complex grammatical constraints with a high accuracy. In spite of this, there is also plenty of experimental evidence that the parser makes errors and is less accurate in the implementation of some other, in fact often simple constraints (Dillion 2016; Phillips et al. 2011; Lewis & Phillips 2015). NEGATION (NPI licensing; see Drenhaus et al. 2005; Vasishth et al. 2008; Xiang et al. 2009; Parker & Phillips 2016), comparatives (Townsend & Bever 2001; Wellwood et al. 2017), CASE (Bader & Meng 1999; Bader et al. 2000), NUMBER (see, e.g., Bock & Miller 1991; Clifton et al. 1999; Pearlmutter et al. 1999, Pearlmutter 2000; Bock et al. 2004; Eberhard et al. 2005; Wagers et al. 2009; Häussler 2012; Dillon et al. 2013) and also GENDER (see Slioussar & Malko 2016) are suspectible to grammatical illusions. **The goal** In the present paper we want to access the question of whether TENSE is one of the features that are relevant for grammatical illusions. To the best of our knowledge, there is no work showing that matching TENSE specifications in different words of a sentence can cause grammatical illusions, similar to what has been described for other grammatical illusion phenomena. **The facts** In Polish there are two possibilities to express future time reference: either by using a present tense form of a perfective lexical verb (see (1)) or by using compound future constructions consisting of the so-called "future auxiliary", and an imperfective lexical verb; see (2). Importantly, Polish has two variants of compound future constructions: one in which the future auxiliary is complemented by an infinitive (2a) and one in which the future auxiliary is complemented by a lexical verb in the so-called *l*-participle form (2b). In both cases the lexical verb complement must be in imperfective aspect, i.e., the future auxiliary selects for an imperfective lexical complement (see Błaszczak et al. 2014 for discussion). What makes Polish interesting in the context of the present paper is the fact that the *l*-participle form is also a form used in the past tense constructions in Polish, as shown in (3). In contrast with compound future constructions, in past tense constructions both imperfective and perfective verbs are allowed; cf. (3) with (2).

(1) Janek pomaluje pokój Zosi.
Janek paint$_{\text{PFV.PRS.3SG}}$ room Zosia$_{\text{GEN}}$
'Janek will paint Zosia's room.'

(2) a. Janek *będzie* ✓malować /*pomalować pokój Zosi.
Janek be$_{\text{AUX.3SG}}$ paint$_{\textbf{IPFV}.\text{INF}}$ / *paint$_{\textbf{PFV}.\text{INF}}$ room Zosia$_{\text{GEN}}$
'Janek will pain/be painting Zosia's room.'

b. Janek *będzie* ✓malował / *pomalował pokój Zosi.
Janek be$_{\text{AUX.3SG}}$ paint$_{\textbf{IPFV}.\text{PTCP.SG.M}}$ / *paint$_{\textbf{PFV}.\text{PTCP.SG.M}}$ room Zosia$_{\text{GEN}}$
'Janek will pain/be painting Zosia's room.'

(3) Janek ✓malował /✓pomalował pokój Zosi.
Janek paint$_{\textbf{IPFV}.\text{PTCP.SG.M}}$/paint$_{\textbf{PFV}.\text{PTCP.SG.M}}$ room Zosia$_{\text{GEN}}$
'Janek was painting / painted Zosia's room.'

The research questions With this background in mind, we can now ask the central question of the present paper: Can matching TENSE specifications in different words of a sentence give rise to grammatical illusions and thus create opportunities for processing errors? The intriguing question is what will happen when in future sentences (with a future auxiliary) instead of 'tomorrow' a semantically incongruent temporal modifier 'yesterday' is used. Thus the scenario (comparison) we are interested in would be the following:

(4) a. future auxiliary + ***tomorrow*** + lexical verb + object
vs. b. future auxiliary + ***yesterday*** + lexical verb + object

Of course, the use of *wczoraj* 'yesterday' violates the selectional restriction of the future auxiliary and such sentences are ungrammatical and judged as such by native speakers in

offline grammaticality judgement tasks. The important question is however whether the presence of 'yesterday' will affect the processing of the lexical verb and the following element in the sentence in any other significant way in addition to the violation caused by the mismatch between the future auxiliary and the past tense modifier. Will the comprehendor be misled by its presence and at least fleetingly consider it for the purpose of interpretation? Importantly, the presence of 'yesterday' should not have any misleading effect in the case of infinitival complements. This is because infinitives (on their own) are not used in past sentences and they are certainly not specified for past tense features, as indicated in (5)-(6).

(5a)	**'tomorrow_imperfective_infinitive'**						
	Janek	będzie	*jutro*	malować	pokój	Zosi.
	Janek	will	tomorrow	paint$_{\textbf{IPFV}.\text{INF}}$	room	(of) Zosia
		[FUTURE]	[FUTURE]	[**]**		
(5b)	**'yesterday_imperfective_infinitive'**						
*	Janek	będzie	***wczoraj***	malować	pokój	Zosi.
	Janek	will	yesterday	paint$_{\textbf{IPFV}.\text{INF}}$	room	(of) Zosia
		[FUTURE]	**[PAST]**	[ ]		
(6a)	**'tomorrow_perfective_infinitive'**						
*	Janek	będzie	*jutro*	pomalować	pokój	Zosi.
	Janek	will	tomorrow	paint$_{\textbf{PFV}.\text{INF}}$	room	(of) Zosia
		[FUTURE]	[FUTURE]	[ ]		
(6b)	**'yesterday_perfective_infinitive'**						
*	Janek	będzie	***wczoraj***	pomalować	pokój	Zosi.
	Janek	will	yesterday	paint$_{\textbf{PFV}.\text{INF}}$	room	(of) Zosia
		[FUTURE]	**[PAST]**	**[ ]**		

Predictions If matching TENSE specifications in different words of a sentence can cause grammatical illusions, similarly to what has been described for other grammatical illusion phenomena, then we may expect to find significant differences in the online processing of the two variants of compound future constructions in Polish. More precisely, two such differences are potentially expected. For one thing, illusory licensing effects could arise with participial complements but not the infinitival ones, and secondly, the interference from the incongruent adverbial 'yesterday' may be stronger for perfective participles than imperfective ones. Such grammatical illusions could be manifested in lower accuracy rates in grammaticality judgment task (behavioral data) and in reduced ERP amplitudes (attenuated or absent ERP effects).

Results and discussion The reported ERP experiment on the processing of compound (infinitival and participial) future constructions in Polish does not provide evidence for the hypothesis that matching TENSE specifications in different words of a sentence can cause grammatical illusions, unlike what has been described for other grammatical illusion phenomena. This conclusion is consistent with the claim found in the literature that the *l*-participle does not have the past tense specification (e.g., Dornisch 1997; Witkoś 1998; Błaszczak et al. 2014 contra Fisiak et al. 1978 and Tajsner 1997). The findings of the reported study in this paper are also consistent with the result of the ERP study by Bos et al. (2012), who examined violations of a past tense context (*zonet* 'a moment ago') with a noncongruent nonpast periphrastic verb form (e.g., *gaat malen* 'will grind') as compared to a congruent past periphrastic verb form (e.g., *heeft gemalen* 'has ground'). Importantly, though both periphrastic verb forms contained a present tense auxiliary: *gaat* 'will' and *heeft* 'has' respectively, only in the former case (non-past [future] periphrastic verb form) a present tense auxiliary evoked a positivity in the past tense context. Based on this observation, Bos et al. (2012) argue that "[t]ense violation only cause a positivity if they lead to an incongruent time reference" (p. 296). In other words, Bos et al.'s (2012) observation is that what matters is not just the tense form of the auxiliary as such but rather "the time reference of the complete verb forms" (ibid., p. 283). If correct, in the context of the present ERP study, this could be taken to mean that the time reference of the complete periphrastic verb form was future and that the superficial morphological similarity of the participial complement of the future auxiliary to a past tense form on its own is not enough to cause any tense related grammatical illusions.

Idioms: A window into the division between lexicon and syntax

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In early theoretical and psycholinguistic approaches, all idioms were viewed as non-compositional lexical units (**[1]**,**[2]**,**[3]**,**[4]**,**[5]**,**[6]**,**[7]**). This unitary view was later challenged by, e.g., **[8]**, who postulated a division of idioms into those which are stored in the mental lexicon (*kick the bucket)* as syntactically frozen chunks and those which are syntactically flexible. Additionally, **[8]** state that we have access to the literal meanings of idiom constituents of syntactically flexible idioms only. In more recent experimental approaches to idioms, **[9]** and **[10]** argue that we always have access to the literal meanings of idiom constituents and that the syntactic behavior of a given idiom is idiosyncratic and such syntactic idiosyncrasies are part of the idiom's lexical representation. In this talk, we intend to provide new facts from Polish showing that idioms display a varying degree of syntactic flexibility (contra **[8])** but that the syntactic behavior of idioms is not as idiosyncratic as suggested by **[10]**. More precisely, we want to ask two questions: (i) whether the syntactic behavior of idioms is predictable or idiosyncratic and (ii) to what extent the syntax of an idiom is encoded in its lexical representation? In order to answer these questions, we conducted a corpus-based study, in which we used 13 tests to determine the syntactic flexibility of 50 Polish VP idioms. We checked whether a given idiom could be found in the corpus **[11]** in the modified form under question (e.g., negative form, passivized form, modal form, etc.) without losing its figurative meaning. Examples from outside the corpus were consulted with Polish native speakers. One important observation is that syntactic flexibility is a scalar property (see Figure 1). Idioms' syntactic properties seem to reflect the hierarchy of projections proposed by major generative accounts (e.g., **[12]**,**[13]**,**[14]**), with less flexible idioms only allowing for most external modifications related to higher functional projections (i.e., those above AspP), and high flexible idioms also allowing for modifications related to lower functional projections (i.e., those including AspP and VoiceP/*v*P) as well as modifications of elements within the VP. This may suggest that only the VP is part of the lexical representation of idioms. To further support this conclusion, we will present the results of our aspect test, where we checked whether a given idiom can occur in a perfective and an imperfective form. Our new data show that we can use only purely grammatical aspectual morphemes but not the ones which carry an additional lexical content to modify the idioms' aspectual interpretation. More precisely, when the original idiomatic phrase has an irregular perfective form or when it contains a lexical perfective prefix, it is possible to change its aspectual value to imperfective by applying a purely grammatical imperfectivizing suffixation (see **1** and **2**). However, when the original idiomatic phrase contains an imperfective verb, it is possible to modify it by means of a purely grammatical perfective prefix but not by means of a lexical perfectivizing prefix (see **3a** vs. **3b**). In addition, if the figurative meaning stored in the lexical representation of a given idiom is habitual, then even if the aspectual morpheme is purely grammatical but it makes an event episodic, such an aspectual modification is blocked (see **4**). These observations allow us to hypothesize following **[9]** and **[10]** that the idiom's lexical representation contains its VP syntactic frame and the syntactic flexibility of a given idiom is constrained by the lexically encoded properties of a verb heading that VP. VP-external aspectual modification (purely grammatical aspectual morphemes) can be used to modify the idiom's aspectual value on condition that this modification is not in conflict with the potentially habitual character of a given idiom. These observations provide new evidence that some perfective verbs (the ones with lexical perfective prefixes) are lexically stored as such but other perfective verbs in Polish (the ones with purely grammatical aspectual morphemes) are regularly composed in syntax. This is in contrast to **[15]**, who claims that all perfective verbs are lexically stored as such.

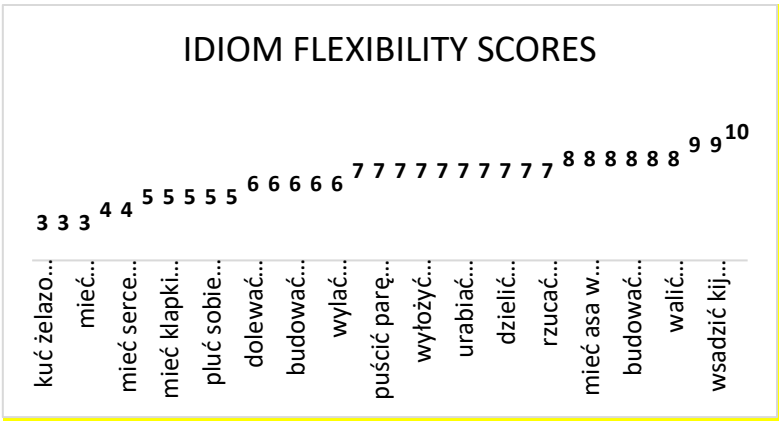

Figure 1. The results of syntactic flexibility tests for selected idioms. Syntactic flexibility of 50 idioms was estimated and expressed on a scale from 0 to 13 (where "0" means "no test passed' and "13" means "all the tests passed").

(1) kupić^{PF} / kup**owa**ć^{IMPF} kota w worku ('to buy a cat in a sack')

(2) dolać^{PF} / dole**wa**ć^{IMPF} oliwy do ognia ('to add olive to the fire' ('to escalate the problem'))

(3) a. dzielić^{IMPF} / **po**dzielić^{PF} włos na czworo ('to split a hair into four parts' ('hair-splitting'))

b. # **roz**dzielić^{PF} włos na czworo ('to divide / break up a hair into four parts' (lit.))

(4) a. rzucać^{IMPF}/ # rzucić^{PF} perły przed wieprze ('to throw pearls in front of the pigs' ('to cast pearls before swine'))

b. chodzić^{IMPF}/ # iść^{PF} spać z kurami ('to go to sleep with hens' (to go very early to bed'))

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Against the unaccusative structure of Polish psych predicates with accusative and dative Experiencers[1]

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Cross-linguistically, stative psychological predicates with an accusative or dative Experiencer are taken to have an unaccusative structure, with the Experiencer generated in the VP-internal position, c-commanding the Stimulus (Belletti and Rizzi 1988, Landau 2010). Not only is the structural position of accusative and dative Experiencers considered to be uniform, but also their syntactic category. According to Landau (2010), accusative and dative Experiencers are oblique, viz. they represent PPs with an overt or covert P head.

The aim of the paper is to examine the structural position, as well as the syntactic category, of accusative and dative Experiencers in Polish. In particular, an attempt is made to check whether accusative and dative Experiencers, found with stative psych predicates in Polish, are associated with an unaccusative structure, and whether they are oblique.

First of all, the binding properties of accusative and dative Experiencers in Polish are examined. It is noted that neither accusative nor dative Experiencers co-occurring with verbal psych predicates can bind the anaphor contained within the Stimulus, as in (1) and (2) below:

(1) *Marka$_1$ martwią swoje$_1$ długi.
Mark-acc worry self's debts-nom
'His debts worry Mark.'

(2) *Markowi$_1$ podobają się swoje$_1$ obrazy.
Mark-dat appeal-to refl self's pictures-nom
'His pictures appeal to Mark.'

The ungrammaticality of (1) and (2) above follows from the Anaphor Agreement Effect (AAE) of Rizzi (1990), which specifies that anaphors cannot appear in positions construed with agreement. In Polish, nominative case marked nominals determine agreement, and therefore the anaphor contained within the nominative Stimulus is blocked in (1) and (2) by the AAE.

Nonetheless, the anaphor marked for case different from the nominative may be bound by the dative Experiencer. This can be observed with non-verbal psych predicates, such as *wstyd* 'shame', *strach* 'fear', *żal* 'pity', etc., and is illustrated in (3).

(3) Markowi$_1$ jest żal siebie$_1$ /swojej$_1$ młodości.
Mark-dat is pity himself-gen /self's$_1$ youth-gen
'Mark feels pity for himself/for his youth.'

Accusative Experiencers, however, can never bind anaphors (contra Tajsner 2008), as confirmed by the ungrammaticality of (4) below:

(4) *Marka$_1$ już mdli od swoich$_1$ kłamstw.
Mark-acc already nauseates from self's lies
'Mark is already sick of his lies.'

The contrast in the binding properties of accusative and dative Experiencers, shown in (3) and (4), testifies to their different structural position. It is argued that dative Experiencers can bind subject-oriented anaphors (cf. (3)), if the AAE is controlled for, and therefore they are merged in the Spec, vP position (following Nikolaeva's 2014 proposal for Russian Experiencers). Accusative Experiencers, in turn, can never bind subject-oriented anaphors (cf. (4)), and are hence merged VP-internally.

Since dative Experiencers are located in Spec, vP, the psych predicates they co-occur with do not have an unaccusative structure (contra Miechowicz-Mathiasen and Scheffler

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2008). Accusative Experiencers, in spite of being VP-internal, are taken not to constitute a part of unaccusative structure, either. This is because, the accusative case of the Experiencer is structural, not inherent, as it turns into the genitive under negation (cf. Biały 2005), cf. (4):

(4) a. Fizyka fascynuje Marię.
physics-nom fascinates Mary-acc
'Physics fascinates Mary.'

b. Fizyka nie fascynuje *Marię /Marii.
physics-nom not fascinates *Mary-acc Mary-gen
'Physics doesn't fascinate Mary.'

It is proposed that accusative Experiencers found with stative psych predicates in Polish are associated with the complex ergative structure, as in Bennis (2004). In the complex ergative structure, the v values the accusative of the Experiencer, even though it lacks an external argument, which proves that Burzio's (1986) Generalisation does not operate in Polish.

It is also demonstrated that neither accusative nor dative Experiencers in Polish can give rise to the verbal (eventive) passive. However, the reason for their resistance to the verbal passive is not the same. Accusative Experiencers in Polish are immune to verbal passives, because the complex ergative structure they form lacks an external argument. Dative Experiencers, in turn, do not give rise to the verbal passive, because they are considered to be oblique, viz. they represent complements of a null P, which values the dative case on the Experiencer. The inherent dative case of the Experiencer cannot be held responsible for the fact that dative Experiencers do not passivise (contra Biały 2005). This is so because some inherently case marked objects can passivise in Polish (cf. Zabrocki 1981). Treating dative Experiencers as PPs can account for their resistance to passivisation. Since PPs are phases (Abels 2003), the dative Experiencer in the complement domain of the phase head cannot be probed from outside the phase.

To conclude, Polish psych predicates with the two types of Experiencer are not associated with an unaccusative structure, but have either a complex ergative structure with the VP-internal accusative Experiencer or a dyadic structure with a dative Experiencer in Spec, vP. Not only do accusative and dative Experiencers in Polish occupy different structural positions, but they also represent different syntactic categories, viz. a D(N)P and a PP, respectively.

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Category Split. The case of the acquisition of Russian posterior sibilants by American L2 learners

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The Russian sibilant inventory, with secondarily palatalized, 'soft' dentals /sʲ zʲ/ and the 'hard' series /sʸ zʸ tsʸ/ is more complex than the corresponding portion of the consonantal inventory in English: where English has just one series, Russian has two, where English has zero, Russian has one (/tsʸ/). Additionally, in the posterior area, Russian has a parallel distinction between 'soft' (long) /ɕ:/ and the hard / /šʸ/. Further, a 'soft' posterior voiceless affricate differs in articulation from the English counterpart – it is pronounced with more raising of the tongue towards palate than the English one, and 'hard' voiced /žʸ/ - articulated with velarization rather than palatalization.

(1) Phonemic distinction in Russian sibilants

		Soft dentals	Hard dentals	Soft posteriors	Hard posteriors
Fricatives	Voiceless	sʲ	sʸ	ɕ:	šʸ
	Voiced	zʲ	zʸ	-	žʸ
Affricates	Voiceless	-	tsʸ	tɕ	-
	Voiced	-	-	-	-

In this study, we investigate (a) the acoustics of the Russian sibilants as acquired by the American learners, in particular, their noise quality and duration, (b) the development of the categories contrasting in softness as the level of speaking proficiency in the foreign language increases, and (c) whether the presence of the acoustic characteristics of the sibilant noise in L2 learners corresponds to that in Russian native speakers as discussed in Kochetov (2017). Finally, we test (d) whether the presence of the corresponding sound which relies exclusively on the softness distinction, such as /sʸ- sʲ/ facilitates/accelerates acquisition. Regarding the latter, we test whether the development of the shaded categories follows a different path than that of categories represented without shading.

28 learners of Russian – native speakers of English – participated in the study, with approximately equal number of subjects at a beginning (after the first semester), intermediate and advanced level. Intermediate and Advanced participants had scored in the Intermediate or Advanced range on an ACTFL Oral Proficiency Interview by computer (OPIc). Subjects were recorded reading words (in a carrier phrase) containing the targeted sounds in initial, medial and final position. The recordings were manually annotated with Praat and measurements of spectral moments and segment duration were extracted using a Praat script.

The preliminary results – the sample including 15 subjects out of 28 - show that across speakers and competence levels, hard dentals have the highest COG with insignificantly lower COG for

soft dentals. Much lower are COG for soft posterior sibilants and hard postalveolars. The difference between postalveolars and prepalatals in our sample is also significant. Preliminary results indicate that the quality of friction seems to be essential in the production of the contrast between prepalatals, hard postalveolars and the dentals as a broader category, but not in the contrast between palatalized and non-palatalized dentals, similarly to the findings for L1 Russian (Kochetov 2017). For the latter, other cues than quality of the friction and its duration, such as formant transitions, must play a role. Further analysis will help to verify this claim.

Preliminary results show no significant differences between COG values for individual places of articulation across levels of proficiency. This would suggest relatively early acquisition of contrasts foreign to L2 learners, which then remain stable as other language skills improve. This finding needs to be re-evaluated based on the data from all 28 participants.

In the preliminary results – the duration of the prepalatal fricative /ɕ:/ was significantly longer than all other categories in all but the final position. This corresponds to the results reported in Kochetov (2017) for Russian native speakers and might result from the general articulatory difficulty to maintain prolonged consonantal articulation in a position before a pause.

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Tongue Root Advancement in Palatalization of Russian and Polish Consonants Measured with 3D Ultrasound

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Polish and Russian are closely related languages utilizing similar dimensions of consonantal contrasts (e.g. 'soft' vs. 'hard'), but these dimensions are realized in different ways phonetically. These differences may have implications for phonological representations in the two languages. This study focuses specifically on palatalization contrasts in dental consonants.

With regard to soft consonants, dentals in Russian are obligatorily secondary palatalized before all front vowels (/i/ and /e/) in all positions, see examples in (1a, b, c). In Polish the pattern differs in three ways: 1) the result of palatalization is not a secondary palatalized dental, but a prepalatal sibilant ('Coronal Palatalization'), see (1g); 2) coronal palatalization is limited to morpheme boundary contexts; 3) morpheme-internally, only /i/ (but not /e/) will cause an **allophonic** secondary palatalization of the preceding dental ('surface palatalization'), see (1e, f). In both, Polish and Russian, the contrast in softness exists also in non-alternating forms, independent of the front vowel context, as shown in (1d, h)

(1) Russian		Polish	*Vowel allophony is disregarded
(a) тихый	[tʲixɨj]	(e)	tik [tʲik]
(b) теперъ	[tʲepʲerʲ]	(f)	teraz [teras]
(c) мода моде	[mod+a][modʲ+e]	(g)	moda – modzie [mod+a][modʑ+e]
(d) тётя	[tʲotʲ+a]	(h)	ciocia [tɕotɕ+a]

Soft consonants contrast with hard consonants in both languages, but with realizational differences. For instance, Russian hard consonants are claimed to be velarized in all cases, whereas Polish consonants have been assumed to be much less velarized or not at all velarized.

In this paper, we compare the realization of the two aspects of the soft-hard contrast in both languages. Fig, 1 shows Polish 'soft' prepalatal [ɕ] compared with 'hard' posterior [š].

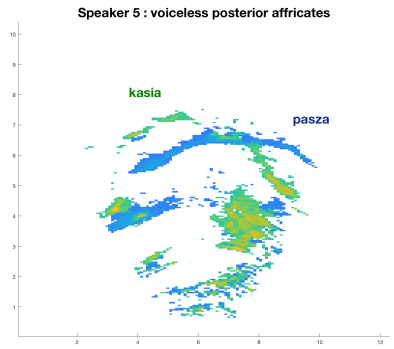


Fig. 1. Polish: hard and soft posteriors compared. Sagittal view (tongue front – left) Soft prepalatals show fronting and raising of the tongue body and substantial fronting of the tongue root. The hard posterior does not show raising of the tongue back typical of velarization.

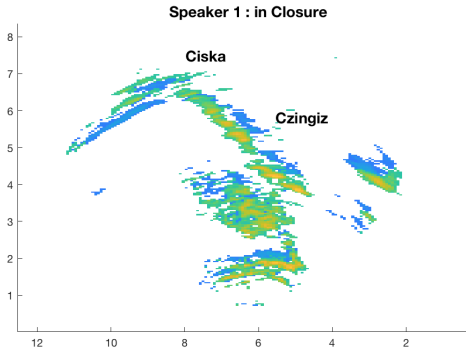
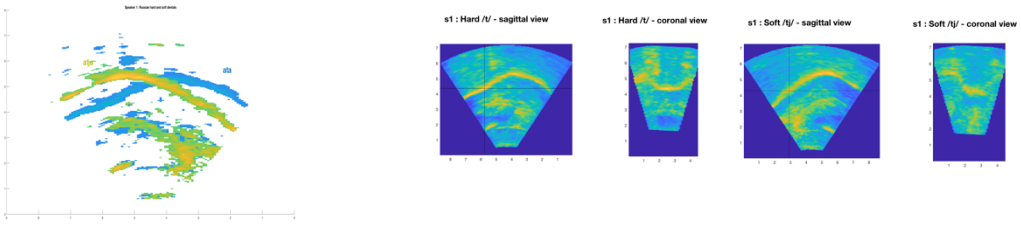
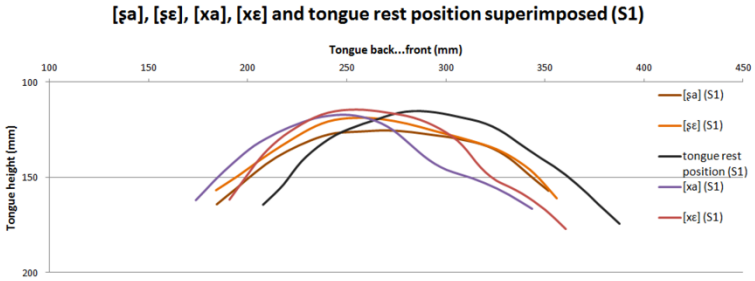


Fig. 2. Polish: soft posterior compared with secondarily palatalized hard posterior. Sagittal view (tongue front – left) Secondarily palatalized 'hard' posteriors show only little less raising and fronting of the tongue body, the tongue root is substantially advanced.

The difference between soft and hard consonants is similar in Russian, cf. Figs. 2 & 3. Palatalized sounds are articulated with a substantial advancement of the tongue root, which, we stipulate pushes the tongue body forward and up and thus results in the palatalization of the consonant.



While in Polish hard consonants show no particular velarization, cf. the shape of the hard posterior fricative in 'pasza' in Fig. 1, the tongue blade and body are flat, in Russian one can observe the characteristic raising of the back of the tongue, cf. Fig. 4. However, Litvin (2014) observes that "Russian non-palatalized consonants are not pharyngealized in the sense of Esling (1996, 1999, 2005), 2) /l/ and /f/ are uvularized, 3) /s/ and /ʂ/ can feature either uvularization or velarization." Thus, Russian 'hard' consonants are not uniformly velarized. The inspection of the ultrasound tracings in Litvin (2014) allows to conclude that the only common denominator for the 'hard' articulation of Russian consonants is the relatively retracted position of the tongue root resulting in either velarization or uvularization.



The investigation of ultrasound images leads us to conclude that the common contrast in Russian and Polish soft vs. hard consonants may be interpreted as a contrast in tongue root position.

Fig. 4. Tongue shape in Russian hard consonants (Litvin 2014:125)

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The weak, the strong and the likelihood: experiments on Slavic scalar particles

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Intro: Scalar particles (SP) like English *even*, German *sogar* among many others associate with focused elements, they are often building material of Negative Polarity Items (NPIs) as a strong English NPI *even one*. Their distribution and behavior can be explained from their pragmatic scalar and additive presuppositions. But despite their impressive research history (Karttunen&Peters 1977, Rooth 1985, Schwarz 2005, ...) many unresolved issues remain: i) are SP like English *even* one (scopal theories like Karttunen&Peters 1977) or two homophonous items (ambiguity theories like Rooth 1985)? ii) what is the exact nature of SP's presuppositions? Our contribution to SP debate is the following: using essentially Krifka's (1995) idea (formulated for strong NPIs) which delimits distribution of strong NPIs/SP to contexts where they are less likely than all the relevant focused alternatives we are able to: i) interpret results of 2 experiments on Czech and Slovene SP and strong NPIs; ii) explain domain restriction effects observed before (von Fintel 1994) and to confirm the quantification over alternatives as a universal (not existential) presupposition; iii) to show that ambiguity approaches to *even* (Rooth 1985) cannot work (at least in case of Czech/Slovene NPIs and SP).

Experiments: we ran two experiments, first consisting of two parts on Czech, second (replicated design of part 1 from the Czech experiment) on Slovene. Both experiments were truth value judgment tasks, 48_{cz} and 57_{sl} speakers successfully passed the fillers. Experiments were run online on IBEX farm and statistically interpreted in R using mixed model probit regression.

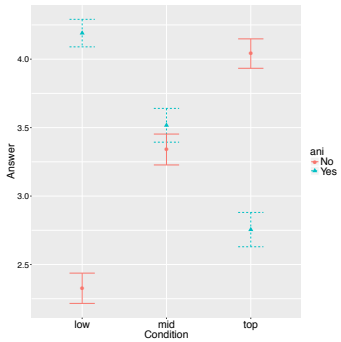

Figure 1: Part-1

Part 1: conditions (for both languages): TOP, MID, LOW varied for *i/ani* (with *i*/*ani* we label both Czech lexemes and Slovene *celo*/*niti* too). Error-bar graph$_{cz}$ is in the Figure 1, example$_{cz}$ item in (1). The statistical model confirms that: *i* combines with strong elements and *ani* with weak elements, *i* with weak elements was perceived as ungrammatical, *ani* with strong elements too. Both strong *i* and weak *ani* are statistically not distinguishable from each other (z_{cz} = -0.780/z_{sl}= -1.071, p_{cz} = 0.435122/p_{sl}= 0.284034) and much better than strong *ani* (diff: z_{cz} = -9.645/z_{sl}= -4.298, p_{cz} = 2e-16/p_{sl}= 1.73e-05) and much better than weak *i* (z_{cz} = -7.306/z_{sl}= -3.869, p_{cz} = 2.75e-13/p_{sl}= 0.000109). Patterns found in both languages converge.

Part 2: was only tested on Czech speakers, conditions were: ANT, NR, NEG, ANI-NEG-TOP, ANT-I-BOT, the first three varied for i/ani. The error-bar graph is in Figure 2, an example item in (2). Statistical model confirms that: *i* associates with strong elements and *ani* with weak elements. The least acceptable were conditions ANT-ANI and NEG-I, all others fared better (reference level condition: ANT-ANI). The best was *i* with strong elements in the antecedent (z = 13.137, p = 2e-16). Considerably better than reference level were also *ani* with weak elements in negated sentences (z = 13.022, p = 2e-16) and *i* with weak elements in antecedent (z = 9.924, p = 2e-16) and much better were also NR-ANI (z = 7.359, p = 1.85e-13) and NR-I (z = 6.461, p = 1.04e-10) and more acceptable was also *ani* with strong elements in negated sentences (z = 4.667, p = 3.06e-06). The second worst was NEG-I, indistinguishable from the reference level condition (z = 1.794, p = 0.0728).

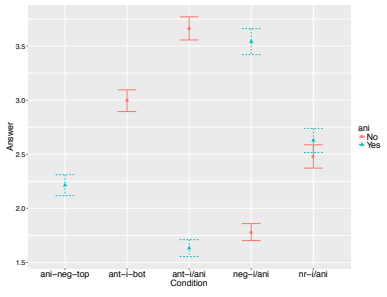

Figure 2: Part-2

(1) Brown rice can preserve essential vitamins but it has to be stored in the fridge, packed in hermetical dose and you have to consume it up to three days after cooking.

a. Rýže v ledničce (vydrží **i** tři dny)/(nevydrží **ani** tři dny). (TOP)
'The rice in the fridge (lasts even three days)/(doesn't last neg-even three days).'

b. Rýže v ledničce (vydrží **i** dva dny)/(nevydrží **ani** dva dny). (MID)
'The rice in the fridge (lasts even two days)/(doesn't last neg-even two days).'

c. Rýže v ledničce (vydrží **i** jeden den)/(nevydrží **ani** jeden den). (LOW)
'The rice in the fridge (lasts even one day)/(doesn't last neg-even one day).'

(2) Mother would be happy if her son would work for the police. The lowest rank is a sergeant, the highest is a general and somewhere in the middle is a colonel.

a. Syn se nakonec nestal (**ani** rotným)/(**ani** generálem). (NEG-ANI/ANI-NEG-TOP)
'Son at the end didn't become neg-even (sergeant)/(general).'

b. Jestli se syn stane **ani** rotným, bude matka ráda. (ANT-ANI)
'If her son becomes neg-even sergeant, his mother would be happy.'

c. Otec nechce, aby se syn stal (**ani** rotným)/(**i** generálem). (NR-ANI/NR-I)
'Father doesn't want his son to become (neg-even sergeant)/(even general).'

d. Syn nakonec vystudoval biochemii a nestal se **i** generálem. (NEG-I)
'Son at the end studied biochemistry and didn't become even general.'

e. Jestli se syn stane (**i** generálem)/(**i** rotným), matka bude .... (ANT-I/ANT-I-BOT)
'If son will become (even general)/(even sergeant), his mother will be happy.'

Theoretical interpretation: both *i* and *ani* bear strong unlikelihood presupposition (formalized after Crnič 2011 as obligatory association with covert $[\![even]\!]^{g,c}$(C, p, w) is defined only if $\exists$q $\in$ C [p $\lhd_c$ q]), on top of that *ani* is a super strong NPI (restricted to A(nti)-M(orphic) environments: $[\![AM]\!]$ = O($\neg$X) = $\neg$O(X) after Zwarts 1998). We formalize this as features on the lexemes: *i* ... [EVEN], *ani* ... [EVEN,AM] and both lexemes compete for insertion via the Maximize Presupposition (MP) mechanism of Heim (1991). Next, we follow the scopal treatment of *even*.
Explanation of the data pattern: *i* prefers narrow scope of covert *even* w.r.t. DE operators (if present): [DE[EVEN ... *i* ...]], *ani* prefers wide scope of covert *even* w.r.t. DE operators [EVEN [DE ... *ani* ...]]. That explains the basic patterns in both experiments: the requirement of *i* for strong elements and *ani* for weak elements (conditions TOP-I, LOW-ANI, ANT-I and NEG-ANI + unacceptability of LOW-I and TOP-ANI): implication as well as negation (being DE) reverse the direction of likelihood/entailment. For the middle of the scale in-between acceptability of MID conditions we propose a solution in terms of domain restriction (e.g. alternatives for *i* in (1) are {1 day, 2 days} and for *ani* {2 days, 3 days}). This solution is more in the correspondence to the experimental data than another logical possibility of weakening $\forall$ from $[\![even]\!]$ to $\exists$ as it would predict the same (unobserved) acceptability rating of MID conditions as TOP-I and LOW-ANI. Next, as conditions ANT-I-BOT and ANI-NEG-TOP relative acceptability shows, the items can associate even with EVEN scoping reversely to the default pattern: [DE [EVEN ... *ani* ...]] and [EVEN [DE ... *i* ...]] which is a strong argument against NPI-*even*-theories like Rooth (1985) which cannot explain such a pattern. NR condition NR-ANI shows most clearly the super strong nature of *ani*: NR predicates are exactly the $\neg$O(X) = O($\neg$X) type of predicates. We hypothesize that both NR conditions lowered acceptability is due to the NR semantic entailment 'transfering' negation (see Gajewski 2005) which is to some extent costly. Finally, the unacceptability of *i* in negated sentences is caused by its competition with more specific *ani* [EVEN, AM] which due to MP should be inserted. And ungrammaticality of *ani* in DE (ANT-I) is a simple result of feature clash: implications are not AM.

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The syntax of adjectival predication and nature of agreement predicate case in Russian

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There are two main questions concerning the syntax of nominal predication: i) the syntactic status of the predicative projection and ii) the case.

With respect to the first problem, there are attributive and non-attributive approaches to adjectival predicates. The first one, dating back to (Isachenko 1963), treats predicative adjectives as a part of noun phrases, (Babby 1973), (Siegel 1976), (Pereltsvaig 2007) et al.:

(#) [[$_{DP}$ Kitajskij jazyk] $Ø_{COP}$ [$_{D/NP}$ očen' trudnyj [$Ø_i$ / ~~jazyk~~]]]
Chinese language very difficult
'Chinese is very difficult.' (Isachenko 1963: 80-85)

I provide some arguments against the strict attributive approach, see also (Geist 2010), (Borik 2014). Firstly, two or more adjectives cannot be used predicatively, see also (Baker 2003:203) on the data outside Slavic:

(#) a. glubokoe sinee more — b. *More bylo glubokoe sinee.
deep blue sea — sea was deep blue
'the deep blue sea' — int.: 'The sea was deep blue.'

Secondly, attributive idioms lose their meaning when used predicatively:

(#) a. kitajskaja gramota — b. Gramota (byla) kitajskaja.
Chinese grammar — grammar (was) Chinese
a. 'something difficult' — b. *'Something (was) difficult'

I claim that predicative adjectives are not strictly attributive, but are instances of substantivization, created as a multilayered structure a la (Cinque 2010) with just one (AdjP) node realized phonologically:

(#) [[$_{DP}$ Kitajskij jazyk] $Ø_{COP}$ [$_{DP}$ … [$_{NunP}$ …[$_{AdjP}$ očen' trudnyj]]]

All their properties thus are the same as those of the AdjPs replacing noun phrases. The constraint on branching and the crash of idiomatic interpretation follow immediately.

As for the case, apart of the well-known predicative instrumental, there is an agreement case pattern observed in Russian nominal predications or depictives:

(#) Boris byl muzykant-Ø.
Boris-NOM was musician-NOM
'Boris was a musician.' predicative nominative (Bailyn 2012:184)

(#.a) My tancevali gol-ye.
we.NOM danced nude-NOM
'We danced nude.'

(#.b) My našli ego p'jan-ogo.
we.NOM found him-ACC drunk-ACC
'We found him drunk.' sameness pattern (Bailyn 2012:178)

Bailyn (2001, 2002, 2012) proposed the analysis of the predicative nominative in lines of PredP with no case-assigning properties and of the "sameness pattern" – as a multiple agree in adjunct small clauses. Multiple agree observed when one source serves a case assigner for

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the argument and the related depictive. In both PredP and multiple agree, the case is assigned from the head (T or v) to its complement.
I will argue here that the agreement case features in nominal predications are received in a step-by-step manner as a result of noun phrase raising (to Spec, TP or Spec, vP), whereas the "sameness pattern" is due to multiple agree in accordance with Bailyn's initial ideas.
The predicative nominative case is ungrammatical with the complement-taking adjectives:

(#) Ženš'iny	byli	ravnodušn-ymi	/	*ravnodušn-ye	k	futbolu.
women	were	indifferent-INS	/	indifferent-NOM	to	football

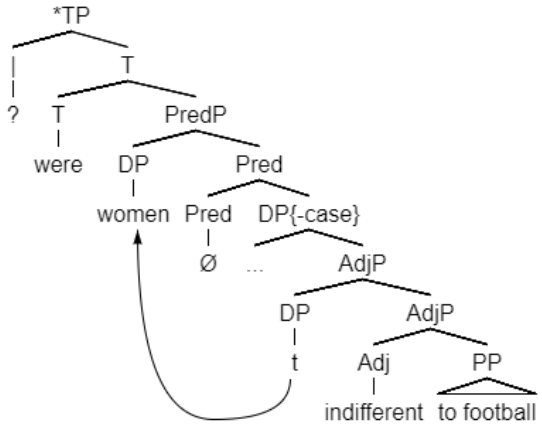
'Women were indifferent to the football.'

To account for this constraint, Borik (2014) proposed that i) the adjectival projection has rich internal structure and ii) the predicative nominative is a default case value. Here I accept the first statement but reject the second one. The positive, non-default value of the predicative nominative can be shown by the fact that it proves unacceptable with the not-finite copula:

(#) Byt'	*zdorov-yj	/	zdorov-ym	dolg	každ-ogo.
be.INF	healthy-NOM	/	healthy-INS	duty	everyone-GEN

'It is everyone's duty to be healthy.'

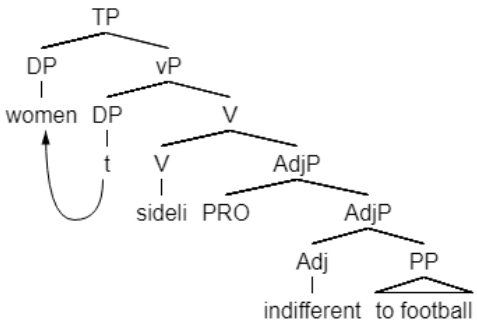
I propose the following explanation for the ungrammaticality of the predicative agreeing adjectives with complements. In case of nominative predication the adjectival phrase projects its subject in Spec, AdjP – along the lines with (Borik 2014) – embedded under PredP. To get the (nominative) case value, the subject must raise to Spec, TP. But at the time the case on the Adj head should be valued, the subject has not yet reached Spec, TP:
(#)



Ungrammaticality is not met with the predicative instrumental, see (#), since in this case Pred is case-assigning and no subject raising necessary for Adj to acquire the case value.
In accordance with (Bailyn 2012), depictives are multiple-agree adjuncts without PredP:

(#) Ženš'iny	sideli	ravnodušn-ye	k	futbolu.
women	sat	indifferent-NOM	to	football

'Women sat indifferent to the football.'


TP
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External 'Possessors' in Bulgarian: An Applicative Account

Snejana Iovtcheva, MIT

Bulgarian (BG) has an external possessive construction (EPC), (1), and a local one, (2), that involve a dative clitic possessor. Discussion has focused on the possessive meaning of these constructions and on whether it represents a transformational *possessor raising* or a *base-generated* possessive construction (Stateva 2002, Schürcks and Wunderlich 2003, Pancheva 2004, Cinque and Krapova 2009, Krapova and Cinque 2013, Iovtcheva 2017). The fact that (1) (but not 2) produces an additional meaning, in which the dative is interpreted as a non-agentive event participant, has been analyzed either as possessor raising into an 'affectee' theta position (Stateva 2002) or as base-generated possessor binding (Krapova and Cinque 2013):

(1) šte **mu** pročetem **(na Ivan)** [$_{DP}$ nova-ta kniga] (2) šte pročetem [$_{DP}$ nova-ta **mu** kniga **(na Ivan)**]
pro will he.$_{DAT}$ read.$_{1PL}$ (on Ivan) new-the book *pro* will read.$_{1P}$ new-the he.$_{DAT}$ book (on Ivan)
'We will read **Ivan's** new book' 'We will read **Ivan's** new book'
'We will read **Ivan** the new book' *We will read **Ivan** the new book'

In this talk I argue for a third alternative analysis. I argue that the two surface positions of the dative-marked arguments in (1) and (2) are not transformationally related and that the 'possessive' interpretation of the EPCs represents an *inference*, rather than a structurally encoded relationship within the possessee nominal. I provide novel evidence in support of a non-derivational applicative account for the dative constructions (along the lines of Marantz 1993/1997 and Pylkkänen 2002/2008). I propose that the dative clitic represents a morpho-syntactic realization of a functional argument-introducing head, which is employed as a general mechanism of creating predicative structure (Hale and Keyser 1993). Crucially, this head is underspecified in meaning (against Pylkkänen 2002/2008 and Cuervo 2003), which a speaker fills in via inference and context:

(3) [$_{ApplP}$ DP $_{DAT}$[$_{APPL'}$ APPL^0 [$_{XP}$ ….]]

Pragmatic context and predicate meaning cancel structural sensitivity. Possessor raising and possessor binding analyses of BG have especially focused on clausal transitive configurations that apparently show structural sensitivity such as definiteness requirement (4a) and PP-islandhood (4b) and have used this as an argument that the 'possessor' interpretation of the dative argument arises from within the DP (Stateva 2002, Krapova and Cinque 2013, Iovtcheva 2017):

(4) a. *Az **mu** xaresvam [$_{DP}$ šapka/prăst] b. *Az **í** mislja [$_{PP}$ za [$_{DP}$ oči-te/statija-ta]]
I he.DAT like.1SG hat-the/finger I she.DAT think.1SG about eyes-the
Intended:'I like a hat/a finger of **his**' Intended: 'I think about **her** eyes/her article
(Stateva 2002) (Krapova and Cinque 2013)

In general in BG, clausal dative arguments that refer to non-agentive event participants are easily available with roots that denote *activities* or *states*, such as √break, √bake, √hold, √give, etc.. Furthermore, a 'possessive' reading with such verbs arises independently of the (in)definiteness or the prepositional embedding of the direct object. Consequently, the unacceptability of the data in (4) is surprising. Yet, when provided with a pragmatic context that allows interpretational accommodation of an additional event participant as in (5), any structural sensitivity in the data in (4) disappears and the clausal dative with a potential possessive interpretation becomes perfectly acceptable:

(5) a. Context for (in)alienable possessive clausal relation to the indefinite direct object in (4a):
Ivan wants/needs me to like a hat/a finger for him (beneficiary) OR Ivan does not want me to like a hat/a finger for him (malefactive);

b. Context for (in)alienable possessive relation to the PP embedded direct object in (4b):
Maria wants/needs me to think about the beautiful eyes (that most probably are hers) or about an article (that might be of her possession or that might have been written by her);

The claimed non-acceptability of the data in (4) is therefore misleading and merely represents an unacceptable 'out-of-the-blue' use of the dative construction with predicates that denote psych and physical perception and is not an argument in favor of a structural possessor raising analysis.

Evidence against possessor raising and in support of a non-derivational account

Argument #1: Clausal datives fail to bind DP-internal reflexive anaphors. In line with Principle A of the Binding Theory, DP-internal datives serve as the local antecedent of the reflexive *svoj* (6a), DP-external datives fail to do so both with activity and psych predicates (6b):

(6) a. Petăr otkradna/xaresva [$_{DP}$ *svoi-te* **mu** snimki (**na Ivan**)]
Peter stole.$_{3SG}$/likes.$_{3SG}$ self-the he.$_{DAT}$ photographs (on Ivan)
'Peter stole/likes **Ivan's** photographs.' /*'Peter$_i$ stole/likes his$_i$ own photograph by Ivan'

b. Petăr **mu** otkradna/xaresva **(na Ivan)** [$_{DP}$ *svoi-(te)* snimki]
Peter he.$_{DAT}$ stole.$_{3SG}$/like.$_{3SG}$ (on Ivan) self –(the) photographs
'Peter$_i$ stole/likes his$_i$ own photos to affect Ivan' / *'Peter$_i$ stole/likes Ivan's photos'

The binding facts raise a structural problem for a raising analysis of the EPCs especially because in raising constructions of the type *John seems to like himself* the subject that surfaces in the matrix clause binds an anaphoric element in the embedded clause proving that traces remain active for binding purposes also in BG:

(7) Ivan izgležda [$_{TP}$ xaresva *svoi-te* snimki]
Ivan seems.$_{3SG}$ like.$_{3PL}$ self-the snimki
'Ivan$_i$ seems to like his$_{i/*j}$ own photographs.'

Argument #2: Clausal dative 'possessors' produce idioms that are not available DP-internally. A possessor raising analysis is also not able to account for distinct idiomatic readings. Note that the idioms in (8) are specifically chosen as they employ a verb that denotes physical perception, thus demonstrating that clausal datives are in general fine with all verb classes in BG:

(8) a. **(na Ivan) mu** vidjaxa smetka-ta.
pro (on Ivan) he.$_{DAT}$ saw.3PL bill-the
'They finished **Ivan.**'
(i.e. They saw the final bill to affect Ivan.)

b. vidjaxa [$_{DP}$ smetkata **mu** **(na Ivan)].**
pro saw.$_{3PL}$ bill-the he.$_{DAT}$ (on Ivan)
'They saw **Ivan's** final bill.'
*'They finished Ivan.'

Argument #3: Canceling a DP-internal possessive relation changes truth conditions. Negating the possessive relation with a clausal dative (9a) does not sound odd and under the right context the sentence produces the non-contradictory interpretation of a beneficiary. Negating the possessive relation of a DP-internal dative (9b), on the other hand, sounds like a correction:

(9) a. **(na Ivan) mu** xaresvam [$_{DP}$ kuče-to], ama to ne e negovo.
pro (on Ivan) he.$_{DAT}$ like.1SG dog-the, but it NEG BE.3SG his
'I like the dog for Ivan's benefit, but it is not his.'

b. #xaresvam [$_{DP}$ kuče-to **mu** **(na Ivan)**], ama to ne e negovo.
pro like.1SG dog-the he.$_{DAT}$ (on Ivan), but it NEG BE.3SG his
#'I like **Ivan's** dog, but it is not his.' (only plausible as a correction of the possessive assertion).

Argument #4: DP-external and DP-internal datives can co-occur. The two dative positions can be (i) simultaneously overtly realized and (ii) do not have to refer to the same individual, thus highlighting the separate domains and the non-transformational nature of dative applicatives in the language:

(10) **(na Ivan) mu** sčupix [$_{DP}$ novij-a **í** telefon **(na Maria)**]
pro (on Ivan) he.$_{DAT}$ break.1SG new-the she.DAT phone (on Maria)
'I broke **Maria's** phone to affect Ivan. (he is affected because they might share possession)'

Furthermore, dative clitic-marked arguments are used productively in BG beyond possessive meaning. The language supports dative experiencers, dative goals, as well as dative arguments of nominal and locative predicates. Thus, I propose that any 'possessive' interpretation of datives in transitive clausal configurations results from (i) the structural context (availability of a direct object), (ii) the overall meaning of the predicate (psych verbs may create interpretational difficulties), (iii) the pragmatic context and general world knowledge.

The pragmatic effects of Macedonian *li*: An empirical study

Izabela Jordanoska (University of Vienna) and Erlinde Meertens (University of Konstanz)

Issue. In Macedonian, three types of Polar Questions can be distinguished, as shown in (1).

(1) a. Ima Pepsi? [Intonation Question (IntQ)]
have.3SG Pepsi
'Is there pepsi?'

b. Dali ima Pepsi? [Dali Question (DaliQ)]
Q have.3sg Pepsi
'Is there Pepsi?'

c. Pepsi li ima? [Li Question (LiQ)]
Pepsi LI have.3SG
'Is there PEPSI?'[1] (Rudin et al 1999 :579)

This paper is concerned with the semantic-pragmatic licensing of the optional particle *li*. Although several suggestions have been proposed in the literature (e.g. *li* marks focus, *li*-questions are rhetorical, rejective, or add a 'perhaps'-feeling (Englund 1979, Rudin et al. 1999)), the precise pragmatic contribution of *li* has remained an open question.

Goal. We build on the syntax-semantics literature, in which *li* is taken to be a focus particle (Lazarova-Nikovska 2003, Schwabe 2004, Tomić 2012) and (i) provide empirical data as to show what focus effect *li* precisely conveys, and (ii) propose a novel account in which we argue that *li*-focus ultimately indicates the shape of the Question Under Discussion (QUD)

Hypotheses. For our study, we considered two hypotheses, (i) *li* contributes EXCLUSIVITY (i.e., only one proposition among the set of propositions denoted by the question (à la Hamblin 1976) can be true), and (ii) *li* shapes the QUD, bringing about a feeling of SURPRISE (in this study: a polarity mismatch in EPISTEMIC and EVIDENTIAL bias (Sudo 2010)).

Methods. We tested the pragmatic contribution of *li* in a rating study. Each trial consisted of a context followed by a question. Participants were asked to rate a question's naturalness in a specific context on a 1(min)-5(max) scale. Two factors were manipulated. Firstly, the form of the target question, which came in three conditions: LiQ, DaliQ and CleftQ.[2] The second factor was the context type, which also came in three conditions: Exclusive+Surprise (E+S), Non-Exclusive+Surprise (NE+S) and Neutral (N). To test whether *li*-focus contributes EXCLUSIVITY, we compared the ratings of li-Qs in NE+S to the ratings in E+S. To test for SURPRISE, we compared the NE+S and E+S to N. An example of a trial is given in (2): a translation of a E+S context followed by a LiQ.

(2) a. You are celebrating Vasilica with your family, when the pogača is being shared. Traditionally, there is a coin in the pogača and whoever finds it will have a prosperous year. Suddenly your aunt, who always has bad luck, lets out a scream. You ask her:

[1] *Li* can cliticize to both verbs and XPs. In this experiment we only consider XP-*li*.

[2] CleftQs are not be discussed in this abstract for length reasons.

b. Tebe li ti padna pari-čka-ta?
2SG.DAT.PRO LI 2SG.DAT.CL fall.3SG.PRES money-DIM-DEF.F
'Did YOU get the coin?'

27 experimental items were distributed in 7 lists with a Latin Square Design, together with 8 fillers that served as controls and 2 practice items. 49 native speakers of Macedonian participated online via soscisurvey.de (Leiner 2014). For each subject age, dialectal background and current location were documented and controlled for.

Results. The relevant average ratings are plotted in Figure 1. A mixed effect model revealed significant effects of Question Type, Context Type, and the combination of those two. We followed up with pairwise comparisons, concentrating on our hypotheses. For EXCLUSIVITY, no effects were found, that is, there were no significant differences between the rating of LiQs and DaliQs in E+S and EN+S contexts. For SURPRISE, a significant contrast emerged: LiQs were rated higher in E+S than in N ($p<.001$), and LiQs were rated higher in EN+S than in N ($p<.01$). Furthermore, the rating of DaliQs, was stable across the board (mean: 3.45), as was, surprisingly, the rating of CleftQs (mean: 2.96).

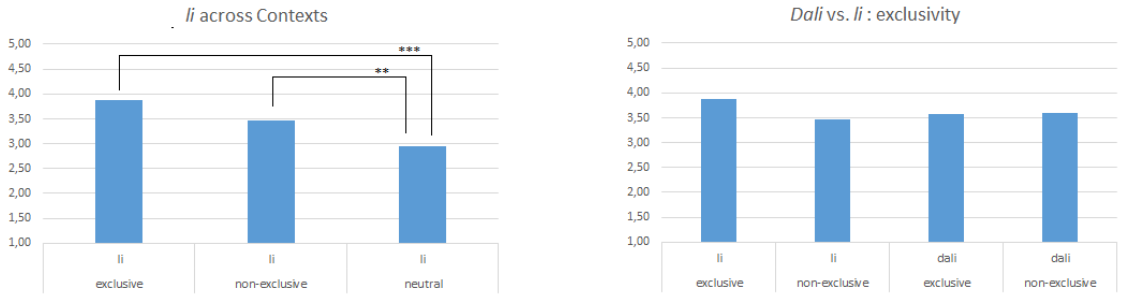

Figure 1: relevant results

Discussion. We conclude that SURPRISE licenses LiQs. We argue that this is not inherent to the meaning of the particle *li*, but rather a result of its function, that we propose to be indicating the shape of the QUD. We follow (Biezma 2009) who proposed a similar analysis for the focal accent in English Polar Questions, as illustrated in (3).

(3) a. Did ALFRED play cards? → QUD = Who played cards?
b. Did Alfred play CARDS? → QUD = What did Alfred play?

Examples (3-a) and (3-b) are branches of different QUDs. We propose that this effect is exactly the effect that *li* conveys, which (i) accounts for our empirical data, (ii) can be easily integrated in existing syntactic accounts of *li*, and (iii) accounts for the intuitions described in the literature, such as that *li* prompts a negative answer.

Finally, we want to point out that the results of our study do not only provide insight in the usage of *li* in Macedonian, but also open a window into the realization of focus. Concerning the final issue, a natural question for follow-up research is how the labour is divided between focus particles and prosodic cues in marking focus in Macedonian.

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On the Bulgarian evidential construction(s)

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It has become commonplace in formal semantic research on evidentiality in Bulgarian to assume the existence of a single evidential construction with various related interpretations. Thus Koev (2017) follows Izvorski (1997) who considers a single construction encoding indirect evidence (*hearsay* and *inference*). Similarly, Smirnova (2013) considers a single construction encoding next to hearsay and inference a third evidential category that she calls *direct evidence* and that is referred to in descriptive literature as *(ad)mirative*. An exception is Sonnenhauser (2013) who distinguishes between a *renarrative* (hearsay) and *conclusive* (inference) paradigm, however without considering the admirative interpretation.

Apart from the empirically unjustified assumption that the Bulgarian inferential forms share the same paradigm with the hearsay forms in terms of auxhiliary drop in the 3rd person (Smirnova 2013), little attention has been given in formal semantic research to differences concerning the morphological form of the participles involved in the realization of the three evidential functions. Thus, while it has been recognized that both the hearsay and the inferential interpretations use both present (imperfect) and past (aorist) *l*-participle stems (cf. Smirnova 2013; Sonnenhauser 2013), it has largely remained unnoticed that the admirative only allows for imperfect stems. The assumption of a single formal paradigm on which all three evidential functions rely contradicts the bulk of extensive descriptive work on the issue (e.g. Bojadžiev et al. 1999, Pašov 1999, Levin-Steinmann 2004) and is easily shown to be empirically inadequate. I suggest instead a distinction between three evidential paradigms illustrated in (1) for the verb *piša* ('to write'). The table includes for comparison the forms of the Bulgarian present perfect tense with which the evidential paradigms partly overlap. (I ignore for the time being future and perfect evidential forms.)

It has further largely escaped the attention of both formal and descriptive work that the evidential sources encoded by these forms are more versatile than previously assumed. Thus, the so-called admirative realized by zero-auxhiliary imperfect-stem *l*-participles can not only be used in the widely recognized exclamative contexts expressing direct evidence (c.f. e.g. Bojadžiev et al. 1999, Smirnova 2013), but also in assertions like (2) which may or may not be embedded under the predicate *okaza se, (če)* ('it turned out (that)'). In such contexts, these forms indicate that the speaker reports on some recent or still ongoing belief revision process caused by observable but not necessarily direct evidence. Examples like this suggest that the so-called admirative forms are not only used for encoding direct perception but also inference-based evidence. Finally, I show that the inferential forms claimed by Smirnova to only express "external" inferences based on observable evidence, may also indicate "internal", knowledge-based inferences as their evidential source. (I ignore for the time being the so-called *dubitative* interpretation of the renarrative construction, cf. e.g. Bojadžiev et al. 1999.)

Based on the above considerations, I propose the description of the properties of the three evidential constructions presented in (3). In addition to the evidential source encoded, the three evidential forms are characterized in terms of the degree of commitment to the truth of the proposition (in terms of a probability P), as well as in terms of the temporal relations expressed by the evidential constructions between *speech time* (ST), *event time* (ET) (cf. Klein 1994), and *evidence acquisition time* (EAT, Smirnova 2013). (I ignore for the time being aspectual differences, as well as the reference time (RT) shown by Smirnova (2013) to play an important role in the temporal analysis of the evidential).

In terms of the relation of evidentials to epistemic modality, I argue that the inferential and admirative express different degrees of speaker commitment (contra Smirnova's 2013 assumption that the speaker is equally committed to the truth of the proposition) – higher in the case of the admirative and lower in the case of the inferential – a difference supported by the compatibility

of epistemic adverbs like *maj* ('perhaps') with the inferential and their incompatibility with the admirative. At the same time, the commitment expressed by the admirative is weaker than knowledge, as also pointed out in Smirnova (2013). I further argue that the renarrative indicates complete lack of speaker commitment, yet agree with Smirnova (2013) who argues that the renarrative encodes a modal value in terms of the commitment of the reporting person. This is also supported by the behaviour of epistemic adverbs like *maj* ('perhaps') which modify the degree of the reporter's commitment, rather than of the speaker. If not epistemically modified, the reporter's commitment has the value P=1. To account for these properties of the epistemic modal component of the three evidential constructions more adequately, I employ Krifka's (2017) distinction between proposition, assertion and judgement, where assertion is a public act committing the speaker to the truth of what is asserted, whereas judgement is a private act expressing the confidence of a judge (speaker, addressee or reporter) in a proposition. The evidential constructions are then accounted for in terms of specifying the evidential source, the judge, as well as the judge's degree of confidence in the proposition, which is generally weakened by asserting a judgement rather than a proposition. This analysis is compatible with Nicolova's (1993) distinction between speaker and witness on the one hand and knowledge and assertion on the other, and with Sonnenhauser's (2013) analysis of evidentiality in terms of point of view.

(1)

	renarrative		conclusive		admirative	perfect
stem:	aorist	imperfect	aorist	imperfect	imperfect	aorist
	pisal sâm pisal ∅	pišel sâm pišel ∅	pisal sâm pisal e	pišel sâm pišel e	pišel sâm pišel ∅	pisal sâm pisal e

(2) Ne bjah prava, kogato pisah, če [...] Košlukov ne raboti [...]. To se okaza ošte po-lošo - toj rabotel. (source: reduta.bg)
'I was not right when I wrote that Košlukov didn't work. It turned out to be worse – he obviously is working.'

(3)

	evidential source	degree of commitment	temporal structure
renarrative	hearsay	reporter's commitment: P=1	ET < ST (aorist stem) ET = ST (imperf. stem) EAT < ST (both stems)
conclusive	inference from observable facts or from knowledge	speaker commitment: P>0.5	ET < ST (both stems) EAT < ST (both stems)
admirative	observation of (in)direct evidence causing belief revision	speaker commitment: P=1	ET = ST (imperf. stem) EAT ≤ ST (imperf. stem)

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One of the most serious challenges modern phonology faces nowadays is the establishment of the character of primes utilized to code speech sounds. This is not an easy task insofar as the proposed primes are required to provide a convincing explanation of phonological phenomena. However, it has been repeatedly pointed out that large amounts of such phenomena still remain problematic because the classical acoustic-perceptual and articulatory-based models are not suitably equipped to deal with them. One of such problematic areas include common interactions between vowels and consonants which results in divergent views on their internal structure, e.g. Clements and Hume (1995), Harris and Lindsey (1995), Padgett (2002), and Flemming (2002), among many others. Another, no less important, issue concerns the phonological patterning of articulatorily distant consonant classes, e.g. Ladefoged (2005), Flemming (2005), and Mielke (2008). This can be illustrated on the example of labials and velars which interact phonologically on a massive scale. Since the representation of labials is pretty uncontroversial, in this talk we concentrate on the internal structure of velars which has recently captured much attention in the literature. This is especially true in Element Theory (ET) – a model which recognizes only certain acoustic properties present in the speech signal as linguistically important. Interestingly, along with the progression of the model, the representation of velars has changed. At the early phase of ET formation, labials and velars are represented by different elements. Labials, non-low back vowels, and the labial glide contain the element |U|, while velars are defined by the neutral element (Harris and Lindsey 1995), empty-headedness (Cyran 1997, 2010; Huber 2007), or an additional element (Scheer 2004). Recently, however, all these proposals have been discarded in favor of a solution which establishes a direct relationship between the two categories (Backley 2011). Building on the idea put forth in Broadbent (1996), Backley claims that both velars and labials share the same element |U|. What differentiates both categories is the status of this resonance element, namely, it is headed in labials |U̲|, but non-headed in velars |U|. In this way, labials and velars are formally related, and at the same time, phonologically distinct.

The analysis of the data presented in the discussion puts us in the position of the supporters of the latter solution. To put it differently, the main aim of this short talk is to back the solution according to which labials and velars share a resonance element. Since the evidence on the intimate phonological relationship between labials and velars is massive, the discussion is narrowed down to only some examples of the relationship between velars and labials in some southern dialects of contemporary Polish. The reason why we have decided to discuss this particular piece of evidence is that it categorically refutes the claim that velars are empty headed, i.e. that they lack a resonance element. The observation that in southern dialects velars can be realized as labials in the non-labial context (no labial vowel or consonant in the vicinity), weighs in favor of this conclusion. More specifically, apart from a common shift of the word final /x/ > /k/ in the dialects of Lesser Poland (south-eastern Poland) (Urbańczyk 1968; Dejna 1981), there are some /x/ > /f/ developments further to the south in the Spiš area (Polish-Slovakian border). The shifts in question, i.e. /x/ > /k/ or /f/, occur predominantly in two contexts: word-finally (1a) and in some consonant clusters (1b).

(1) Dialectal developments of the velar fricative in Polish (Dejna 1981)

	Standard Polish	*Lesser Poland*	*South*	*gloss*
a.	[x]	[x] > [k]	[x] > [f]	
	da[x]	da[k]	da[f]	*roof*

	me[x]	me[k]	me[f]	*moss*
	gro[x]	gro[k]	gro[f]	*pea*
	ty[x] stary[x]	ty[k] stary[k]	ty[f] stary[f]	*these old*
b.	[x]wała	[k]wała	------	*glory*
	p[x]ła	p[k]ła	------	*flea*
	t[x]órze	t[k]órze	t[f]órze	*coward, pl.*
	[k]tóry	------	[f]tóry	*which*

In (1a) the velar fricative in the Standard variety is shifted to [k] or [f] word-finally in some dialects of Lesser Poland. Similar developments can be observed in (1b) with the difference that here the shift takes place in consonant clusters. Some forms are claimed to be derived by analogy, i.e. the shift is motivated by the presence of the shift or lack of it in related forms. For example, in some dialects a noun in gen.pl. may receive the ending -[ux], e.g. *syn*[ux], St. Pol. *syn*[uf] 'son, gen.pl.' which agrees with the form of the determiner and adjective, i.e. *ty*[x] *dobry*[x] 'these good, gen.pl.' In other dialects, however, we can observe the opposite direction of the development in that the latter forms *ty*[x] *dobry*[x] 'these good, gen.pl.' are realized phonetically with the final labial fricative *ty*[f] *dobry*[f], which in turn are assumed to be modeled on *syn*[uf] 'son, gen.pl'. In the latter dialects, these endings are claimed to have influenced the phonetic realization of nouns in loc.pl. in that they terminate with [f], e.g. St. Pol. *na pola*[x] - dial. *na pola*[f] 'in the fields', St. Pol. *w ręka*[x] – dial. [v rentsaf] 'in the hands'. The data to be presented include also a cluster simplification pattern found in the dialects of Lesser Poland and Mazovia, which can be schematized as [xw] > [xv] > [xf] > [f] and exemplified by some place names and proper nouns, e.g. *Bogu*[f]*ał* < *Bogu*[xf]*ał*, [f]*alimir* < [xf]*alimir*, *fała* < [xf]*ała* 'glory', [fʲ]*ila* < [xfʲ]*ila* 'moment' (Dejna 1981). The latter developments will be contrasted with similar simplifications in the Kurp and Northern Mazovian dialects, e.g. [fɕ]*ołek* ~ [ɕ]*ołek* 'violet', [gvʑ]*azdy* ~ [gʑ]*azdy* 'stars', [mɲ]*asto* ~ [ɲ]*asto* 'city' (Czaplicki 1998). The cluster simplification here consists in, first, the strengthening of the soft labial [fʲ vʲ mʲ] to [ɕ] or [ç] and then deletion of the preceding labial fricative (or nasal).

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Datives in Dependent Case Theory: Lexical, Dependent, or Unmarked?

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This paper examines the categorial nature of the dative in the context of Dependent Case Theory (DCT) with special attention to Russian dative infinitival structures. Since the seminal work by Marantz (1991), DCT has been described based on the idea that morphological case is assigned to noun phrases on a configurational basis (Bittner & Hale 1996, Bobaljik 2008, Baker 2015) in contrast with the syntactic approach presupposing that case is assigned by functional heads (Chomsky 2000, 2001). Nevertheless, details including how oblique cases are assigned remain to be discussed. This paper argues that oblique cases cannot be oversimplified into lexical cases as a whole, especially focusing on datives, the categorial nature of which has been the most problematic.

The dative has been regarded as a *lexical case.* As the first category of the *Disjunctive Case Hierarchy*, it is evaluated by lexical items such as adpositions or quirky case marking verbs. Baker & Vinokurova (2010) argue that some instances of the dative in Sakha are better understood as *dependent cases*, the second category, and this dative is assigned to a higher DP in a VP-phase in the presence of another DP that is yet to be case-marked. Alternatively, Puškar & Müller (2017) analyze other instances of lexical datives as dependent cases in Serbian. In this paper, I discuss the distribution of datives in Russian, mainly focusing on those structures used in Dative Infinitive Modal (DIM) and Dative Infinitive Existential (DIE) constructions (Jung 2011), exemplified in (1-4). While I largely adopt the viewpoint that the dative assigned to an indirect object is a dependent case, I argue that the dative in the DIM and DIE constructions cannot be understood as a lexical or dependent case; they are, in fact, realizations of the *unmarked case* within a non-finite TP phase.

Dative subjects in (1-4) cannot be considered to have received a lexical case for several reasons. First, the DIM and DIE constructions are independent of the idiosyncratic selection of specific verbs in a manner unlike lexical datives, which are selected by a limited set of verbs sharing semantic structures (e.g. psych verbs). There appears no other overt item that governs the dative case throughout the examples. Second, the dative case is not restricted to certain semantics in DIE construction, as shown in (3). This controverts the possible interpretation that the dative subject is assigned due to its θ-role as an Experiencer of modality. Third, even if we assume a hypothetical null head that might license the dative case, dative–accusative constructions in (2) cannot be deducted from the DCT. This is because lexical cases are assigned in advance of dependent cases and the object cannot receive accusative case when the other argument in the phase has already been marked for case. It is also impossible to understand the datives in (1-3) as dependent cases, for these constructions are readily compatible with intransitive verbs as in (1), which indicates that the subject can be assigned a dative while it is the sole argument in the whole sentence. An indirect object analysis on these datives is ruled out because the thematic role of indirect objects is most commonly restricted to the role of Goal, which is not the case in (4).

On the other hand, the gender agreement between the dative subject and predicate adjectives in (4) strongly supports the possibility that this dative is a realization of the unmarked case, as the *Revised Moravcsik Hierarchy* (Bobaljik 2008) suggests that unmarked case is most accessible for φ-feature agreement and there is no other evidence of agreement between predicates and arguments bearing dependent cases, such as accusative, in Russian. Moreover, the loss of ability to assign accusative case to object when passivized suggests that the dative subject and the accusative argument are involved in case-competition, implying that the subject has not been case-marked by the time the object is marked accusative. The last reason of that these datives are unmarked case comes from the Second Dative phenomenon, where the secondary predicate *odin* 'one, alone' in the embedded infinitival phrase with a controlled subject is marked dative, as shown in (5) (Moore & Perlmutter 2000, Greenberg & Franks 2001, Fleisher 2006). From the

observations that *odin* always agrees in case with its reference, it can be argued that the PRO subject in the infinitival clause bears a dative case in absence of other case assigners.

To summarize, I argue that the dative assigned to a subject in an infinitival clause in Russian is a realization of unmarked case in the framework of DCT.

(1) *Gde* ***mne*** *spat'?*
where me.**DAT** sleep.INF
'Where is there for me to sleep?' [Greenberg & Franks, 1991:72]

(2) *Začem* ***mne*** *pokupat'* ***sigarety****?*
for-what me.**DAT** buy.INF cigarette.**ACC**.PL
'For what I buy cigarettes?' [Jung, 2013:173]

(3) ***Mne*** *est'* ***čto*** *skazat'.*
me.**DAT** be.PRST what.**ACC** say.INF
'There is something for me to say.' [Jung, 2011:186]

(4) *Toj* ***rukopisi*** *ne byt' opublikovannoj*
that manuscript.**DAT**.F NEG be.INF published.INST.F.SG
zarubezhnym izdatel'stvom.
foreign publishing-house.INST [Moore & Perlmutter 2000:393]
'It's not (in the cards) for that manuscript to be published by a foreign publishing house.'

(5) *Ja poprosil Ivana*$_i$ [**PRO**$_i$ *prijti* ***odnomu***$_i$].
I asked Ivan.ACC come.INF alone.**DAT**.**M**
'I asked Ivan$_i$ [PRO$_i$ to come alone].' [Jung, 2011:110]

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The transitive 'need' construction in Russian: A null BE analysis

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In Russian, the so-called intensional transitive *need* (see Harves 2008, Harves and Kayne 2012) corresponds to two distinct constructions: (i) with the agreeing adjectival predicate *nužno* and a nominative theme (**agreeing 'need' construction, ANC**), as in (1); and (ii) with *nužno* with default (NEUT.SG) agreement or impersonal nonverbal predicate *nado* and an accusative (sometimes genitive) theme (**transitive 'need' construction, TNC**), as in (1b).

(1) a. Mne nužn**a** lopat**a**
me$_{DAT}$ need$_{F.SG}$ spade$_{NO}$
'I need a spade.'

b. Mne nužn**o/nado** lopat**u**.
me$_{DAT}$ need$_{N.SG}$ /need spade$_{ACC}$
'I need a spade.'

Although TNC has been mentioned in both descriptive and theoretical literatures (see Švedova 1980, Pesetsky 1982, see also Dobrushina 2015 for a similar construction with the subjunctive particle *by*), it has not received sufficient attention. For example, it is missing in a (formal) typological survey of 'need' predicates in Harves & Kayne 2012. TNC has a strong colloquial flavor and is less common than ANC, which might explain why it has received little attention. However, we do find TNC in the Russian National Corpus (RNC): 57 and 68 hits for *nužno* (229 and 223 for *nado*) in the written (after 1950) resp. spoken part of RNC. The aim of this paper is to characterize the properties of TNC and to provide a theoretically-informed analysis.

Properties of TNC Apart from the register and frequency differences between the two constructions, TNC has some further peculiarities. First, TNC is (lexically) restricted to *nado*/*nužno* and does not appear with a semantically similar predicate *neobxodimo* 'necessary', cf. ANC in (1b)

(2) a. ??Nam neobxodimo kuklu.
us$_{DAT}$ necessary$_{N.SG}$ doll$_{ACC}$
Intended: 'We need a doll.'

b. Nam neobxodima kukla.
us$_{DAT}$ necessary$_{F.SG}$ doll$_{NOM}$
'We need a doll.'

Second, TNC has a selectional restriction on its theme argument. Semantically abstract themes, including state/event nominalizations, are banned, as shown in (3a), cf. ANC in (3b). This restriction cannot be explained by an *independent* dispreference for accusative case (and preference for genitive case) associated with abstract nominals (see Kagan 2013), as genitive is still blocked, as shown in (4a); note that genitive on the direct object is in principle possible in TNC (for certain nouns), as shown in (4b).

(3) a. *Im nužno/nado pomošč'.
them$_{DAT}$ need$_{N.SG}$/need help$_{ACC}$
Intended: 'They need help.'

b. Im nužna pomošč'.
them$_{DAT}$ need$_{F.SG}$ help$_{NOM}$
'They need help.'

(4) a. *Im nužno/nado pomošči.
them$_{DAT}$ need$_{N.SG}$/need help$_{GEN}$
Intended: 'They need help.'

b. Im nužno/nado ljubvi.
them$_{DAT}$ need$_{N.SG}$/need love$_{GEN}$
'They need help/love.'

Third, the dative argument of TNC shows an animacy restriction. Although inanimate dative arguments sound slightly unnatural in ANC, as in (5b), they seem to be considerably worse in TNC, as in (5a).

(5) a. Im / *karte nužno stol.
them$_{DAT}$ map $_{DAT}$ need$_{N.SG}$ table$_{ACC}$
'They/the map need(s) a table'

b. (?)Karte nužen stol
map$_{DAT}$ need$_{M.SG}$ table$_{ACC}$
'The map needs a table' (RNC)

Harves's (and Kayne's) analysis The challenge posed by TNC is that its analysis should be sufficiently similar to the analysis of ANC to capture the semantic similarity between the two and yet sufficiently different to capture their difference. Harves (2008) discusses ANC in Russian and argues, based on the ambiguity of the temporal modifier in (6), that it should contain an abstract possessive verb, i.e. BE or GET, see (7), but not HAVE, which is not available in Russian, given the lack of an overt productive 'have' and assuming that the lack of an overt HAVE should correspond to the lack of abstract 'have', see Harves & Kayne 2012.

(6) Ivanu byli nužny den'gi do sobranija.
Ivan$_{DAT}$ were$_{3PL}$ necessary.$_{ADJ.PL}$ money$_{NOM.PL}$ before meeting
'Ivan needed some money before the meeting.'

(7) NP_{DATi} *nužen* [PRO_i **BE/GET** NP_{NOM}]

I would like to argue that the analysis in (7) is unsatisfactory as it leaves no room for a proper analysis of TNC. Under Harves's (and Kayne's) framework, a possible analysis of the two constructions would be as in (8): TNC in (8b) contains an abstract predicate GET, which is able to assign accusative/genitive and is presumably associated with the selectional restrictions above, while ANC contains 'unaccusative' BE, which is not so restricted.

(8) a. NP_{DATi} *nužen* [PRO_i **BE** NP_{NOM}] b. NP_{DATi} *nužno*/*nado* [PRO_i **GET** NP_{ACC}]

The analysis in (8), however, faces a challenge as TNC in (1b) cannot be paraphrased with 'get', as shown in (9a), and requires a paraphrase with 'be' in (9b). It is also doubtful that Russian has an overt productive GET, as Russian *poluchat'* arguably has a more specific meaning than English *get* (i.e. inchoative variant of HAVE, see Harley 2002). Given Harves and Kayne's logic, GET should not exist in Russian. Moreover, it is not clear why GET but not BE should be associated with selectional restrictions and disallow *neobxodimo* 'necessary'.

(9) a. #Mne nužno **polučit** lopatu.
me$_{DAT}$ need$_{N.SG}$ get$_{INF}$ spade$_{\mathbf{ACC}}$
'I need to get a spade.'
b. Mne nužno, čtoby u menja **byla** lopata.
me$_{DAT}$ need$_{N.SG}$ that$_{SUBJ}$ at me was$_{SUBJ}$ spade$_{NOM}$
'I need to have a spade.'

Proposal Assuming that there is just *one* abstract possessive verb in Russian (BE), I wish to argue that only TNC contains an abstract possessive head, as in (10b), whereas ANC is monoclausal, contra Harves 2008, as in (10a).

(10) a. NP_{DAT} *nužen* NP_{NOM} b. NP_{DATi} *nužno/nado* [PRO_i **BE** NP_{ACC}]

The analysis in (10) can account for the selectional restrictions in TNC, which would follow from the presence of BE; e.g, (5a) could be linked to the infelicity of the corresponding possessive construction, cf. **U karty est' stol* '#The map has a table', and similarly for (3a), cf. **U nix est' pomošč'* '#They have help'. Alternatively, it could be assumed that null BE is different from its overt counterpart (cf. van Riemsdijk (2002)'s discussion of GO). The analysis could also account for the accusative case in TNC. Under the configurational case assignment theory in Baker (2015) (see also Lavine & Franks 2008) it follows from the presence of the unmarked NP (PRO) c-commanding the theme in (10b), leading to dependent (ACC) case marking. Finally, the ban on *neobxodimo* is expected if null Vs require licensing by functional heads (van Riemsdijk 2002) and *neobxodimo* is a lexical rather than a functional modal.

Under the analysis in (10), we still need to understand the source of the possessive semantics in ANC and the ambiguity in (6). I wish to argue that the possessive meaning in ANC arises via a special (lexical) composition rule for *nužno*/*nado*, as was proposed by Fodor & Lepore (1998) for *want* (see some discussion in Harley 2004). Given that the possessive predication in (10a) arises only in the semantic interpretation but not in the syntax, adverbial ambiguity should also be treated as a semantic phenomenon orthogonal to the question of bi- vs. monoclausality (see Horvath & Siloni 2016 for a similar view).

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Polish Dative Experiencers as binders and the effect of anaphor embedding - an experimental study.

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This study focuses on binding by dative Experiencers (Exp_{DAT}) in the Polish psychological predicate structures of the Experiencer – Theme type (Exp - Th). The judgements as for whether Exp_{DAT}s can bind anaphors vary, typically allowing binding in non-verbal predicates selecting for non-nominative Themes ($Th_{non\text{-}NOM}$), but disallowing anaphor binding in structures with verbal predicates and nominative Themes (Th_{NOM}). We propose that the lack of binding in Exp_{DAT} – Th_{NOM} structures is caused by the Anaphor Agreement Effect, AAE (Rizzi 1990; Woolford 1999), i.e. a generalization which states that "anaphors do not occur in syntactic positions construed with agreement". We support this claim with the results of two experiments: a) Exp1 – testing binding by Exp_{DAT} in Exp_{DAT} – $Th_{NOM/non\text{-}NOM}$ structures, as in (1-2), and b) Exp2 - testing binding by indirect object datives (IO_{DAT}) in double object constructions, DOCs, as in (3)

In both experiments, we elicited grammaticality judgments using a 7-point Likert scale, testing experimental items based on three binary variables. In Exp1, these were: a) theme.case (nominative vs. non-nominative), b) bindee.type (possessive pronoun vs. possessive reflexive) and c) bindee.embedding (one-degree, e.g. [$_{NP}$ self's/her sister]), vs. two-degree embedding, e.g. [$_{NP}$ friend [$_{NP}$ self's/her sister$_{GEN}$]]). The latter two variables were also used in Exp2. The reason for using anaphor embedding as a variable was to examine the degree to which it facilitates binding. Also, since two degree embedding results in a change in case marking of the embedded NP (to genitive), it will directly test the influence of AAE on binding. Therefore, we predict that if, in general, Exp_{DAT}s can bind anaphors, but the AAE disallows agreeing anaphors, then: a) we should find a consistent difference in binding by Exp_{DAT}s in Th_{NOM}, (1), and $Th_{non\text{-}NOM}$, (2), and b) we should find a stronger effect of embedding on reflexives modifying NPs embedded in Th_{NOM}, (1b), than the ones in $Th_{non\text{-}NOM}$, (2b). Moreover, we use the results of Exp2 on DOCs (Author et. al, to appear) as a baseline for the interpretation of the embedding effect. In Exp2, we found no statistically significant effect of bindee's level of embedding, which means that the same binding possibilities hold regardless of pronoun/reflexive embedding. This is expected considering the fact that IO_{DAT}s do not bind anaphors, as the results of Exp2 indicate. This also indicates that, if, similarly to IO_{DAT}s, Exp_{DAT} cannot bind anaphors, we should not expect any anaphor binding improvement under anaphor embedding.

The experiments' variables in focus are illustrated in (1-3); the sentences provide grammaticality judgments based on the acceptability task in Exp1 and Exp2.

(1) **Exp 2 – binding by Exp_{DAT} into verb-agreeing Th_{NOM}**

a. **Koleżance$_1$** przypomniał się [***swój$_1$/jej$_1$** pierwszy chłopak].
friend$_{3.SG.FDAT}$ recalled$_{PST.3.SG.M}$ refl self's$_{NOM}$/her$_{NOM}$ first boyfriend$_{3.SG.M.NOM}$
'My friend recalled her first boyfriend.'

b. Kuzynce$_1$ przypomniał się [dziadek [$^{?*}$**swojej$_1$/jej$_1$** przyjaciółki]].
cousin$_{DAT}$ recalled$_{3.SG.M}$ refl grandfather$_{NOM.M}$ self's$_{GEN.F}$/her$_{GEN.F}$ friend$_{GEN.F}$
'My cousin recalled the grandfather of her friend.'

(2) **Exp 2 – binding by Exp_{DAT} into verb-non-agreeing $Th_{non\text{-}NOM}$**

a. **Marii** brakowało [?**swojego/jej** narzeczonego].
Maria$_{DAT}$ missed/lacked self's/her fiance$_{GEN}$
'Maria was missing her fiance'

b. **Marii** brakowało [towarzystwa [[?**swojego/jej** narzeczonego]].
Maria$_{DAT}$ missed/lacked company$_{GEN}$ self's/her fiance$_{GEN}$
'Maria was missing the company of her fiance'

(3) **Exp 1 – binding by IO_{DAT} into accusative dierct object**

a. Babcia pokazała **wnukowi$_1$** **[*swoją$_1$/jego$_1$** kuzynkę]
granny$_{3SG.F.NOM}$ showed$_{3SG.F.PST}$ grandson$_{DAT}$ self/his cousin$_{ACC}$
'Grandmother showed her grandson his cousin'

b. Babcia pokazała **wnukowi$_1$** [zdjęcie [***swojej$_1$/jego$_1$** kuzynki]]
granny$_{3SG.F.NOM}$ showed$_{3SG.F.PST}$ grandson$_{DAT}$ picture$_{ACC}$ self/his cousin$_{GEN}$
'Grandmother showed her grandson a picture of his cousin'

The results of Exp1 showed three significant main effects: theme.case: F(1,94) = 240,704, p=.000, bindee.type: F(1,94) = 372,011, p=.000 and embedding: F(1,94)= 6,542, p=.012, as well as a significant interaction between theme.case* bindee.type*embedding: F(1,94) = 21,088, p = .000. This means, among others, that bindees in Th_{nonNOM} were rated high as both reflexive and pronominal, with a preference for pronominal bindees. Bindees in Th_{NOM} were rated higher as pronominal than as reflexive. Two degree embedding improved acceptability of reflexive possessive bindees to a larger extent than pronominal bindees. This improvement was more significant in the case of nominative bindees than non-nominative ones. The results of this experiment thus confirm our prediction that the AAE is the factor negatively influencing the acceptability of binding in Exp_{DAT} - Th_{NOM} structures.

However, if, generally, Exp_{DAT}s can bind anaphors, why is it that for many speakers, they cannot bind a reflexive possessive embedded in a nominative theme, as in (1a) or embedded in a complement NP of the nominative theme (1b), neither of which is an argument directly involved in agreement with T? Since the original version of AAE does not apply to possessive anaphors, in our analysis, we would like to extend the notion of Anaphor Agreement Effect to contexts in which the anaphor itself is not an argument directly involved in agreement with the verb but only modifies the agreeing NP, as in (4). We propose the following structure, in which the possessive is an adjunct (following Despić 2011, 2013, 2015):

(4) $T_{AGR,1/2}$ … [$_{NP}$ self's$_{2\ (NOM)}$ [$_{NP}$ boyfriend$_{1\ (NOM)}$]]$_{1/2}$

In this structure, the possessive element is equidistant to T with the NP it modifies, which makes it ambiguous when the AAE applies. We assume that the possessive may force its referential subscript to represent the subscript of the entire NP. This is to account for unacceptability of (1a). We assume that for the purpose of binding, the extension of the subscript may be less local, and the possessive need not be close to the edge of the higher NP_3 to propagate its referential subscript to the whole complex NP, as in (5). This is to account for unacceptability of (1b).

(5) $T_{AGR2/3}$ … [$_{NP2}$ grandfather$_{3\ (NOM)}$ [$_{NP1}$ self's$_{2\ (GEN)}$ [$_{NP1}$ friend$_{1\ (GEN)}$]]]$_{2/3}$

The idea of referential subscript extension as shown in (4-5) is based on a correspondent notion of logophoric extension in Obligatory Control structures which was proposed in Landau (2000: 109-111) as in (6), which can also apply less locally, as in (7).

(6) It would help Bill's$_1$ development [PRO$_1$ to behave himself$_1$ in public]
(7) ?It considerably helped [$_{NP}{}^1$ first stages of [$_{NP}{}^2$ her$_1$ music career]] [PRO$_1$ to have an uncle in a record company]

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Minor's puzzle revisited: On raising effects in Russian control verbs

The puzzle. It has been widely assumed since Rosenbaum 1965 that infinitival complement constructions fall into two classes involving raising and control. A number of diagnostics suggest that Russian infinitival complement constructions with directive predicates involve object control (Kozinskij 1985; Lasnik 1998; Stepanov 2007). However, Minor (2011, 2013) observes that object control constructions with speech act matrix verbs (*velet'* 'order', *posovetovat'* 'advise', etc.) allow for their dative object to be interpreted within the infinitival clause, (1), thus pointing towards a raising-to-object/ECM analysis. Minor's data include quantificational objects, *nibud'*-pronouns and *ni*-pronouns. Minor suggests a "mixed" structure where the object originates and stays in the embedded clause but receives case and thematic role from the matrix verb. Crucially, this analysis fails to restrict "mixed" constructions to speech act object control verbs. Yet, subject control verbs and the rest of object control verbs reject arguments which need embedded scope to be licensed, (2a-b).

New data and generalizations. Our contribution to the topic is twofold. First, we present new data on Russian object control constructions suggesting that *ni*-licensing and narrow scope phenomena have to be teased apart. Secondly, we propose analyses for both of them.

① *Ni*-pronouns are licensed in a wider range of control configurations than *nibud'*-pronouns, including causative verbs, (3a), and subject control verbs, (3b). ② Among *ni*-pronouns, only *nikto* 'nobody' and *ni odin* 'no one' are available; negative DPs headed by *nikakoj* 'no, none' are ungrammatical in control configurations, (4). ③ Configurations where *nibud'*-pronouns are licit license other narrow scope phenomena, e.g., quantificational DPs or disjunction, (5a-b). They are restricted to speech act object control verbs with non-implicative infinitival complements, (6a-b).

Analysis. We argue that *ni*-pronouns licensed in control configurations are negative floating quantifiers construed with PRO, which is controlled by an (implicit) argument in the matrix clause. The structure of (4) is therefore (7). (7) is supported by the following five facts. ❶ Only those *ni*-pronouns that can float are allowed in control configurations. ❷ Case options available for *ni*-pronouns are the same as those reported in Babby 1998 for garden-variety FQs. ❸ An infinitival clause with a *ni*-pronoun behaves like a constituent (e.g. wrt coordination). ❹ Floating *ni*-pronouns are licit with *rasporjadit'sja* 'order' that never realizes the addressee in the matrix clause. ❺ Constructions with an explicit controller DP AND a *ni*-pronoun are readily available.

Configurations licensing embedded scope phenomena involve speech act control verbs exclusively. The crucial observation we want to make sense of is that the same scope relations can be found in imperative constructions with indefinite vocatives, (8). Surfacing outside of the imperative clause (which is signaled by the prosodic boundary, as well as by imperative particle position), indefinite vocatives are nevertheless in the scope of the imperative; moreover, they are only licensed in imperative (and exhortative) utterances.

We propose that imperative and directive constructions share a substantial part of syntactic structure. In line with Speas & Tenny 2003, Hill 2007, 2014, Haegeman & Hill 2013, a.m.o., we assume that speech act coordinates, which comprise Author and Addressee, are syntactically represented within a dedicated saP/SAP layer. Building on Zanuttini 2008, Zanuttini, Pak & Portner 2012 and Alcazar & Saltarelli 2014, we propose that imperatives are extended verbal projections embedded under JUSSIVE head that introduces modality associated with imperatives, promissives etc. Imperative subjects are base-generated in Spec, *v*P as Performers; their optional raising to the Addressee position creates vocatives with embedded scope, (9a). Speech act verbs embed the structure in (9a) as a complement; the difference between imperative and directive constructions is that the former license (nominative) case on the subject whereas the latter do not. Consequently, the overt infinitival clause subject can only be case-licensed by matrix functional heads *v* or Appl via ECM (cf. Shehaan 2014); in this case, the matrix nominal argument has to be implicit, (9b). Alternatively, Performer can be realized as a logophorically controlled PRO (cf. Landau 2015); in this configuration, matrix argument position can host an overt DP (9c). Crucially, (9b) produces embedded scope configurations, since the DP construed

as the Addressee of the indirect speech act is generated under JUSSIVE head and in this way can be licensed.

Examples

(1) Vrač posovetoval komu-nibud' sxodit' za lekarstvami. (Minor 2011)
doctor advised anyone.DAT go.INF for medicine
'The doctor advised someone to go and get some medicine.' (*∃>advise, advise>∃)

(2) a. *Udalos' komu-nibud' sxodit' za lekarstvami.
succeeded anyone.DAT go.INF for medicine
b. *Vrač vynudil kogo-nibud' sxodit' za lekarstvami.
doctor forced anyone.ACC go.INF for medicine

(3) a. … goryačij čai pomog nikomu ne zamerznut'. [Yandex hit]
hot tea helped no_one.DAT NEG freeze.INF
'Hot tea helped for nobody to get cold.'
b. Udalos' nikomu ne razbolet'sja. [Yandex hit]
succeeded no_one.DAT NEG get_sick.INF
'(We) managed to avoid getting sick.'

(4) Pet'a prikazal nikomu / *nikakomu klientu sjuda ne zaxodit'.
Petya ordered no_one.DAT no.DAT client.DAT here NEG enter.INF
'Petya ordered that noone / *no customer should enter here.' (*NI>order, order>NI)

(5) a. Nas dvoe brat'ev — ya i Gustav… Kogda otec ponyal, v kakuyu storonu duet veter,
on prikazal [odnomu iz nas] stat' naci.
he ordered one.DAT of us become nazi
Ya mladšij, xolostoj. Prišlos' podčinit'sya. [RNC]
'We were two brothers, Gustav and me. When our father saw where things would go, he ordered for one of us to become a nazi. I'm the youngest and I'm a bachelor. I had to obey.'
b. Ya poprošu [sin'ora ili sin'or] vynut' odnu iz vilok… [RNC]
I ask signor or signoras take one of forks
'Now I'm asking signor or signoras to take one of these forks…'

(6) a. Ryžaya ten'yu metalas' u sten,
gor'kim plačem umolyaya kogo-nibud' pomoč' ee Mal'čiku. [RNC]
bitter.INS crying.INS imploring.IPF anyone.ACC help her Boy
'The red-haired woman was running back and forth at the wall, pleading for anyone to help her Boy.'
b. *Ona umolila kogo-nibud' pomoč' ee Mal'čiku.
she implored.PF anyone.ACC help her Boy

(7) Pet'a prikazal *pro*$_i$ [$_{CP}$ PRO$_i$ nikomu$_i$ sjuda ne zaxodit'].
Petya ordered no_one.DAT here NEG enter.INF

(8) Kto-nibud', da pomogite uže emu! [Yandex hit]
anyone IMP.PART help.IMP.2PL yet him
'Anyone help him after all!'

(9) a. [$_{saP}$…[$_{SAP}$ Addressee$_i$ [$_{ForceP}$ JUSSIVE … [$_{vP}$ Performer$_i$ *v* [$_{VP}$ …]]]]]
b. [$_{vP}$ *v* [$_{ApplP}$ Appl [$_{VP}$ V [$_{saP}$ …[$_{SAP}$ DP$_i$ [$_{ForceP}$ JUSSIVE … [$_{vP}$ ~~DP~~$_i$ *v* [$_{VP}$ …]]]]]]]]
c. [$_{vP}$ *v* [$_{ApplP}$ (DP$_i$) Appl [$_{VP}$ (DP$_i$) V [$_{saP}$ … [$_{ForceP}$ JUSSIVE … [$_{vP}$ PRO$_i$ *v* [$_{VP}$ …]]]]]

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A note on conjoined binominal NPs

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Conjunct agreement has recently received a lot of attention, especially in Slavic linguistics (cf. Bošković 2009, Marušič *et al*. 2007, 2015, Willer Gold *et al*. 2016, 2018, Murphy & Puškar 2018 etc.). While there's mostly agreement about the data and the agreement patterns that are reported to exist in South Slavic (not surprising given the many experimental studies conducted on this topic), a number of questions remain open.

Recent approaches to conjunct agreement can be divided into two broad groups: those that model the observed patterns exclusively in narrow syntax (e.g. Bošković 2009, Murphy and Puškar 2018) and those that revert to PF to model the non-hierarchical nature of one of the observed patterns (e.g. Bhatt & Walkow 2013, Marušič *et al*. 2015, Willer Gold *et al*. 2016, 2018). The two groups of approaches mostly converge on the patterns they try to explain but given the many possible noun combinations inside coordinated subjects, there is still plenty of room for testing their predictions on novel empirical observations. The choice between these approaches is thus still an empirical question.

The two types of approaches make different predictions when it comes to the behavior of binominal noun phrases such as (1), where two nominative-cased nouns are combined, but where only one of the two, typically the first one, is the head of the noun phrase and acts as the goal of agreement. Syntactic approaches predict that the head-noun will always be the goal of agreement regardless of whether such noun phrases are part of a coordinated subject or not. Approaches that place some part of the agree process inside PF, on the other hand, predict that such noun phrases could behave differently when inside a coordinated subject as the closest noun to a verbal probe need not always be the head-noun of the closest noun phrase.

(1) *Hotel Slavia*; *mesto Jesenice*; *žirafa Rastko* (Slovenian)
hotel$_{M.SG}$ Slavia$_{F.SG}$ town$_{N.SG}$ Jesenice$_{F.PL}$ giraffe$_{F.SG}$ Rastko$_{M.SG}$

These noun phrases have both nouns in the nominative case when in subject position and in some of them both nouns decline, (2). But crucially, when noun phrases of the type 'town X' are in the subject position, they always trigger only agreement with what is understood to be the head-noun in Slovenian. So for example in (3), where the head-noun is understood to be the noun *mesto "town"*, verb can only agree in neuter singular, (3a). Plural agreement, that is agreement with the plural name *Jesenice,* is impossible in such cases (or at least very much degraded). When the plural name that is part of the complex noun phrase appears on its own, it must agree in plural, (3b).

(2) Žirafa Živa je brcnila žirafo Rastkota. (Slovenian)
giraffe$_{NOM}$ Živa$_{NOM}$ aux$_{SG}$ kicked$_{F.SG}$ giraffe$_{ACC}$ Rastko$_{ACC}$

(3) a. *Mesto Jesenice je dobilo / *so dobile novo bolnico.* (Slovenian)
town$_{N.SG.NOM}$ Jesenice$_{F.PL.NOM}$ aux$_{SG}$ got$_{N.SG}$ aux$_{PL}$ got$_{F.PL}$ new hospital
"The town Jesenice just got a new hospital."

b. *Jesenice *je dobilo / so dobile novo bolnico.* (Slovenian)
Jesenice$_{F.PL}$ aux$_{SG}$ got$_{N.SG}$ aux$_{PL}$ got$_{F.PL}$ new hospital
"The town Jesenice just got a new hospital."

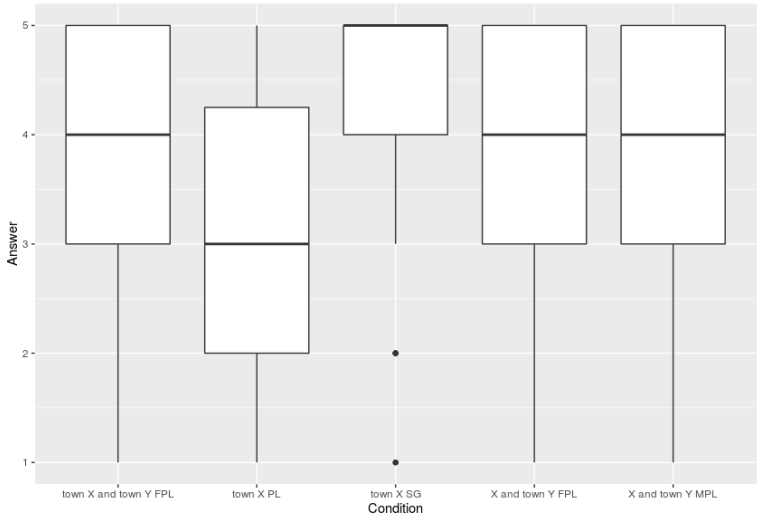
We prepared a grammaticality judgment test where we compared Slovenian sentences of the type given in (3) with sentences of the type given in (4), where three noun phrases of the same type were coordinated (three noun phrases were coordinated rather than two, in order to avoid the potential interference of dual). 34 high-school students participated in this study grading 68 sentences, half of which were fillers.

(4) *Mesto Ptuj, naselje Ig in mesto Jesenice so dobile/-i novo bolnico.*
town$_{N.SG}$ Ptuj$_{M.SG}$ town Ig$_{M.SG}$ and town$_{N.SG}$ Jesenice$_{F.PL}$ aux$_{PL}$ got$_{F.PL/M.PL}$ new hospital
"The town Ptuj, the town Ig, and the town Jesenice just got a new hospital."

Coordinating three nouns phrases with a neuter head-noun like *mesto X* "town X" should either trigger neuter plural or else masculine plural agreement (cf. Corbett 1983: 188). If agreement is strictly hierarchical, this combination of nouns should not trigger feminine plural agreement even if X is a noun carrying feminine plural features, as X is not the head-noun of the noun phrase and thus the noun phrase shouldn't pass these features to the probe. But if agreement (or just the copying of *phi*- features from the goal to the probe, as per Marušič *et al*. 2015) takes place at PF, where the syntactic structure is already linearized, and the structural distinction between the head-noun and its complement disappears, a verbal probe that comes after the subject should also see the second noun that actually ends up being closer to the verb and could easily copy the relevant features (feminine plural in (4)) directly from the second noun.

The results of our study show that agreement of such binominal noun phrases differs between coordinated and non-coordinated cases. Sentences such as (3a) with feminine plural agreement on the verb (town X PL) were graded as significantly worse than sentences such as (4) in which the coordinated with feminine plural agreement (town X and town Y FPL) as shown in Figure 1 ("town X PL" *vs*. "town X and town Y FPL": t = 4.7072, df = 254.86, p-value = 4.125e-06).

Figure 1: Comparison of the five most relevant conditions in the study. From left to right:
- town X and town Y FPL (goal = X/Y)
- town X PL (goal = X/Y)
- town X SG (goal = town/head)
- X and town Y FPL (goal = X/Y)
- X and town Y MPL (goal = &P/head)



This result supports the approach presented in Marušič *et al*. (2015), assuming that feminine agreement in these cases comes from the non-head-noun of the "town X" complex and is not a result of some attraction error. This later point can be made comparing the two rightmost conditions in *Figure* 1, as masculine plural and feminine plural agreement in these kind of sentences were statistically indistinguishable.

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Perfective *dozapisyvat'* - real or fake?

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It has been argued that Russian verb forms such as *dozapisyvat'* are biaspectual, as the result of two different derivational histories (1a) vs. (1b) (Zinova & Filip 2015; Zinova 2016). The main argument for (1b) is the felicitous use in chain-of-event contexts (2a), which are known to call for perfectives. If true, the proposal falsifies the most elaborate theory of Russian complex verb formation "on the market", i.e. Tatevosov (2009, 2013), which predicts that the prefix *do-* may never appear above the suffix *-yva-*. In (1b), however, it does. The present paper inquires about the existence of perfective *dozapisyvat'*, and about the consequences that would follow from its existence. Specifically, it pursues the hypothesis that the verbs in (2) are indeed perfective, but they do not result from the derivational history (1b), and that their existence does therefore not falsify Tatevosov's theory.

Observation 1: If we change the order of events, we observe that, while (3b) is easily accepted out of the blue, (3a) calls for contextual support. For (3a) to be sound, we have to think of the recording of the song as being realized in distinct stages, with the non-final stages having been realized before going home (think of a recording studio context). (3b), on the other hand, is fine because embroidering a picture is an action that normally involves taking breaks. (4a) is felicitous because we know that installing a computer program proceeds in distinct from each other stages. (4b) is acceptable only if we take the denoted event to be the final stage of a lengthy endeavor to persuade the husband, as in (5). Note that substituting *dougavarivaju* by *ugovorju*^{PFV} will abandon the information that the speaker was constantly on her husband's back about a second child (the form *dougovorju* does not exist is Russian).

Observation 2: It has been observed (Zinova 2016) that the problematic verbs are acceptable with *za*-X-time adverbials, a standard diagnostics for perfectivity. Indeed, if combined with *za 10 minut* ('within 10 minutes'), all of the verbs in (6) lend themselves for a habitual reading, explicated by *obyčno* ('usually'), which expresses that the speaker used to finish recording a song (installing Windows etc.) within 10 minutes. This can be explained by that the verbs are imperfective (1a) and that the adverbial is VP-internal. To ban the habitual reading, we use a short-term framesetter like *segodnja utrom* ('today in the morning'). Still the verbs are fine with *za 10 minut*, albeit (6a) and (6d) need contextual support. We again observe that for the verbs to be usable as perfectives, they must form VPs that characterize events made up of distinct subevents. For *doustanavlivat' Windows* and *dovyšivat' kartinu* this condition is met without further ado, the other two require appropriate contextualizations.

Analysis: Assume that the biaspectuality hypothesis according to which there is *dozapisyvat'*^{PFV} besides *dozapisyvat'*^{IPFV} is real. I have observed that the former denotes recording events that are made up of the sum of subevents, possibly dislocated from each other in space and time. This property of *dozapisyvat'*^{PFV} falls out if we assign to the suffix *-yva-* a different place in the derivational history than in (1b). One might propose that *-yva-* attaches prior to any prefixation. At that early stage of derivation, iterative stems are formed from simplex imperfective bases. Next, an internal prefix attaches. To handle the consequence that the output is imperfective (8), one would have to assume that the meaning of internal prefixes always modifies (i.e. assigns a culmination condition to) atomic events, also if the prefix attaches to an iterative base. Whether speakers accept *dovyšivat'*, *dozapisyvat'* and *dougovarivat'* as perfectives then depends on whether they accept the structures in (8). The most problematic derivational history is (8b), because it is difficult to think of a recording as the sum of distinct writing events. This may explain why speakers differ as to whether they accept *dozapisyvat'* as a perfective (Zinova 2016:16). Finally, external *do-* attaches on top to create a perfective, scoping over the sum of events, cf. (10). Comparing (2a) and (11), we note an intuitive difference: (2a) invites the inference that it took quite a while for the recording to come to an end. (11) merely says that

the recording will be finished. The hypothesis offers an explanation for this intuition. A problem for it is *doustanavlivat'*^{PFV}, as there is no verb *stanovit'*. Given strict construction rules for derivational histories (Zinova & Filip 2015), this rules out (12a). Note, however, that an analysis along the lines of (12b) would face the same problem. If *-yva-* in perfective verbs like *dovyšivat'* combines locally to the base morpheme, this yields an explanation for why *do-* in this special case may attach above of it: -yva- is no true imperfectivizing suffix. It has a more narrow semantics forming sums of events denoted by its derivational base. As such, *-yva-* is predicted to behave like another pre-prefixal suffix, *-a-*. This marker is shown to not fall under the constraint that completive *do-* had to apply below of it (13) (cf. Tatevosov 2013:66).

(1a) [[do-[za-[pis-]^{IPFV}]^{PFV}]^{PFV}-yva]^{IPFV}(-t') (1b) [do-[[za-[pis-]^{IPFV}]^{PFV}-yva-]^{IPFV}]^{PFV}(-t')

(2a) *Ja dozapisyvaju pesnju i pojdu domoj*. (2b) *Ja dovyšivaju kartinu i pojdu domoj*.

(3a) $^{?}$*Ja pojdu domoj i dozapisyvaju pesnju*. (3b) *Ja pojdu domoj i dovyšivaju kartinu*.

(4a) *Ja pojdu domoj i doustanavlivaju Windows*. (4b) *Ja pojdu domoj i dougovarivaju muža*.

(5) *Moldcy na vtorogo rešilis', i ja skoro muža dougavarivaju na vtorogo sovsem nemnožečko...* [https://m.babyblog.ru]

(6a) *{*^{OK}*Obyčno /* $^{??}$*Segodnja utrom} ja dozapisyval pesnju za 10 minut*.

(6b) *{*^{OK}*Obyčno /* ^{OK}*Segodnja utrom} ja doustanavlivala Windows za 10 minut*.

(6c) *{*^{OK}*Obyčno /* ^{OK}*Segodnja utrom} ja dovyšivala kartinu za 10 minut*.

(6d) *{*^{OK}*Obyčno /* $^{??}$*Segodnja utrom} ja dougovarivala muža za 10 minut*.

(7a) [[ši-]^{IPFV} -va]^{IPFV}(-t') (8a) [vy- [[ši-]^{IPFV} -va]^{IPFV}]^{IPFV}(-t')

(7b) [[pis-]^{IPFV} -yva]^{IPFV}(-t') (8b) [za- [[pis-]^{IPFV} -yva]^{IPFV}]^{IPFV}(-t')

(7c) [[govar-]^{IPFV} -iva]^{IPFV}(-t') (8c) [u- [[govar-]^{IPFV} -iva]^{IPFV}]^{IPFV}(-t')

(9a) [do- [vy- [[ši-]^{IPFV} -va]^{IPFV}]^{IPFV}]^{PFV}(-t') (9b) [do- [za- [[pis-]^{IPFV} -yva]^{IPFV}]^{IPFV}]^{PFV}(-t')

(9c) [do- [u- [[govar-]^{IPFV} -iva]^{IPFV}]^{IPFV}]^{PFV}(-t')

(10) V poslednie gody muž ugovarival menja rodit' vtorogo rebenka. Dougovarival do togo, čto ja popala k psichoterapevtu. [https://ru-perinatal.livejournal.com]

(11) *Ja dozapišu pesnju i pojdu domoj*.

(12a) [do-[u-[[stanav(l)-]^{IPFV}-iva]^{IPFV}]^{IPFV}]^{PFV}(-t') (12b) [do-[[u-[stanav(l)-]^{IPFV}]^{PFV} -iva]^{IPFV}]^{PFV}(-t')

(13) [do- [[reš-]^{PFV} -a]^{IPFV}]^{PFV}(-t')

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Clitics as disambiguators in child grammar

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One of the main properties of Slavic languages is their syntactic flexibility, which provides a great level of variability in the ordering of sentence constituents (1). This paper deals with the L1-acquisition of noncanonical word orders in Bulgarian, and more specifically with the alternations between Verb-Object (VO) and Object-Verb (OV) word orders, both presenting licit combinations in the target grammar. Whereas the sentences in (1) are potentially ambiguous with regards to the interpretation of subject/object, (2) shows an option, in which the overt doubling of the direct object by a clitic with the same *phi*-features and case resolves the ambiguity. The Bulgarian examples in (2) are instances of the so-called object clitic doubling (CD) phenomenon that is prevalent in the Balkan (and Romance) languages.

The questions that arise here are how children deal with such syntactic alternations in the early stages of grammar, and whether they can interpret clitics in sentences like (2) as disambiguators in such specific ambiguous syntactic settings. In order to address these questions, I present experimental data from an elicited comprehension study of direct object CD constructions in Bulgarian. The experiment utilized an elicited comprehension picture-matching task with 16 children, aged 2;5-4;2. Four transitive verbs in three conditions depending on the used clitic form- masculine, feminine and neuter, gave a total of 12 test items. A model test sentence is given in (3).

On the basis of the Bulgarian data, we gain evidence for the following observations. Children show some comprehension of CD (meaning they interpret the clitic correctly as a reference to the direct object) around age 3;0, but do not achieve adult-like performance even by age 4;2. In view of the observations that, on the one hand, single clitics in Bulgarian emerge at around 2;3 with productive use at 2;6 and, on the other hand, CD is adult-like at only 63% even by age 4;2 (cf. Radeva-Bork 2012, 2015), we can conclude that single and double cliticization are not simultaneous processes (similar findings for Modern Greek in Marinis 2000). This could mean that whereas children understand and produce clitics as direct objects (i.e. in contexts of single cliticization), they have problems deciphering clitics in doubling contexts and remain misled by the ambiguity of the syntactic structure. The results from Bulgarian are interesting in the context of the observations made by Smolík's (2015) elicited comprehension study of 107 monolingual Czech children, showing that noncanonical, object-initial sentences are generally more difficult to understand by children than sentences with neutral word order.

The main finding from the present experiment on Bulgarian CD, i.e. children are often led down the garden path even in the presence of a doubling clitic, are further discussed in a cross-linguistic context, analyzing data from studies on clitic doubling and OV word order from Spanish (Varela 1988, Torrens and Wexler 1996), Serbo-Croatian (Ilić&Deen 2004), and Albanian (Kapia 2010). Additionally, some observations about the asymmetry between production and comprehension of CD will be made on the basis of a pilot study on the production of disambiguating CD contexts in Bulgarian.

Data (from Bulgarian)

(1) a. Majkata celuna deteto.
mother$_{DEF}$ kissed child$_{DEF}$

b. Deteto majkata celuna.

c. Majkata deteto celuna.

d. Celuna majkata deteto.

'The mother kissed the child.'

'The child kissed the mother.'

…

(2) a. *Deteto* *go* celuna majkata.
child$_{DEF}$ it$_{ACC.CL.3SG.NEU}$ kissed mother$_{DEF}$
'The mother kissed the child.'

b. *Deteto* majkata *go* celuna.
'The mother kissed the child.'

c. *Majkata* *ja* celuna deteto.
mother$_{DEF}$ her$_{ACC.CL.3SG.FEM}$ kissed child$_{DEF}$
'The child kissed the mother.'

d. *Majkata* deteto *ja* celuna.
'The child kissed the mother.'

…

(3) Model test sentence with CD (elicited comprehension)
Mečkata *ja* xvana Borko.
bear$_{3SG.FEM.DEF}$ her$_{ACC.CL.3SG.FEM}$ caught$_{3SG.PAST}$ Borko$_{3SG.MASC}$
'Borko caught the bear.'

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On the shortening of vowel length of the first component of compounds in Standard Serbian

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The Standard Serbian (SS) is a pitch-accent language characterized by four different accents: short-falling (*rìba* 'fish'), long-falling (*grà:d* 'town'), short-rising (*sélo* 'village') and long-rising (*glá:va* 'head').Falling accents can occur only on the word initial syllables, while rising accents are traditionally assumed to occur on any syllable of the word except the last one. Rakić (1991) has however proposed a general rule according to which the rising accent may fall on the penult if the final or penult syllable is heavy; if the final syllable and the penult are light, the antepenult is preferred in trisyllabic words, but in bisyllabic words the penult is accented. This rule coves the majority of cases, but many of the numerous exceptions must be accounted by extrametricality rule.

In SS as in English, trochaic shortening can shorten the foot $(HL)_F$ into the optimal foot $(LL)_F$ (Prince 1990). English, the vowel length of the first components of English compounds cannot be shortened by trochaic shortening because the principle of strict cyclicity bans the alternation of lexical units if the condition of 'derived environment' is not satisfied (Rakić 2015). In SS such shortening is also impossible in the so-called 'semi-compounds' in which each component keeps its own accent as in the examples *dȉ:zel-mótōr* 'Diesel engine', *gò:l-rá:zlika* 'goal difference', *prà:h-šèčer* 'powdered sugar'. In these examples there is no linking vowel which would make the previous syllable open, and trochaic shortening is impossible. In SS, if the compounds make prosodic words and have a linking vowel, trochaic shortening often applies as in (1):

(1) *kȑ:v* 'blood' + *o* 'linking vowel' +*tô:k* 'flow' → *kȑvotōk* 'bloodstream'

vì:d 'sight' + *o* 'linking vowel' + *krù:g* 'circle' → *vìdokrūg* 'field of vision'

In (1), the linking vowel forms a foot with the first components to which trochaic shortening can apply as in$(vì:do)_F(krù:g)_F$ → *vìdokrūg.* The linking vowel *o* crucially provides a required 'derived environment 'for trochaic shortening.

The shortening of the first components which as independent words have a rising accent involves the change of tone which so far has not been satisfactorily explained. Comparing the accent of the first compound components with its independent forms, we notice that the long-rising accent of the independent forms is shortened into the short-falling one in compounds:

(2a) *zì:m(a)* + *o* + *lì:st*→*zìmolīst* 'a woody perennial plant'

'the stem of the noun *zí:ma* 'winter' + l. vowel + 'leaf'

rù:k(a)+*o* + *pì:s*→*rùkopīs*'handwriting'

'the stem of the noun *rú:ka* 'hand''+ l. vowel + 'the stem of the verb *pȉ:sati* 'to write''

(2b) *vòd(a)*+ *o* + *pà:d*→*vòdopād* 'waterfall'

'the stem of the noun *vó*da 'water'' + l. vowel + 'fall'

In (2) two-syllabic words are replaced in the first components with one-syllabic stems bearing a falling accent plus a linking vowel. In (2a) trochaic shortening applies. The same alternation of tone without shortening occurs in (2b). Inkelas & Zec (1987) tried to account for the change of tone in (2b) by proposing that there is a special rule which cancels the tone of the first compound components. They did not specify to which type of compounds this rule applies, so supporting evidence for it is missing. They simply assume that there is a special rule – 'Initial High' which on the first syllable of the compounds without tone inserts a short-falling accent.

The rising accents in SS are generally considered to extend over the stressed syllable and the post-stressed one, while falling accents extend over the stressed syllable. This means that the falling accent on the one-syllabic stems of the compound's first components in (2) corresponds to the rising accent of the two-syllabic independent words. Therefore, the following replacement in (2) are made: *zȉ:ma - zì:m, ruć:ka - rù:k, vóda -vòd*. It is well-known from tone languages that tone can spread to the left or to the right to neighboring syllables. In SS we can add the complementary alternation of tone shrinking which is obvious in back-formation in (4):

(4) *dúć:žiti* 'to make longer'– *dù:ž*, f. 'a segment of a straight line', *glać:siti*'to pronounce' – *glà:s* m. 'voice', *hoć:dati*'to walk' – *hò:d* m. 'walk' *rać:diti*'to work' – *rà:d* m. 'work'.

The rising accents on polysyllabic stems are replaced with falling accents on monosyllabic stems. The same alternation also happens if the ending *-a* of the nom.sg. of the feminine nouns is replaced with neutral suffixes as, for example, in *kúć:la*'tower' – *kuȉ:lskī* adj. 'of the tower', *zȉ:ma*'winter' - *zì:mnjī* adj. 'of the winter' (Rakić 1991). Neutral suffixes do not allow the spreading of tone, it must shrink, and becomes falling. This shrinking accounts for the change of tone in (2). The segment *pì:s* in (2a) is also derived from *pȉ:sati* 'to write' by backformation.

The presence of the linking vowel is crucial for trochaic shortening in (1) and (2). There is however a small set of compounds which occur without a linking vowel and belong to the so-called 'proper' compounds because they have just one accent. These compounds are usually short compounds whose second components have maximally two-syllables as in (4):

(4) *blágdan* (lit. *blà:g* 'gentle' + *dà:n* 'day') 'holiday',
čuvárkuća (lit.*čúva:r* 'watchman' + *kùća* 'house') 'janitor',
generálštab (lit. *genéra:l*'general' + *štàb* 'headquaters') 'general staff',
krémpita (lit. *krè:m* 'cream' + *pìta*'pie') 'custard-slice'.

In (4), the shortening of the length of the first components applies although no linking vowel is present. The compounds in (4) make up a prosodic word and have a rising tone falling on the penult or antepenult syllable of a whole compound (e.g. *blágdan* vs. *blà:g*, *čuvárkuća* vs. *čúva:r*). The shortening follows from the general rule that the rising accent on the closed syllable must be a short one (Rakić 2008). The only exception to this rule are some sporadic cases in which the accent falls on a syllable closed by a sonorant (e.g. *bé:rba* 'vintage', *vó:jska* 'army', *tó:rba* 'bag', *bŕ:vno*'log', *gá:jtan* 'braid', *pé:ršun* 'parsley'). However, the lengthening of the syllables closed by a sonorant is not a completely predictable process in SS. Nonetheless, there are generally a greater number of examples of the syllables closed with sonorants which bear the short-rising accent than those which bear the long-rising accent (s. Rakić 2008).

In this paper, I account for the change of tone in the compounds in (2) by proposing the shrinking of rising accents on monosyllabic stems, and further, I discover a particular set of compounds in which the general rule of shortening of the closed syllables applies. The examples (4) comply very well with the shortening rules noted provisionally by Rakić (1996) in the following way:

(5) The length of the last suffix of the stems is shortened before
a) bisyllabic or polysyllabic suffixes or,
b) closed monosyllabic suffixes.

These lexical rules apply also to the compounds like those in (4), and otherwise profoundly affect the structure of SS lexicon. The first of them has the same form as Trisyllabic Shortening, the well-known rule from English phonology.

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Passives of Subject Experiencer verbs in Polish[1]

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The presentation focuses on the nature of passives of SE verbs in Polish at the background of current literature related to different types of passives on one hand and to properties of psych predicates on the other hand. We address the question whether passives of Polish SE verbs (which cross-linguistically are considered to be stative), are stative or eventive. Polish resembles German and Spanish in that it signals the distinction between the stative/adjectival and the eventive/verbal passive by means of different combinations of the auxiliary and passive participles. Following Nagórko (1996) and Laskowski (1998), we assume that the combination of the auxiliary *być/bywać* and the perfective passive participle is a stative passive, whereas the eventive passive has two possible forms: (i) the auxiliary *być* +the imperfective passive participle and (ii) the auxiliary *zostać* + the perfective passive participle. Gehrke (2015) observes that SE verbs in German do not constitute good inputs to stative passives, because with these verbs the holder of the state is an external argument, not the internal one (in contrast to OE verbs). Gehrke (2015) postulates 2 generalisations for German:

Generalisation 1: Only verbs with internal (Theme or Experiencer) argument can appear in German adjectival passives.

Generalisation 2: Only verbs that are associated with a change of state along a (unique, one-dimensional) scale can appear in German adjectival passives.

Similar to German, Polish SE verbs, such as *kochać* 'to love', *lubić* 'to like', *nienawidzić* 'to hate', *uwielbiać* 'to love', *ubóstwiać* 'to love', *podziwiać* 'to admire', *doceniać* 'to appreciate', *szanować* 'to respect', *gardzić* 'to despise', etc., can only sporadically give rise to the stative passive. Evidence from the National Corpus of Polish (www. nkjp.pl) confirms an observation already made in Biały (2005) that some perfective SE verbs like *pokochać* 'to start to love' (also *polubić* 'to start to like') are disallowed in the stative passive, as in (1):

(1) *Prezydent jest pokochany przez naród.
president-nom is loved-perf by nation
'The president is loved by the nation.'

However, some perfective passive participles, illicit in the stative passive like (1), are perfectly acceptable with the auxiliary *zostać* 'to become' in the eventive passive, as in (2):

(2) Prezydent został pokochany przez naród.
president-nom became loved-perf by nation
'The president was loved by the nation.'

The fact that SE verbs can give rise to *zostać*-passives is unproblematic, as it contains the passive participle derived from the perfective form of the verb, which is always eventive and describes the beginning of a state. What is problematic in view of Gehrke's generalisations is the ability of stative SE verbs to appear in the *być* + imperfective passive, as in (3) – (4):

(3) Jest podziwiany, ale nie jest lubiany.
he-is admired-imperf but not is liked-imperf

(4) Milingo jest uwielbiany przez swoich współziomków.
Milingo-nom is admired-imperf by his countrymen
'Milingo is admired by his countrymen.'

We argue that the *być* + imperfective passives formed of SE verbs are neither resultant state nor target state passives (cf. Kratzer 2000) and suggest that they represent the eventive passive despite their stative interpretation. However, we show that they cannot be taken to be coerced

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into achievements (as proposed for English by Gehrke and Grillo 2009). SE verbs in the passive may co-occur with *wciąż* 'still', as in (5), whereas achievements do not tolerate it, as in (6):

(5) Marek jest wciąż kochany przez Marię.
Mark-nom is still loved-imperf by Mary
'Mark is still loved by Mary.'

(6) Obraz jest (*wciąż) znaleziony przez Marka.
painting-nom is (*still) found-perf by Mark
'The painting is (*still) found by Mark.'

Moreover, states and achievements give rise to different temporal entailments, diagnosed by the tests adopted from Bar-el (2005), such as culmination cancellation and event continuation:

(7) ??Robotnicy poszerzyli drogę, ale nie skończyli/przestali (jej poszerzać).
workers-nom widened road but not finished/stopped its widening
'The workers widened the road, but didn't finish (widening it).'

(8) Janek pokochał Zosię i nie przestał jej kochać.
Janek-nom love-perf Zosia-acc and not cease her love-imperf
'Janek started do love Zosia and he didn't cease to love her.'

(9) ??Robotnicy poszerzyli drogę i nadal ją poszerzają.
workers-nom widened-perf road-acc and still it widen-imperf
'The workers widened the road and they're still widening it.'

(10) Janek pokochał Zosię i nadal ją kocha.
Janek-nom loved-perf Zosia-acc and still her loves-imperf
'Janek started to love Zosia and he still loves her.'

The above tests distinguish between achievements and inceptive states with respect to the presence of final points. With achievements, final points are diagnosed in the event structure, whereas with inceptive states, no final points are diagnosed. These and other properties of Polish SE verbs as opposed to achievements allow us to conclude that their ability to appear in eventive/verbal passives cannot be accounted for in terms of coercion to achievements. Instead, we treat them as non-dynamic events, as proposed by Fábregas and Marín (2017) for Spanish predicates referring to the maintenance of a situation, such as *protect*, *hold*, *govern*, *block*, etc. The predicates analysed by Fábregas and Marín (2017) display mixed properties of activities and states. The same may be observed for SE verbs in Polish. Since SE verbs only partly resemble activities, but also show some properties typical of states, we would like to propose that they can be coerced to represent the class which Fábregas and Marín (2017) call non-dynamic events. The possibility of coercing states into events is responsible for the fact that SE verbs can give rise to the eventive *być* + imperfective passive in Polish.

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Inherent vs. accidental uniqueness in definite descriptions

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Background Recent semantic literature has accumulated evidence that a single language can use more than one kind of definite descriptions. Most authors (Schwarz 2009, 2013, Arkoh & Matthewson 2013, or Jenks 2015) distinguish between UNIQUENESS- and FAMILIARITY-based definites (but Barlew 2014 argued that the notion of SALIENCE might also be independently needed). The semantic division receives support from two types of differential formal markings: (i) the distinction between weak and strong definite articles (e.g., German, Hausa), (1-a), and (ii) between bare NPs and NPs with determiners/demonstratives (e.g., Akan, Bulu, Thai, Czech), (1-b).

(1) a. Hans ging zu **-m** / zu **dem** Haus. (German; Schwarz 2009)
Hans went to -the$_{\text{weak}}$ / to the$_{\text{strong}}$ house
'Hans went to the house.'

b. Honza to dal na ∅ / ten stůl. (Czech)
Honza it put on / DEM table
'Honza put it on the table.'

Proposal I propose that uniqueness comes in two types: INHERENT and ACCIDENTAL. Given a resource situation s_r (relative to which a definite description is interpreted; see Schwarz 2009), an entity (the denotation of a definite description) is INHERENTLY UNIQUE if it is unique in s_r and in every prototypical counterpart of s_r; an entity is ACCIDENTALLY UNIQUE if it is unique in s_r, but not in every prototypical counterpart of s_r. The notion of a "prototypical situation" comes close to Fillmore's (1976) "frame" and is (perhaps necessarily) somewhat vague and dependent on the utterance situation and common ground. I provide a semi-formal definition of prototypicality in (2) (assuming that prototypical counterpart situations are epistemically accessible and possibly further restricted by a stereotypical ordering source). To give some examples: prototypically, a town (a "town situation") has a unique mayor, a classroom a unique blackboard, an office desk a unique computer, etc.

(2) For any s, s' is a prototypical counterpart of s ($\textsc{prototype}(s)(s')$) iff s' is a minimal situation that qualifies for the same name as s.

The lexical entries of the two hypothesized kinds of definite determiners are provided below. I assume that $\text{D}_{\text{inh(erent)}} \approx$ weak article in German / covert iota in articleless languages and that $\text{D}_{\text{acc(idental)}} \approx$ strong article / demonstrative.

(3) $[\![\text{D}_{\text{inh}}]\!] = \lambda s_r.\lambda P : |P(s_r)| = 1 \wedge \forall s[\textsc{prototype}(s_r)(s) \rightarrow |P(s)| = 1.\iota x[P(s_r)(x)]$

(4) $[\![\text{D}_{\text{acc}}]\!] = \lambda s_r.\lambda P : |P(s_r)| = 1 \wedge \neg\forall s[\textsc{prototype}(s_r)(s) \rightarrow |P(s)| = 1.\iota x[P(s_r)(x)]$

Basic predictions The proposal predicts that weak articles / bare NPs will be used in (small or large) situation uniqueness cases on the condition that uniqueness holds in the prototypical counterparts of the resource situation. This condition is satisfied by the examples standardly used to illustrate situational definites, e.g., 'the prime minister' (s_r: a country), 'the steering whell' (s_r: a car), 'the brain' (s_r: an animal). While certainly a matter of closer analysis, the basic prediction for anaphoric uses seems to be that they involve strong articles / demonstratives. The reason for this is that the resource situation includes the discourse situation and the uniqueness of an entity in discourse is always accidental (in fact, the question is whether there is any prototypical discourse situation involving some unique referent at all).

Strong articles in situational uniqueness cases The UNIQUENESS–FAMILIARITY approach seems to predict that any kind of situational uniqueness gives rise to the use of weak articles (or bare NPs). The present INHERENT–ACCIDENTAL approach, on the other hand, draws a line within situational uniqueness, since not all situational uniqueness is inherent. The contrast between (5-a) and (5-b) shows just that. In both cases, the resource situation corresponds to the addressee's desk. In both cases, the definite description under consideration ('the computer' and 'the book') denotes an entity that is unique in that situation. In neither case need the utterance be accompanied by a gesture. (Note also: The degree of salience for both entities might very well be the same.) Yet, despite all these similarities, a bare NP is clearly preferred in (5-a), while a demonstrative is preferred in (5-b). This contrast is predicted by the present approach insofar as a unique computer is an inherent part of the prototypical addressee's desk situation, but a unique book is not (in fact, since prototypical situations are minimal, a prototypical office desk situation will have no book in it). The same empirical situation replicates in German, only with a weak article used in the translation of (5-a) and a strong article used in the translation of (5-b) (to be demonstrated in the talk).

(5) "Addressee's desk situation"

a. *You are searching your desk for your pencil and I can see that it is next to the computer that is on your desk:*
Ta tužka (co hledáš) je vedle (# **toho**) počítače.
DEM pencil that look.for.2SG is next.to DEM computer
'The pencil is lying next to the computer.' [no pointing involved]

b. *You are searching your desk for your pencil and I can see that it is next to the book that is on your desk:*
Ta tužka (co hledáš) je vedle #(**té**) knížky.
DEM pencil that look.for.2SG is next.to DEM book
'The pencil is lying next to the book.' [no pointing involved]

Kind-denoting definite descriptions Singular definite descriptions can be used to refer to kinds, as in *The dodo is extinct* (see, e.g., Krifka et al. 1995). Two further generalizations are relevant here: First, unless anaphoric, kind-denoting definites are obligatorily accompanied by weak definite articles / expressed by bare NPs. Second, there is no known language that has a dedicated kind-article. The present inherent–accidental approach to definiteness provides a rationale for why these two generalizations should hold. In particular, kind-related uniqueness seems like a natural sub-instance of inherent uniqueness because a kind is always unique in prototypical counterpart situations (worlds) of the relevant resource situation (the actual world).

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Derivational affixes as roots in a lexical stress system

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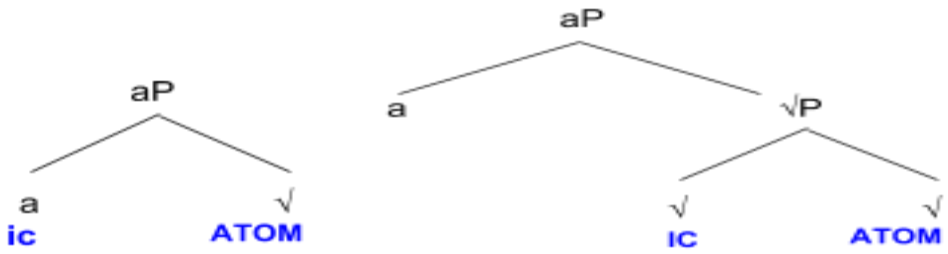
In a recent elaboration of Distributed Morphology, the separation between roots and categorial heads has been extended to derivational suffixes (Lowenstamm 2015, Creemers et al. 2018). These authors then propose replacing the 'traditional' DM representation of the adjective such as *atomic* in 1a with the representation in 1b.

(1)

a. b.



The arguments for the move from 1a to 1b come from the selectional requirements, the syntactic behaviour and the stress assignment triggered by derivational suffixes. Suffixes such as *-ic-* have been argued to select roots, derive either nouns or adjectives (cf. *tunic*, *magic* and *comic*) and affect stress of the root they select (*atómic* vs *átom*).

To our knowledge, this approach has only been applied to languages in which prosodic contrast is the result of the cyclic application of the same stress rule rather than of lexical prosody. It is therefore that the discussion of prosodic alternations remained limited to the issue of cyclicity. In this paper, we consider the consequences of derivational affixes as roots in Slovenian, a lexical prosody system. In Slovenian complex words, lexical accent information of different roots combines to produce the stress pattern of the entire word.

Simonović (2018) analyses Slovenian verb prosody as guided by the presence or absence of a floating lexical prosody in combination with markedness constraints which align stress with the right edge of the stress-assignment domain and militate against stressing agreement morphemes. As a result, in accented roots the stress is stem-final, and in unaccented roots the stress ends up on the theme vowel. Surprisingly, the secondary imperfectivisation suffixes which override the prosody of the verbalised root, display the same contrast. Under this analysis, the difference between a free accented root such as √GLED and a bound accented root such as √AV is only in their selectional properties (the latter requiring a vP complement).

Accented roots	Accentless roots
a. gléd-a-ti 'to watch' b. polír-a-ti 'to polish'	a. kop-á-ti 'to dig' b. goljuf-á-ti 'to trick'
c. pre-gled-áv-a-ti 'to check$_{SecImp}$' d. pre-kop-áv-a-ti 'to dig$_{SecImp}$'	c. pre-gled-ov-á-ti 'to check$_{SecImp}$' d. pri-skrb-ov-á-ti 'to procure$_{SecImp}$'

As argued by Creemers et al. (2017), the root analysis is especially desirable for those derivational affixes which display categorial flexibility, as English *-ic* quoted above. It is not uncontroversial, however, that e.g. *tunic* and *atomic* contain the same suffix or even that the

former contains a suffix to begin with. This is another area in which a lexical stress system constitutes an optimal case study because the underlying prosody of the root can survive across categorical embeddings, which constitutes additional evidence for a unified analysis. It is such evidence that we find for the two derivational suffixes identified by Simonović (2018): √AV tends to be stressed, √OV tends to be unstressed.

	nouns	adjectives
√AV	pis-áv-a 'writing' write-av-N pušč-áv-a 'dessert' desolate-av-N'	zved-áv-a 'curious' learn-av-A bah-áv-a 'boastful' boast-av-A
√OV	hríb-ov 'mountain.GenPl' mountain-ov paradížnik-ov 'tomato.GenPl' tomato-ov	limón-ov-a 'lemon.A' lemon-ov paradížnik-ov-a 'tomato.A' tomato-ov

The nominalised *-ov-* does present some challenges. The analysis of the genitive plural affix as the same root may appear problematic and the arguments for an accidental-homonymy analysis should be considered seriously. An additional issue is the existence in the stressed -ov- in two contexts.

DU and PL augment (lexically restricted to dozens of nouns)	Augment in derivations √+OV+√+CAT
sin-óv-a 'son.NomDu' son-ov-NomDu sin-óv-om 'son.DatPl' son-ov-DatPl	podatk-óv-n-a 'data.A' data-ov-n-A grm-óv-j-e 'bushes' bush-ov-j-N

An analysis of the distribution of *-ov-* will be presented in which the stressed *-ov-* is actually a consequence of its ending up in a structural position in which any root would be stressed. Finally, the pros and cons of the root analysis of the two affixes will be pitted against each other and the theoretical importance of investigations into other Slavic lexical systems will be elaborated.

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DP-Exfoliation, Lowering, and Local Dislocation: LBE in Bulgarian and Macedonian

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Claim. Contrary to previous reports, novel data presented here show that Left-Branch Extraction is allowed in Bulgarian and Macedonian, but it is blocked when there is more than one modifier of the noun. I argue that LBE is allowed when the DP layer is syntactically removed via Exfoliation (Pesetsky 2016). Taken that post-syntax can interleave narrow syntax (Martinović 2017), Exfoliation is fed by post-cyclic Def-Lowering, but counter-fed by post-linearization Local Dislocation.

Data. Bošković (2005; 2008 et seq.) argues that there is a parametric distinction between languages with articles and languages without them: only the latter allow Left-Branch Extraction. Bulgarian (BLG) and Macedonian (MKD), the only Slavic languages with articles, were first reported by Uriagereka (1988) as not allowing LBE, because they project a DP. After consulting 11 native speakers of BLG and MKD, I have found that they do in fact allow LBE, but only when extracting the only modifier of a noun (1)–(4). In configurations with two modifiers LBE is blocked (5)–(12).

(1) Crvenite$_i$ gi kupi [$_{DP}$ t$_i$ čevli] ?
red.DEF them bought shoes
'Did you buy the red shoes?' (MKD, Stanković 2013: 11–12)

(2) Červenite$_i$ gi kupi [$_{DP}$ t$_i$ obuvki] ?
red.DEF them bought shoes
'Did you buy the red shoes?' (BLG)

(3) Šest-te$_i$ gi zaboravi [$_{DP}$ t$_i$ torbi] ?
six-DEF them forgot bags
'He/She forgot (all) the six bags?' (MKD)

(4) Šest-te$_i$ gi zabravi [$_{DP}$ t$_i$ čanti] ?
six-DEF them forgot bags
'He/She forgot (all) the six bags?' (BLG)

(5) *Crni$_i$ gi prati [$_{DP}$ šest-te t$_i$ torbi]
black them sent six-DEF bags

(6) *Crni-te$_i$ gi prati [$_{DP}$ t$_i$ šest torbi]
black-DEF them sent six bags

(7) *Šest-te$_i$ gi prati [$_{DP}$ t$_i$ crni torbi]
six-DEF them sent black bags

(8) *Šest$_i$ gi prati [$_{DP}$ crni-te t$_i$ torbi]
six them sent black-DEF bags

(9) *Malki-te$_i$ gi sčupi [$_{DP}$ t$_i$ beli čaški]
small-DEF them broke white cups

(10) *Malki$_i$ gi sčupi [$_{DP}$ beli-te t$_i$ čaški]
small them broke white-DEF cups

(11) *Beli-te$_i$ gi sčupi [$_{DP}$ t$_i$ malki čaški]
white-DEF them broke small cups

(12) *Beli$_i$ gi sčupi [$_{DP}$ malki-te t$_i$ čaški]
white them broke small-DEF cups

The summary of the data in Table 1 shows that LBE depends on the number of modifiers: if there is one, LBE can be performed, if there are two, it cannot. This is a problem for the existing analyses of LBE.

Table 1: Availability of LBE in BLG and MKD

structure	LBE
[$_{DP}$ AP NP]	✔
[$_{DP}$ QP NP]	✔
[$_{DP}$ QP AP NP]	✘
[$_{DP}$ AP AP NP]	✘

Proposal. I follow the original proposal from Bošković (2005) that DP, projected as the highest phrase, is a phase, and that LBE is blocked due to the *PIC* (Chomsky 2000) and *anti-locality* (Abels 2003; Grohmann 2003). In the case of BLG and MKD, the article is a phrasal morpheme originating in the DP, placed via two operations: post-cyclic Lowering (Embick & Noyer 2001; Martinović 2017), performed by targeting the [+N] constituents within the DP (the natural class of nouns, adjectives and quantifiers; Cornilescu & Nicolae 2011; Schürcks & Wunderlich 2003), and Local Dislocation, a PF-operation, which places the article when Lowering fails to do so. Similar behaviour of adjectives and quantifiers w.r.t. LBE indicates that they might be projected in Spec,NP. When there is only one of them, D finds a single [+N] goal higher than the noun and Lowering applies. With two adjectives, or an adjective and a quantifier, D fails to locate a single goal due to equidistance of the two specifiers (Chomsky 1995, 2000; Ura 1996). *Lethal Ambiguity* (McGinnis 1998) arises and Lowering fails. After Linearization, Local Dislocation places the article to the leftmost constituent. Evidence comes from cases when an adverb modifies an adjective. Should Lowering apply also in the case of two specifiers, (13), with an intervening adverb, would be grammatical; instead, the full pronoun is inserted (14).

(13) *mnogo hubavi-te dve momičeta *[Adv Adj+D Q N]
very beautiful-DEF two girls

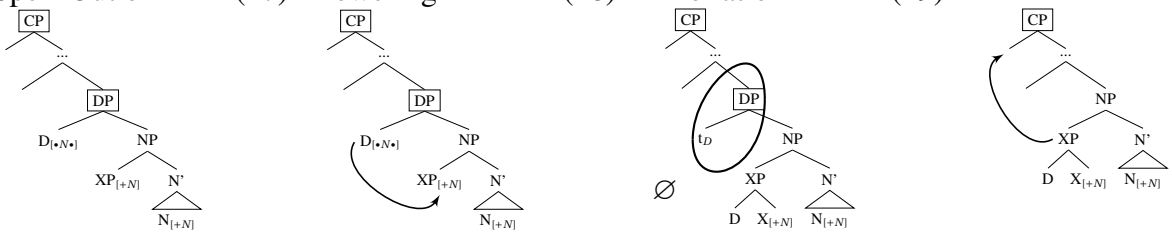
(14) tija mnogo hubavi dve momičeta [D Adv Adj Q N]
th(es)e very beautiful two girls

I propose the following order of operations: Lowering applies when DP is spelled out, and the structure is fed back into Narrow Syntax (Calabrese & Pescarini 2014; Martinović 2016; 2017). Exfoliation (Pesetsky 2016) applies as a Last-Resort operation, by removing the blocking phase layer in order to make a higher operation (in this case LBE) possible, as in (16)–(20).

(15) **Order of operations**

narrow syntax	post-cyclic	narrow syntax	post-syntax
Merge (DP, WP) » Spell-Out (DP)	Lowering	Exfoliation » LBE	Linearization Local Dislocation

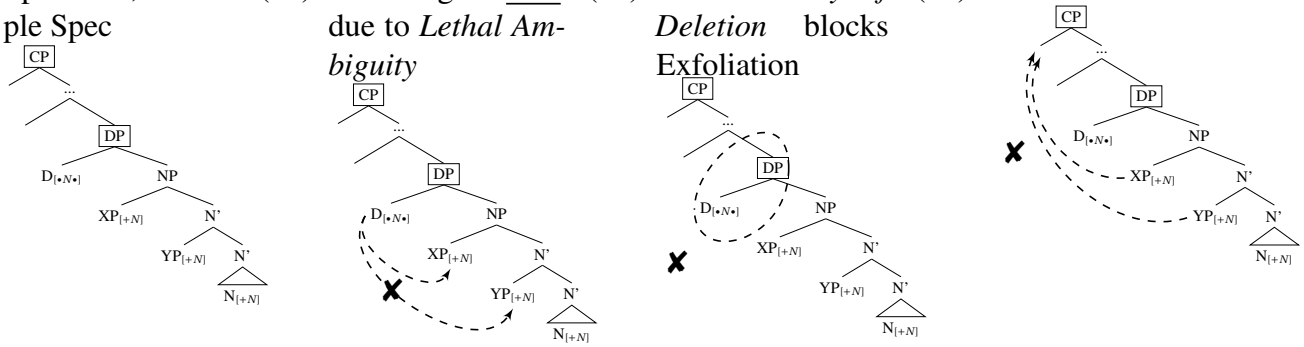
(16) Spell-Out of DP (17) Lowering (18) Exfoliation (19) LBE



(20) post-syntax: Vocabulary Insertion & Linearization [X+D C ... N]

In the case with equidistant specifiers, as mentioned, Lowering fails to apply due to D failing to locate a single [+N] goal. When the structure is fed back into narrow syntax, Exfoliation is blocked by the constraint on *Recoverability of Deletion* (Chomsky 1981; Chomsky & Lasnik 1977), since the information cannot be recovered from the rest of the structure. Blocking of Exfoliation subsequently renders LBE unavailable, as in (21)–(25).

(21) Spell-Out, multiple Spec (22) Lowering fails due to *Lethal Ambiguity* (23) *Recoverability of Deletion* blocks Exfoliation (24) PIC blocks LBE



(25) post-syntax: Vocabulary Insertion, Linearization, **Local Dislocation** [C ... D X Y N]

Summary and outlook. Taking from the novel data, I argue that the availability of LBE in BLG and MKD depends on the presence/absence of DP, which can be syntactically removed via Exfoliation (Pesetsky 2016), but not if the information is not recoverable. Following (Martinović 2016; 2017) that post-syntactic operations which refer to the hierarchical structure could interleave narrow syntax, I have shown that Exfoliation (and subseq. LBE) is fed by Lowering in the cases with one modifier. With two modifiers the article is placed via late Local Dislocation, which in turn counter-feeds Exfoliation and LBE. This proposal does not over-generalise to other DP languages, where LBE is strictly prohibited, since, e.g. the article in English does not lower, thus Exfoliation cannot apply as in (23). Scandinavian languages have an affixal article, but no LBE, which follows from Martinović's (2017) claim that interleaving post-syntax is language-specific: in a language which does not have the interleaving post-syntax DP-Exfoliation, and LBE, would not apply.

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Two Relativisation Strategies under Superlatives in Russian

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Preliminaries. There are several relative pronouns available in Russian, incl. *kotoryj* 'which' and *kakoj* '∼ what kind of'. According to the normative grammar [9], *kotoryj* is less specialised than *kakoj* and is therefore able to function in its stead in contexts such as (1). This exchange is precluded if *kakoj* has kind (as opposed to individual) reference, hence the semantic difference in (2), where *kotoryx* would mean that those very people, as opposed to people of that kind, have never been seen before (see also Spencer [7]).

(1) samyj bol'šoj bulyžnik, **kotoryj** tol'ko byl u nego v karmane
most large stone REL PRT was PREP he.GEN in pocket
'the largest stone he had in his pocket' (Dostoevsky, *The Brothers Karamazov*)

(2) Pojavilis' neobyknovennye ljudi, **kakix** ran'še ne vidyvali…
appeared extraordinary people REL.ACC/GEN.PL earlier NEG see.PST.PL
'Extraordinary people appeared of the kind yet unseen' (A. Tolstoy, *The Road to Calvary*)

The present paper examines the syntactic effects of the two pronouns in restrictive RCs embedded under superlatives (synthetic as well as analytic ones). The quantitative data was obtained from the RNC and filtered so that only such examples remained where a restrictive interpretation is possible. Only cases with REL followed by the subject (or a homonymous object) were included.

Licensing behaviour. The two pronouns behave differently w.r.t. the licensing of the particle *tol'ko* (table 1) and NPI pronouns of the *-libo* and *-nibud'* series (table 2, where all examples featuring *tol'ko*, none of which has an NPI pronoun, are excluded). Unlike in (1), *tol'ko* typically does not appear under *kotoryj*. NPIs are licensed by both, although quantities differ.

Elective mismatch. REL may fail to agree in number with the (overt or elided) RC head:

(3) Možet byt', samyj velikij ∅, kakix on znaet.
maybe most great REL.ACC.PL he knows
'Maybe the greatest one he knows'

This sort of mismatch is significantly facilitated by the presence of the elective construction (4) of the type *odin iz...* 'one of' (table 3); in fact, **all** mismatches in my corpus where REL is singular (despite the plural head) occur in the elective construction.

(4) ...razrazilas' odna iz samyx sil'nyx groz, kakuju ja zapomnju.
broke.out one of most strong thunderstorms REL.ACC.SG I will.remember
'one of the heaviest thunderstorms I can recall broke out'

Generally, *kakoj* does not have to share the number feature of its head [3]. For *kotoryj* mismatch is allowed in **appositive** RCs [5], but there is a difference between the two pronouns in my corpus: only one out of 5 mismatches with *kakoj* was in an elective construction; out of 9 mismatches with *kotoryj*, all were (Fisher's exact test, two-sided: $p < .01$). It is plausible that *kotoryj* in restricrive RCs may agree with *odin* instead of the RC head as if it were not bound but merely coreferential with the *odin*-DP, mismatches for *kakoj* being mostly due to its kind reference.

tol'ko	+	−
kakoj	34	171
kotoryj	6	332

Table 1: *Tol'ko* licensing
($\chi^2 : p \ll .001$)

NPI	+	−
kakoj	51	120
kotoryj	55	277

Table 2: NPI licensing
($\chi^2 : p < .001$)

Mismatch	+	−
elective	10	91
non-elective	4	438

Table 3: Mismatch & electivity
($\chi^2 : p \ll .001$)

Towards an account. Appositive RCs with *kotoryj* are known to (be able to) have independent illocutionary force [5], e.g. that of a command within a sentence which is itself declarative; additionally, regardless of their restrictive/appositive status, *kotoryj*-relatives have been shown to exhibit a clause-like prosodic pattern [6]. The data above suggest that under superlatives *kotoryj* retains some degree of independence, so that (a) *tol'ko*, licensed higher in the structure than the relative pronoun is placed (see e.g. Bhatt [1]), cannot occur (the environment being "too factive" for it), (b) NPIs are less readily licensed under *kotoryj* than under *kakoj*, and (c) REL can interact with the elective head *odin* although it is within the scope of the superlative below *odin*.
Note that *tol'ko* is licensed in other sorts of non-assertive contexts, such as (5).

(5) Kak menja tol'ko ne nazyvali!
how I.ACC TOL'KO NEG call.PST.PL
'By what name have I not been called!'

A way to capture both restrictiveness and agreement in cases like (4) might be to stipulate that the set quantified over by the superlative is contextually restricted—whether by means of a variable in the syntax or by manipulating the interpretation function—and that the RC is used as the source of the contextual restriction:

(6) [odna iz [samyx$_{\text{in } D}$ sil'nyx groz]], $\quad D = \{x \mid \text{I can recall } x\}$

This is improbable since (a) it does not explain why number mismatch is facilitated by *odin* and (b) the RC in (4) does not satisfy the criteria for appositiveness, e.g. one cannot add an epistemic adverb [5] such as *požaluj* 'perhaps' to the RC in (4) (the same for *kakoj* replaced with *kotoryj*).

The proposal. A more promising analysis attributes the number mismatch to the referential (as opposed to bound) reading of the number feature on the relative pronoun, cf. the ambiguity of *I am the only one who did* ***my*** *homework* (bound: 'no one else did his/her homework'; referential: 'no one else did my homework'; Sudo [8] for discussion). Therefore, I conclude that an expression need not be bound in the all-or-none fashion: the index of *kakuju* in (4) is bound from above (see Erlewine and Kotek [2], whose analysis is however ultimately different, for why the relevant λ-abstractor may be above the *wh*-pronoun), but its number feature is referential.
The analysis is supported by the known fact that *kotoryj*-clauses allow for *de re* readings of the **person** feature of the embedded verb. Unlike the complementiser *čto* [10], *kotoryj* allows for 1/2 person on the verb with 1/2 person heads [4]:

(7) Vy, kotorye kaetes'...
you.NOM.PL REL.NOM.PL repent.2PL (Yevtushenko; OK: *kajutsja* 'repent.3PL')

To account for the virtual lack of *tol'ko* under *kotoryj*, note that *kakoj* is used as a question word, whereas *kotoryj* (with the relevant interpetation) is not. *Kto*, which is also a question word, patterns with *kotoryj* in terms of mismatches. Cf. question-like semantics for RCs in [2].

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Speaking rate in Czech TV weather forecasts

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Speaking rate is one of the important prosodic phenomena. Together with pauses involved in the division of speech into smaller units, it contributes to the degree of intelligibility of speech. Therefore it is a significant element of interpersonal communication.

Speaking rate shows extensive variability, which is manifested both among speakers and in the same individual/speaker. There are many factors that affect speaking rate, both extralinguistic (age, gender, geographical background etc.; conf. e.g. Trouvain 2003 and Verhoeven et al. 2004) and intralinguistic (length of the intonation phrase (Quené 2005), syllable structure (Pfitzinger 2006), position within the unit (Dankovičová 2001). It is not easy to explain the influence of these factors on the speaking rate directly, because some factors may suitably complement each other, but they may also act against one another (conf. Kohler 1986).

Speaking rate has long been the subject of research in Czech, but usually only as single experiments conducted on different speech materials. The observed tendencies cannot therefore be easily generalized to Czech. Our analysis of speech in TV weather forecasts is a contribution to the verification of the tendencies and influence of the selected factors on the speaking rate.

Newsreaders and other media speakers, including weather forecast speakers, are taken as promoters of the standard speech. Regarding speaking rate, there is evidence that speech pronounced on the Czech radio and TV has accelerated in the last decades. The mean speech rate of radio newsreaders in 1996 was 5.3 syll/s (Bartošek 2000) and 6.2 syll/s in 2002 (according to Palková, published in Palková et al. 2003). The mean speech rate of Czech TV weather forecast was 5.6 syll/s (Balkó 2001).

Studies suggest that there was no difference between men and women in speaking rate (Bartošek 2000, Poukarová & Veroňková 2017) but the values measured in the professional speakers were much higher than in non-professional speakers (cf. e.g. Balkó 1999, Veroňková-Janíková 2004). The objective (measured) speaking rates could be compared with the subjective evaluation of the audience. With regard to weather forecasts, listeners tended to rate slower speech more positively (Machač 2008).

The observed aspects also include the variability of the speaking rate in the linear division of speech into the introduction – central part – conclusion. The results did not show any evident tendency. For some speakers, the central passage was slower, for some faster than the neighboring parts (see Balkó 2001 for weather forecast, Rubovičová 2014 for professional interpreters or Hrachová 2016 for voiceovers).

The present paper provides data on the speaking rate of 4 speakers (2 men and 2 women) of Czech TV weather forecasts on newer material compared to Balkó (2001), so the potential tendencies for accelerating speaking rate can be monitored. In addition to speech rate (speaking rate including pauses), it also examines articulation rate (excluding pauses) and pause volume. As far as pauses are concerned, their position in the structure of the text will also be monitored with regard to the suitability of syntactic and semantic relations. The baseline domain for the articulation rate measurement are breath groups and tone units (Dankovičová 2001). The variability of speaking rate will also be monitored within the structural parts introduction – central part – conclusion (see above).

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The exceptive-additive ambiguity

Introduction: In a number of languages one and the same expression can mean "in addition to" and "except for". The ambiguity of this sort exists in Russian, Turkish, English, Hindi etc. The fact that this pattern is so crosslinguistically common suggests that this is not simply a lexical ambiguity. In this paper I will focus on Russian exceptive-additive markers *krome* and *pomimo*. The exceptive reading arises with universal quantifiers and the additive reading is attested with existentials, focus and in questions. Thus, (1) comes with inferences typical for exceptives (Horn 1989, von Fintel 1994): containment (Masha and Anya are girls), negative entailment (Masha and Anya were not there) and domain subtraction (all other girls were there). In (2) and (3) containment and domain subtraction are still present, but instead of the negative entailment there is a positive entailment (Masha and Anya were there). (4) means that Masha talked to Anya and Petya about this.

(1) Na sobranii prisutstvovali vse devočki pomimo/krome Ani i Maši
On meeting present all girls apart from Anya and Masha
'All girls apart from Anya and Masha were at the meeting.'

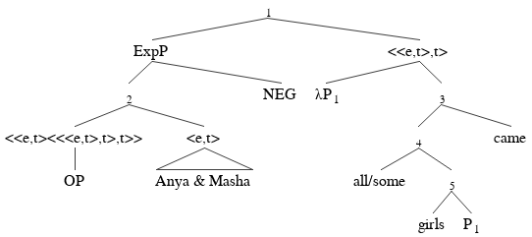
(2) Na sobranii prisutstvovali kakie-to devočki pomimo/krome Ani i Maši
On meeting present some girls apart from Anya and Masha
'There were some girls apart from Anya and Masha at the meeting.'

(3) Kakie devočki krome Ani i Maši prišli?
Which girls apart from Anya and Masha came?
'Which girl apart from Anya came?'

(4) Krome Ani, Masha pogovorla ob etom s Petej$_F$
apart from Anya, Masha talked about this with Petya$_F$
'Apart from Anya, Masha talked about this with Petya$_F$'

In this paper I will focus on the interaction of *krome* and *pomimo* with universal and existential quantifiers. For the exceptive reading, I will adopt von Fintel's (1994) approach to the semantics of exceptives, according to which an exceptive subtracts a set introduced by the DP following the exceptive marker from a domain of a quantifier and adds the leastness condition. Following the existing literature (Gajewski 2008, Hirsch 2016), I will separate the domain restriction step and the leastness condition syntactically. I will show that the ambiguity can be derived if the job of the leastness condition is divided between 2 operators, one of which is negation. Depending on the way the two operators compose the meaning is exceptive or additive.

Analysis: The structure I propose is shown in the tree below. The exceptive phrase undergoes quantifier raising out of its connected position. It leaves a trace of type <e,t>. The trace combines with the head noun via predicate modification. It is bound by the lambda abstractor at LF. The job of *krome/pomimo* is distributed between OP and NEG. Negation can have different types. Depending on its type and the mode of composition with *OP+Anya and Masha* the reading is exceptive or additive. The DP *Anya and Masha* is interpreted as a set {Anya, Masha}.



(5) [[OP]]= $\lambda X_{<e,t>}\lambda M_{<<e,t>t>}$: $\forall Y$ [$Y \cap X \neq \emptyset \rightarrow M(Y)$]. $\neg M(\overline{X})$

(6) [[OP Anya and Masha]]= $\lambda M_{<<e,t>t>}$:$\forall Y[Y \cap \{Anya,Masha\} \neq \emptyset \rightarrow M(Y)]$. $\neg M(\overline{\{Anya, Masha\}})$

OP takes a set introduced by its complement as its first argument. Its second argument is the constituent formed by the abstraction. *Krome* quantifies over properties (variables of type <e,t>). It has a condition of well-formedness (presupposition) and the assertive part. Negation can have different semantic types. Depending on its type and the mode of composition with *OP+DP* the resulting denotation for the exceptive phrase is exceptive or additive.

Exceptive meaning with universals Negation has a meaning given in (7) and it combines with *OP+Anya and Masha* via function composition. As a result every occurrence of the variable M in (6) is substituted by a variable of the same type with the opposite polarity. The denotation of the sister of the ExcP is in (9).

(7) $[[NEG_1]] = \lambda Q_{<<e,t>t>}\lambda S_{<e,t>.}\ \neg Q(S)$

(8) [[OP Anya and Masha NEG]]= by function composition
λQ [[OP Anya and Masha]] ([[NEG]](Q))=
$\lambda Q_{<<e,t>t>}$:$\forall Y[Y \cap \{Anya, Masha\} \neq \emptyset \rightarrow \neg Q(Y)]$. $Q(\overline{\{Anya, Masha\}})$)]

(9) $\lambda Y_{<e,t>}.\forall x$[x is a girl & $x \in Y \rightarrow$ x was there]

The predicted interpretation for the entire sentence is given in (10).

(10) Presupposition:$\forall Y[Y \cap \{Anya, Masha\} \neq \emptyset \rightarrow \exists x$[x is a girl & $x \in Y$ & ¬ x was there]]
Assertion: $\forall x$[x is a girl & $x \notin \{Anya, Masha\} \rightarrow$ x was there]

The assertive part is the domain subtraction. The presupposition is equivalent to the leastness condition (von Fintel 1994). It requires that Anya and Masha are girls who came. Since $\{Anya\} \cap \{Anya, Masha\} \neq \emptyset$, it has to be the case that $\exists x$[x is a girl & $x \in \{Anya\}$ &¬ x was there]. The same goes for Masha.

Additive meaning with existentials: Negation has a higher semantic type and takes OP+Anya and Masha as its argument. As a result, the presuppositional component of OP remains unaffected by negation. The denotation of the sister of the ExcP is in (13).

(11) [[NEG]] = $\lambda P_{<<<e,t>t>t>}\lambda S_{<<e,t>t>.}\ \neg P(S)$

(12) [[ExcP]]= $\lambda M_{<<e,t>t>}$:$\forall Y[Y \cap \{Anya,Masha\} \neq \emptyset \rightarrow M(Y)]$. $M(\overline{\{Anya, Masha\}})$

(13) $\lambda Y_{<e,t>}$. $\exists x$[x is a girl & $x \in Y$ & x was there]

The predicted interpretation for the entire sentence is given in (14).

(14) Presupposition: $\forall Y[Y \cap \{Anya, Masha\} \neq \emptyset \rightarrow \exists x$[$x \in$ Y &x is a girl & x was there]]
Assertion: $\exists x$[$x \notin \{Anya, Masha\}$ & x is a girl & x was there]

The presupposition is the additivity. It requires that Anya and Masha are girls who came. This is again, because both {Anya} and {Masha} satisfy the domain condition of the universal quantifier over sets. Thus $\exists x$[$x \in \{Anya\}$ &x is a girl & x was there] (the same for Masha).

No exceptive meaning with existentials: if (8) applies to (13), the result is a contradiction. This is because leastness is not compatible with existential quantifiers (von Fintel 1994).

(15) Pres: $\forall Y[Y \cap \{Anya, Masha\} \neq \emptyset \rightarrow \neg\ \exists x$[x is a girl & $x \in Y$ & x was there]]
Assertion: $\exists x$[x is a girl & $x \notin \{Anya, Masha\}$& x was there]

Lets take U: the universal set containing every object in the world. Since $U \cap \{Anya, Masha\} \neq \emptyset$ the presupposition requires that there is no girl in the universe that was there. The assertion requires that some girl who is not Anya or Masha was there.

No additive meaning with universals: if (12) applies to (9) the result is ill-formed too.

(16) Pres: $\forall Y[Y \cap \{Anya, Masha\} \neq \emptyset \rightarrow \forall x$[$x \in Y$ & x is a girl $\rightarrow$ x was there]]

Assertion: $\forall x[x \text{ is a girl } \& \ x \notin \{\text{Anya, Masha}\} \rightarrow x \text{ was there}]$

Again because of U, the presupposition requires that every girl was there (including A and M). The presupposition is stronger than the assertion, this is why this reading is not attested.

Agent and experiencer implications in Polish impersonal middles with a dative

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The dative in Polish impersonal middles (IM(s)), i.e. structures with a verb in the non-agreeing (3rd singular neuter (3.SG.N)) form, the reflexive pronoun *się*, and an adverb like *łatwo* 'easily', as in (1), has been analyzed as an involuntary agent (Ackerman & Moore 2001), an agent without control over the (manner of the) eventuality denoted by the verb, acting while being in a state that is involuntary (Rivero *et al*. 2010), or as a benefactive argument of a high applicative head (Krzek 2013):

(1) Jankowi dobrze się dziś pracowało.
John-DAT well SE today worked-3.SG.N 'John enjoyed working today.'

Although IMs like (1) are often taken to have agentive implications, the dative being interpreted as (coreferential with) the understood agent of the V-*ing* event (Holvoet & Linde-Usiekniewicz 2015), they do not provide evidence for a structurally represented agent (see also Krzek 2013), whether intentional (see (3a)) or involuntary (see (3b)):

(2) Janek czytał tę książkę dobrowolnie/celowo/chętnie.
John-NOM read this-ACC book-ACC voluntarily/on.purpose/willingly
'John read this book voluntarily/on purpose/willingly.'

(3) a. Jankowi czytało się tę książkę dobrze/przyjemnie
John-DAT read-3.SG.N SE this-ACC book-ACC well/with.pleasure
(*dobrowolnie/celowo/chętnie).
voluntarily/on.purpose/willingly.
'This book read well/with pleasure for John (*voluntarily/on purpose/willingly).'

b. Jankowi czytało się tę książkę
John-DAT read-3.SG.N SE this-ACC book-ACC
dobrze/ przyjemnie (*niechcąco/przypadkiem).
well/ pleasantly/ involuntarily/by.accident-INSTR
'The book read well/with.pleasure (*involuntarily/by accident) for John.'

For Wierzbicka (1988: 219), Polish IMs also have experiencer implications in that "the agent experiences his own action as proceeding well (or not well) for reasons independent of him and unspecifiable." Building on Wierzbicka (1988), I suggest here that Polish IMs consist of an experience event and a semantically intransitive dynamic event based on a verbal (manner) root modifying a verbalizing *v* head introducing a process, which may underlie an unergative or transitive activity verb, a verb of directed motion, or a progressive achievement verb (see (4)), i.e. a predicate with stages in the sense of Rothstein (2004):

(4) Łatwo mi się zasypia w moim nowym łóżku
easily me-DAT SE fall.asleep-3.SG.N in my new bed
'It's easy for me to fall asleep in my new bed./I fall asleep easily in my new bed.'

The V-*ing* event is the cause of the experience event in which the affected experiencer evaluates V-*ing* as positive or negative. The experiencer must be sentient and aware in the situation, and must have a specific personal experience of V-*ing*, similarly to the experiencer of the mental attitude predicate *find* in (6) from McNally and Stojanovic (2017):

(5) *Dobrze mi się prowadziło samochód
well me-DAT SE drove-3.SG.N car-ACC
śpiąc na tylnym siedzeniu.
sleeping-PART on back seat
'*It was nice for me to drive the car while sleeping in the backseat.'

(6) I find lying bad/worse than stealing.

The middle adverb is (normally) obligatory in an Polish IM (see (7)), and it is experiencer-oriented, adverbs available in IMs belonging to the class of adverbs that can predicate over an experiencer argument (see (8) vs. (9)):

(7) *Jankowi się dziś biegało.
John-DAT SE today ran-3.SG.N '*It ran to/for John.'

(8) Było (nam) przyjemnie leżeć na plaży
was us-DAT pleasant-ADV lie-INF on beach
'It was pleasant (for us) to lie on the beach.'

(9) a. (*Jankowi) mądrze było pójść na spacer.
John-DAT wise-ADV was go-INF on walk
'It was wise (for John) to go for a walk,'

b. *Jankowi mądrze chodzi się na spacery.
John-DAT wise-ADV go-3.SG.N on walks '*It walks wisely for John.'

Middle adverbs are evaluative and subjective. Building on McNally & Kennedy's (2013) analysis of *well*, they are analyzed here as degree adverbs which map an event they apply to onto a degree on a scale they lexicalize, subject to approval by some judge. Assuming with Bylinina (2014: 60) that "[a] direct statement about someone's internal state can be made only if the judge parameter is set to the same value as the experiencer of this internal state", middle adverbs have the 'experiencer=judge' postulate in their meaning, which explains the interdependence between the dative and the middle adverb in IMs (see (7)). Syntactically, the dative (experiencer) patterns with the experiencer of a main clause adverbial predicate with respect to binding and control and not with a benefactive (contra Krzek 2013), which is unable to act as a binder and does not control into adjunct clauses in Polish (not shown here). Dative, bleeding Genitive of Negation, is inherent, not structural case in Polish IMs (contra Krzek 2013). In a negated IM, the middle adverb is in the scope of negation (see (10)), which also licenses the dative as an NPI, and thus also the dative cannot originate outside TP, contra Rivero *et al*. (2010). The example in (10) also shows that the experience event and the V-*ing* event need not necessarily have the same spatiotemporal location:

(10) Nikomu nie spało się dziś dobrze.
no.one-DAT not slept-3.SG.N SE today well 'No one slept well today.'

To capture their intricate properties, Polish IMs are argued here to be built from a non-thematic Voice with expletive *się* in its specifier, a null syntactic head (Aff(ect)) introducing an experience event, with the experiencer bearing (inherent) dative case in its specifier, the middle adverb as adjunct, and a V-*ing* event as its complement, as shown schematically in (11) for (10), where the V-*ing* event is the cause of the (narrated) experiencer's evaluation made on the basis on his/her specific personal experience of V-*ing*, and the adverb specifies the content of the evaluation/mental attitude:

(11) [T [$_{\text{NegP}}$ nie [$_{\text{Voice}}$ się [$_{\text{Voice}}$Voice$_{\text{Expl}}$ [$_{\text{AffP}}$ nikomu [$_{\text{Aff'}}$ dobrze [$_{\text{Aff'}}$ Aff [$_{v\text{P}}$ [$_{v\text{DOP}}$ spał-]]]]]]]]]

The dative experiencer and the middle adverb contribute experiencer implications in tandem. The roots that appear in IM syntax may have encyclopedic agentivity and they combine with a dynamic verbalizer (v_{DO}) selected by the Aff head, which derives a process-denoting verb, but agentivity is not syntactically represented in Polish IMs. As accusative case may be assigned/valued in the absence of a syntactically represented agent (see (3)), Polish IMs offer evidence that the assignment of accusative case should be divorced from the assignment of the external theta role, contra the original formulation of Burzio's Generalization.

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Non-nominative binders in Polish

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This paper aims to account for peculiar binding properties of dative and accusative experiencers with psychological predicates (EXP_{DAT}/EXP_{ACC}). Specifically, we seek answers to questions **(A)** why EXP_{DAT}/EXP_{ACC} can function as antecedents to both pronominal and reflexive possessives (unlike nominative antecedents, which strictly require reflexive possessives) and **(B)** why EXP_{DAT}/EXP_{ACC} find it hard to function as antecedents to reflexives embedded at the edge of nominative NPs. **(A)** Although Polish anaphors are strictly nominative subject oriented (and dative and accusative objects are infelicitous binders, see (1)), they can be bound by EXP_{DAT}/EXP_{ACC} (Bondaruk and Szymanek 2007, Bondaruk and Rozwadowska (2017), Bondaruk (2017) Tajsner 2008, Wiland 2016), see (2-3):

(1) a. Jan$_1$ pokazał Marii$_2$ [swoje$_{1,*2}$ /jej$_2$ /*jego$_1$ zdjęcie].
Jan$_{NOM}$ showed Maria$_{DAT}$ self/her/his picture$_{ACC}$
'Jan showed Maria his/her picture.'

b. Jan$_1$ pokazał Marię$_2$ [swojej$_{1,*2}$ /jej$_2$ /*jego$_1$ cioci].
Jan$_{NOM}$ showed Maria$_{ACC}$ self/her/his aunt$_{DAT}$
'Jan showed Maria to his/her aunt.'

(2) a. Marii$_1$ żal było siebie$_1$/*?jej$_1$ (samej).
Maria$_{DAT}$ sorrow$_{3.SG.M}$ was$_{3.SG.N}$ self/ *?her (alone)
'Maria felt sorry for herself.'

b. Marii$_1$ żal było swojej$_1$/jej$_1$ koleżanki.
Maria$_{DAT}$ sorrow$_{3.SG.M}$ was$_{3.SG.N}$ self's/her friend$_{3.SG.F.GEN}$
'Maria felt sorry for her female friend.'

(3) a. Maria brzydzi się swoim zachowaniem, aż [odrzuca ją$_1$ od
Mary$_{NOM}$ despises REFL self's behaviour$_{INST}$ so-that puts off her$_{ACC}$ from
siebie$_1$/*niej$_1$].
herself$_{GEN}$/her$_{GEN}$
'Mary despises her own behaviour so much that it puts her off herself.'

b. Marię$_1$ odrzuca od listów swojego$_1$/jej$_1$ byłego męża.
Maria$_{ACC}$ puts off from [letters$_{GEN}$ [self's$_{GEN}$/her$_{GEN}$ ex-husband$_{GEN}$]]
'Maria is put off by letters of her ex-husband.'

Yet, EXP_{DAT}/EXP_{ACC}, unlike nominative subjects, are proper antecedents for both reflexive and pronominal possessives, see (2b-3b). This mixed behaviour is a puzzle for the traditional formulations of Binding Theory (Chomsky 1981, 1986, Manzini and Wexler 1987, Rappaport 1986, Willim 1986/1989, Reinders-Machowska 1991) which assume complementarity between anaphors and pronominals in their local domains and plainly state that the subject is the privileged binder in Slavic. Ex. (2b-3b) also pose a challenge to Safir (2004), Boeckx et al. (2008) and Reuland (2011), who all stress the significance of competition and derivational preference for reflexives in local domains. We propose a consistent picture of anaphoric binding based on approach proposed in Avrutin (1994), Nikolaeva (2014), following Hestvik (1992) and Safir (2014). The proposal implements the concept of Index Raising (IR), where the abstract bound form (D-bound/index) is (covertly) moved and adjoined to v or T, see (4-5), the only two positions where its lexical form is determined.

(4)[$_{TP}$ Sub$_{NOM}$ **index-T** [$_{vP}$ ~~Sub~~$_{NOM}$ **index-v** [$_{VP}$ Obj$_{DAT/ACC}$ [V [Obj$_{DAT/ACC}$ …index]]]]] ditransitive VP

(5)[$_{TP}$ … **index-T** [$_{vP}$ OE$_{DAT/ACC}$ **index-v** [$_{VP}$ V [Obj …index]]]] psych VP

The distribution of anaphoric and pronominal elements is determined by two main factors: the movement of the index and the case position of the antecedent (based on Nikolaeva 2014):

(6) When the sentence is sent to spell-out, if an index is co-indexed with a specifier of the [head] to which it is adjoined (v/T), the index has to be realized as reflexive. Pronominal is an elsewhere condition: if an index has not been realized as reflexive, it is realized as pronominal.

Thus, if the index moves to v in (2b-3b) it is c-commanded by the EXP_{DAT}/EXP_{ACC} in [spec, vP] and is spelled out as a reflexive possessive; if the index moves to T it is not c-commanded by EXP_{DAT}/EXP_{ACC} and is spelled out as a pronominal possessive. These two options are not available to the nominative

antecedent, which c-commands the index attached to both v and T in (4). **(B)** Yet, there is an additional factor involving the relationship between the index and T. In general, the index embedded at the edge of a nominative NP and c-commanded by EXP_{DAT}/EXP_{ACC} is still preferably spelled-out as pronominal, rather than reflexive. For instance, the psychological predicate *podobać się* 'appeal to' shows a varied behaviour: the possessive pronoun in the nominative argument is strongly preferred to the possessive reflexive in (7). Yet, Witkoś (2007) shows that EXP_{DAT} can bind anaphors embedded in the nominative constituent (cf. 8):

(7) Marii$_1$ spodobała się %*swoja$_1$/jej$_1$ nowa sukienka.
Maria$_{DAT}$ liked REFL %*self's/her new dress$_{NOM}$
'Maria liked her new dress.'

(8) [Nowakom$_2$] spodobała się [nowa książka (Kowalskich$_1$) o sobie$_{1,2}$/nich$_2$]
Nowaks$_{DAT}$ liked REFL new book$_{NOM}$ (Kowalskis') about self/them
'The Nowaks liked the new book (by the Kowalskis) about themselves/them.'

Tajsner (2008) and Wiland (2016) observe that EXP_{ACC} can also bind a possessive reflexive inside a nominative NP in (10), although it is avoided in (9):

(9) Jana$_1$ przestraszyła %*swoja$_1$/jego$_1$ rana.
Jan$_{ACC}$ frightened self's wound$_{NOM}$
'His wound frightened Jan.'

(10) Jana$_1$ przestraszył stan swojego$_1$/jego$_1$ konta
Jan$_{ACC}$ frightened balance$_{NOM}$ self's account$_{GEN}$
'The balance in his account frightened Jan.'

We submit that examples such as (7) and (9) are encumbered with an additional complicating factor in the form of the (Extended) Anaphor Agreement Effect (AAE: *anaphors do not occur in syntactic positions construed with agreement*; Rizzi 1990, Woolford 1999). Nominative reflexive possessives are avoided, although they are construed with agreement only indirectly: they agree (in case and ϕ-features) with NP they modify while this NP agrees with the auxiliary/verb (the structure of NP is based on Despić 2011, 2013):

(11) [$_{NP}$ swoja [$_{NP}$ rana]], see ex. (9)
self's$_{NOM}$ wound$_{NOM}$

This structure may be quite ambiguous when the AAE applies, as the possessive element is equidistant to T with the NP it modifies (NP in ex.11 does not c-command the pronominal/reflexive element and does not count as 'closer to T' on the definition of the Minimal Link Condition):

(12) *$T_{AGR,2/1}$…Jan$_{ACC,1}$ … [$_{NP}$ swoja$_{NOM,1}$ [$_{NP}$ siostra$_{NOM,2}$]]

The equidistant relationship in question may cause confusion as to what really agrees with Infl/T here, the modified NP (with no consequence for the AAE) or the possessive reflexive (violating the AAE in ex.12). The fact, that from the perspective of binding the possessive forces its index to represent the index of the entire NP that contains it, is similar to what Landau (2000: 109-111) observes for Obligatory Control and calls it the *logophoric extension* of X:

(13) It would help Bill's$_1$ development [PRO$_1$ to behave himself$_1$ in public]

Landau proposes that a well-defined class of nouns denoting abstract notions reflecting the individuality of the controller ([X's NP]):

(14) For the purpose of control, a logophoric extension [X's NP] is non-distinct from X: [X's$_1$ NP] → [X's NP]$_1$.

An analogous *indexical extension* of the reflexive in (11-12) triggers off an (Extended) AAE. More complex structures in (8) and (10) are free from this problem but instead they involve more complicated derivations, as they require IR from an NP embedded in another NP. This is in principle possible although it produces degraded results with overt movement (Deep Left Branch Extraction). Certain amelioration of the Deep LBE is possible, see Bošković (2005). He observes that such examples become more acceptable when the embedded NP is first removed from the container NP and only then the LBE is launched. We assume that the same operations apply to (8) and (10) covertly:

(15) index … [$_{NP}$ ~~index~~ [$_{NP}$ account]] … [$_{NP}$ balance [$_{NP}$ index [$_{NP}$ account]]]

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Polish resultative adjectives are derived in the syntax

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The paper argues against the claim made in Cetnarowska (2000) that Polish resultative adjectives, which I analyse as passive participles of unaccusative verbs, such as *posiwiały* 'that became grey-haired' or *upadły* 'fallen' are derived in the lexicon by conversion of verbal *ł*-stems. My proposal contributes to the ongoing debate concerning the status of adjectival passives. Works such as Wasow (1977) or Horvath and Siloni (2008) claim that the differences between verbal and adjectival passives suggest that the latter must derived in the lexicon. As noted by Bruening (2014) the view according to which the syntax is the only engine of the grammar is more parsimonious and the *onus probandi* is on the part of the proponents of the 'active lexicon'. I am going to argue that the arguments presented by Cetnarowska (2000) in favour of the lexical derivation of resultative adjectives are not sufficient to deny the syntactic status of their derivation. These arguments comprise:

1. The exponence of the passives of reflexively marked verbs. It has been noted by Cetnarowska (2000: 52) that resultative adjectives in Polish fall into two morphological categories: adjectives in *-ł-* and adjectives in *-n/t-*. As shown by Cetnarowska, resultative adjectives in *-ł-* are derived from unaccusative verbs, while *-n/t-* affix is a regular realization in passive participles derived from reflexively marked verbs, e.g. *ogolić się* 'shave, intr.' - *ogolo-n-y* 'shaved', *otworzyć się* 'open, intr.' - *otwar-t-y* 'opened'. She also singles out reflexively marked verbs whose resultative adjectives take *-ł-*, e.g. *rozeschnąć się* 'to become dry' - *rozesch-ł-y* 'that became dry', *zsiąść się* 'to become sour' - *zsiad-ł-e* 'that became sour'. For Cetnarowska, the irregularities in the exponence of the resultatives based on reflexively marked verbs suggest that resultatives come about in the lexical process of conversion.

2. Doublets in *-ł-* and *-t-*. Cetnarowska (2000, 2012) points out to a tendency observed among resultative adjectives in *-ł-* to slowly but gradually give way to forms in *-t-* (as in *zachryp-ł-y* → *zachryp-nię-t-y* 'hoarse', *zamarz-ł-y* → *zamarz-nię-t-y* 'that became frozen'). She claims this phenomenon to be a case of paradigm uniformity (forms in *-nię-t-* resemble the infinitives and non-past forms) and that it is enhanced by the frequency of the participles in *-t-* based on semelfactive verbs. Paradigm uniformity effects, claims Cetnarowska, are a case of analogical extension which takes place in the lexicon.

3. Semantic idiosyncrasies. As pointed out by Cetnarowska many *ł*-adjectives show non-compositional semantics. Adjectives such as *czuły* 'sensitive', *wzniosły* 'lofty' or *okazały* 'magnificent' do not share meaning with the verbs they are based on (cf. *czuć* 'feel', *wznieść się* 'rise up', *okazać się* 'appear (to be)'). The presence of resultative adjectives/adjectival passives with idiomatic meaning not shared with the base verb is claimed to be indicative of lexical rather than syntactic derivation.

Concerning **point 1**., I am going to show that the passive participle marker *-n-* is found only in the participles which share the Voice head with their base verbs. I will show that the reflexively marked verbs mentioned by Cetnarowska (2000) in fact fall into three distinct types. Verbs such as *ogolić się* 'shave, intr.' are true reflexives, i.e. their referential argument is merged in the specifier of the Voice head. This is evidence by the fact that such predicates do not accept the prefixation with a quantificational *na-*: a prefix which requires the presence of a quantifiable internal argument (see 1).

(1) *Na-gol-i-ł-o się mężczyzn.
NA-shave-TH-PTCP-3.SG.NEU SELF man-GEN.PL
Intended: 'Many men shaved'

The second type are reflexively marked anticausatives which merge the referential argument as the internal argument (see Schäfer 2008) and the *się*-element as the head of the phrase in the specifier of VoiceP (see Krzek 2014). These verbs possess a non-thematic active Voice

head Schäfer (2008:175). They have causative counterparts, allow *na*-constructions and the agentive interpretations of dative arguments (see 2).

(2)

(a) Na-otwier-a-ł-o się drzwi.
NA-open-TH-PTCP-3.SG.NEU SE door-GEN.PL
'Many door opened'

(b) Mark-owi niechcąc-y otwar-ł-y się drzw-i.
Mark-DAT.SG unintentional-ADV open-PTCP-3.PL.NVIR SE door-NOM.PL
'Mark opened the door unintentionally'

Verbs such as *zsiąść się* 'become sour' or *rozeschnąć się* 'become dry', which mark resultative adjectives with *-ł-*, lack the Voice head altogether. Such verbs do not possess causative counterparts and their dative arguments cannot be interpreted agentively (see 3).

(3)

*Mark-owi niechcąc-y zsiad-ł-o się mlek-o.
Mark-DAT.SG unintentional-ADV sit-PTCP-3.SG.NEU SE milk-NOM.SG
Int: 'Mark unintentionally caused the milk to become sour'

I take the presence of the Voice-head to be the prerequisite for the agentive interpretation of the dative argument. The passive participial head in the passives of reflexively marked verbs is realized by means of *-ł-* only in the absence of the Voice-head. If the Voice-head is present, the participle may be realized as *-n-* or *-t-* depending on the morphophonology of the stem.

2. Doublets in *-ł-* and *-t-*. I will demonstrate that the relative markedness of resultative adjectives in *-ł-* is the effect of the tendency to simplify the vocabulary items that realize the resultatives. I will demonstrate that the presence of exponent *-t-* depends on the Asp-head in the relevant participle to be realized by means of exponent *-ną-*. This is possible only if the Asp-layer is not realized by means of the stem. I will argue that the vocabulary items that realize the low layers of verbal structure in Polish mention the environments in which the stem realizes the functional heads V and Asp. The fewer such environments are mentioned, the greater the number of forms of a given verb which realize the Asp-head by means of *-ną-*. I will argue that the tendency to replace the participles in *-ł-* (*za-**marz**-ł-y* PREF-**ROOT.V.ASP**-PTCP-NOM.SG.M 'that became frozen') with participles in *-nię-t-y* (*za-**marz**-nię-t-y* PREF-**ROOT.V**-ASP-PTCP-NOM.SG.M 'that became frozen') is the surface manifestation of the tendency to select the simpler vocabulary items that realise a given participle and, in the long run, to decrease the number environments in which the stem realizes the functional layers. The observed 'analogical levelling' is, therefore, an epiphenomenon: a surface consequence of the tendency to simplify the environment of vocabulary items.

3. Semantic idiosyncrasies. I will show that adjectives such as *czuły* 'sensitive', *wzniosły* 'lofty' or *okazały* 'magnificent', differ from most resultative adjectives in that they do not allow event modification. Hence the semantically anomalous adjectives should be treated as statives (Embick 2004). Moreover, I will argue that the presence of non-compositional semantics is fully predicable under the syntactico-centric approach to word formation, and that such an approach, unlike the lexicalist approach, places structural restrictions on the nature of the triggers of idiomatic semantics. These properties of the syntactic approach allow it to account for the difference between the root adjective such as *ślepy* 'blind' or *biały* 'white', and the resultative adjectives/adjectival passives such as *oślepły* 'that become blind' and *zbielały* 'that became white'. Whereas the former may show idiomatic semantics triggered by the nouns they modify, the latter retain their meaning regardless of the noun they occur with.

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The role of the correlate in clause-embedding

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In languages like German and Russian, the embedding of clauses can be connected with the presence of a correlative pronoun. In German, it is the neuter personal pronoun *es* or its suppletive forms *dessen*, *dem*, *da* (*r*), and in Russian, the demonstrative pronoun *to* in its various case forms is used. The respective forms are governed by the embedding lexical head.

The embedded clause, CP, gets by the correlate a nominal shell and becomes opaque for extractions. Furthermore, the correlate allows to mark the respective complement as part of the discourse and as ingredient of information structure.[1]

The type of the clause is determined by the governing embedding lexical head. (1) represents the corresponding syntactic configurations.

(1) $[_{XP}\, X_{\alpha} \ldots ([_{PP}\, P)\, [_{DP}\, [_{D'}\, [_{D}\, \{es, to\}]]\, CP](]) \ldots X_{-\alpha}]$

X is the governing lexical head with a PP- or DP-complement and an embedded clause, located in SpecDP, where it is accessible for government by X.

The governed c-selectional properties concern the preposition and/or the case of the DP and the syntactic types of the embedded CP. The non-adverbial P and the case of the governed PP or DP are licensed by the governing head, and the syntactic clause type, too, and both by feature agreement.

In addition to these c-selectional features there are s-selectional relations between the governing head and its complements. The analysis proposed in (1) guarantees that the pertinent governed constituents are accessible independently from one another for the governor.

It deserves mention that idiosyncratic PPs and DPs with lexical or structural cases[2] can be omitted such that the embedded CP appears directly associated with the governing head. Predominantly this is the case, whenever the correlate does not signal givenness. The possible omission – like the extraposition of CP – is considered as a PF-operation.

The lexical entry for the German and Russian correlates is represented in (2).[3]

(2) a. $/\{es_{\alpha}/to\}/,\ ([_{DP}\ \_\_\ ])_{\alpha}$

b. +D +def +spec –deict βgiven –I –II –pl –fem –masc {γgoverned –oblique/γR –P –U}

c. $\lambda Q \lambda P_2.\ [P_2\ (\iota x\ [[P_1\ (x)] \wedge [Q\ (x)]])]$
$Q, P_1, P_2 \in <\delta t>,\ \delta \in \{st, <st<st>>\}$

The correlates are characterized as multivalent definite non-deictic determiners which are used cataphorically. They require an attribute Q and express a generalized quantifier with a parametric restrictor P_1 and the nucleus P_2.

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1 For details see the comprehensive treatment of Willer-Gold (2013).

2 For structural, lexical and inherent cases see Smirnova & Jackendoff (2017.

3 Schwabe, Frey & Meinunger (2016); Knjazev (2016), Zimmermann (2016).

In order to serve as an attributive predicate like Q in (2c) the following type shift of complement clauses is necessary:

(3) TS_{PM1}: λYλZ. [Z = Y]
Y, Z ∈ {st, <st <st>>}

This type shift converts non-interrogative and interrogative complement clauses into predicates with the help of the identity functor. By this treatment of the correlate the type of the clausal complement of the governing head is retained.

Another accommodation of clausal complements is proposed by Kratzer (2006, 2016) and Moulton (2014, 2015). A corresponding type shift for complement clauses would be (4).

(4) TS_{PM2}: λYλx. [CONSIST-IN (Y) (x)]
Y ∈ {st, <st <st>>}, x ∈ {e, i}

I propose to apply this template in cases where the restrictor of definite DPs is expressed by content nouns like *Idee*/*ideja*, *Plan*/*plan*, *Frage*/*vopros* etc. Another realm of application are adverbial clauses. For example, adverbial clauses with *damit … /{dlja togo/ s tem}, čtoby ...* can be interpreted as WITH-THE GOAL-CONSISTING-IN ||CP||, where GOAL is the specification of the parameter P_1 of (2c).

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A formal approach to terminativity and telicity in Russian

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A common criterion for distinguishing atelic and telic phrases in English is their compatibility with time measure phrases (MPs) preceded by *for* versus *in*. In Russian, by contrast, *for*-phrases are expressed by an accusative NP while *in*-phrases corresponds to a PP headed by the preposition *za* 'behind, beyond':

(1) Anna čitala^{IPF} des'at' minut.
Anna read.PST.SG.F ten.ACC minute.PL.GEN
Anna read for ten minutes.

(2) Anna dočitala^{PF} knigu za des'at' minut.
Anna *do*.read book.SG.ACC *za* ten minute
Anna finished reading the book in ten minutes.

The examples in (1) illustrate the correlation of telicity, perfectivity and prefixation in Russian and other Slavic languages. There is an ongoing debate as to which extent this correlation is based on strict rules. Borer (2005), among others, assumes that Slavic prefixes encode telicity on the verb; Filip (2003), on the other hand, points out that while all perfective verbs may be regarded as semantically telic, prefixes should not be viewed as perfectivity or telicity markers. Moreover, "[t]here is an intuitive agreement that telic predicates are completed or inherently bounded, but what exactly that means is very much under debate" (Rothstein, 2008, p. 3).

If one assumes that perfective verbs are telic then the test for telicity by means of time adverbials does not work for Russian. It is neither obligatory for a telic verbal description to be compatible with a *za*-headed temporal PP nor does the compatibility indicate that the predicate denotes single completed events. (Examples of the latter are given by secondary imperfective verbs with habitual interpretation and basic imperfective verbs with generic interpretation.) The prefix *po-* with its 'somewhat/for some time' interpretation is a case in point of the former fact. For instance, the verb *počitat'*^{PF} ('to read for some time') is perfective and denotes bounded reading events, but it is only compatible with accusative temporal adverbials:

(3) On počital^{PF} knigu pjat' minut.
he *po*.read.PST.SG.F book.SG.ACC five minute
'He read the book for 5 minutes.'

(4) *On počital^{PF} knigu za pjat' minut.
he *po*.read.PST.SG.F book.SG.ACC *za* five minute

Corre (2015), following Padučeva and Pentus (2008) and Mehlig (2008), therefore argues for an extended notion of telicity which includes cases of *terminativity* as encoded by delimitative *po-*. Kagan (2016), building on Filip (2000), proposes a scale-based analysis of delimitative *po-* along the following lines: *po-* picks out an event-related scale in the semantic structure of the verb as a dimension of measurement and imposes the constraint that the amount of change along that scale does not exceed a contextually given standard of expectation. In (3), the scale in question can be identified with the time course of the event itself.

The main goal of the present paper is (i) to explain the (in)compatibility of accusative MPs and *za*-headed MPs in the cases under discussion by (ii) modelling the scalar semantics of *po-* and related prefixes within a feature-based decompositional framework. To this end, it is worthwhile to take a look at paired verbs of motion: a limited set of basic imperfective verbs which exist in *determinate* (directed, unidirectional) and *indeterminate* (multi-directional, non-directed) forms. Like Kagan (2016), we assume that determinate motion verbs lexicalize a *path scale*, in contrast to indeterminate verbs. Consider the pair of motion verbs *begat'*$_{indet}$/*bežat'*$_{det}$ ('to run'). When prefixed with *po-*, the indeterminate verb but not the determinate verb can take an accusative time MP (5).

(5) Vasja pobegal$_{indet}$/*pobežal$_{det}$ 2 časa.
Vasja *po*.run.PST.SG.M 2 hours
'Vasja did two hours of running.'

(6) Vasja probégal$_{indet}$/*probežál$_{det}$ 2 časa.
Vasja *pro*.run.PST.SG.M 2 hours
'Vasja ran for two hours (without stopping).'

(7) Vasja probégal$_{indet}$/probežál$_{det}$ 20 kilometrov za 2 časa.
Vasja *pro*.run.PST.SG.M 20 kilometers *za* 2 hours
'Vasja ran 20 kilometers in two hours.'

termin.	telic	example	time scale (indet. verb)	path scale (det. verb)
+	+	*pro*-pref. verb	accusative time MP *za*-headed MP	*za*-headed MP
+	−	*po*-pref. verb	accusative time MP	—

Table 1: Overview of the relation between scale type, telicity, and measure phrase type

Prefixation with *pro*-, by comparison, gives rise to the verbs *probegat'* ('to run for some time') and *probežat'* ('to run some distance or past something'), which behave like *po*-prefixed verbs with respect to accusative time MPs (6). In contrast to the *po*-prefixed verbs, however, which are not compatible with *za*-phrases without reinterpretation, the *pro*-prefixed verbs can also combine with *za*-headed time MPs (7).

The different effects of the two prefixes can be explained by assuming that *pro*-, in contrast to *po*-, imposes a closed scalar structure as the dimension of measurement on the selected scale, which may be time or path depending on the type of the motion verb. This means, first, that the type of the selected scale has to be compatible with the type *closed scale*. For scales that are not inherently closed this means to specify a segment that can be regarded as a closed scale (like a *two hours* segment of the time scale). A second point is concerned with the kind of the mapping that the prefix imposes between the event stages and the degrees of the scale (segment) specified in the measure dimension. In the case of *po*-, the information contributed by the prefix is just the presence of the initial and final stages of the event, whereas in case of *pro*-, these stages are in addition bound to the minimum and the maximum degrees of the scale (segment).

In traditional terms, *pro*-prefixed verbs are telic event predicates while *po*-prefixed verbs are not. In order to distinguish the latter from atelic predicates, we call them *terminative*, following the terminology mentioned above. This leads to a three-way distinction: atelic/terminative/telic. Table 1 summarizes how the attachment of the types of MPs depends on the event type. While the attachment of *za*-headed MPs requires a telic event predicate, the attachment of accusative MPs depends on the scale selected for delimiting the event: accusative MPs are only possible if the event is measured along the time scale and not along any other (e.g. path) scale.

Following Zinova (2017), we model the semantic elements and constraints just described by employing a frame-based decompositional system with types and relations in line with Kallmeyer and Osswald (2013). In this model, *pro*- imposes a closed scalar structure as the measure dimension (the value of the event attribute MDIM) on a scale component provided by the verb frame. Moreover, *pro*- binds the minimum and maximum of the closed scale introduced by MDIM to degrees on the selected scale that are required to hold at the initial stage (INIT) and the final stage (FIN) of the event, respectively. The prefix *po*-, by contrast, simply characterizes the event as bounded by introducing the attributes INIT and FIN into the frame representation.

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Some considerations on clitic doubling in Torlak Serbian

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Clitic doubling is a widespread feature across Balkan Sprachbund. In fact, Spencer & Luis (2012) state that "in a number of languages of the Balkans we find that pronominal elements, which are in many respects just like the pronominal clitics of (Western) Romance languages, are freely permitted or even required as doubles to overt arguments". Such a scenario mostly occurs around the finite verb or auxiliary or around the non-finite verb, if there is no finite auxiliary, as in the following example of Torlak Serbian (Barbiers et al., 2008:463):

1)	*Nesam*	*(ga)*	*videl*	*ovčaratoga.*
	not+be.1SG.CL	3SG.M.ACC.CL	seen.M.SG.PART	shepherd+the.M.SG
	I haven't seen the shepherd.			

According to Bošković's (2001) analysis, it is evident that the clitic pattern is the one used by Macedonian, where we find proclitics instead of enclitics, as in Bulgarian. In the present paper I will take into consideration some rather peculiar constructions employed by Torlak speakers, involving orthotonic and enclitic personal pronouns in transitive predications. While the order of the main sentence constituents is superficially non-canonical, the patterns under investigation do not strike the speaker as marked or particularly informationally charged, which might point towards a non-peripheral interpretation of the functional slots and projections involved. Indeed, in my experience as a native speaker of this variety of Serbian, as well as in the experience of the speakers I have interviewed, the constructions under discussion simply represent the Torlak standard patterns corresponding to modern Serbian sentences with an orthotonic accusative element and no clitic pronoun, consider for instance:

2)	*Mene*	*me*	*boli*	*glavetinata*	(Torlak Serbian)
	1SG.ACC.PN	1SG.ACC.CL	hurts.3SG.PRES	big head+the.F.SG	
	I've got a headache.				

3)	*Mene*	*boli*	*glava.*	(Standard Serbian)
	1SG.ACC.PN	hurts.3SG.PRES	head.F.SG	
	I've got a headache.			

The research is enriched through an extensive fieldwork in the extreme south of Serbia, in the area of Trgovište, which is close to the western boundary of Bulgaria and even nearer the northern border of Macedonia.

A preliminary analysis of data shows a tendency for clitics to constantly occur in the second position and such placements are traditionally described as following Wackernagel's law. However, certain scholars hypothesized additional reasons for this phenomenon. Namely, Schütze (1994) claims that clitics are in Comp[1] at S-structure, so that XPs that move to Spec-CP or heads that move to C^0 are potential hosts for the clitics. Such theory will be discussed more into detail and will be followed by a meticulous analysis of data gathered in the field.

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