



## 9th European Conference on Formal Description of Slavic Languages

University of Göttingen, December 7-9, 2011

### Conference Program

Tagungszentrum an der Sternwarte

Geismar Landstraße 11, 37083 Göttingen

<http://www.uni-goettingen.de/de/198513.html>

#### 6 Dec 2011 (Tuesday)

19:00 –	<b>Warm up</b> at 'Apex' (Burgstr. 46, city center) <a href="http://www.apex-goe.de/front_content.php?idcat=231">http://www.apex-goe.de/front_content.php?idcat=231</a>
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#### 7 Dec 2011 (Wednesday)

9:00 – 10:45	<b>registration</b> at the conference venue
10:45 – 11:00	<b>opening</b>
11:00 – 12:30 chair: Uwe Junghanns	JAKUB <b>DOTLAČIL</b> (Santa Cruz, Cal.) & RADEK ŠIMÍK (Potsdam) Non-canonical infinitival passives in Czech ANNA <b>BONDARUK</b> (Lublin) Person Case Constraint effects and Polish copular constructions TATJANA <b>MARVIN</b> & ADRIAN STEGOVEC (Ljubljana) Restrictions on different applicative readings in Slovenian
12:30 – 14:30	<b>lunch break</b>
14:30 – 16:00 chair: Anna Bondaruk	PETR <b>BISKUP</b> (Leipzig) Constitution NATALIA <b>MITROFANOVA</b> (Moscow) & SERGE MINOR (Tromsø) Syntax and Semantics of Axial Expressions in Russian GERHILD <b>ZYBATOW</b> (Leipzig) The Russian prefix <i>po-</i>
16:00 – 16:30	<b>coffee break</b>
16:30 – 17:00 chair: Tobias Scheer	STANIMIR <b>RAKIĆ</b> (Belgrade) On the Trochaic Lengthening in Neoštokavian
17:00 – 18:00 chair: Dorothee Fehrmann	<b>INVITED SPEAKER</b> TOBIAS <b>SCHEER</b> (Nice) Variation in the lexicon: yer-based and epenthetic vowel-zero alternations in Polish

## 8 Dec 2011 (Thursday)

<p>9:30 – 10:30 chair: Denisa Lenertová</p>	<p><b>INVITED SPEAKER</b> LUKA <b>SZUCSICH</b> (Berlin) Free Riders and the Activation of Inactive Features: The Case of NP Adverbials</p>
<p>10:30 – 11:00</p>	<p><b>coffee break</b></p>
<p>11:00 – 12:30 chair: Joanna Błaszczak</p>	<p>KATJA <b>JASINSKAJA</b> (Berlin) (A)symmetric Correction Markers in English, Russian, Polish, and Japanese HANA <b>STRACHOŇOVÁ</b> (Brno) <i>Semantic Compatibility of Two Czech Temporal Adjuncts</i> LJUDMILA <b>GEIST</b> (Stuttgart) The rise of an indefinite article: The case of Bulgarian <i>edin</i> and Russian <i>odin</i></p>
<p>12:30 – 14:30</p>	<p><b>lunch break</b></p>
<p>14:30 – 16:00 chair: Ljudmila Geist</p>	<p>OLAV <b>MUELLER-REICHAU</b> (Leipzig) Why kratnost'? JOANNA <b>BŁASZCZAK</b> &amp; DOROTA KLIMEK-JANKOWSKA (Wrocław) Futures in Polish and Slovenian from the perspective of a force- dynamic model HAGEN <b>PITSCH</b> (Göttingen) Russian verb stems and <i>byť</i></p>
<p>16:00 – 16:30</p>	<p><b>coffee break</b></p>
<p>16:30 – 18:00 chair: Radek Šimík</p>	<p>MOJMÍR <b>DOČEKAL</b> (Brno) What do we count with numerals? Semantic analysis of Czech kind-denoting and group-denoting NPs BARBARA <b>TOMASZEWICZ</b> (Los Angeles) <i>Až/čak</i> – the scalar opposite of scalar <i>only</i> HELEN <b>TRUGMAN</b> (Tel Aviv) Naturally-Atomic Singular N-A Kinds in Russian</p>
<p>19:00 –</p>	<p><b>conference dinner</b> at 'Bullerjahn' (Ratskeller, Markt 9, city center) <a href="http://www.bullerjahn.info/de/kontakt/">http://www.bullerjahn.info/de/kontakt/</a></p>

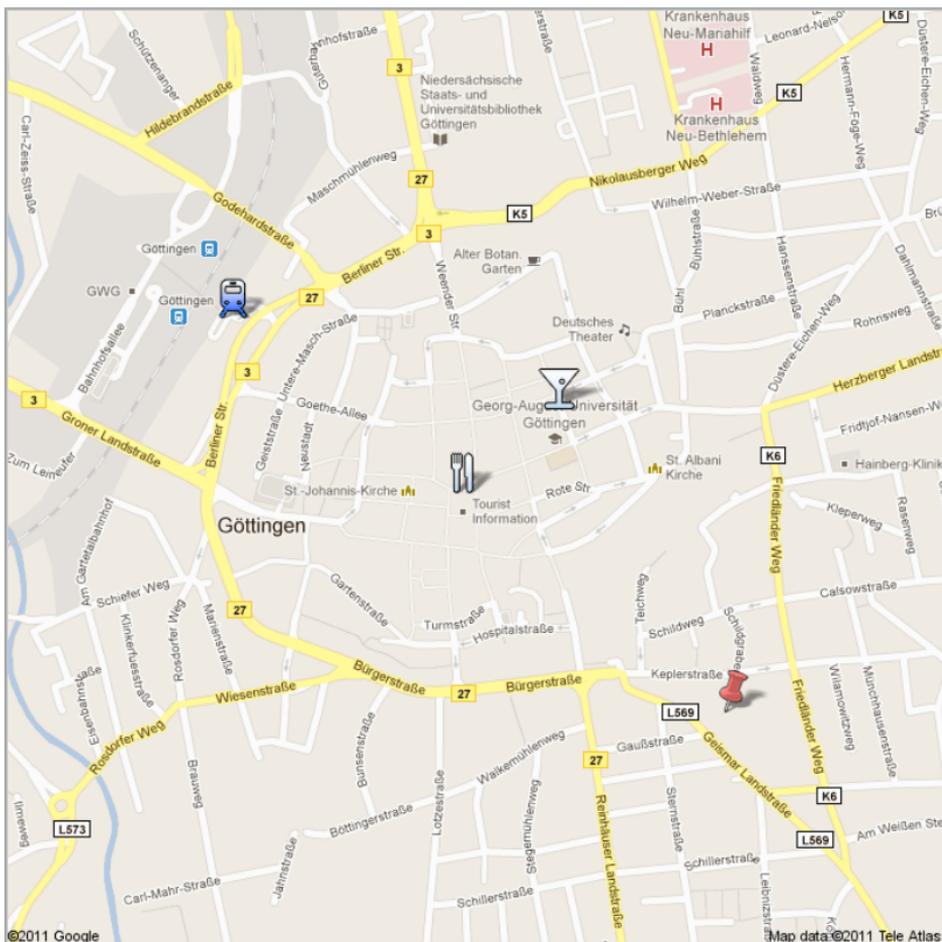
**9 Dec 2011 (Friday)**

9:30 – 10:30 chair: Jacek Witkoś	<b>INVITED SPEAKER</b> <b>ADAM PRZEPIÓRKOWSKI</b> (Warsaw) Linguistic Annotation in the National Corpus of Polish
10:30 – 11:00	<b>coffee break</b>
11:00 – 12:30 chair: Petr Biskup	<b>JACEK WITKOŚ</b> (Poznań) Control across an object: Late Merge and Smuggling <b>EKATERINA CHERNOVA</b> (Girona) On Russian Wh-Echo Questions <b>DURDICA ZELIKA CARUSO</b> (Stuttgart) In Support of a DP-Analysis of Nominal Phrases in Croatian
12:30 – 14:30	<b>lunch break</b>
14:30 – 15:30 chair: Hagen Pitsch	<b>MAŁGORZATA KRZEK</b> (Newcastle) SIĘ constructions in Polish <b>UWE JUNGHANNS, DOROTHEE FEHRMANN &amp; DENISA LENERTOVÁ</b> (Göttingen) Decausatives in a minimal theory of refl
15:30 – 15:45	<b>closing</b>

<b>Alternate speaker</b>	<b>NADIA VARLEY</b> (Wuppertal) <i>Whereabouts of impersonals in Slavic languages... Ask features!</i>
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*The conference program may be subject to changes.*

Abstracts follow **in alphabetical order**.  
**Bold face surnames** indicate where to find the respective abstract.



## FDSL-9

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Bullerjahn (Ratskeller, Markt)

**Conference dinner**

Thursday, December 8



Apex (Burgstr. 46)

**Warm up**

Tuesday, December 6

# **Invited Speakers**

# Variation is in the lexicon: yer-based and epenthetic vowel-zero alternations in Polish

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Polish features two competing patterns of root-final cluster vocalisation in Gpl: monomorphemic -CC# may (*wiadr-o* - *wiader* "pail Nsg, Gpl") or may not vocalize (*cyfr-a* - *cyfr* "number Nsg, Gpl"). The latter will be called pattern A, the former pattern B. However, (monomorphemic) clusters always vocalize in presence of a C-initial (or yer-initial) suffix, even those that do not in Gpl: *wiader-k-o* "id., dim.", *cyfer-k-a* "id., dim.". The pattern is also lexically variable: some roots have both vocalized and non-vocalized forms in free variation (*wydr-a* - *wydr* / *wyder* "otter Nsg, Gpl"). Finally, there is cross-speaker variation as well: some speakers may accept a vocalized or unvocalized version of a root in Gpl, while others may not (e.g. *kurw-a* - *kurew* / ?*kurw* "whore Nsg, Gpl").

The pattern cannot be analysed with the regular instrument that is put to use for (Slavic) vowel-zero alternations, i.e. lexically present vowels that are made inaudible by phonological computation (the yers). Most of the literature does not talk about the pattern at all: this is the case for instance of two of the three books that have founded the generative analysis of Polish, Gussmann (1980) and Rubach (1984). By contrast, the third book in this category, Laskowski (1975:29ff), offers a very careful survey of the very intricate empirical situation and provides rich material (see also Bajerowa 1953). Laskowski (1975) is couched in linear SPE, and he considers all vowel-zero alternations the result of epenthesis (rather than of deletion). His conclusion is that all kinds of lexical items need to be diacritically marked as an exception to all kinds of rules. Szpyra (1995:97) reaches the same obvious conclusion, but formulates the need for lexical marking in theory-neutral terms: "the logical conclusion is that the presence versus absence of yers is largely unpredictable and must therefore be marked in the lexical representation of the relevant items."

Gussmann (2007) proposes a completely different interpretation of the pattern: giving up on its phonological character altogether, he argues that the relevant vowel-zero alternations are instances of allomorphy, i.e. managed outside of the phonology. Cyran's (2005) analysis of the (non-)vocalization of word-final clusters, although not explicitly so (because forms with C/yer-final suffixes are not considered), also results in an allomorphic solution.

Finally, Bethin (1992:146ff) argues for a scenario whereby vowel-zero alternations are based on regular yers, except in loanwords where they are of epenthetic origin. The talk argues that this approach is on the right track, but needs to be refined: there is no difference between loanwords and native vocabulary (extension of the scope of Bethin's epenthetic analysis), and all vowel-zero alternations in loans do not originate in epenthesis (restriction of the scope of Bethin's epenthetic analysis). Also, The difference between *cyfr-a* - *cyfr* and *wiadr-o* - *wiader* is certainly unpredictable and hence encoded in the lexical recording of each item – but not by way of Laskowski's lexical diacritics, which are also used by Bethin. Instead of placing diacritics into phonological representations that alter the course of the phonological computation, I argue that the lexical opposition is achieved by contrasting properties of the (autosegmental) representation itself. That is, there are three (and only three) distinct structures: 1) stable vowels (i.e. which do not alternate), 2) alternating vowels that appear in clusters in Gpl (*wiadr-o* - *wiader*) and 3) alternating vowels that do not appear in clusters in Gpl, but surface before C/yer-initial suffixes (*cyfr-a* - *cyfr* - *cyfer-k-a*). This triple lexical

contrast is expressed in the vocabulary of strict CV phonology (Lowenstamm 1996, Scheer 2004, Cyran 2010).

The three variations mentioned (within Gpl, cross-roots and cross-speaker) are then a consequence of alternative or hesitating lexicalisation of the three lexical representations. As Bethin's, this solution is thus purely phonological and instantiates a currently developed idea in minimalist syntax: variation reduces to variation in the lexicon (the so-called Chomsky-Borer Conjecture: Biberauer 2008, Baker 2008, Roberts & Holmberg 2010).

The gist of the analysis is that an important piece of the standard Slavic yer-based account of vowel-zero alternations needs to be abandoned: it is not true that all vowels which alternate with zero are underlyingly yers – Bethin (1992:153) says that "[v]owel-zero alternations in Polish are not attributable to a unique underlying representation". Some are yers (in my analysis, but not in Bethin's, those that vocalize in Gpl: *wiadr-o* - *wiader*), while others are not (those that do not vocalize: *cyfr-a* - *cyfr*). The latter are epenthetic vowels, i.e. lexically absent and inserted in order to repair an ill-formed structure (three consonants in a row in surface description, two empty nuclei in a row in the analysis developed here).

Only analysis will tell who is who, i.e. whether a given alternating vowel is a yer or epenthetic. In the Polish case, the critical diagnostic is the behaviour of stem- or root-final clusters in Gpl: vowels that appear before C/yer-initial suffixes in pattern A roots are epenthetic (*cyfer-k-a*, cluster unvocalized in Gpl: *cyfr-a* - *cyfr*) while they represent vocalized yers in pattern B roots (*wiader-k-o*, cluster vocalized in Gpl: *wiadr-o* - *wiader*).

All variation encountered is lexical in nature. On the one hand, A- and B-items contrast by the lexical presence vs. absence of a yer, and roots that have both A- and B-forms in free variation (*wydr-a* - *wydr/wyder*) afford both lexical recordings (with and without the yer). On the other hand, there is variation associated to forms with C/yer-initial suffixes. The following reactions are encountered in order to repair a CCC sequence (i.e. one that contains two empty nuclei in a row):

(1)  $C_1C_2C_3$

	CC-V Nsg	C(e)C# Gpl	/C(e)C(e)C/ C/yer-initial suff.
a. epenthesis: CeCC	cyfr-a	cyfr	cyfer-k-a
b. yer vocalization: CeCC	srebr-o	sreber	sreber-k-o
c. trapped sonorant	srebr-o	sreber	srebr-n-y
d. branching coda-sonorant	kart-a	kart	kart-k-a
e. $C_2$ eliminated	mas-ł-o	mas-eł	mas-nic-a (mas-el-nic-a)

A pattern where several strategies compete in order to repair an ill-formed structure appears to be predestined for an OT-type analysis in terms of constraint interaction. This is not the case here: I argue that the contrast between all patterns is only lexical, and that no piece of the variation is produced by phonological computation.

Let us now look at the broader Slavic picture. If Polish has alternating vowels that are the result of epenthesis, other Slavic languages may have epenthetic vowels as well. Czech for instance is not among them: in this language vocalisation in Gpl is absolutely regular (*form-a* - *forem* - *ne-forem-n-ý*) "form Nsg, Gpl, adj." and so on). In Polish terms, Czech is a language where all roots are of the B-type, and hence where all vowel-zero alternations represent yer vocalisation. Diachronically speaking, then, it may be the case that Polish is on the way to become like Czech (the movement is from A- to B-roots).

Finally, the analysis of Polish makes a prediction regarding Slavic languages where more than one vowel alternates with zero (e.g. of the Eastern family): in case they feature the Polish pattern and thus have epenthetic vowels, there must be a way to predict which vowel (e or o in Russian for example) will be inserted. Either it is always the same vowel, i.e. e or o, or the quality of the vowel must be predictable from the consonantal environment. Russian happens to instantiate the Polish pattern (Worth 1968), and the prediction may thus be tested: those alternating vowels which appear in presence of yer-initial suffixes, but not in Gpl (e.g. *igr-á - ígr - igór-k-a* "game Nsg, Gpl, dim."), must not be able to sustain the lexical contrast between e and o. This appears to be a true statement.

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# Free Riders and the Activation of Inactive Features: The Case of NP Adverbials

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In this paper, I will examine some properties of features and AGREE-relations, in particular the conditions for establishing feature relations itself. Accusative NP adverbials, so-called “weakly governed” accusatives, will be discussed as representing instances of multiple AGREE (i.e. more than two categories containing the same feature type are involved in forming an AGREE-relation).

Cross-linguistically, there is good evidence for the fact that case marking on accusative temporal NP adverbials is structural rather than non-structural (“semantic” in a direct sense). One piece of evidence is the phenomenon of case alternation with Russian duratives: The genitive with duratives is licensed basically under the same conditions as the genitive with internal arguments, cf. (1) and (2) (cf. also Brown & Franks 1995, Borovikoff 1997 for discussion). In Korean, double nominative contexts trigger the nominative on temporal adverbials, cf. (3), rather than accusative as with agentive verbs, cf. (4) (cf. Wechsler & Lee 1996 for a detailed discussion). These systematic alternations indicate that accusative on adverbials is structural.

On standard assumptions about feature agreement involving case features, however, this allegation poses at least two problems:

- (i) If case licensing—as often assumed—is indeed linked to  $\phi$ -feature agreement between a potentially case licensing probe and a goal containing unvalued case features, unaccusative predicates as in (5) shouldn't be able to license accusative adverbials contrary to fact. Since  $\nu$  (or an equivalent probe) is classified as  $\phi$ -defective, it shouldn't license accusative at all.
- (ii)  $\nu$  (or an equivalent probe) of transitive predicates containing [ $u\phi$ ] probes its domain and finds an appropriate NP goal subsequently licensing the accusative on the internal argument. For the probe, there is no need to step into an AGREE-relation with another NP licensing the accusative.

The first ingredient to resolve the abovementioned problems is to follow Pesetsky & Torrego (2006, 2007) in taking structural case morphology as a materialization of nominal temporal features (and not as a by-product of  $\phi$ -feature valuation). T's and  $\nu$ 's Tns-features (in the latter case a feature with aspectual interpretation) license nominative and accusative case morphology, respectively.

Second, interpretable features of non-probes may be accessed by categories containing unvalued instances of the same feature type, if the latter independently establish feature relations to the former.

Third, interpretable features of probes which already formed AGREE-relations with appropriate goals remain active and may be accessed by further AGREE-relations resulting in multiple AGREE (as long as locality conditions are not violated).

With unaccusatives,  $\nu$  still contains interpretable (aspectual) Tns-features (cf. aspectual pairs in Russian as *plavitsja* — *rasplavit'sja* ‘melt’), but it fails to step into an AGREE-relation with the internal argument—for whatever reason (e.g., due to the lack of external selection). The internal argument's case features are valued by T. Crucially,  $\nu$  still has the potential to “deliver” its Tns-feature to a DP, if an appropriate AGREE-relation is established.

This is exactly what happens with adverbials. As optional, non-selected phrases, adverbials themselves have to establish some sort of relation to their syntactic targets. Durative adverbials limit the temporal extension of an unbounded situation, i.e. they modify the time of the situation (TSit) in the sense of Klein (1994). This is information specified by grammatical

aspect which relates topic time (TT) to TSit. Valuation of case features (nominal temporal features) of the adverbial is due to a free rider effect.

Similarly, the interpretable Tns-feature of transitive *v*, although involved in an AGREE-relation with the internal argument, still may be accessed by a nominal adverbial independently establishing the feature relation sketched above, cf. (6).

Russian (as well as some other Slavic languages, among others Bosnian/Croatian/Serbian) provides evidence for a featural relation between the adverbial and aspectual features. Only bounded duratives (count nouns) limiting the situation denoted by the clause are marked with accusative. Unbounded duratives (cumulative plural terms) bear the instrumental, cf. (7).

- (1) a. Maša pisala pis'mo celyj čas. [Ru]  
 Maša wrote letter<sub>ACC</sub> whole hour<sub>ACC</sub>  
 'Maša was writing a/the letter for one hour.'
- b. Maša ne pisala pis'mo i čas / časa.  
 Maša NEG wrote letter<sub>ACC</sub> even hour<sub>ACC/GEN</sub>  
 'Maša didn't write a/the letter even for one hour.'
- c. \*Maša pisala pis'mo i časa.  
 Maša wrote letter<sub>ACC</sub> even hour<sub>GEN</sub>
- (2) a. Pětr čital knigu. [Ru]  
 Pětr read book<sub>ACC</sub>  
 'Pětr read a/the book.'
- b. Pětr ne čital knigu / knigi.  
 Pětr NEG read book<sub>ACC/GEN</sub>  
 'Pětr didn't read a/the book.'
- c. \*Pětr čital (ětoj) knigi.  
 Pětr read (this) book<sub>GEN</sub>
- (3) ku-ka cha-ka sey sikan-i philyoha-ta. [Ko]  
 he<sub>NOM</sub> car<sub>NOM</sub> three hour<sub>NOM</sub> need<sub>DEC</sub>  
 'He needs a car for three hours.'
- (4) Tom-i twu sikan-tongan-ul tali-ess-ta. [Ko]  
 Tom<sub>NOM</sub> two hours-period<sub>ACC</sub> run<sub>PST-DEC</sub>  
 'Tom visited America two times.' (Wechsler/Lee 1996: 631/636)
- (5) Lilija cvela odnu nedelju. [Ru]  
 lily<sub>NOM</sub> bloomed one<sub>ACC</sub> week<sub>ACC</sub>  
 'The lily bloomed for one week.'
- (6) Pětr čital ètu knigu odin mesjac. [Ru]  
 Pětr<sub>NOM</sub> read this<sub>ACC</sub> book<sub>ACC</sub> one<sub>ACC</sub> month<sub>ACC</sub>  
 'Pětr was reading this book for one month.'
- (7) a. Pětr časami sidel molča. [Ru]  
 Pětr hour<sub>INST:PL</sub> sat being-silent  
 'Pětr has been sitting (there) for hours without saying a word.'
- b. Pětr dva časa sidel molča.  
 Pětr two<sub>ACC</sub> hour<sub>ACC</sub> sat being-silent  
 'Pětr has been sitting (there) for two hours without saying a word.'

## References

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# **Abstracts**

**in alphabetical order**

(see **bold face surnames**  
in the conference program)

# Constitution

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**Introduction:** There are four phenomena in the minimalist framework that restrict the syntactic derivation, namely, the Extension Condition, the Inclusiveness Condition, the No-Tampering Condition and the Ban on Non-constituent Movement. In this paper, I propose to reduce these four syntactic phenomena to one condition: Constitution. My argument is purely conceptual. Given Occam's razor, one condition is better than four different phenomena. The rationale behind Constitution is computational efficiency, in syntactic terms, the phase status of labelled syntactic objects. I propose that labelling triggers spell-out, therefore labelled constituents cannot change.

**The four phenomena:** In (1), we find Chomsky's (2000) version of the Inclusiveness Condition, where  $C_{HL}$  means the computational procedure of human language. This condition bars e.g. introduction of traces and new syntactic categories in the course of syntactic computation. In (2) we see the Extension Condition, also taken from Chomsky (2000). This condition requires that all merge operations happen at the root of the syntactic object. This blocks e.g. downward movement. Chomsky (2005) proposes the No-Tampering Condition, which states that the operation merge leaves the syntactic object to which something is merged intact; consider (3). Given the definition in (3), this condition cannot be taken to be a later version of the Extension Condition but e.g. the definition of the No-Tampering Condition in Chomsky (2008) can. The final phenomenon, the Ban on Non-constituent Movement, blocks movement of non-constituents; see e.g. Radford (1988), Adger (2003).

**Proposal:** What the four phenomena have in common is that they bar manipulation of syntactic objects, either syntactic objects directly affected by the operation merge or syntactic objects generally participating in the syntactic derivation. Therefore, I propose to reduce the four phenomena to the Constitution condition (4), which bars changing the constitution of labelled syntactic objects. This condition includes all four phenomena mentioned above, which means that it has wider application domain than, e.g., the No-Tampering Condition. Note that the Constitution is not concerned only with the operation merge. By the constitution of syntactic objects, I mean featural properties of syntactic objects, where features are of three types, phonological, formal and semantic; see e.g. Chomsky (2001). The proposed condition is based on computational efficiency. Since changes in the constitution of syntactic objects would need an extra computational effort (in contrast to unchanged syntactic objects), optimal computation should not allow changes in already computed – here labelled – syntactic objects. Building on Chomsky (1995, chap. 4, 2000, 2001), I assume that merge is composed of two different operations: the set-constructing operation (concatenation) and labelling (cf. Gärtner 2002, Hornstein & Nunes 2008). I propose that labelling triggers spell-out, which sends the labelled syntactic object to the interfaces. For this reason, the constitution of labelled syntactic objects cannot change. In other words, every merge constitutes a phase in the derivation; cf. Epstein & Seely (2002). This approach has the advantage that it is strictly derivational and eliminates the standard phase (such as  $vP$  and  $CP$ ) representations. Thus, it reduces computational load more than standard phases since the computational workspace contains fewer syntactic objects accessible for syntactic operations than the computational workspace of standard phases. In addition, it has the advantage that it avoids the discussion why some categories constitute phases and others do not and allows us to eliminate Chomsky's Phase Impenetrability Condition.

Let us exemplify how the Constitution works in a derivation with the countercyclic merger. Consider (5), with five elements in the numeration:  $\alpha$ ,  $\beta$ ,  $\gamma$ ,  $\delta$  a  $\omega$ , and suppose that  $\omega$

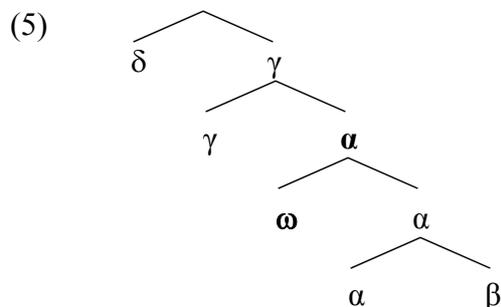
externally merges with  $\alpha$  after merger of  $\delta$ . This derivational step violates both the Extension Condition and No-Tampering Condition. It is also correctly excluded by the Constitution because the constitution of the labelled syntactic object  $\gamma$  was changed by insertion of the node  $\omega$  and  $\alpha$ , as shown in bold. Now let us look at how (5) is derived in the proposed model. First,  $\alpha$  concatenates with  $\beta$  (6a). I assume that if there is another element present in the numeration, labelling - and consequently spell-out - applies after the next concatenation. This assumption ensures that the derivation can continue and that the numeration will be exhausted. Thus,  $\gamma$  is concatenated (6b). Now labelling happens (suppose that  $\alpha$  projects) and  $\alpha_{\max}$  is spelled out (6c). Note that this labelling does not violate the No-Tampering Condition in (3) because labelling itself does not count as merge. Then,  $\delta$  is concatenated (6d), now labelling happens since labelling applies by default after every concatenation (this excludes the possibility that  $\omega$  concatenates with  $\gamma$  below  $\delta$ ), and  $\gamma_{\max}$  is spelled out (6e). The crucial point is that at the time when  $\omega$  is going to concatenate with  $\alpha$ ,  $\alpha$  is already spelled out, hence inaccessible for further operations. And  $\omega$  also cannot concatenate with  $\gamma$  below  $\delta$  in (6e) because the (whole)  $\gamma_{\max}$  is inaccessible for operations (being already spelled out).

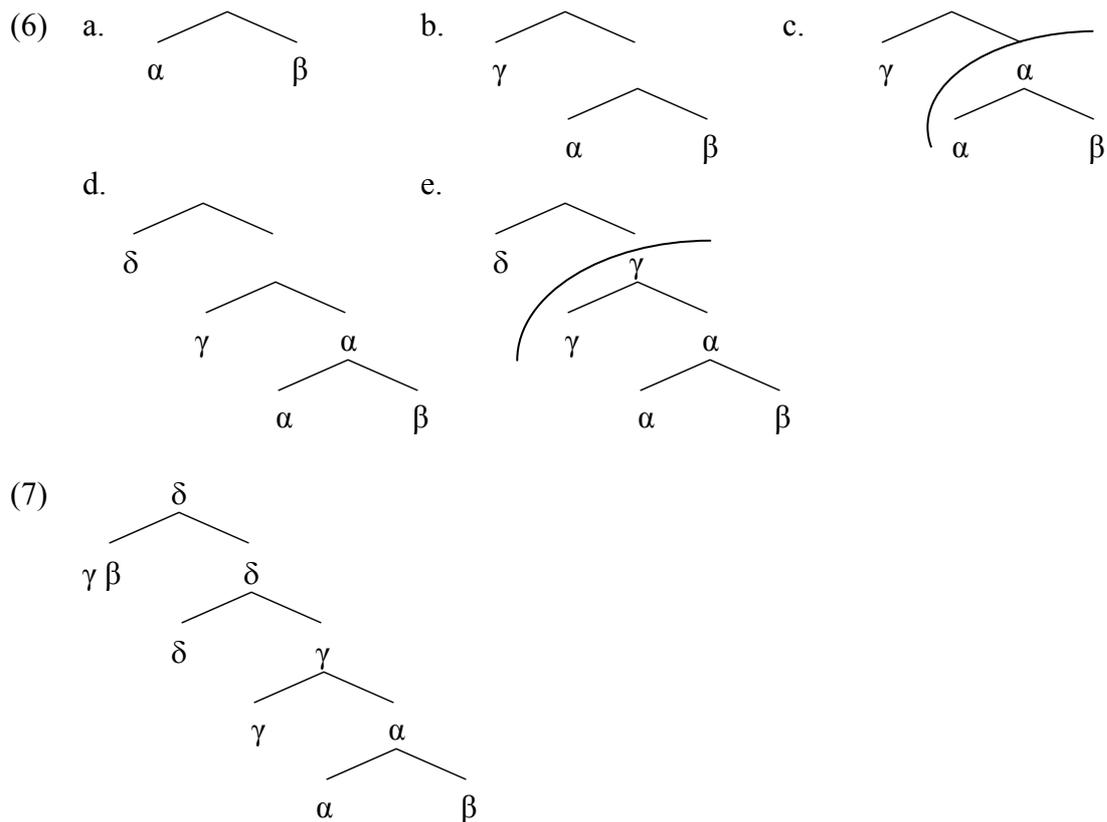
As to the Ban on Non-constituent Movement, I assume that the Constitution also holds for moved elements, i.e. copies. Example (7) demonstrates that  $\gamma$  and  $\beta$  do not form a constituent to the exclusion of  $\alpha$ ; for this reason, they cannot move and merge with  $\delta$ . This illicit movement step produces a structure with the syntactic object containing  $\gamma$  and  $\beta$  in Spec, $\delta$ . The crucial point is that this syntactic object does not correspond to any syntactic object in the original structure.

I assume that syntactic objects are constituted of features but not directly from their values. This has the consequence that the agree operation, which values particular features, does not change the constitution of syntactic objects, hence it does not violate the Constitution.

In my talk, I will show how the Constitution deals with movement and other phenomena mentioned above. I will also show that the proposed analysis supports the copy or remerge theory of movement.

- (1) The Inclusiveness Condition: No new features are introduced by  $C_{HL}$ .
- (2) [...] the Extension Condition always holds: operations preserve existing structure.
- (3) Assuming the no-tampering condition that minimizes computational load, both kinds of Merge to A will leave A intact.
- (4) Constitution  
The constitution of labelled syntactic objects cannot change.





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- (4) a. *Uwaga, spadniesz<sub>[perf]</sub>!* (warning – the hearer can still do something to prevent falling)  
 ‘Be careful/Watch out: You are going to fall down (otherwise)!’
- b. *Nie chce mi się wierzyć, że Janek wykona<sub>[perf]</sub> tak odpowiedzialne zadanie.*  
 ‘I cannot believe (#I am amazed) that John will fulfil/perform such a responsible task.’
- c. *Kto naprawi<sub>[perf]</sub> mi samochód?* ‘Who will repair my car?’
- d. *Jeśli chcesz, nasza firma naprawi<sub>[perf]</sub> ci auto.*  
 ‘If you want, our company will repair your car.’

**Our hypothesis** There is a correspondence between the Polish and Slovenian future forms: *sf* (Pol.) = **BE** + [**perf**] (Slov.) and *pf* (Pol.) = **BE** + [**impf**] (Slov.). **Our methodology** We created a scenario-based online questionnaire to test this hypothesis. Our hypothesis has been confirmed. **Our questions** ❶ Why are contexts (i)-(iii) compatible with *sf* (Pol.)/**BE** + [**perf**] (Slov.) and why are contexts (iv)-(vii) compatible with *pf* (Pol.)/**BE** + [**impf**] (Slov.)? ❷ Why do we have the semantic correspondence between the Polish and Slovenian future forms despite their different composition? **Our analysis** **BE** in Slovenian is a purely temporal element which is realized in T° and as such it is compatible with both [+**perf**] and [+**impf**] verbal complements. In contrast, **BE** in Polish is realized lower in the syntactic structure; it is a kind of a semi-lexical aspectual element (a kind of “light *v*”), denoting the inception of the state **BE** and as such it is comparable to **phase verbs like zacząć ‘to begin’**, which are also compatible only with [+**impf**] verbal complements in Polish. In Slovenian the future reference arises because the temporal auxiliary **BE** in T° locates the reference time (RT) after the speech time (ST) (RT ≥ ST). In Polish, both in *sf* and *pf*, the future reference arises from the combination of present tense and perfective aspect. Due to the presence of the perfective aspect the RT is forward-shifted from “around the ST” (ST ⊆ RT) to “after the ST” (RT ≥ ST). Having said this, the question is now how to explain the different distribution of the futures in Polish and Slovenian in the contexts (i)-(vii). To answer this question, we adopt concepts such as force and causal chains formalized in Copley&Harley (2010). Force is defined as a function from an initial situation to the situation that a particular input of energy causes to occur, if nothing external intervenes. In the case of Polish futures Force can be contextually specified: it can be an intention, prediction or a plan, i.e., propositions that must be true in some interval (some set of possible worlds) surrounding the ST. The **BE** + [**impf**] future forms in Polish and Slovenian come with a default requirement that Force and the situations they denote (topic situation) must form an immediate causal chain: there are just two situations linked by this chain: the force situation and the topic situation. This explains why it is those forms that are compatible with **context (i)-(iii)**, in which the topic situation is a continuation of a plan (Copley 2009). In contrast, there is no such default requirement in the case of the Polish *sf* and the Slovenian **BE**+**[perf]**. I.e., the causal chain between force and the topic situation is longer: it consists of more intermediate situations, thus creating more opportunities for some external forces to intervene and change the outcome of the (future) topic situation. Because of this, these future forms are compatible with **contexts (iv)-(vii)**, in which there is no plan for the topic situation or in which a future situation can be prevented. The above mentioned difference in the length of the causal chain (the number of links) patterns with yet another difference: only the **BE** + [**impf**] future forms in Polish and Slovenian are compatible with **‘still’ context (5)**.

- (5) a. *Janek czyta gazetę i nadal będzie ją czytał<sub>[impf]</sub>.*  
 ‘John is reading a newspaper and he will still be reading it.’
- b. \**Janek czyta gazetę i nadal ją przeczyta<sub>[perf]</sub>*  
 ‘\*John is reading a newspaper and he will still have read it.’

Why is this so? Here we see the role of aspect of the verbal complement. The **[impf] complements of BE** are [+durative]; as such they do not have a clear initial or final boundary, hence – if not specified otherwise – their temporal trace is coextensive with the RF which begins at or right after the ST ( $RF \geq ST$ ). In contrast, in the case of the Polish *sf* and the Slovenian **BE+[perf]**, due to the perfective aspect on the lexical VP the focus is on the initial or final boundary of an event. Hence, the temporal trace in these cases cannot be coextensive with the RF which begins after the ST ( $RF > ST$ ). To conclude, **in the former case** there is no gap between the ST and the beginning of the future event (in a default case, i.e., in a case with no adverbial restrictors such as, e.g., *tomorrow*), hence Force and the topic situation can be directly linked. In contrast, **in the latter case** there is a gap between the ST and the beginning of the future event, hence Force and the topic situation form a longer causal chain with more intermediate links (situations) which leaves space for preventing or changing the outcome of the future eventuality.

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# Person Case Constraint effects in Polish copular constructions

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The aim of the paper is to provide an analysis of two agreement patterns found in one type of copular sentences in Polish, i.e. those containing the so-called pronominal copula *to* and the verbal element *być* ‘be’ (cf. Citko (2008)), as in (1).

(1) Marek           to (jest) dobry lekarz.

Mark-Nom. TO is   good doctor-Nom.<sup>1</sup>

‘Mark is a good doctor.’

In these sentences the verbal element can be dropped in the present tense, which gives rise to clauses with just a pronominal copula *to* (cf. (1)). Since the clauses with *to* and those with *to* and *być* show analogous syntactic properties, they are treated (contra Citko (2008)) as representing one type. The characteristic property of this type of structure is that the pronominal copula *to* links only identical categories, mostly DP<sub>s</sub> which obligatorily bear nominative case (see (1)). However, instead of the expected agreement pattern, in these sentences the verb seems to agree with the second, not with the first DP, as can be seen in (2), where the verb is marked as feminine singular in the same way as the second DP, while the first DP does not seem to have any influence upon the morphological form of the verb. Cases like (2) illustrate the first agreement pattern to be analysed in this paper.

(2) Tych jedenastu mężczyzn   to była                   drużyna                   piłkarska.  
 these eleven   men-Nom-pl. TO was-Past.3sg.fem. team-fem.-Nom football-fem.

‘These eleven men were a football team.’

Nonetheless, it seems that it is the first DP that determines the person properties of the verb, as it cannot correspond to a first or second person pronoun but is restricted to third person only, as confirmed by (3). This is the second pattern that will be scrutinized here.

(3) \*Ja       /\*Ty       /On   to dyrektor.

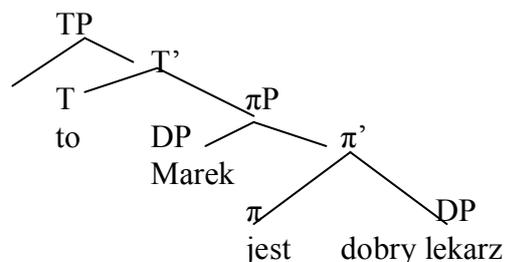
I-1sg. /you-2sg. /he-3sg. TO manager

‘I am a manager.’

This pattern, which has hardly been noticed in the literature so far (cf. Wiśniewski (1990) and Hentschel (2001)), seems to be reminiscent of the Person Case Constraint (PCC) effects. The PCC in certain constructions requires that some types of DPs be 3<sup>rd</sup> person (cf. Richards (2005)).

The structure proposed for sentences like (1) heavily relies on Citko’s (2008) analysis, reproduced in (4) below, where  $\pi$  stands for a functional head underlying the predication relation.

(4) (cf. (1))



<sup>1</sup> The following abbreviations will be used: fem. – feminine, Nom. – nominative, pl. – plural, and sg. – singular.



A way of voiding the PCC in *to być* clauses involves predicate inversion as in (9) below, where DP2 is moved to the clause initial position. Sentences like this are analysed in terms of parallel probing by T and C, whereby C probes the second DP and therefore removes it from the search space of T, which thus undergoes just one Agree with DP1, and consequently no person mismatch arises between the two DPs.

(9) Państwo to (jestem) ja.  
state-3sg. TO am I-1sg.  
'I am the state.'

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# In Support of a DP-Analysis of Nominal Phrases in Croatian

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Beginning with Abney's (1987) DP-Hypothesis, many linguists have provided empirical evidence for the presence of a DP in various languages. While the head of a DP is occupied by articles in languages that overtly employ them, the focus of recent discussions on languages without articles (such as Russian, Polish, SerBoCroatian<sup>1</sup>) is whether there is a DP on top of NP in these languages. The different proposals range from an elaborated DP structure (cf. Progovac 1998, Dimitrova-Vulchanova and Giusti 1998, Leko 1999, Rutkowski 2002, Bašić 2004, Pereltsvaig 2007) to the complete omission of the DP layer in favour of a simple NP analysis (Zlatić 1998, Trenkić 2004, Bošković 2005, 2008, 2009).

This paper argues for a split DP-analysis of nominal expressions in Croatian. I will critically review the main arguments that have been brought in favour of an NP analysis (optionality of determiners, unavailability of a DP-head, adjectival nature of determiners) and will show that they are inconclusive. Instead I will show that Croatian nominal expressions do indeed host a D head. This is contrary to the NP approach in Corver (1992), Zlatić (1998) and Bošković (2005, 2008, 2009), who take determiners to appear either as specifiers of the noun or in a position adjoined to NP. It is also contrary to the DP approach in Progovac (1998) and Leko (1999), who propose that determiners appear in the specifier position of various functional categories projected above NP.

**1. Revisiting the pro-NP arguments.** SerBoCroatian does not have overt articles, which typically occupy the D<sup>0</sup> structural position in languages that have one, therefore the projection of DP on top of NP is not necessary. Determiners that are potentially used instead of articles (prenominal possessives, demonstratives, quantifiers) are optional, since determiners can be omitted without influencing the grammaticality of the sentence (1a), and are claimed to be “morphologically adjectives in SC” for various reasons (Zlatić 1998, Bošković 2005, 2009, 2011). However, the determiner *onaj* in (1b) has effects on the interpretation of the nominal expression. In contexts like (1b), the sentence is unacceptable if the demonstrative determiner *onaj* is omitted:

- (1) a. **(Onaj)** student voli Mariju.  
That student loves Mary
- b. \***(Onaj) razgovor** sa svećenikom, dok je još bio dijete, pretvorio se u  
(That) conversation with priest, while is still been child, turned itself into  
sjećanje.  
memory.  
*“The conversation with the priest, when he was still a child, came to be a mere  
memory.”*
- c. \***ovaj onaj** moj prvi crveni kožni putnički kovčeg  
this that my first red leather suitcase

Therefore, I claim that the adverbial clause in (1b) creates a particular referential context which makes the demonstrative determiner obligatory. The demonstrative determiner *onaj* cannot be treated as an adjectival adjunct, because adjuncts are always optional and they can iterate (cf. Richards 2008), while the demonstrative *onaj* obviously does not behave in that

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<sup>1</sup> The term SerBoCroatian stands for Serbian, Bosnian and Croatian (Aljović 1999).

manner (1b, c). Besides, adjuncts do not c-select the phrase to which they adjoin (ibid.) However, as shown in (2), some determiners impose strict restrictions on the selected noun:

- (2) a. **nekoliko** ključeva / hlača / \*ključa / \*mlijeka  
**several** keys-G.Pl. / trousers-G.Pl. / \*key-G.Sg. / \*milk-G.Sg.  
 b. **svaki** recept / \***svaki** recept-i  
**each** prescription-N.Sg. / \*each prescriptions-N.Pl.

My investigation of quantifiers and numerals will show that they display head properties and accordingly must occupy the head position of their own functional projection. For example, in (3), the quantifier *mnogo* (*many*) assigns genitive case to the noun *knjiga* (*books*), which itself obligatorily carries a [+plural] grammatical feature:

- (3) *mnogo* knjiga  
*many* books-G.Pl.

In order to function as a case assigner, the quantifier *mnogo* (*many*) must govern the noun *knjiga* (*books*). By definition, governors are heads within the GB framework. Regarding the adjectival status of determiners in SerBoCroatian, I will provide a range of arguments for the view that determiners and adjectives are distinct categories with different morphological (inflection, derivation) and syntactic properties (modification, distribution, thematic structure) (cf. Frleta 2005). For instance, descriptive adjectives are gradable, see (4a), whereas determiners are not<sup>2</sup>, as shown in (4b) (ibid.):

- (4) a. lijep - ljepši - najljepši  
 beautiful- more beautiful - the most beautiful  
 b. taj - \*tajiji - \*najtajiji / moj - \*mojiji - \*najmojiji  
 that - \*thater - \*thatest / my - \*myer - \*the myest

**2. Genitive Constructions/Argument Supporting Nominalizations (ASNs).** In order to support the view that nominal expressions in languages with and without articles are fundamentally different, Bošković (2008, 2009, 2011) claims that the latter do not allow ASNs with two lexical genitives. According to Bošković (2011:2), an ASN comparable to German (5a) is not possible in Croatian, as it disallows two nominal genitive arguments:

- (5) a. Hannibals Eroberung Roms  
 Hannibal-GEN conquest Rome-GEN  
 b. Kolumbovo otkriće Amerike  
 Columbus-POSS.NOM discovery America-GEN

First, Croatian has ASNs equivalent to (5a), see (5b). Second, note that *-s* in (5a) is a possessive marker and not a genitive (cf. Strunk 2004), just like *-ov* in (5b). The unavailability of two structural genitives within the DP is a cross-linguistic fact (Alexiadou 2001). Given the inability of the noun *otkriće* ‘discovery’ to assign two structural genitives, the noun *Kolumbo* moves to a prenominal position, where it agrees with the head noun and receives nominative case via Spec-head agreement (Kuna 2003). Following Kuna’s proposal, which provides evidence for the existence of functional PossP projection above NP (and of the DP-internal NP-movement), I propose an elaborated split-DP structure in Croatian. In the ASN-construction in (5b) the possessive suffix *-ov* qualifies as a D-head, being followed by AgrP, which is headed by the overt agreement marker *-o*. Following Alexiadou (2001), Birtić (2008) and Alexiadou, Iordăchioaia and Soare (2010), I will show that, in addition to the above functional projections, the ASNs in Croatian also include NumP, ClassP and AspP, thus having the following structure: [DP [AgrP [NumP [ClassP[nP [AspP [VP]]]]]]]. The complexity of ASNs can not be accounted for by a simple NP-analysis. Therefore, I adopt an articulated structure of DP proposed by Ihsane & Puskás (2001), where the left periphery of

<sup>2</sup> Exception: the indefinite quantifiers *puno* (*a lot / much / many*) and *malo* (*little*) take, due to their scalar nature, the comparative and superlative forms analogous to their English counterparts (*puno, više, najviše* (*much, more, the most*) / *malo, manje, najmanje* (*little, less, the least*)).

DP contains the projections TopP (realizing the feature [+/-specific]), the projection DefP (hosting the feature [+/-definite]) and the FocP, to which emphasized elements can move. The postulation of a split-DP for Croatian nominals allows for the explanation of word order variations within the DP, where any deviation from the neutral word order involves the emphasis of the moved element. Besides, it also captures the definiteness/specificity features of the nominal constructions of the type *neki Markovi prijatelji* 'some Marco's friends', which is [+definite], but [-specific].

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# On Russian Wh- Echo Questions

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It is well known that crosslinguistically echo questions (EQs) present considerable challenges to standard theories of syntax of non-EQs since they appear to contradict general claims about question formation. This paper presents some novel facts concerning the syntax of Russian *wh*-EQs and provides an analysis that accounts for their key syntactic features and also sheds light on the behavior of non-echo *wh*-interrogatives.

There is no unanimity among researchers as to whether or not Russian *wh*-phrases undergo [wh]-driven movement. On the one hand, fronting of a *wh*-word is obligatory both in single, (1), and multiple *wh*-questions, (2), which can be taken as evidence that Russian is a normal *wh*-movement language (Zavitnevich 2005). On the other, it was claimed that Russian does not exhibit Superiority effects in multiple questions, as in (2a,b), therefore the driving force of *wh*-fronting is of a different nature and could be analyzed as focus movement (Stepanov 1998, Bošković 2002).

- (1) a. Čto kupil otec?  
what.ACC bought father  
'What did the father buy?'  
b. \*Otec kupil čto?  
father bought what.ACC
- (2) a. Kto kogo poceloval? NOM > ACC  
who.NOM who.ACC kissed  
'Who kissed whom?'  
b. Kogo kto poceloval? ACC > NOM  
c. \*Kto poceloval kogo?

Nevertheless, the assertion that Russian lacks Superiority effects is controversial empirically. For example, Rudin (1996) states that there are strong preferences reminiscent of Superiority; Stepanov (1998) notes that the sequence *čto* > *kto* 'what<sub>ACC</sub> > who<sub>NOM</sub>' is strongly ungrammatical, and Meyer (2004) reports the existence of a general preference for the linear order *wh* subject > *wh* object.

In this paper I follow slightly adapted Rudin's (1988) and Richards' (2001) analysis in considering that Russian is an IP-absorption language (Richards 1997, 2001) where multiple *wh*-fronting in non-echo *wh*-questions takes place by movement of the first *wh*-phrase to Spec,CP and by adjunction of the subsequent *wh*-constituents to multiple specifiers of IP, (3):<sup>1</sup>

- (3) [CP wh<sub>1</sub> C° [IP wh<sub>2</sub> wh<sub>3</sub> I°...]]

With respect to the extension of the obligatoriness of the *wh*-movement in Russian, it was claimed that *wh*-words must be fronted even in EQs (see Stepanov 1998). However, the results of controlled queries of informants designed for this work demonstrate that (1b) and (2c), with a *wh*-word in situ, are bad only on the true question reading, but they are perfectly acceptable on the echo reading, when the question is pronounced in immediate response to an utterance (U) to

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<sup>1</sup> Notice that this idea can be transformed into Bošković's (2002) analysis, under which only the first *wh*-phrase undergoes [wh]-driven movement to Spec,CP, the rest of the *wh*-constituents being subject to focus movement to some lower position, AgrP or FocP.

request for repetition or to express surprise, as in (4). (Notice that in (4b) *čto* ‘what’ is an echo *wh*-phrase, accompanied by emphatic stress, while *kto* ‘who’ proceeds from the original U.)

- (4) a. U: Kto kupil cvety?  
           who.NOM bought flowers  
           ‘Who bought the flowers?’  
    b. EQ: Kto kupil ČTO?  
           who.NOM bought what.ACC  
    c. R: Cvety.  
           flowers  
    d. R: Kto kupil CVETY.↓  
           who.NOM bought flowers  
    e. R: \*Mama./\*Mama kupila cvety.  
           mother/ mother bought flowers

Interestingly, contrary to a normal multiple *wh*-question, (2), where a proper response entails giving values for each *wh*-phrase, in EQ (4b) only *čto* ‘what’ (but not the *wh*-phrase *kto* ‘who’ from the original U) receives root scope. Thus, the only viable responses (R) to (4b) are (4c) and (4d) (notice that the latter, contrary to the U in (4a), can not be pronounced with an interrogative fall-rise intonation and the value assigned to the echo *wh*-word from (4b) is focused).

I will also argue that an echo *wh*-phrase, since its value has been explicitly given in the previous discourse (i.e., the set of potential referents of the *wh*-phrase is restricted to only one element, and both speaker and hearer know that, although the latter ignores its value), is some kind of a D-linked constituent and as such can remain in situ (see Pesetsky 1987). Actually, with respect to multiple questions containing an echo *wh*-word, that is the only option in languages like English, where just one *wh*-phrase moves, as in (5).

- (5) a. U: Who ate the worms?  
       b. EQ: Who ate WHAT?  
       c. EQ: \*Who WHAT ate?  
       d. EQ: \*WHAT did who eat?

Nevertheless, in multiple *wh*-fronting languages like Russian, an echo *wh*-element, apart from remaining in situ, can optionally undergo movement, as shown in (6) and (7), but, strikingly, it can not end up higher than the true *wh*-word (or *wh*-words, as in (7)) inherited from the original U, nor intervene between them, as in (7d,e). Notice also that the ungrammaticality of (6d) and (7d,e) has nothing to do with Superiority effects.

- (6) a. Čto skazal Bartolo?  
           what.ACC said Bartolo.NOM  
           ‘What did Bartolo say?’  
    b. Čto skazal KTO?  
           what.ACC said who.NOM  
    c. Čto KTO skazal?  
    d. \*KTO čto skazal?
- (7) a. Čto komu podaril Bartolo?  
           what.ACC who.DAT gave Bartolo.NOM  
           ‘What did Bartolo give to whom?’  
    b. Čto komu podaril KTO?  
    c. Čto komu KTO podaril?  
    d. \*Čto KTO komu podaril?  
    e. \*KTO čto komu podaril?

First, following Sobin’s (2010) analysis, I will hypothesize that the requisite root scope only for echo *wh*-phrases, as shown in (4), can be accounted for in terms of independently necessary scope assignment mechanisms and a superior complementizer  $C_{EQ}$ , with its unique feature composition, which takes an echoed CP structure of a U (where all true *wh*-phrases have already been fronted) as its complement and binds an EQ-introduced *wh*-expression, as in (8):

- (8) [ $C_{PEQ}$   $C_{EQ}$  [ $C_{PWH}$  C .....  $wh_{EQ}$ ]]

To account for the linear word order in sentences such as in (6/7), I will argue that the derivation of an EQ has two stages. First all *wh*-words of the U undergo movement: the first U's *wh*-phrase moves to Spec,CP<sub>WH</sub> and the rest of the *wh*-constituents, if present, are adjoined to IP, as in (3). Following Richards (1997, 2001), I will claim that in Russian, as an IP-absorption language, an IP projection has multiple specifiers, but CP has only one (see also Pesetsky's (2000) C<sub>mult-spec</sub> vs. C<sub>1-spec</sub> distinction.). Given that the Spec,CP<sub>WH</sub> is already filled with the first *wh*-phrase of the U, the further *wh*-movement of an echo *wh*-phrase past that specifier position to the superior CP<sub>EQ</sub> is blocked (assuming that the *Extension Condition* regulates the application of (Internal) Merge; see Chomsky 1993, 1995). Hence the ungrammaticality of (6d) and (7e).

I will also explore the possibility that echo *wh*-phrases, apart from bearing [wh] feature, are associated with [focus] and, among other types of focused constituents, in Russian can be licensed in a clause-final position (see Neeleman & Titov 2009 for non-*wh* focused constituents). But then, after being bound in situ by the superior C<sub>EQ</sub>, echo *wh*-phrases have two different options in Russian (and other multiple *wh*-fronting languages): (i) being discourse given, they can remain in situ, or (ii) undergo focus movement ending up in some lower than CP position.

In sum, this paper puts forward an analysis of Russian EQs as a double-CP-structure phenomenon, whereby echo *wh*-phrases are scope-bound in situ by a superior C<sub>EQ</sub> and can undergo subsequent focus-driven movement (Russian being a multiple *wh*-fronting language).

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# Acquisition of definiteness and specificity in L2 Russian

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Challenging the current parameter-resetting approach for its descriptive inadequacy, Lardiere (2009) argues that the second language (L2) learning task has been oversimplified by this approach as selecting features from an inventory of Universal Grammar (UG). In other words, simple feature selection cannot adequately describe the complexities of the mechanisms underlying L2 acquisition. Instead, she suggests an alternative approach to L2 acquisition by proposing the Feature Re-assembly Hypothesis. According to this hypothesis, the biggest L2 learning task is not resetting parameters by selecting features from UG but reconfiguring, or remapping, features from the way they are represented in the first language (L1) into new formal configurations in the L2. This means that even if the learner's L1 and L2 have selected the same feature (i.e., the same parameter value without any resetting required), they may differ as to how these features are morphologically represented and assembled into lexical items.

Building on the Feature Re-assembly Hypothesis, Slabakova (2009) makes a prediction that mapping overtly realized features in the L1 onto contextually expressed features in the L2 will carry a greater difficulty than re-assembling features that show the reverse pattern (covert→overt feature realizations). Based on the predictions of these two proposals, the present study examines the degrees of difficulty in remapping of the covert feature [definite] and the overt feature [specific] in Russian by English-speaking learners whose L1 marks definiteness with overt articles and specificity through context.

In Russian, the feature [definite] is encoded through context, and often by word order changes (e.g., *malčik spit* [+definite] 'the boy sleeps'; *spit malčik* [-definite], 'a boy sleeps'); while the feature [specific] can be realized overtly with indefinite determiners (known as specificity markers) (e.g., *Ivan xotel kupit' kakoj'-to dom* 'Ivan wanted to buy a [specific] house'; *Ivan xotel kupit' kakoj'-nibud' dom* 'Ivan wanted to buy a/any [non-specific] house'). In English, on the other hand, the feature [definite] is marked overtly by articles (e.g., *a boy* [-def]/*the boy* [+def]), whereas the feature [specific] can be determined only by context (e.g., *John wanted to buy a house* [±specific]). That is, L1 English learners have to remap their overt [definite] realization onto a contextual realization in L2 Russian (which constitutes overt to covert mapping). With respect to the feature [specific], L1 English learners have to go from the feature marked covertly in their L1 to the feature encoded overtly in the L2 (covert to overt realization). Therefore, we predicted that the feature [specific] would be acquired earlier than the feature [definite], and rate of acquisition could be reflected in differential accuracy for different proficiency groups.

**Methodology:** Participants in this study include English-speaking learners of Russian at the intermediate (n=36) and advanced levels (n=9) as well as native Russian speakers as controls (n=8). A contextualized acceptability judgment task was used (comprising 24 token items and 34 fillers). The subjects read short passages (in English) and rated target sentences (in Russian) as (un)acceptable descriptions of the stories on a 5-point scale.

**Findings:** There are no significant differences among native speakers, advanced and intermediate-level learners in recognizing the specific and non-specific interpretations encoded overtly by specificity markers. As for the definite and indefinite reading expressed covertly by

word order, there are significant differences between the intermediate learners and the native controls ( $\alpha=0.05$ ,  $p < 0.005$ ). The advanced-level learners demonstrated native-like knowledge, i.e., there were no statistically significant differences between the advanced-level group and the native controls. Table 1 gives converted accuracy scores, where 1 stands for inaccurate (unexpected) performance and 5 stands for accurate performance (no matter whether rejection or acceptance of the test sentence). The only mean score that is significantly different from the rest of the scores is the one marked with two stars \*\*.

Table 1. Accuracy scores per participant group and condition

	[+specific] contexts	[-specific] contexts	[+definite] Object NP	[+definite] Subject NP
Intermediate (n=36)	4.32	3.79	3.95	2.07**
Advanced (n=9)	4.83	4.74	4.43	3.78
Native (n=8)	4.97	4.91	4.57	3.72

Conclusions: Our data indicate that the feature [specific], whose value is overtly marked, is acquired earlier than the feature [definite], whose value needs to be supplied covertly by context. These findings support Slabakova's proposal on degrees of difficulty in feature acquisition as well as Lardiere's approach to feature re-assembly in L2 acquisition. The present study investigates the L2 acquisition of nominal features [definite] and [specific] in Russian by L1 English learners whose L1 encodes those features differently. Thus, our findings will provide new insights into the effects of native language morphology on L2 feature acquisition, which can expand our understanding of the L2 acquisition mechanisms.

Sample test items for word order and definiteness

Condition A: [+definite ] Object NP (OVS should be accepted) (n=6)

(1) Oleg and his brothers Sergei and Aleksei always help their mom make dinner. Today they made mushroom soup, baked potatoes and beet salad. When their dad came home and tried the soup, he asked: kto svaril takoj' vkusnij' sup? ('Who made such delicious soup?')

- a. Sup svaril Oleg. [ 1 2 3 4 **5**]  
 Soup boiled Oleg ('Oleg made the soup.') [I don't know]
- b. Ego svaril Oleg [ 1 2 3 4 **5**]  
 It boiled Oleg ('Oleg made it.') [I don't know]

Condition B: [+definite] subject NP (OVS should be rejected) (n=6)

(2) Oleg, Masha and I are close friends. We grew up together. I know Masha likes Oleg a lot but Oleg likes Sveta who transferred to our school last week. Yesterday Oleg told Masha that he was in love with someone else. Masha got upset and called me last night and asked: Kogo ljubit Oleg? ('Who does Oleg love?')

- a. Noven'kuju studentku ljubit Oleg. [**1** 2 3 4 5 ]

- New student love Oleg ('Oleg loves a [-def] new student.') [I don't know]
- b. Noven'kuju studentku ljubiti on  
New student love he ('He loves a [-def] new student.') [1 2 3 4 5]  
[I don't know]

Sample test items for indefinite determiners and specificity

Condition A: [+specific] context (n=6)

- (3) My brother Leo wants to borrow money from me. He says he saw a nice car at a dealership last week. He already has two cars and I don't think his wife will be happy if I lend him money.
- a. Moj' brat xočet kupit' kakuju-to mašinu. [+spec] [ 1 2 3 4 5 ]  
My brother wants buy wh-to car [I don't know]
- b. Moj' brat xočet kupit' kakuju-nibud' mašinu. [-spec] [ 1 2 3 4 5 ]  
My brother wants buy wh-nibud' car [I don't know]  
both: My brother wants to buy a car.

Condition B: [-specific] context (n=6)

- (4) My son Sasha is turning six tomorrow. He asked me if I could get him a pony. He told me that it didn't have to be an expensive pony and he would not care if the pony is white, black or brown. I don't know where he is going to keep his pony if I get him one. We have a small apartment.
- a. Saša xočet kakogo-to poni. [+spec] [ 1 2 3 4 5 ]  
Sasha wants wh-to pony. [I don't know]
- b. Saša xočet kakogo-nibud' poni. [-spec] [ 1 2 3 4 5 ]  
Sasha wants wh-nibud' pony. [I don't know]  
both: Sasha wants a pony.

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# What do we count with numerals? Semantic analysis of Czech kind-denoting and group-denoting NPs

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I present novel data showing that (i) derivational morphology of Czech displays very clearly some of the shifting operators postulated in the plurality (Landman 2000 a.o.) and kind-oriented semantic frameworks (Chierchia 1998 a.o.), and that (ii) some of the distributional constraints on Czech numeral/noun combinations (see the section **Puzzle**) emerge very neatly from the interaction of the shifting operators with the lattice-theoretical description of numerals and grammatical number. The crucial piece of evidence comes from derivational morphology processes in Czech, namely from various classes of numerals.

**Proposal** Czech has a productive system of a semantically driven derivational morphology for numerals. I will examine three classes of numerals: numerals with the suffix *-je*, numerals with the suffix *-ice* and numerals with the suffix *-jí*. I model the semantic contribution of the suffixes in the plurality framework of Landman (1998, 2000). Crucially, (i) the numerals with the suffix *-je* count groups or sums in the denotation of the noun which the numeral modifies; (ii) the *-ice* numerals count atoms in the denotation of the noun and the result is interpreted as group-atom (formally through  $\hat{\uparrow}$ : Landman's group-forming operator); (iii) the *-jí* numerals count sub-kinds in the denotation of the noun (formally through  $\hat{\phantom{x}}$  – Chierchia's kind-forming operator).

The formalizations predict all the important semantic properties of the discussed sentences: (1a) with the *-je* numeral can be interpreted either distributively – the NP is interpreted as denoting sum – (two events of bringing one bunch of keys) or collectively – the NP is interpreted as denoting group (one event of bringing two bunches of keys); the number in the numeral count groups/sums, not atoms constituting the groups/sums, the number of atoms constituting the groups/sums is arbitrary. (1b) with the *-ice* numeral can be interpreted only collectively: the numeral counts atoms in the denotation of the group-atom, the group-atom becomes then argument of the predicate, there is no distributive reading of the sentence. (1c) with the suffix *-jí* can be interpreted either as (1c') – distributively or (1c'') – collectively: in any case there are two instantiations (the NP is in the scope of the episodic predicate) of the sub-kinds of keys and the instantiations are as as sums or groups arguments of the predicate.

- (1) a. Petr přinesl dvo-**je** klíče.  
'Petr brought two bunches of keys.'  
a'.  $\exists x \in *KEY: |\hat{\uparrow}(x)|=2 \wedge \forall a \in AT(x): \exists e \in BRING: Ag(e) = PETR \wedge Th(e) = x$   
a''.  $\exists e \in BRING: Ag(e) = Petr \wedge \exists y \in *KEY: |\hat{\uparrow}(y)|=2 \wedge Th(e) = \hat{\uparrow}(y)$
- b. Petr přinesl dvoj-**ici** klíčů.  
'Petr brought two keys. (group/sum)'  
b'.  $\exists e \in BRING: Ag(e) = Petr \wedge \exists y \in *KEY: |y|=2 \wedge Th(e) = \hat{\uparrow}(y)$
- c. Petr přinesl dvo-**jí** klíče.  
'Petr brought two kinds of keys.'  
c'.  $\exists x \exists x^k \in KEY-KIND: \mathbf{R}(x, x^k) \wedge |x|=2 \wedge \forall a \in AT(x): \exists e \in BRING: Ag(e) = PETR \wedge Th(e) = x$   
c''.  $\exists e \in BRING: Ag(e) = Petr \wedge \exists x \exists x^k \in KEY-KIND: \mathbf{R}(x, x^k) \wedge |x|=2 \wedge Th(e) = \hat{\uparrow}(x)$

The crucial distinction between (1a) and (1c) – the distinction between *-je* numerals and *-jí* numerals) is the identity constraint: (1c) must mean that the two bunches of keys are different which stems from the different sub-kinds interpretation of the *-jí* suffix, the bunches in (1a) can be identical. The non-identity constraint observable with *-jí* numerals follows from the disjointness condition for kinds (see Wilkinson 1995). The disjointness condition states that for any object it isn't possible for the object to belong to two different sub-kinds – formalization is in (2). Because *-jí* numerals count over sub-kinds, it follows that the counted objects cannot be identical (otherwise the disjointness condition would be violated). The sub-kind-denoting nature of *-jí* numerals is corroborated by (3) – (3a) with *-je* numerals and *-ice* numerals allow identity of counted objects, that shows that these numerals don't refer necessarily to kinds/sub-kinds, otherwise the identity of counted objects wouldn't be possible. (3b) shows that assertion of the identity of the counted objects leads to the unacceptability of the sentence with *-jí* numerals which I take as the proof of the real sub-kind counting nature of *-jí* numerals.

$$(2) \quad \neg \exists x^0 \exists y^k \exists z^k [y^k \neq z^k \wedge S_0(y) \wedge S_0(z) \wedge \mathbf{R}'(x,y) \wedge \mathbf{R}'(x,z)]$$

- (3) a. Petr přinesl troje klíče/trojici klíčů a všechny klíče byly stejné.  
'Petr brought three bunches of keys and all the keys were identical.'  
b. Petr přinesl trojí klíče # a všechny klíče byly stejné.  
'Petr brought three kinds of keys # and all the keys were identical.'

The whole analysis has some interesting consequences which are empirically right: because the suffix *-ice* is a morphological reflex of the group-forming operator  $\hat{\uparrow}$ : (i) *-ice* numerals cannot occur with unambiguously distributive predicates like in (4); (ii) *-ice* numerals cannot occur with cumulative predicates – see (5) – the reason is that cumulative readings are distributive reading without scoping mechanism which would make the pluralities dependent on each other; (iii) for predicates ambiguous between collective/cumulative and distributive readings *-ice* numerals disambiguate and pick up only the collective reading with usual collective implications – see (6) and (7).

- (4) #Pět-**ice** chlapců má křivý nos.  
'(Group of) five boys has a wry nose.'
- (5) #Pět-**ice** žen porodila trojici dětí.  
'(Group of) five women gave birth to (group of) three children.'
- (6) Šest-**ice** chlapců se dotkla stropu.  
'(Group of) six boys touched the ceiling.' = only collective interpretation
- (7) a. Troj-**ice** chlapců napsala dopis. = only one letter written  
'(Group of) three boys wrote a letter.'  
b. Tři chlapci napsali dopis. = either 1 (collective) or 3 (distributive) letters  
'Three boys wrote a letter.'

**Puzzle** I will discuss a puzzle concerning the Czech numerals: Czech doesn't allow basic numerals to count pluralia tantum like *kalhoty* or *nůžky* ('trousers' and 'scissors') – see (8a). The *-je* numerals must be used for that purpose (*-jí* numerals are grammatical there also), there is not such a restriction in English as it's clear from the translation. I argue that the

reason for this restriction lies in the mass-noun algebraic structure of pluralia tantum in Czech – the Czech pluralia tantum lack singular counterpart which leads to the lack of their obligatory sum interpretation. They can denote atoms and sums while ordinary plural count nouns must in majority of contexts denote sums only. I assume that for ordinary plural count nouns this ban on atom interpretation is achieved through the maximize presupposition strategy, see Sauerland 2003 a.o. And because ordinary numerals are incompatible with mass nouns in most language (*\*two furnitures*), also pluralia tantum are ungrammatical with Czech ordinary numerals. The reason why *-je* numerals can modify the pluralia tantum is then the inner opacity of the groups which the *-je* numerals count (see the example (1a) and its interpretation). The reason why *-jí* numerals are grammatical with pluralia tantum is similar: *-jí* numerals count sub-kinds and are not sensitive to the inner structure of the plurality constituting the kinds (supremums in the semi-lattices).

As an anonymous reviewer of this abstract pointed out, in German it's possible to count even mass nouns – expressions as *zwei Weine* are grammatical and are interpreted as counting sub-kinds in the denotation of the wine kind. The ban on counting whole semi-lattices (atoms and sums) with basic numerals is not general then. Why do Czech pluralia tantum not allow for such a kind-level interpretation? I assume again that some competition story can explain this: because Czech has marked class of numerals for sub-kinds counting (*-jí* numerals), speakers must use it for sub-kinds counting and consequently basic numerals are ungrammatical for mass nouns even in the sub-kind interpretation. Because German lacks such specialized class of numerals, it allows sub-kind counting even with basic numerals.

- (8) Petr koupil \*dvě/dvo-**je**/dvo-**jí** kalhoty/nůžky.  
'Petr bought two/two bunches/two kinds of trousers/scissors.'

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# Non-canonical infinitival passives in Czech

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**Problem** The example in (1) is ambiguous in a rather unexpected way. (1a) is the run-of-the-mill reading in which the infinitival subject is interpreted as *Marie*, the matrix subject. In (1b), however, it is the object of the infinitival clause that is interpreted as *Marie*.

- (1) Marie        potřebuje pomoci.  
Marie:NOM needs    help:INF  
a. Marie needs to help (somebody).  
b. It is desirable that Marie be helped.

An analogous pattern is illustrated in (2), with the difference that the unexpected reading, (2b), is the only grammatical one. (2a) is ungrammatical due to an unsaturated subcategorization requirement of the embedded verb. Apart from *potřebovat* ‘need’, two more control verbs—*chtít* ‘want’ and *zasloužit si* ‘deserve’—allow for this unexpected constructions in which an object is seemingly controlled.

- (2) Marie        potřebuje umýt.  
Marie:NOM needs    wash:INF  
a. \*Marie needs to wash.  
b. It is desirable that Marie get washed.

**Relevance** The structures (1)/(2) under their (b)-readings are problematic for standard theories of control. The control-through-PRO theories (e.g. Landau 2001) would have to give up the idea of PRO being caseless. This is because the controlled arguments in (1b) and (2b) would normally bear dative and accusative, respectively, both of which infinitives can assign. The control-as-movement theories (e.g. Hornstein 1999), though compatible with the idea of “controlled” DPs bearing case, would predict that the matrix subject *Marie* surfaces with dative or accusative, rather than nominative. The very same objection applies to a raising-style analysis. Besides, this movement should be blocked due to intervention: the argument moves across the unexpressed subject of the infinitival clause. To sum up, (1b) and (2b) pose a challenge to the theories of control and/or raising, which, as far as we know, has not been addressed before. In fact, to the best of our knowledge, these constructions have only been discussed in traditional grammar and never in generative frameworks.

**Proposal** We argue that the structures in (1)/(2) under their (b)-readings are hidden non-canonical passives and call them **non-canonical infinitival passives** (NIP), accordingly. NIPs are *passives* because they can be modified by agentive *by*-phrases, such as *někým mladším* ‘somebody younger:INSTR’ in (3).

- (3) Ta kniha        potřebuje přeložit        někým        mladším.  
that book:NOM needs    translate:INF someone:INSTR younger:INSTR  
‘This books needs to be translated by someone younger.’

However, unlike passives they lack the agent-introducing functional structure (i.e. the agentive little *v*), as witnessed by the unacceptability of agent-oriented adverbs, as is *záměrně* ‘intentionally’ in (4).

- (4) Ta skladba potřebuje {?? záměrně} zahrát {?? záměrně} mnohem pomaleji.  
 that song needs intentionally play:INF intentionally much slower  
 ‘It is desirable to play this song intentionally much slower.’ (intended)

In this respect they are *non-canonical* passives—belonging to the same class as *get*-passives, which also lack an implicit external argument (Fox and Grodzinsky 1998, Alexiadou 2005). Treating (1)/(2) as NIPs also solves the problem for control and raising theories: the PRO/raised object does not receive case in the infinitival clause.

**Analysis** The subject of the NIPs in (1)/(2) (*Marie*) is base-generated in the internal argument position of the infinitive and its case-feature remains unchecked at that point. It undergoes raising to SpecTP of the infinitive—a case of passive A-movement—and subsequently is raised into the matrix, where it receives the nominative. That the matrix verb *potřebovat* ‘need’ (just like *zasloužit si* ‘deserve’) is indeed a raising verb (when selecting NIPs) is supported by the preservation of idiomatic readings, illustrated in (5).

- (5) Dvě mouchy { potřebují / si zaslouží } zabít jednou ranou.  
 two flies:NOM need / REFL deserve kill:INF one blow:INSTR  
 ‘It is desirable to kill two birds with one stone.’ (idiomatic reading present)

NIPs can also be embedded by a control verb, particularly *chtít* ‘want’, cf. (6).

- (6) #Dvě mouchy chtějí zabít jednou ranou.  
 two flies:NOM want kill:INF one blow:INSTR  
 ‘Two birds wanted to be killed with one stone.’ (idiomatic reading absent)

In that case, the nominative subject is base-generated in the matrix clause and the PRO in the infinitival clause undergoes the internal passive movement.

**Evidence from minimality** Since the infinitive-internal passive movement to SpecTP is triggered by a purely formal EPP (Bailyn 2004, Kučerová 2005), we predict a minimality effect—only the closest argument can satisfy the EPP, irrespective of its theta-role or “underlying” case-marking (notice that the NIP is indifferent to the “underlying” case-marking of the passivized constituent—*Marie* corresponds to a dative in (1), and an accusative in (2)). That this prediction is borne out is illustrated by the contrast in (7), where the external possessor *Lukáš* can be passivized in the presence of the direct object *auto* ‘car’, (7a), but the direct object can only be passivized in the absence of the structurally higher external possessor, (7b).

- (7) a. Lukáš potřebuje opravit auto zkušeným mechanikem.  
 L.:NOM needs repair:INF car:ACC experienced mechanic:INSTR  
 ‘Lukáš needs to get his car repaired by an experienced mechanic.’

- b. To auto potřebuje opravit (\* Lukášovi) zkušeným mechanikem.  
 that car:INF needs repair:INF L.:DAT experienced mechanic:INSTR  
 ‘That car needs to be repaired (for Lukáš) by an experienced mechanic’

Due to this property, NIP is a window into the VP structure. In particular, it provides strong support in favor of non-uniform treatments of double object constructions (supporting Dvořák 2010, contra Bailyn 1995), where in some cases the dative is structurally higher, (8), while in others the accusative is, (9).

(8) *vrátit* (‘return’) (**Dat**>**Acc**)

- a. Šéfka potřebuje vrátit půjčené peníze do deseti minut.  
 boss:NOM needs return:INF borrowed money:ACC to ten minutes  
 ‘It is desirable that the boss’ money be returned to her in ten minutes’
- b. \*Půjčené peníze potřebují vrátit šéfce.  
 borrowed money needs return:INF boss:DAT

(9) *podrobit* (‘put through’) (**Acc**>**Dat**)

- a. Jeho firma potřebuje podrobit kontrole.  
 his company:NOM needs put-through:INF control:DAT  
 ‘It is desirable that his company be screened.’
- b. \*Kontrola potřebuje podrobit jeho firmu.  
 control:NOM needs put-through:INF his company:ACC

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# The rise of an indefinite article: The case of Bulgarian *edin* and Russian *odin*

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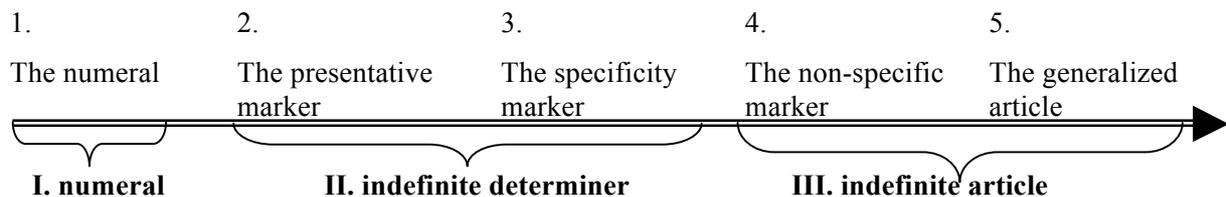
Although it has been assumed that Slavic languages have no indefinite articles, there are hints in the literature that the counterpart of *ONE* in Bulgarian and Russian can serve as markers of indefinite reference (cf. Padučeva 2004<sup>4</sup>, Ivanova and Koval' 1994). In example (1), *edin/odin* do not highlight the cardinality (the sentence is not understood as being an answer to “how many linguists did she marry last year”) but indicate indefinite reference.

- (1) a. Maša se omāži za *edin* lingvist. <Bulg.>  
b. Maša vyšla замуž za *odnogo* lingvista. <Russ.>  
'Masha married a linguist.'

The aim of this paper will be to examine the current status of *edin* in Bulgarian in comparison to *odin* in Russian. In particular, we want to answer the question as to which grammaticalization paths fit in with the present pattern in Bulgarian and Russian and which might be the outlines of any further development.

It has been assumed that the development of indefinite articles in languages of the world from numerals is a continuous process which goes through different stages. Givón (1981) distinguishes three stages: besides the stage of *numeral*, the stage of *indefinite determiner* and the stage of *indefinite article*. Heine (1997) suggests a more fine-grained view of the grammaticalization process of the numeral to the article: he distinguishes 5 stages, cf. the integrated scale of Heine/Givón in (2). Besides the diachronic view of the evolution, the implicational scale in (2) provides a synchronic view, in which we are interested in. On the synchronic view an indefiniteness marker at a given stage may have properties of all preceding stages, but not vice versa.

## (2) Grammaticalization stages on the integrated scale of Heine (1997) and Givón (1981)



Heine and Givón define the stages descriptively. We improve on Heine and Givón providing robust linguistic criteria and tests for every stage. On the stage of *the presentative marker* the indefinite determiner indicates the importance of the referent of the NP for the subsequent discourse. As linguistic indicator for this “importance” we assume anaphoric reference to this NP in the subsequent discourse. On the stage of *the specificity marker* the indefinite determiner indicates the identifiability of the referent by the speaker. This can be tested by adding continuations signaling identifiability. Moreover, specific indefinites exhibit special interaction with other components of the clause: they have wide scope with respect to all quantifiers and operators in the clause and exhibit an exceptional scope taking behavior in scope islands. This can be tested in contexts with quantifiers. On the next stage of its

development, the stage of *the non-specific marker*, the indefiniteness marker can be combined with non-referential NPs. Besides NPs with narrow scope in modal contexts, predicative and generic NPs belong to this type. On the terminal stage, the stage of *the generalized article*, the indefiniteness marker can be combined with all kinds of nouns, irrespective of whether they are count or mass.

We use these linguistic tests to identify the grammaticalization stage of *edin* and *odin* and show that *edin* is further in its development toward the indefinite article than *odin*. In particular, we show that *edin* as well as *odin* can serve as *presentative markers*, since the NP combined with it in examples from corpora is often taken up in the subsequent discourse. Moreover, *edin* as well as *odin* can serve as *specificity markers*. This is showed in the continuation test in (3), the contexts testing scope-taking behavior in (4) and the context testing the possibility of exceptional scope in (5). NPs without *edin/odin* cannot be used in the same way. The development of *odin* stops at this stage of the scale. As shown in examples (6-9) it cannot be used in other functions. *Edin*, however, goes further. It can combine with non-specific NPs of two types: generic subject-NPs and predicate NPs, cf. (6-7a). However, the combination of *edin* with predicate nouns is highly restricted: *edin* combines only with the so-called characterizing nouns such as *glupak* ‘fool’ triggering a pejorative connotation, thus it has the special function of a meaning shifter or intensifier here (Gorišneva 2009). The combination of *edin* with typical predicate nouns is not possible without meaning shifts, cf. (7b). The use of *edin* with generic and partly with predicate NPs suggests that *edin* has reached the stage of *the indefinite article*. However, its development to the indefinite article is not completed since it cannot be used with non-specific NPs under modal scope (8). *Edin* has also not reached the stage of *the generalized article*: it cannot be combined with mass nouns without meaning shifts. Mass nouns accompanied by *edin* obligatorily shift to count nouns, cf. (9).

- *Stage 3: Specificity marker*

#### Identifiability

- (3) a. Čete mi se *edno spisanie*. <Bulg> / Ja choču počitat’ *odin žurnal*. <Russ.>  
 ‘I would read a journal.’  
 b. Continuation compatible with (3a): ‘Namely the last number of Novo Vreme.’  
 d. Continuation not compatible with (3a): ‘Any journal would do.’

#### Wide scope

- (4) a. Vseki student v tozi universitet se vāzchištava ot *edin profesor*. <Bulg> /  
 Každyj stident ètogo universiteta voschiščaetsja *odnim professorom*. .<Russ.>  
 ‘Every student of this university admires a professor.’  
 b. Continuation compatible with (4a): namely Professor Simpson.  
 wide scope: NP > ∇  
 c. Continuation not compatible with (4a): Peter – Professor Schmidt, Anna – Professor Simpson, ...  
 narrow scope: ∇ > NP

#### Exceptional wide scope

- (5) a. Marija pročete vsjaka kniga, kojato *edin profesor* i preporuča. <Bulg> /  
 Marija pročitala každuju knigu, kotoruju rekomendoval *odin profesor*. <Russ.>  
 ‘Mary read very book, which a professor has recommended.’  
 b. Reading not available for (5a): There were different professors.

narrow scope:  $\forall > NP$

- c. Reading available for (5a): This was only one professor.  
(exceptional) wide scope reading:  $NP > \forall$

- *Stage 4: Non-specificity marker*

**Generic use**

- (6) \*(*Edin*) *džentälmen* vinagi otvarja vrata na damite. <Bulg> /  
(\**odin*) *džentel'men* vseгда otvarjaet dveri damam. <Russ.>  
'A gentleman always opens doors for ladies.'

**Predicate use**

- (7) a. Ivan e *edin glupak!* <Bulg> / Ivan (\**odin*) *durak!* .<Russ.>  
'Ivan is such a fool!'  
b. Toj stana (\**edin*) student. <Bulg> / On stal (\**odnim*) *studentom.* <Russ.>  
'He became a student.' (Ivanova and Koval' 1994)

**Only wide scope in modal contexts**

- (8) Iskam da gledam *edin film* utre. <Bulg> /  
My sobiraemsja posmotret' zavtra *odin fil'm.* <Russ.>  
'We are going to see a certain movie tomorrow.'

- *Stage 5: Generalized article*

**Incompatibility with mass nouns**

- (9) Az piech *edin čaj.* <Bulg> / Ja vypil *odin čaj.* <Russ.>  
'I drank one (cup of) tea.'

To conclude, the numerals *edin* and *odin* have developed some functions of indefiniteness markers. *Edin* is further in its development since it can be used not only with referential nouns but with some types of non-referential nouns.

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# (A)symmetric Correction Markers in English, Russian, Polish, and Japanese

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Although the semantics and pragmatics of conjunctions *and/but* in English and *i/a/no* in Russian has received a lot of attention in the literature (Foolen, 1991; Blakemore and Carston, 1999; Kreidlin and Paducheva, 1974; Sannikov, 1989), one interesting aspect of their functioning has been largely neglected. Both the English *but* and the Russian *a* can express *correction* in the sense that one conjunct of *but/a* explicitly negates some contextually salient proposition, e.g. *John isn't going to Paris* in (1), and the other “replaces” the “wrong” part of that proposition by a “correct” element *Berlin*. However, whereas Russian *a* shows symmetric behaviour in its corrective uses, that is, negation can occur both in the first and in the second conjunct, cf. (2a) and (2b), and this does not affect the corrective interpretation of the sentences, the English *but* is asymmetric in the sense that it is interpreted correctively only if the first conjunct is negated. If negation occurs in the second conjunct, as in (3a), the interpretation is not that John went to Berlin “instead of” going to Paris (replacive correction), but rather that John went only to Berlin while he was expected to go to both places, or that going to Berlin somehow has a lower value than going to Paris. In both cases, the second conjunct of *but* has a restrictive rather than replacive function, and therefore does not instantiate correction (Umbach, 2005). Most interestingly, it appears that a better way to express replacive correction in English in the positive-negative order is to use *and* instead of *but* (3b), or leave out the conjunction altogether (3c).

(1) John *isn't* going to Paris, *but* to Berlin.

(2) a.	Oleg edet	<i>ne</i>	v	Pariž,	<i>a</i>	v	Berlin	<i>Oleg isn't going to Paris,</i>
	Oleg is going	not	to	Paris	CORR	to	Berlin	<i>but to Berlin.</i>
b.	Oleg edet	v	Berlin,	<i>a</i>	<i>ne</i>	v	Pariž	<i>Oleg is going to Berlin,</i>
	Oleg is going	to	Berlin	CORR	not	to	Paris	<i>and not to Paris.</i>

(3) a. John is going to Berlin, *but not* to Paris.  
b. John is going to Berlin, *and not* to Paris.  
c. John is going to Berlin, *not* to Paris.

The first goal of this study was to substantiate these rather subtle intuitions in a more rigorous empirical setting. To this end, we searched for and analysed corrective uses of *a* in the Russian original texts of the RuN-Euro Corpus, a parallel corpus of (mostly) literary prose (<http://www.nevmenandr.net/run/index.php>), and studied their English translations. Our expectation that *a* would be most frequently translated by *but* with the negative-positive order of conjuncts (2a), but very rarely so with the positive-negative order (2b), was confirmed. With the negative-positive order (362 occurrences in total), *a* was translated as *but* in 78.7%, as *and* in 3.9%, and as zero

in 7.2% of the times. With the positive-negative order (56 in total), the respective frequencies in translations were: 8.9% for *but*, 44.6% for *and*, and 26.8% for zero.

In the second part, we compare two possible theoretical explanations for this difference between Russian and English. The first one is based on a syntactic difference. It is well known that a contrastive reading is preferred to a replacive correction reading if *but* introduces a full clause (4) rather than a phrase (1): (4) is very much like (3a) except that here the denied expectation is rather that John neither went to Paris nor to Berlin, or there is an assumption that going to Berlin has a higher value than going to Paris. Assuming that the corrective *but* is restricted to phrasal coordination (though see Vicente (2010) for counterarguments), one might argue that negation in the second conjunct in (3a) indicates that this is underlyingly a clause, and therefore corrective *but* is excluded. In contrast, Russian is much more liberal with the so-called constituent negation: out of context (5) is more acceptable than its literal English gloss. So there is a case for saying that *ne v Pariž* in (2b) is a phrase, so even if corrective *a* in Russian were restricted to phrasal coordination, like *but*, it would not be ruled out here.

(4) John isn't going to Paris, *but* he is going to Berlin.

(5) Oleg edet [ *ne v Pariž.* ] *It is not Paris that Oleg is going to.*  
Oleg is going not to Paris

The other explanation is semantic and is based on the observation that *but* shows an asymmetry between its conjuncts also in its argumentative uses, cf. (6): the second conjunct “wins” the argument. The same holds for the Russian *no*, and adversative conjunctions in many other languages (Anscombe and Ducrot, 1977; Sannikov, 1989), whereas both the English *and* and the Russian *a* are symmetric in this sense and can be used instead of *but/no* in cases like (7), to indicate that there is no winning argument, it is the contradiction itself and not one of the conjuncts that is essential for drawing further conclusions (Sannikov, 1989; Blakemore and Carston, 1999).

(6) a. Paul is a linguist, *but* he can't spell. [So we shouldn't hire him.]  
b. Paul can't spell, *but* he's a linguist. [So we should hire him.]

(7) Paul is a linguist, *and* he can't spell!

The asymmetry of “*but*-like” conjunctions can be explained assuming that their second conjunct has to resolve the current question under dispute (Jasinskaja and Zeevat, 2009). In (6), the question is whether we should hire Paul; in corrections (1) and (3) it is the question *Where is John going?* The answer *not to Paris* does not resolve this question as it excludes only one alternative, leaving it open whether John is going to Berlin, Madrid, Istanbul, etc., while the positive conjunct *to Berlin* does (under exhaustive interpretation, see Schulz and van Rooij, 2006, on the exhaustivization of positive vs. negative answers). Therefore the negative conjunct must appear first, and the positive second in the corrective uses of *but*. Since Russian happens to use *a*, a symmetrical, “*and*-like” conjunction to express correction, rather than “*but*-like” *no*, it does not impose the same kind of constraints on the order of the negative and the positive conjunct.

Further cross-linguistic evidence (collected from a number of informants, no corpus study was carried out) establishes a clear preference for the semantic explanation over the syntactic one. The Polish constituent negation behaves rather like its Russian counterpart (Błaszczak, 2001), but Polish differs from Russian in that it marks correction with a “*but*-like” conjunction *ale* (among other options), which appears to be restricted to the negative-positive order like the English *but*, and has to be replaced by e.g. *a* (otherwise close to the Russian *a*) in the reverse order to retain the corrective interpretation (Adamíková, 2004), cf. (8). The reversed version of (8a) with *ale* is less acceptable, it becomes better if the verb is repeated and verbal negation is

used, in which case it receives a contrastive interpretation like the English (3a).

- (8) a. Peter pojechał *nie* do Paryża *ale* do Berlina *Peter didn't go to Paris,*  
Peter went not to Paris but to Berlin *but to Berlin.*  
b. Peter pojechał do Berlina *a* *nie* do Paryża *Peter went to Berlin,*  
Peter went to Berlin and not to Paris *and not to Paris.*

In contrast, Japanese has nothing like the Russian constituent negation, negative morphology can only appear on the verb or the copula. However, like in Russian, in Japanese correction is expressed by an symmetric marker, the converb marker *-te/-de* (Mauri, 2008), which in its other, non-corrective uses covers a range of functions close to that of the English clausal *and*. If both the negative-positive and the positive-negative order is possible for independent syntactic reasons, the order does not affect the corrective interpretation, just like in the Russian example (2), i.e. the same marker is used to express correction in both orders:

- (9) a. tyumonsi-ta-no-wa koohii-de-wa-naku-te kootya-desu  
order-PRF-NOM-TOP coffee-COP-TOP-NEG-CORR tea-COP  
*What I ordered is not coffee, but tea.*  
b. tyumonsi-ta-no-wa kootya-deat-te koohii-de-wa-nai  
order-PRF-NOM-TOP tea-COP-CORR coffee-COP-TOP-NEG  
*What I ordered is tee, and not coffee.*

If the syntactic explanation were right and the (a)symmetry of a correction marker had to do with the syntactic properties of negation, we would expect Polish to pattern with Russian, and Japanese with English. However, the observed pattern is exactly opposite of that: the Polish *ale* shows asymmetric behaviour like the English *but*, while the Russian *a* and the Japanese *-te/-de* are both symmetric. We conclude that the semantic explanation is correct: i.e. adversative (“*but-like*”) markers are asymmetric, while additive (“*and-like*”) markers are symmetric in their corrective uses.

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# Decausatives in a minimal theory of reflexive marking

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*Purpose.* Sentences with the reflexive marker (refl) in Slavic can get various interpretations (ranging from genuine Reflexive to Passive and Impersonal); among them is the so-called Decausative (Anticausative, Inchoative), cf. ex. (1b), where refl combines with originally transitive change-of-state (COS) verbs forming intransitive structures. The purpose of the paper is to propose an analysis of Decausatives within a minimal theory of refl (FJL 2010) assuming only two lexical types of refl to account for all refl uses across Slavic.

- (1) a. Mal'čik zakryl/zaper dver'. (Ru, adapted from Padučeva 2001)  
boy.nom close/bolt.past door.nom  
'The boy closed/bolted the door.'
- b. Dver' zakrylas' (ot poryva vetra /\*mal'čikom /\*nazlo /\*special'nym ključom).  
door.nom close.past.refl from gust wind boy.instr vexingly with a special key  
'The door closed (because of a gust of wind).' (by-phrase, agent-oriented adverb, controlled instrument impossible)
- c. \*Dver' zaperlas'.  
door.nom bolt.past.refl  
Intended meaning: 'The door got bolted.'

*Background.* Based on a two-level semantics (Bierwisch 1986, 2007, a.o.) distinguishing Semantic Form (SF) and Conceptual Structure (CS), we assume that Slavic refl always applies at the lexicon–syntax interface. It operates on the argument structure of the verb preventing the canonical realization of one of its arguments without removing it from the semantic representation. The proposed system, cf. FJL (2010), exploits lexical entries that are underspecified wrt which structural argument is affected by refl and which verb class it combines with. Different interpretations are not encoded in the lexical entry, but established at CS. However, to capture cross-Slavic variation wrt oblique and null realization of the affected argument, verb-class selection, etc., it is necessary to assume two types of refl. Argument blocking refl – refl 1, cf. (2) – makes an internal or external argument of a transitive verb an unbound SF-variable. Existential binding takes place at CS. With argument binding refl – refl 2, cf. (3) – the highest available argument variable of any predicate is bound already at SF by an arbitrary human operator. This excludes, e.g., semantic specification (oblique realization). Language specific complementary distribution of the two refls is captured by more or less restricted versions of the two refls – the a and b versions of (2) and (3).

- (2) a. refl 1:  $\lambda P (\lambda y)_{-\alpha} (\lambda x)_{\alpha} [P (y)_{-\alpha} z (x)_{\alpha}]$   
b. refl 1':  $\lambda P \lambda x [P z x]$
- (3) a. refl 2:  $\lambda P (\lambda y) OPz [P (y) z]$ ,  $OP \in \{Q_{arb-hum}, \lambda[-overt, arb-hum]\}$   
b. refl 2':  $\lambda P Q_{arb-hum}z [P z]$

*The issue with Decausatives.* The crucial problem with Decausatives is how to explain the absence – not only in syntax but also on the semantic level of representation – of the agent argument that is present in the causative counterpart, or, more generally, the lack of agentivity – as evidenced by the impossibility of a by-phrase, agent-oriented adverbs, or controlled instruments. Further issues are the status of optional Force phrases, cf. the PP in ex. (1b), and the lexical restrictions on Decausatives – more or less the same for all Slavic languages (see,

e.g., Padučeva 2003 on Ru): they are derived exclusively from COS verbs that allow for an unagentive reading, (1b) vs (1c).

*Previous proposals.* Standardly, Decausatives are derived from their agentive counterparts via refl-induced elimination of the external agent argument (cf., e.g., R&S 2005). Consequently, various types of refls inducing different operations such as elimination, absorption, etc., would have to be postulated. Approaches such as Dudchuk et al. (2009) are in conflict with standard assumptions on the correlation between morphological and syntactic/semantic complexity. They assume a non-causative root for both the Decausative and its agentive counterpart and argue that the predicate acquires the agentive component in the course of syntactic derivation, which, in a way, reverses the picture. The functional lexicon unnecessarily expands due to the inclusion of a whole set of various *v*-types. Accounts such as Alexiadou et al. (2006), Riv&Sav (2005), F&Riv (2008) rely on the distinction between Cause and Voice (two types of *v*-head) and the absence of Voice with Decausatives. However, the role of overt morphological/syntactic marking of Decausatives is either neglected (Alexiadou et al.), or various types of refl are postulated (F&Riv). Padučeva 2001, 2003 and Babby 1998 assume alternative lexical entries for predicates forming Decausatives – one with an external agent argument, the other without. Decausatives are derived from the unagentive verbal lexeme with a natural force/non-volitional causer argument. Padučeva – see already L&RH 1996 – assumes that the causer is the external argument blocked by refl and optionally realized by an oblique NP/PP. Babby claims that the causer is an internal argument marked with lexical case. However, there are facts suggesting that the oblique NP/PP is not an argument but an adverbial adjunct – these NPs/PPs are not available with all Decausatives and have variable morphosyntactic realization. Finally, approaches such as e.g., Koontz-Garboden 2009 and Chierchia 2004, derive Decausatives by analogy with genuine Reflexives, i.e. via identification of two arguments. This is in line with our account, however, we assume that identification is achieved at CS, not at the lexico–semantic level prior to syntactic insertion.

*Analysis.* We argue that with Decausatives, as with genuine Reflexives, refl affects the internal argument. Consequently, refl 1 applies, cf. the derivation in (4) for the sentence in (1b).

(4) Decausative: Application of refl 1 effects blocking of the internal argument

- a. refl 1:  $\lambda P \lambda x [P z x]$
- b.  $\lambda y \lambda x \lambda e [e \text{ INST } [[x \text{ CAUSE } e'] : [e' \text{ INST } [\text{BECOME NOT OPEN } y]]]]$   
[+/-vol.]
- c. a (b) resulting in:  
 $\lambda x \lambda e [e \text{ INST } [[x \text{ CAUSE } e'] : [e' \text{ INST } [\text{BECOME NOT OPEN } z]]]]$

The external argument of the Decausative is canonically realized as a nominative noun phrase referring to an inanimate entity. The blocked internal argument remains an unbound variable at SF (semantic parameter) and gets interpreted at CS as coreferential with the external argument. Thus, the referent is interpreted as bearing the theta roles of both the internal and the external argument. (For similar ideas developed in quite different theoretical frameworks see Szymańska & Śpiewak 1998 and Jabłońska 2007.) However in contrast to genuine Reflexives, with Decausatives the sortal properties of the subject preclude an interpretation as (volitional) agent. The event is conceptualized as non-agentive and caused (non-volitionally) by the patient itself. Evidence is provided by the ‘by itself’ test (Chierchia 2004), cf. (5). Underived unaccusative verbs fail the test, since they lack an external argument. Observe the contrast between (6b) and (6a).

- (5) Dver' zakrylas' sama (sobj). (Ru)  
 door.nom.f close.past.sg.f.refl by-itself.f refl.instr  
 'The door closed by itself.'
- (6) a. Samochód (sam) się spalił. (Po)  
 car.nom.m by-itself.m refl burn.past.sg.m  
 'The car burnt (by itself).'
- b. Samochód (\*sam) spłonał.  
 car.nom.m by-itself.m burn.past.sg.m  
 'The car burnt. ('by itself' impossible)

In our approach, predicates forming Decausatives are underspecified wrt the thematic role of the external argument: agent or non-volitional causer. This explains the lexical restriction on Decausatives – only predicates underspecified in this way can undergo Decausativization. An oblique realization of the affected argument is excluded with Decausatives in the same way as it is with genuine Reflexives – since the blocked argument is identified with another argument at CS, it cannot have an oblique realization. Optional oblique NPs/PPs expressing some kind of causing eventuality are analyzed as adverbial modifiers. No additional refl type is necessary for the derivation of Decausatives. Verbal entries need not be duplicated. Under-specification yields lexical economy.

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# SIE constructions in Polish

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1. This paper is concerned with the derivation and the function of the particle SIE in the following superficially similar constructions:

- (1) Czytało się dużo książek.  
read.3SG.NEUT SIE a lot of books.ACC  
'[One] read a lot of books.'
- (2) Marysi przyjemnie czytało się te książki.  
Marysia.DAT pleasantly read.3SG.NEUT SIE these books.ACC  
'Marysia read these books with pleasure.'

According to Dziwirek (1994), Rivero (2000, 2003) and Rivero et al. (2010), the sentence in (2) is derived from the sentence in (1). Dziwirek (1994) assumes the existence of a covert Dative nominal in (1), which, when it is overt, it yields the sentence in (2). For Rivero (2000, 2003, 2010), on the other hand, the Dative is not apart of the argument structure of the verb, but it is introduced by the Applicative Phrase which is merged above TP. The two analyses are problematic for a number of reasons.

2. Dziwirek's analysis fails to account for why covert Dative subject in (1) behaves differently from the overt Dative nominal in (2) with respect to a number of subjecthood tests (e.g. licencing agent oriented adverbials, participation in control relations). Secondly, it does not explain why the presence of the Dative nominal is contingent on the presence of a manner adverb. Thirdly, if it is assumed, as Dziwirek does, that the Dative contributes the human flavour to SIE and such there can only be one Dative nominal in a sentence, then an example such as in (3) is problematic.

- (3) Czytało się dzieciom książki.  
read.3SG.NEUT SIE children.DAT books.ACC  
'[One] read books to children.'

The sentence in (3) contains an overt Dative nominal, which suggests that a covert subject does not carry Dative case.

3. According to Rivero (2010), adverbs of manner are merged much higher, not in vP, but in a position from which they c-command the whole TP. If this is the case, they should be then analysed as factive adverbs, and one of the properties of factive adverbs is that they can occur outside the scope of negation and also outside the scope of the universal quantifier in the subject position. If this is the case, they should be then analysed as factive adverbs of the type illustrated by examples in (4).

- (4)a. Stupidly, Mary kissed John (adapted from Wyner 2008)  
b. Stupidly, Mary did not kiss John  
c. Stupidly, every girl kissed John.

Examples in (5) demonstrate, however, that this is not the case for manner adverbs in impersonal SIE constructions. These adverbs receive the interpretation typical for those that appear under semantic scope of sentence operators mentioned above.

- (5)a. Marysi nie czytało się tych książek szybko.  
Marysia.DAT NEG read.3SG.NEUT SIE these.ACC books.GEN quickly  
'Marysia didn't read these books quickly.'

- b. Każdej matce gotowało się przyjemnie dla swojej rodziny.  
 every.DAT mother.DAT cooked.3SG.NEUT SIE with-pleasure for her family  
 ‘Every mother cooked for her family with pleasure.’

The sentences above then show that adverbs occurring in impersonal SIE construction are indeed merged within *v*P/VoiceP, not as argued by Rivero (2010) outside of the TP.

4. One of the overlooked properties of the constructions in question is that they behave differently with respect to passivization. While for the construction in (1) passivization is allowed, it is excluded for the construction in (2). This is illustrated by examples in (6) and (7) respectively.

- (6) Było się oskarżanym.

AUX.<sub>past</sub> SIE accused

‘[One] was accused.’

- (7) \*Marysi nieprzyjemnie było się oskarżaną.  
 Marysia.DAT unpleasantly AUX.<sub>past</sub> SIE accused

‘(intended) Marysia found being accused unpleasant.’

Based on the observations above, it is argued that the particle SIE in the two constructions performs two different functions, either an argument or a head of a functional projection. In (1) it is an argument, and in (2) it is a head of Voice Phrase (Fassi Fehri 2009). What follows is that the construction in (1) is not related to (2). The construction in (1) is impersonal and is a cognate of a *si*-construction present in Romance, whereas the one in (2) is derived from the middle construction.

5. The argumental SIE is merged in the [SpecVoiceP], and it is assigned nominative case (Saloni 1975; Chomsky 1995; D’Alessandro 2004). Because it is devoid of phi-feature, it is interpreted as generic, arbitrary or specific depending on the kind of element it is bound by. The argumental SIE can be bound either spatial or temporal adverbials. If it is not bound, it is interpreted as generic.

6. Following Kratzer (1996), it is assumed that the external argument is not an argument of the verb but is rather introduced into the structure by Voice Phrase. As the head of VoiceP, SIE blocks the merge of the external argument. The lack of agent in middle constructions is substantiated by the facts that neither agent-oriented adverbials nor control into embedded infinitival clauses are possible. A non-core argument, of which a dative nominal is an example, can be introduced into the structure by a high applicative head (Pylkkänen 2008). Because this High Applicative Phrase (HAppIP) is of a benefactive type<sup>1</sup>, and because high applied arguments and arguments of VoiceP are both considered external arguments that compose with the verb in precisely the same way (Pylkkänen 2008), the dual interpretation of a dative nominal as a benefactive and an agent follows naturally from this assumption. The dative nominal is an optional element in the clause when, however, it is introduced into the structure it is always higher in the thematic hierarchy (Grimshaw 1992) than any of the internal arguments. Because of that, it is the dative nominal that will rise to [SpecTP]. Due, however, to the theta role and case assigned to it and because Polish lacks specific inflectional suffixes to mark agreement with an element in Dative, when the dative nominal enters an Agree relation with T, T receives a default

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<sup>1</sup> For Pylkkänen (2008) the universal inventory of functional heads includes several different high

marking<sup>2</sup>. As for the internal argument of V in (2) (*te książki* ‘these books’), following Lavine (2005), it is assumed that it assigned Accusative case, flouting Burzio’s Generalization, as the morphology on T is non-agreeing.

When the dative nominal is not merged it is the internal argument of a verb that moves to [SpecTP], giving rise to the middle reading.

As for the obligatory adverbs of manner, they are considered to be VP-adverbs not V<sup>o</sup>-adverbs (as argued by Jones & Lavine 2010 for Russian middles) as they modify not only the verb but the whole VP in Polish middle constructions.

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<sup>2</sup> Following Sigurdsson (2009), it is assumed that case and agreement are divorced, with case being assigned below TP.

# Restrictions on different applicative readings in Slovenian

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This presentation deals with an applicative analysis of ditransitive constructions in Slovenian, with special emphasis on the syntax-driven approach to the matter, found in Pylkkänen (2002) and subsequent work. In Slovenian, ditransitive constructions show ambiguity with respect to the low and high applicative reading (*send-* and *throw-*type verbs), (1a), however, some verbs (*give-*type verbs) exclude the high and appear with the low applicative reading only, (1b), suggesting that the availability of applicative meanings is linked to the inherent meaning of the verb in the VP, as shown in Marvin (2009).

- (1) a. Bine je poslal Zoji pismo.  
Bine<sub>Nom</sub> AUX sent<sub>3.sg.m.</sub> Zoja<sub>Dat</sub> letter<sub>Acc</sub>  
Low: '*Bine sent Zoja a letter.*' or High: '*Bine sent a letter for Zoja (as a favor to Zoja).*'
- b. Bine je dal Zoji pismo.  
Bine<sub>Nom</sub> AUX given<sub>3.sg.m.</sub> Zoja<sub>Dat</sub> letter<sub>Acc</sub>  
Low: '*Bine gave Zoja a letter.*'

There is, however, an additional constraint on high applicative readings related to the word order of the dative and accusative objects. While it is traditionally assumed that Slovenian does not have two ditransitive constructions like the English Prepositional Dative (PDC hereafter) and Double Object (DOC hereafter) constructions, tests such as the binding of possessives (Larson 1988, Pesetsky 1995) and the frozen scope (Aoun and Li 1989, Bruening 2001) show otherwise (Stegovec 2011). The examples in (2) and (3) show that like in Croatian (Gračanin-Yuksek 2006) word order is what sets apart the two types of ditransitives in Slovenian; the Dative-Accusative word order is a ditransitive

construction and is – except with *give*-type verbs – ambiguous between the low (DOC) and the high applicative, while the Accusative-Dative has the structure of a PDC.

- (2) a. Tat<sub>j</sub> je [vsakemu oškodovancu]<sub>i</sub> vrnil [svoj<sub>i,j</sub> avto].  
 thief<sub>j</sub> AUX [each victim<sub>DAT</sub>]<sub>i</sub> gave back [his<sub>i,j</sub> car<sub>ACC</sub>]  
*'The thief returned every victim his car.'* / *'The thief returned every victim his (the thief's) car.'*
- b. Tat<sub>j</sub> je vrnil [vsakemu oškodovancu]<sub>i</sub> [svoj<sub>i,j</sub> avto].  
 thief<sub>j</sub> AUX gave back [each victim<sub>DAT</sub>]<sub>i</sub> [his<sub>i,j</sub> car<sub>ACC</sub>].  
*'The thief returned every victim his car.'* / *'The thief returned every victim his (the thief's) car.'*
- c. Tat<sub>j</sub> je vrnil [svoj<sub>\*i,j</sub> avto] [vsakemu oškodovancu]<sub>i</sub>.  
 thief<sub>j</sub> AUX gave back [his<sub>\*i,j</sub> car<sub>ACC</sub>] [each victim<sub>DAT</sub>]<sub>i</sub>  
*'\*The thief returned every victim his car.'* / *'The thief returned every victim his (the thief's) car.'*
- (3) a. Učitelj je [enemu učencu] dal [vsako nalogo].  
 teacher<sub>NOM</sub> AUX [a student<sub>DAT</sub>] gave [each task<sub>ACC</sub>]  
*'The teacher gave each student a task.'* \* $\forall > \exists, \exists > \forall$
- b. Učitelj je dal [enemu učencu] [vsako nalogo].  
 teacher<sub>NOM</sub> AUX gave [a student<sub>DAT</sub>] [each task<sub>ACC</sub>]  
*'The teacher gave each student a task.'* \* $\forall > \exists, \exists > \forall$
- c. i. Učitelj je dal [eno nalogo] [vsakemu učencu].  
 teacher<sub>NOM</sub> AUX gave [a task<sub>ACC</sub>] [each student<sub>DAT</sub>]  
*'The teacher gave a task to each student.'*  $\forall > \exists, \exists > \forall$
- ii. Učitelj je dal [vsako nalogo] [enemu učencu].  
 teacher<sub>NOM</sub> AUX gave [each task<sub>ACC</sub>] [a student<sub>DAT</sub>]  
*'The teacher gave each task to a student.'*  $\forall > \exists, \exists > \forall$

The two constructions can be directly linked to the availability of the high and low applicative readings in the following way: Verbs that allow both interpretations exhibit this only in Dative-Accusative (ditransitive) constructions, while in Accusative-Dative (PDC) constructions the high applicative reading is unavailable, as seen in (4).

- (4) a. Bine je poslal Zoji pismo.  
 Bine AUX sent Zoja<sub>Dat</sub> letter<sub>Acc</sub>  
*'Bine sent Zoja the letter.'* / *'Bine sent the letter for Zoja.'* (low/high)
- b. Bine je poslal pismo Zoji.  
 Bine AUX sent letter<sub>Acc</sub> Zoja<sub>Dat</sub>  
*'Bine sent the letter to Zoja.'* (PDC/\*high)

Slovenian is a language that allows low as well as high applicatives with ditransitive verbs, albeit with certain restrictions. High applicatives are disallowed in a lexically conditioned environment, i.e. with *give*-type verbs. In this paper we show that the availability of high applicatives is restricted also with the word order of the objects, the high applicative reading only appearing in the Dative-Accusative but not in the Accusative-Dative order.

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# Why kratnost'?

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The feature 'kratnost' (≈replicability) is known to be a necessary condition for imperfective reference to completed events in Russian (factual ipf). Many authors believe that it belongs to the semantics of this construction (e.g. Glovinskaja 1982, Padučeva 1996). Empirically, kratnost'-effects show up in contrasts like the following (adapted from Mehlig 2001; superscripts „i“ and „p“ are used for marking perfective and imperfective aspects, respectively):

- (1) (a) Kolumb {otkryl<sup>p</sup> /\*otkryval<sup>i</sup>} Ameriku.  
(b) Do Kolumba ešče vikingi otkryvali<sup>i</sup> Ameriku.

Factual ipf becomes possible only in a frame where America can be discovered more than once. From this it is concluded that the construction requires kratnost'. The question is why. The first guess is that pf might be semantically associated with uniqueness, and that this blocks the use of ipf in contexts where uniqueness is met (as in (1a)). However, pf may of course well be used to denote potentially replicable events:

- (2) Kolumb otkryl<sup>p</sup> okno.

Therefore, uniqueness must not be directly located in the semantics of pf. One widespread view is that uniqueness derives from definiteness: “[T]he pv signals a request on the part of the speaker that the [described event] be identified by the listener as an element of the shared knowledge” (Dickey 2000:121). However:

- (3) A- Krasivo ukrasili<sup>p</sup> elku.  
B- Kto ukrašal<sup>i</sup>?

Obviously, the event referred to by B is “an element of the shared knowledge” of A and B. B clearly wants A to identify the event as the one mentioned beforehand. The perfect context for the pf if it was definite – but B chooses the ipf. Examples like (3) lead Grønn (2004) to conclude the opposite, that it is ipfs that serve to anaphorically relate the event to an “element of the shared knowledge”. Such ipfs are presuppositional in the sense of Van der Sandt (1992) and Geurts (1999).

Thus, the kratnost'-effect in (1) cannot be traced back to uniqueness or definiteness. Grønn's alternative is as follows: pfs are semantically associated with target state relevance. If it happens that, due to the lexical semantics of the VP, the target state of the denoted event must hold forever after (as in (1a)), then target state relevance is trivially met, and the pf is unavoidable. However, this account has its problems as well:

- (4) A – Skažite, a Vam uže udaljali<sup>i</sup> appendixit?  
B – Udaljali<sup>i</sup>.

Even though the event reported here brings about a state that holds forever after (once you had your appendix out, it will remain out), ipf can be used. I conclude from this that the explanation based on permanent target state relevance is problematic, as it faces counterevidence.

The explanation of the kratnost'-effect that I will propose instead starts off from the basic observation that factual ipfs do not tolerate specific temporal adverbials. The following sentence only has a processual interpretation (Grønn 2004):

- (5) (a) V detstve ja čitali 'Čudesu Indii'. (factual ipf preferred)  
 (b) V tri casa ja čitali 'Čudesu Indii'. (only processual ipf possible)

The straightforward way to account for that would be to assume that, under the factual interpretation, there is no Davidsonian argument in semantic structure to be specified. This is basically my proposal. Factual ipfs do not denote completed events in the way pfs do. In the talk I will argue that factual ipfs are stative predications – despite the fact that they have a full-fledged VP and typically a dynamic verb. This construction is used to classify an object (the subject referent) as a member of a certain object kind which is determined by a certain property; I take predicates of this sort to have the following general semantic form (“R” is Carlson's (1977) realization relation, subscript “k” indicates kind-level denotation):

- (6)  $\lambda x \lambda P \exists x_k. R(x, x_k) \ \& \ P(x_k)$

The peculiarity of factual ipf is that the property P is built of an event kind, which is denoted by the VP. Here it is for (1b):

- (7)  $P = \lambda x_k \exists e_k. \text{AGENT}(x_k, e_k) \ \& \ \text{DISCOVER-AMERICA}(e_k)$

Taken together, this gives us the following denotation for the predicate *otkryvali Ameriku*:

- (8)  $\lambda x \exists x_k \exists e_k. R(x, x_k) \ \& \ \text{AGENT}(x_k, e_k) \ \& \ \text{DISCOVER-AMERICA}(e_k)$

Finally, let *vikingi* translate as an object individual for simplicity. We get the following representation for (1b): the vikings are said to belong to the kind which is characterized by that its members qualify as discoverers of America.

- (9)  $\exists x_k \exists e_k. R(v, x_k) \ \& \ \text{AGENT}(x_k, e_k) \ \& \ \text{DISCOVER-AMERICA}(e_k)$

Now, why do factual ipfs require kratnost'? The answer that I will give is pragmatic by nature. As outlined above, it is assumed that the function of using factual ipf is to relate an object to a certain class/kind. Given this, relating an object to a kind that necessarily includes only one member would be non-informative, because such a kind would be equivalent to the object itself. This is the case of (1a): The VP describes a unique event, which means that the description of the VP (=the event kind) allows for one realization only. As there can be only one instantiator of such an event kind, it does not make sense to establish a category of objects that would have the property of realizing agents of it. Choosing factual ipf would be mistaken, unless we imagine a special context within which the event kind is no longer restricted to one realization only (1b).

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# Russian verb stems and *byt'*

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The **topic** of this contribution is the lexical representation of verb stems in contemporary Russian. Although the system of Russian verb stems is well described, theories usually stay rather agnostic wrt the way stems should be accounted for within the mental lexicon.<sup>1</sup> Assuming verb stems to be lexical entities,<sup>2</sup> a number of **questions** arise: **(i)** Are the different stem variants associated with a verb stored in the mental lexicon as distinct lexical entries, or can they be integrated within one single verbal lexical entry? **(ii)** Whatever the answer may be, what do such entries look like, that is what phonetic, morphosyntactic and semantic information are the stem variants associated with? Do the various stems of a verb differ wrt meaning? **(iii)** How can one account for ‘irregularities’, e.g., for the forms of *idti* ‘go’ or *vesti* ‘lead’? **(iv)** How can the particularly ‘deviant’ forms of *byt'* ‘be’ (zero present / overt present *est'*; infinitive stem *by-*; ‘future stem’ *bud-*) be accounted for and integrated into the system of verb stems in Russian?

My **goal** is to formally capture Russian verb stems within a minimalist generative framework (cf. Chomsky 1995). Since this investigation is primarily concerned with the mental lexicon, I rely on assumptions and formal means developed by Bierwisch (1988, 1997, 2007) and Zimmermann (1992, 2003), among others.

The **proposal** is that verb stems represent variants of one and the same verbal lexeme. The various stems of a verb do not differ wrt meaning. It follows that traditional terms such as ‘present stem’ are misleading, since they refer to mere tendencies as regards the attachment of specific sets of affixes to particular stems. They do not, however, capture the basic function of verb stems, namely to ‘diversify’ the verbal paradigm. As a consequence, the more neutral terms ‘open base’ (‘infinitive stem’, final vowel) and ‘closed base’ (‘present stem’, final consonant) should be preferred (cf., e.g., Gagarina 2003, 132-133). In (1)-(8), I present simplified lexical entries for verbal lexemes of both aspects reflecting these assumptions:<sup>3</sup>

(1)	/čita <sub>(a)</sub> -/	[+V, -N, -Perf]	λy λx λs	[s INST [x READ y]]
(2)	/pocel <sub>(a)ova</sub> (-a <sub>uj</sub> )-/	[+V, -N, +Perf]	λy λx λs	[s INST [x KISS y]]
(3)	/opi <sub>(a)sa</sub> (-a <sub>š</sub> )-/	[+V, -N, +Perf]	λy λx λs	[s INST [x DESCRIBE y]]
(4)	/opisyva <sub>(a)</sub> -/	[+V, -N, -Perf]	λy λx λs	[s INST [x DESCRIBE y]]
(5)	/v <sub>(-a)o</sub> z <sub>(a)ja</sub> (-a <sub>m</sub> )-/	[+V, -N, +Perf]	λy λx λs	[s INST [x TAKE y]]
(6)	/b <sub>(-a)e</sub> r <sub>(a)a</sub> -/	[+V, -N, -Perf]	λy λx λs	[s INST [x TAKE y]]

<sup>1</sup> The traditional view is that every Russian verb has two stem variants – a ‘present stem’ and an ‘infinitive stem’ (cf., e.g., Bielfeldt 1952; Vinogradov 1952, 270ff.; Isačenko 1960, 27ff.; 1962, 214ff.; Belošapkova 1997, 574-577). Jakobson (1948), by contrast, assumes only one stem from which all inflected forms are derived, given appropriate phonological rules. Although Jakobson explicitly notes that his system serves didactic purposes, the rules he formulates may serve to explain seemingly irregular forms such as the infinitives *vesti* ‘lead’ (stem *ved-*) or *peč'* ‘bake’ (stem *pek-*). See also fn. 5.

<sup>2</sup> That the stems assumed traditionally are indeed represented in the lexicon is supported by data from research on language acquisition; cf., e.g., Gagarina (2003, 132-133), Gülzow & Gagarina (2006).

<sup>3</sup> Aspect semantics are omitted. Stem variants are formalised by means of a Phonetic Form that allows either the one or the other stem variant (‘open base’ vs. ‘closed base’) to be chosen for suffixation by either a consonantal or a vocalic suffix.

- (7) /i( $\alpha$ d)-/ [+V, $-$ N, $-$ Perf]  $\lambda x \lambda s$  [s INST [GO x]]<sup>4</sup>  
 (8) /ved-/ [+V, $-$ N, $-$ Perf]  $\lambda y \lambda x \lambda s$  [s INST [x LEAD y]]<sup>5</sup>

These assumptions should carry over to the **forms of *byt'***. In (9)-(12), I give lexical entries for the copula as well as the auxiliary *byt'*.<sup>6</sup> Forms of the auxiliary *byt'* occur with the periphrastic future (*bud-* + impf. inf.) and the periphrastic passive (*bud-* or *byl-* + pass. part.).<sup>7</sup>

As to the 'future stem' *bud-*, I will make the assumption that it is no particular exception as compared to other stems. It is the 'closed base' of *byt'*, but is inherently equipped with future tense semantics.<sup>8</sup> Nonetheless, it is morphosyntactically marked with [ $-$ Perf, $-$ Past]. Thus, I take an intermediate position between the standard assumption that *bud-* is a 'future stem' (cf., e.g., Geist 2008, 11) and Junghanns (1997) who claims that *bud-* is perfective *byt'* (see also Franks 1995, 232). In my analysis, *bud-* denotes future reference only due to its inherent semantics which is, however, invisible to syntax. It can, thus, be treated as imperfective aspect, as standardly assumed (cf. arguments in Geist 2008, 11-13). These assumptions are formalised in the entry in (9). (10) captures the auxiliary stems. They differ from the copular forms wrt their categorial features. Also, they do not have a situation argument of their own.

In fact, what seems to be special about *byt'* is the co-existence of a zero present tense form and overt *est'*. Neither zero nor *est'* can be assumed to be derived from a stem, since both occur with subjects of all persons and numbers. Hence, they must be variable wrt these grammatical features. I conclude that they are stored as a separate lexical entry with present tense semantics and 'flexible' person and number features (they are inherently finite). Cf. the entry in (11). In (12), I give an entry for the (archaic) 3Pl form *sut'* '(they) are' which must be represented separately in the lexicon.

- (9) /b( $\alpha$ y)( $-$  $\alpha$ ud)-/ [+V, $-$ N, $-$ Perf,( $-$  $\alpha$ -Past)]  $\lambda P \lambda x \lambda z$  [z ( $-$  $\alpha$ : [[Tz] AFTER t<sup>0</sup>])  $\approx$  [P x]]  
 $\lambda P \in [\alpha V, \beta N]$   
 $\alpha = + \rightarrow \beta = +$
- (10) /b( $\alpha$ y)( $-$  $\alpha$ ud)-/ [+T,( $-$  $\alpha$ -Past)]  $\lambda P \lambda x \lambda s$  [( $-$  $\alpha$ [[Ts] AFTER t<sup>0</sup>]) : P x s]  
 $\lambda P \in [+V, $-$ N, \beta Perf, -Fin, \alpha Part, ( $\alpha$ +Pass)]$
- (11) /( $\alpha$ Ø)( $-$  $\alpha$ est')/ [+V, $-$ N, $-$ Perf, $-$ Past, $\pm$ 1, $\pm$ 2, $\pm$ Pl]  $\lambda P \lambda x \lambda z$  [z : [[Tz] = t<sup>0</sup>]  $\approx$  [P x]]  
 (12) /sut'/ [+V, $-$ N, $-$ Perf, $-$ Past, $-$ 1, $-$ 2,+Pl]  $\lambda P \lambda x \lambda z$  [z : [[Tz] = t<sup>0</sup>]  $\approx$  [P x]]

<sup>4</sup> Note that the entries in (7) and (8) are simplified insofar as they lack an optional directional argument verbs of motion are likely to possess (I thank Uwe Junghanns for drawing my attention to this fact). The past forms of *idti* are derived from the suppletive stem *š(e)d-* which I assume to be stored in the lexicon in a list of stems pertaining to the lemma of this verbal lexeme (the same holds for the stems and/or forms of *byt'*).

<sup>5</sup> Consonantal stems as in (8) that end in *k, g, t, d, s, z, b, r* have no 'open' (vocalic) counterpart. When consonantal affixes are attached, the final consonant of these stems underlies phonological accommodations (see the phonological accommodation rules formulated in Jakobson 1948[1971], 125).

<sup>6</sup> The way of representing the copula in (11) is adapted from Maienborn (2003, 125). 'z' is a state variable which corresponds to Maienborn's conclusion that copular verbs refer to states. ' $\approx$ ' characterises this state with the meaning of the predicative expression.

<sup>7</sup> I do not assume a zero present tense auxiliary. The so-called 'statal passive' as *Portret napisan* 'The portrait is painted' is a copular sentence involving the zero copula in (13) (cf., e.g., Stechow & Paslawska 2003a, 20).

<sup>8</sup> Historically, *bud-* was a perfective inchoative verb (cf. Miklosich 1926, 262). As such, it is similar to modern *stat'* 'become', which is used for this purpose today (Geist 2008, 11). It follows that historically, *bud-* was 'equipped' with both perfective semantics and the component BECOME. Probably, the latter was gradually lost as *stat'* replaced *bud-*. When this replacement was completed, *bud-* was integrated into the paradigm of the BE copula *byt'*. It seems conceivable that the inherent future reference of modern *bud-* assumed here is a reflex of the semantic component BECOME as well as of the perfective aspect of historical *bud-*.

It follows that the suffixes involved in the formation of present tense forms do not merely express person/number, but also present tense. The *l*-suffix, on the other hand, realises past tense (perfect tense according to Stechow & Paslawska 2003b). The emerging *l*-form is subsequently attached a number(/gender) agreement suffix. From a synchronic point of view, hence, *l*-forms are finite past forms that show a particular number(/gender)-agreement pattern which differs from the person/number-pattern exhibited by verbs marked for present tense (see also Junghanns 1995, 8).<sup>9</sup>

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<sup>9</sup> One is, thus, able to clearly dissociate tense from agreement morphology in the case of past tense, but not in the case of present tense forms. See Jakobson (1948[1971], 123) for a different analysis of the present tense suffixes.

On the Trochaic Lengthening in Neoštokavian  
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According to the traditional view, rising accents in Neoštokavian<sup>1</sup> (NS) may take any position in the word except the last one, while falling accents redundantly fall on the first syllable. In regards to accents, one can distinguish five main kinds of suffixes in NS: cyclic, extracyclic, receptive, neutral<sup>2</sup> and dominant which all influence the position of accents in a particular way (Rakić 1991). Morphological analysis reveals that, in monomorphemic words, accents normally fall on one of the last three syllables (Rakić 2008). Capitalizing on these observations, we can try to formulate the lexical rule for the accent of monomorphemic nouns.

- (1) a. If the last syllable is heavy, the stress falls on the penult.  
b. If the penult is heavy, the stress falls on it.  
c. If neither a) nor b) are fulfilled, the stress falls on the antepenult, but in lexically determined cases the penult is stressed.

For the notion of extrametricality we must stipulate that the final heavy syllable in NS is regarded as light, and that the final light syllable as extrametrical. We also admit that in NS extrametricality is partly lexically determined so that the additional provision in 1c) is necessary. The trochaic system based on the classical inventory of feet as defined in Hayes (1995) accounts for a number of shortening rules (Rakić 2010). Most of these shortening rules are morphologically conditioned, i.e. triggered by particular kind of affixes. In this paper we show that there is also a rule of trochaic lengthening which also applies in well-defined morphological categories. In this paper, we use the fact that extrametricality is largely lexically determined and in particular point out to the suffix *-ba* as an exception to extrametricality rule.

Prince (1990) notes that, in trochaic systems, besides shortenings there is a complementary phenomenon of lengthening which eliminates undesirable monomoraic feet. In Serbian and Croatian, we come across a similar alternation in the so-called Kanovian lengthening of the short-rising accent into the long-rising one in the nouns like *vóda* 'water', *sélo* 'village', in which the first syllables are originally short. Another very well-known example of penult lengthening are hypocoristics in Neoštokavian (e.g. *kòkōš* > *kóka* 'hen', *gòspòda* > *gósipa* 'lady', *ùčitelj* > *účalo* 'teacher', *sèljāk* > *séljaló* 'peasant', etc., (Rakić 2010). From feminine and masculine names we get numerous hypocoristics with long rising accent (*Bósa*, *Vída*, *Désa*, *Zóra*, *Ráda*, *Pájalo*, *Gájalo*, *Lékaló*, *Níkaló* etc.), where *o* is more usual in the West of Neoštokavian territory. If the penult is closed, the lengthening is precluded. Thus, with the suffix *-ko* we have hypocoristics with a long-rising accent in *Jóko*, *Péko*, *stríko* 'uncle', but the short accents in the hypocoristics *bràtko* 'brother', *čàćko* 'father' and *zlòćko* 'villain' with closed penults. These alternations suggest that closed syllables in Neoštokavian are heavy.

Trochaic lengthening mainly applies in suffixal derivations where it marks a particular category of nouns. Generally, it does not apply in inflection as the examples (1a) clearly show:

- (1a) nom.sg. *mètar* 'meter'      *đàbar* 'beaver'      *vòsak* 'wax'      *bàkar* 'copper'

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<sup>1</sup> Both standard Serbian and standard Croatian, and since recently also Bosniak, are based on Neoštokavian dialects.

<sup>2</sup> The difference between neutral and receptive suffixes consists in their different treatment of tone. Neutral suffixes are extrametrical and extratonal, while receptive ones are only extrametrical. Thus, neutral suffixes shift rising accents to the left (*tarífa* 'rate' - *tàrífñī* adj.), while receptive suffixes 'accept' rising accents from the preceding syllable (*sèljāk* 'peasant' - *seljácē* dim., s. Rakić 1991). In Neoštokavian, rising accents are assumed to bear rising tone stretching over two syllables.

	gen.sg. mètra	đàbra	vòska	bàkra
(b)	nom.sg. stàrac 'old man'	pàlac 'thumb'	sìnak dim. 'son'	
	gen. sg. stârca	pâlca	sínka	

Yet, lengthening occurs in (1b) if the syllable preceding the last light syllable is closed by a sonant. Could this mean that the syllables ending in sonorants do not count as closed?

Let us consider the cases of lengthening in the domain of suffixal derivations. In this domain, stems usually end in consonants which may contribute to the building of a closed penult. The palatalization of a preceding consonant in some cases may produce an open penult and consequently trigger lengthening as in the following deverbal nouns derived by *-nja*:

- 2) čèznuti 'to yearn' - čéžnja 'yearning', nòsiti 'to carry' - nòšnja 'dress', vòziti 'to drive' - vóžnja 'driving', gròziti 'to threaten' > gróžnja 'threat'.

The palatalized consonant clusters have the same place of articulation and may form the onset of the following syllable (s. Duanmu 2008). Therefore, in the nouns 2) the segments *žnj* and *šnj* belong to the following syllables and trochaic lengthening is free to apply. Similar examples are found amongst the collective nouns built by the suffix *-je*:

- (3) *pèro* 'feather' > *pérje*, *brèza* 'birch' - *brèzje*, *dřvo* 'tree' - *dřveta* pl. > *dřvēće*, *zřno* 'grain' > *zřnje*, *òsa* 'wasp' - *òsje*, *òrah* 'walnut' > *òrašje*, *ròb* 'slave' > *ròblje*, etc. Babić 1986: 131).

Vukušić et al.(2007) notes that the collective nouns derived by the suffix *-je* have a long-falling accent or unaccented length before this suffix. According to Belić (1948: 108) and Miletić (1952), the lengths following the main accent may be understood as secondary accents. If this is the case, all examples in (3) can be understood as trochaic lengthening.

There are not many suffixes which attach to the stems ending in vowels. Among few of them are the deverbal suffixes *-nje* and *-će*. The vowels before these suffixes are always long (e.g. *bàcati* inf. > *bàcānje* 'throwing', *batinati* inf. > *batinānje* 'beating', *obécati* inf. > *obećānje* 'promise', *izdati* inf. > *izdānje* 'edition', *dòstignuti* inf. > *dostignúće* 'achievement', *òtkriti* inf. > *òtkríće* 'discovery', *svànuti* 'to dawn' > *svanúće* 'dawn', etc.). The deverbal suffix *-lo* also provides some examples with lengthening:

- 4) *čùti* 'to hear' > *čúlo* 'sense', *dřžati* 'to hold' > *dřžálo* 'handle', *lèci* 'to lie down', *lègnēm* 1.p. present > *léglo* 'brood', *pìti* 'to drink' - *pílo* 'a dink' (Croatian), *prèsti* 'to spin' > *prélo* 'act of spinning', *šljiti* 'to sharpen' > *šiljilo* 'sharpner', *sèsti* 'to sit' > *sélo* (folk.) 'outdoor party'.

With some other derivatives with *-lo* a short-rising accent appears on the antepenult:

- (5) *céditi* 'to strain' > *cèdilo* 'strainer', *gásiti* 'to extinguish' > *gàsilo* 'extinguisher', *mlátiti* 'to thresh' > *mlàtilo* 'stick'.

Both the accented penult and antepenult are in accordance with (1). In fact, *dřžálo*, the only trisyllabic noun in (4), has the alternative form *dřžalo* (Rečnik srpskoga jezika 2007). In (5), in the antepenult position the trochaic shortening applies, not lengthening. On the basis of assumed foot binarity, only the penultimate syllables can be lengthened if the following syllable is extrametrical. Other examples of suffixes satisfying the conditions for trochaic lengthening are scarce or non-productive.

Some suffixes are lexicalized with a short-rising accents on the open penult:

- 6) *-ina* (*bržina* 'speed'), *-oća* (*čistòća* 'cleanliness'), *-ota* (*dobròta* 'goodness'), *-oba* (*grdòba* 'ugliness'), *-ica* (*krivìca* 'guilt').

All suffixes in 6) derive deadjectival abstract nouns. The short-rising accent on an open penult exists in Neoštokavian parallelly with the long-rising accent, increasing the possibilities of semantic differentiation. Applied in suffixal derivations, this accent has a precisely-defined function - it contributes to the definition of the category of deadjectival abstract nouns. Another suffix which bears a short-rising accent is *-ana* (*crepàna* 'tilery'), a lexical borrowing from Turkish which derives the nouns denoting location. These cases illustrate the ubiquitous morphologization of phonological rules in Neoštokavian - trochaic lengthening and its denial are equally used to define some categories of nouns with specified meanings and functions.

The deverbal suffix *-ba* seems to be exempt from the extrametricality rule. A similar case is known in English: the adjectival suffix *-ic* is an exception to the extrametricality rule so that it can shorten the preceding syllables (e.g. *pàrasite* /pærəsalt/ > *pàrasitic* /pærə'sltlk/). The suffix *-ba* acts in the same way - it shortens open penults if they are long:

7) *drâž* 'allure' - *drâžba* 'auction', *drûg* 'friend' - *drûžba* 'friendship', *glâs* 'voice' - *glâzba* 'music', *gôst* 'guest' - *gòzba* 'feast'

The trochaic shortening, which we see in these examples, applies also to the syllables ending in sonorants:

8) *pàliti* 'to set fire' > *pàljba* 'firing', *húli* 'to blaspheme' > *hùljba* 'swearing', *žúriti* 'to hurry' > *žùrba* n., *dvóriti* 'to serve' > *dvòrba* 'service', *kínjiti* 'to mistreat' > *kinjba* n.

In 8), the syllables closed by sonorants are treated as if they were open. These examples suggest that pre-sonorant lengthening is not different from trochaic lengthening. The same rule has been discussed in Vukušić et al. (2007: 31) as 'positional lengthening'. According to Vukušić et al., pre-sonorant lengthening applies generally in inflection but in derivation it is blocked if the following syllable has a long vowel. However, this rule does not hold before the suffix *-nĭk* (e.g. *nèvĕrnĭk* 'infidel', *náčĕlnĭk* 'chief', *nádzĕrnĭk*). From our point of view, this is an apparent exception because *-nĭk* is a neutral suffix, and as extrametrical it is empowered to trigger lengthening of the preceding syllable. The same holds for *-nica* (*mĕsara* 'butcher shop' > *mĕsàrnica*), which we also regard as neutral suffix. The data for the suffix *-skĭ*, which Vukušić et al. also cites, provide mixed evidence which does not come as a surprise in view of our assumption that extrametricality is largely lexically determined.

Nonetheless, there still remains a question of why the syllables closed with sonorants do not count as closed in the examples like 1b) and 8). The same problem however also persists in English where the rule of sonorant destressing has to be assumed (Hayes 1980, Kager 1989).

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# Semantic Compatibility of Two Czech Temporal Adjuncts

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I present novel data and a new analysis concerning Czech temporal adjuncts. I focus on two types of temporal adjuncts (TAs): *až do* + NP\_GEN (*až do rána* ‘until morning’) and *nejméně* + NP\_ACC (*nejméně hodinu* ‘at least one hour’). The primary data contrast is the following: TAs can be combined with negated perfective predicates (1), while their use in sentences with perfective predicates lacking negation leads to ungrammaticality (2).

- (1) *Petr neusnul až do rána /nejméně hodinu.*  
Petr NEG fall asleep: 3Sg Past Perf until morning /at least one hour.  
‘Petr didn’t fall asleep until morning / at least one hour.’
- (2) *Petr usnul \*až do rána /nejméně hodinu.*  
Petr fall asleep: 3Sg Past Perf until morning / at least one hour.  
(‘Petr fell asleep until morning / at least one hour.’)

From the semantic point of view there are two principal ways to explain the contrast: the first type of explanation claims that TAs behave as negative polarity items (NPIs) and their ungrammaticality in sentences with non-negated perfective verbs stems from their NPI nature (see Bošković & Gajewski 2009). The second approach is based on aspectual properties of TAs explaining the distribution of TAs in terms of their aspectual sensitivity (TAs occur only with homogeneous predicates); negation simply reverses entailments from supersets to subsets making TAs compatible even with perfective verbs (see Dočekal 2011).

I choose the latter strategy due to the fact that a lot of Czech data shows that TAs are perfectly acceptable with non-negated imperfective predicates (3) – a fact that is hardly explainable assuming the NPI analysis.

- (3) *Petr spal až do rána /nejméně hodinu.*  
Petr sleep: 3Sg Past Impf until morning / at least one hour.  
‘Petr slept until morning / at least one hour.’

I have gathered around 3000 Czech sentences containing TAs (data obtained from the corpus SYN2010 – the latest representative electronic corpus of contemporary Czech, a subcorpus of the Czech National Corpus – CNC) and classified them. My intention was to find the accurate definition of the semantic context making the use of TAs possible. My main claim is that the use of TAs is subject to a homogeneity requirement. Following Csirmaz (2006) and Dočekal & Kučerová (2009) a.o., I divide aspect into two types: external (grammatical) aspect expressed in terms of perfectivity and internal (lexical) aspect defined as difference between telicity and atelicity.

The analysis of data shows that TAs can occur in sentences with imperfective predicates as well as sentences with perfective ones. However, the latter group is strictly limited to atelic predicates. My conclusion is that TAs are sensitive to lexical aspect, particularly they require atelic lexical aspect. I follow von Stechow (2002) a.o. in defining atelicity in terms of homo-

generality: only homogeneous predicates are atelic (P is homogeneous if it has the subinterval property:  $P(t): \forall t' [t' \subset t \rightarrow P(t')]$ ).

In order to establish whether the homogeneity hypothesis is correct, I made the corpus search mentioned earlier and categorized the sentences containing TAs into various groups wrt factors as character of the predicate<sup>1</sup>, aspect of the predicative verb, presence of negation, or type of dependency (verb-dependent or non verb-dependent TAs<sup>2</sup>), etc.

Then I focused on data in 4 groups, which I considered to support the hypothesis of the work to be presented<sup>3</sup>: (a) sentences with a simple atelic predicate (4), (b) sentences containing a predicate with a superlexical prefix (5), (c) sentences with a modal verb syntactically dominating the perfective telic verb (6), and (d) sentences containing a negated perfective telic predicate (7).

(4) *...nechám tu před branami až do poledne (...) skupinu vojáků.*  
 leave: 1Sg Pres Perf here outside the gates until noon a group of soldiers  
 ‘I will leave a group of soldiers outside the gates until noon.’

(5) *Povaříme [jídlo] nejméně hodinu.*  
 cook: 1 Pl Pres Perf [meal] for at least one hour  
 ‘We will be cooking the meal at least for an hour.’

(6) *Výstavu (...) mohou zájemci navštívit až do konce října.*  
 exhibition: AccSg can: 3Pl those interested: 1Pl visit: Inf Perf until the end of October.  
 ‘Those interested can visit the exhibition until the end of October.’

(7) *Jeho zbytky (...) nikdo nenajde nejméně dalších padesát tisíc let.*  
 his:Acc remain: Acc Pl nobody NEG find: 3Sg Pres Perf at least next fifty thousand years  
 ‘Nobody will find his remains at least for the next fifty thousand years.’

Group (a) behaves according to the hypothesis. Group (d) behaves well also because negation (although it isn’t an aspectual operator) has the same subinterval property as atelic predicates do. Group (b): superlexical prefixes differ from lexical prefixes by not encoding resultativity (see Svenonius 2004), so even if the superlexically prefixed verb is perfective, it remains atelic. Group (c): modal verbs show very interesting patterns. There is a difference between the use of *až do* ‘until’ and *nejméně* ‘at least’. It seems that universal modals allow *nejméně* ‘at least’ with perfective telic verbs, as in (8), and existential modals allow *až do* ‘until’ with perfective telic verbs, as in (9).<sup>4</sup>

<sup>1</sup> I separated into different groups sentences with simple verbal predicates, nominal predicates with a copula, complex predicates formed by modal + infinitive(s) (separately existential and universal ones, then considering the aspect of the infinitive), etc.

<sup>2</sup> By non verb-dependent TAs I mean structures where the TA forms a syntactic constituent with an adjectivized verbal participle (in Czech tradition treated as adjective), see example (i):

(i) *Celý areál, běžně otevřený až do začátku května, je samozřejmě ...*  
 whole area usually open:ADJ until beginning: Gen Sg May:Gen Sg is of course  
 ‘The whole area, usually open until the beginning of May, is of course ...’

<sup>3</sup> I agree with the reviewer who pointed out that the database of 3000 sentences forms a very heterogeneous sample hardly distributable into 4 groups. I would like to emphasize that there is no space here to present all the material and my intention is to present only the data which are relevant for the defined task (common semantic requirement of the discussed TAs).

<sup>4</sup> This idea must be elaborated in more detail, I do not have an interpretation of the contrast yet.

(8) *Karel Poborský se bude muset/\*moci nejméně týden obejít bez fotbalu.*  
[proper name] refl aux fut: 3Sg must/can at least week do without football  
'Karel Poborský will need to/\*can do without football for at least a week.'

(9) *Výstavu mohou/\*musí zájemci navštívit až do konce října.*  
exhibition can/must: 3Pl pres those interested visit until end of October  
'Those interested can/\*must visit the exhibition until the end of October.'

Conclusion: the common semantic criterion for the use of *až do* 'until' and *nejméně* 'at least' is not the perfectivity of the predicative verb but the homogeneity of the event expressed by the sentence. Homogeneity can arise either from the lexical semantics of the predicate (atelic imperfective verbs, simple atelic perfectives or verbs with a superlexical prefix) or from the presence of other operators in the syntactic structure (modal verbs, negation). At the same time I do not claim that the two types of TAs behave exactly the same way.<sup>5</sup> As insinuated earlier, there are some differences between the use of TAs in various groups of my classification. I believe that the database of 3000 sentences deserves a more detailed analysis, which will help me to offer an interpretation of the different behavior of *až do* 'until' and *nejméně* 'at least'. At the moment I claim that all the occurrences of the discussed temporal adjuncts form a natural class based on the common property of homogeneity of the sentential event.

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<sup>5</sup> It will be necessary to consider more factors (than just the homogeneity requirement) in order to specify the exact conditions of use for each of the two types of TAs. These conditions will probably be different for *až do* and *nejméně*.

# *Až/čak* – the scalar opposite of scalar *only*

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We provide an analysis of the focus sensitive particle *až* (Slovak, Polish, Russian)/*čak* (Bulgarian, Serbian) that has not been previously noted in the typology of such particles.

**Data:** The addition of the particle modifies the meaning of the sentence in a way that superficially resembles the contribution of *even*:

(1) Govorih      čak/daže [s      Mary]<sub>F</sub>.      *Bulgarian*  
I.talked      *čak/even* with Mary  
'I talked even to Mary.'

(2) Zajtra      vydiskutujem to až/dokonca [s      Igorom]<sub>F</sub>.      *Slovak*  
tomorrowI.will.discuss it *až/even* with Igor

Intuitively, (1-2) convey there is something exceptional about talking to Mary/Igor, and this meaning clearly comes from the presence of the adverbials. Similarly, for (3) the English translation using *even* conveys that crying was somehow significant.

(3) *Až* [krzyczała]<sub>F</sub> (z bólu).      *Polish*  
*až* cried      from pain  
'She even cried (from pain).'

Interestingly, in some contexts *až/čak* tends to be more adequately translated as *only* or *merely* in English:

(4) Prepáčte, že odpisujem *až* [teraz]<sub>F</sub>.      *Slovak*  
excuse that I.answer only now

The reading in (4) is incompatible with *even*. Similarly to *only*, (4) conveys that *now* is late. Moreover, the scalar presupposition projects under negation – there is no scale reversal as in the case of *even* (6-7) in contrast to *only/merely* (8-9).

(5) Ivan ne stigna čak do [Berlin]<sub>F</sub>.      *Bulgarian*  
Ivan not reached *čak* to Berlin  
Ivan did not get as far as Berlin (and Berlin is far).

(6) Ivan didn't even reach [Berlin]<sub>F</sub>. (Berlin is high on the likelihood scale, easy to reach)

(7) Ivan even reached [Berlin]<sub>F</sub>. (Berlin is low on the likelihood scale, hard to reach)

(8) Ivan didn't merely reach [Berlin]<sub>F</sub>. (easy to reach)

(9) Ivan merely reached [Berlin]<sub>F</sub>. (easy to reach)

We explain the above contrast by proposing that that *až/čak* carries a scalar presupposition that is not always specified in terms of likelihood, but rather it is the opposite of the scalar *only* where the type of scale is contextually defined. It additionally carries an exclusive implicature, which accounts for the *only*-like reading of (4). Crucially, being the scalar opposite of *only*, *až/čak* “says” that the focused element is high (as opposed to low) on the relevant contextual scale.

**Analysis:** Scalar focus associating particles fall into two classes – the scalar *only* vs *even* and *also*. The latter have been described as relating to a scale of likelihood (Karttunen and Peters 1979) (combined with the focal presupposition, e.g. Rooth 1985, 1992).

(10) “even<sub>C</sub> φ” presupposes that

$\lambda w. \exists p [p \in C \ \& \ p \neq [\varphi] \ \& \ p(w) = 1]$  (additive presupposition)

$\lambda w. \forall p [p \in C \ \& \ p \neq [\varphi] \ \rightarrow \ p <_{\text{likely}} [\varphi]]$  (scalar presupposition)

Scalar *only* is linked to variable scales (e.g. distance, importance) constructed on the basis of the prejacent proposition with respect to the context (Klinedinst, 2005).

(11) “only<sub>C</sub> φ” presupposes that

$\lambda w. \neg \exists p [p \in S \ \& \ p(w) = 1 \ \& \ \llbracket \varphi \rrbracket <_S p]$  (exclusivity asserted)

$\lambda w. \llbracket \varphi \rrbracket$  is low on S (scalar presupposition)

where S is an ordered set C of contextually determined alternative propositions

This division into two classes brings in a theoretical question of how scales are constructed. Is the type of scale always pragmatically determined as in (10) or is it lexically specified in the meaning of individual focus-sensitive particles as in (11)? Another theoretical question is whether the position of the focused element with respect to its scalar alternatives is lexically determined (11) or whether it follows entirely from pragmatics (10)?

Cross-linguistically we find that scalar readings emerge compositionally when the additivity is combined with the semantics of focus without the need for a lexical item meaning *even* (Lahiri 1998 and Koch and Zimmerman 2010). Thus, the reference to the likelihood scale needs not be built into the lexical meaning of *also* and *even*, it could be derived pragmatically. Moreover, we can expect that cross-linguistically additive particles will always involve a scale of likelihood and the focus at the bottom of the scale.

In the case of scalar *only*, on the other hand, the scale is not always likelihood. The alternatives on the scale are determined on the basis of the prejacent and the focused constituent. In (12:B1) alternative propositions involve places further than Berlin, since the exclusive assertion “I am in no other place than Berlin” can only be felicitous if places further on the way are excluded.

(12) A: How far did you get?

B1: I am only/merely in [Berlin]<sub>F</sub>. = *I didn't get far.*

B2: I am *až/čak* in [Berlin]<sub>F</sub>. = *I got very far.*

B3: \*I am even in [Berlin]<sub>F</sub>.

If the “low on the scale” component of the scalar *only* does not follow from exclusivity, but is part of the presupposition (e.g. Klinedienst 2005), we should be able to find its dual that refers to a position “high on the scale”. *Even* is standardly analyzed as having the presupposition “low on the scale of likelihood” which is equivalent to “high on the scale of noteworthiness” (e.g. Herburger 2000). However (B3) is unacceptable because of the additivity of *even* implying that I am in Berlin and at an alternative place at the same time. The grammaticality of *až/čak* in (B2) is explained if it is the scalar opposite of the scalar *only* in (11) – something to be expected if indeed its scalarity is not entirely pragmatically determined.

(13) “*až/čak*<sub>C</sub> φ” presupposes that

$\lambda w. \llbracket \varphi \rrbracket$  is high on S (scalar presupposition)

where S is an ordered set C of contextually determined alternative propositions

$\lambda w. \neg \exists p [p \in S \ \& \ p(w) \ \& \ \llbracket \varphi \rrbracket <_S p]$  (exclusive implicature)

**Conclusion:** The place of *až/čak* in the typology follows a theoretically predicted asymmetry: scales that are entirely pragmatically determined can be subsumed under the notion of likelihood and only the bottom of the scale will be the “target” of the focus. For scales that are lexically/grammatically determined (and not entirely by the pragmatics) we expect more types, as well as, both the top and bottom of the scale available for focus.

# Naturally-Atomic Singular N-A Kinds in Russian

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A past decade or so has seen a surge of renewed interest in bare noun distribution and interpretation. A lot of new work has been done in the field, with a focus on languages that do not have either definite or indefinite determiners, or both (see Chierchia 1998, Dayal 2004, Doron 2003, Halmøy 2010, Munn & Schmitt 1999, Rothstein 2009, 2010, 2011; Schmitt & Munn 2005, to mention just a few). The issues debated pertain to possible interpretations of bare singular NPs and their (dis)similarity to mass nouns in kind use. It has been shown that Chierchia's (1998) model, which disallows bare singulars as kind terms, is challenged by the distribution of such singulars in Hebrew, Brazilian Portuguese, Norwegian, Hindi, and Russian.

This talk will focus on Russian bare singulars accompanied by postnominal adjectives, analyzed in Trugman (2010, in press) as kind names. Trugman (ibid.) adopts Bouchard's (2002) framework and claims that a non-canonical NA word order results from modification of a bare noun, which is underspecified for semantic Number and must combine with its modifiers in the Head-Dependent order. To substantiate her claim that Russian Ns are indeed Number neutral in NA constructions, Trugman examines their behavior in a series of environments and shows that they exhibit mass-like behavior, which buttresses her claim. Hence, she proposes that NA noun phrases should be considered (taxonomic) kind names (NA kinds, henceforth), similar to the singular definite generics in English (e.g. *The Berger lion is small.*).

In her works, Trugman examines several types of NA constructions: (i) non-sentential occurrences in various scientific and product terms and labels (1a) and expressives (vocatives and interjections) (1b); and (ii) kind-denoting arguments and characterizing predicates (1c&d):

- (1) a. mjod *pčelinyj*  
honey bee<sub>ADJ</sub> 'bee honey'
- b. P'jan' *podzabornaja!* 'Lying-in-the-gutter drunkard!'
- c. Panda *gigantskaja*—èto podvid medvedja.  
panda giant<sub>ADJ</sub> this sub-species of-bear 'The giant panda is a sub-species of the bear.'
- d. Lou Shen —panda *gigantskaja*.  
Lou Shen panda giant 'Lou Shen is a giant panda.'

Though her claim that NA kinds exhibit mass-like behavior seems trivial for substance nouns (*veščestvennye suščestvitel'nye*), (1a), and collective ones (*sobiratel'nye suščestvitel'nye*), (1b); it is more controversial for NA kinds derived from count N roots, such as *panda* (1c&d), and deserves further investigation.

In this paper, we will follow the theory of mass-count distinction developed in Rothstein (2009, 2010, 2011), focusing on the distinction between natural and semantic atomicity she draws to explain the different behavior of various noun classes. Rothstein's theory allow for prototypical and non-prototypical count and mass nouns: while prototypical mass nouns are not naturally atomic and prototypical count nouns are, there are also non-prototypical naturally atomic mass nouns like *furniture* and *silverware*, and non-prototypical non-naturally atomic count nouns like *fence* and *line*. Semantic atomicity is a property of count nouns denoting sets of atoms indexed for the context in which they count as atomic. First, we will demonstrate that

whereas all Russian substance and collective nouns are semantically non-atomic (i.e. of type <d,t> and uncountable), collective nouns are naturally atomic (i.e. inherently individuable), while substance nouns are naturally non-atomic. This will be illustrated based on a number of standard tests. For instance, substance NA kinds (1a) are incompatible with distributive and reciprocal predicates, as shown in (2):

- (2) a. \*Mjod *pčelinyj* vesit 3 gramma.  
Honey bee<sub>ADJ</sub> weighs 3 grams  
b. \*Mjod *pčelinyj* po vkusu napominaet drug druga.  
Honey bee<sub>ADJ</sub> on taste resembles each other

Collective NA kinds, on the other hand, seem to license reciprocals (3a), distributive and collective predicates (3b), as well as plural discourse anaphora (3c).

- (3) a. P'jan' *podzabornaja* uznaet drug druga po poxodke.  
Drunkard<sub>SG.FEM</sub> under-the-fence<sub>SG.FEM</sub> recognizes each other by the gait/walk  
b. P'jan' *podzabornaja* sobiraetsja u pivnoj bočki no utram.  
Drunkard<sub>SG.FEM</sub> under-the-fence<sub>SG.FEM</sub> gathers at beer tank in the-mornings  
c. V poslednee vremja u nas v gorode razvelos' mnogo p'jani *podzabornoj*.  
Lately in our city multiplied much of-drunkard<sub>SG.FEM</sub> under-the-fence<sub>SG.FEM</sub>  
Oni bujanjat/\*<sup>2</sup>Ona bujanit u menja pod oknom každyj večer.  
They raise-the-hell/ \*It raises-the-hell under my window every evening

The examples in (3) illustrate that natural atomicity of the N root does not necessarily make a noun predicate count. Therefore, naturally atomic count N roots may be expected to give rise to non-count noun predicates as well. Indeed, as (4) shows, count NA kinds pair with collective NA kinds and, consequently, can be considered mass in spite of their natural atomicity, which sustains Trugman's (ibid.) claim that all NA kinds are mass-like in Russian.

- (4) a. Panda *gigantskaja* otličaevtsja drug ot druga markirovkoj mordy.  
Panda<sub>SG.FEM</sub> giant<sub>SG.FEM</sub> differs one on another marking-INSTR snout.GEN  
b. Panda *gigantskaja* vesit 20 kg v ètom vozraste.  
Panda<sub>SG.FEM</sub> giant<sub>SG.FEM</sub> weighs 20 kg at this age  
c. Tigr *usurijskij* naxoditsja na grani uničtoženija, poètomu oni oxranjajutsja zakonom.  
Tiger Usurijsk is-found on edge of-extinction, therefore they are-protected by law

It will also be shown that Russian singular NA kinds are not unique in their behavior and have counterparts in other languages (Rothstein 2010, Pires de Oliveira & Rothstein 2011, Doron 2003). For instance, Brazilian Portuguese bare singulars can license distributive predicates, (5a); and the reciprocal pronouns in this language can also take pluralities of natural atoms as their antecedents, (5b) (cited after Pires de Oliveira & Rothstein 2011, (12a) and (13)):

- (5) a. Mobilia (nesta loja) pesa 20 kilos.  
Furniture (in this store) weighs 20 kilos.  
b. Mobilia (dessa marca) encaixa uma na outra.  
Furniture (of this brand) fits one in-the other.  
'Pieces of furniture of this brand fit into each other.'

The existence of NA kinds alongside count predicates derived from the same count N root makes a strong prediction that such roots in Russian can sometimes give rise to double lexical

derivations—a count predicate and a lexicalized mass correlate when the root is modified postnominally (with a particular kind of modifiers, see Trugman (ibid.)). The possibility of double derivation is supported by the lack of the Universal Grinder effect (Pelletier 1979) with count NA kinds. While a lexically derived count predicate might be (somewhat marginally) coerced into the ground reading in an appropriate context (6a), the count NA predicate (6b) derived from the same count N root as a kind term is not expected to yield such a reading, on a par with other mass nouns in English or Russian (6c&d). Count NA kinds are no different from collective or substance NA kinds, which occur in contexts coercing a 'ground' reading without actually producing one (6c&d). In fact, naturally atomic NA kinds (6b&d) produce a reading where many instances of individuals denoted by N predicate are found in some place (cf. with the "wallpaper" reading produced by Chinese nouns (see Cheng, Doetjes and Sybesma 2008) and bare singulars in Brazilian Portuguese (Pires de Oliveira & Rothstein 2011)).

- (6) a. ?Posle avarii ves' asfal't byl v zebre. (Universal Grinder reading)  
 After accident whole asphalt was in zebra<sub>SG.FEM</sub>
- b. ?Vsja pojma reki byla v zebre *ravninnoj*.  
 whole floodplain river<sub>GEN</sub> was in zebra<sub>SG.FEM</sub> (valley<sub>ADJ.SG.FEM</sub>)
- c. Vse steny byli v vine.  
 All walls were in wine.
- d. ?Ves' vinno-vodočnyj otdel vyl v p'jani *podzabornoj*.  
 Whole wine-vodka<sub>ADJ</sub> department was in drunkard under-the-fence  
 'The whole wine-vodka department was flooded with drunkards.'

In sum, this talk provides a more refined classification of NA kind names in Russian, which will account for the distinct properties of various sub-types without refuting the major claims put forth in Trugman (2010, in press). In addition, the existence of count NA kind terms in Russian verifies the usefulness of the notion of natural atomicity in the grammar of mass nouns cross-linguistically, as proposed by Rothstein (2010, 2011).

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# Whereabouts of impersonals in Slavic languages... Ask features!

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In this talk the syntactic computation of impersonal constructions (IMPs) in Bulgarian (BG), Russian (RU) and Polish (PO) is discussed. For the discussion the following aspects are taken into account: (i) the syntactic computation of overt/null impersonals, and (ii) default morphological marking 3SG/PL in Slavic impersonal constructions.

The theoretical basis is recent minimalist research (Chomsky 2005, 2008) and the cartographic method as initiated in Rizzi (1997) and relevant work. Within this framework functional domains minimally consist of the following features:

- (1) [CP Force ... TOP/FOC ...( $\Lambda$ -features)... Fin [TP PRSN( $\varphi$ -features)... ASP/Mood/TNS/Voice [vP v ... (NP) [VP V... (NP ( $\theta$ -features))]]]

It is argued that the computation of IMPs takes place in the NS and as such does not hinge on allegedly syntactic primitives such as different subject positions (Mohr 2004), cognate empty object (Cabredo Hofherr 1999) or silent expletives (Perlmutter & Moore 2002). Moreover, impersonals are computed in the syntax by merger of abstract syntactic features PRSN, NUM,  $\Lambda$ -features (cf. Sigurðsson & Egerland 2009). Arb 3SG IMPs are the result of non-matching with logophoric features in C-domain which leads to the 'default' morphological marking 3SG-DFLT, cf. the following Polish examples (from Lavine 1998: 18) where the difference between matched and non-matched 3SG is morphologically marked:

- (2) Pszenicę sian0 zawsze jesenią  
wheat<sub>FEM-ACC</sub> sowed<sub>IMP 3SG-DFLT</sub> always in-fall  
'Wheat was always sowed in the fall'
- (3) \*Pszenicę sian $\theta$  zawsze jesenią  
wheat<sub>FEM-ACC</sub> sowed<sub>IMP 3SG-matched</sub> always in-fall

Thus in IMP constructions matching attempts take place between  $T_\varphi$  and incorporated  $\varphi/\theta$  features on v (for similar proposals in GB-bound terms cf. Jaeggli 1986 and subsequent work). In this spirit, 3SG impersonals are complex feature bundles which are syntactically inactive, i.e.  $\varphi$ -features in v are invisible for  $T_\varphi$  probing which leads to default morphological marking 3SG-DFLT:

- (4) [CP ... [TP ...  $T_\varphi$  ... Voice [vP ... v-V $\varphi/\theta$ ... (NP)]]]  
←----->

Under the split approach functional projections are filled with complex syntactic feature bundles. The general upshot then boils down to the insight that Narrow Syntax is a highly constrained, universal system which operates only with abstract interpretable features. From this follows that feature valuation occurs in PF, cf. \*3SG-matched vs. 3SG-DFLT marking in Polish impersonals. Slavic impersonals thus constitute further evidence that subjects, pronominals, and expletives, as well as other functional heads (e.g. Infl, Agr) are not syntactic primitives but rather complex underlying relations realised at the PF interface.

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# Control across an object: Late Merge and Smuggling

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This presentation concerns a phenomenon of Subject Control across an object (1) and concerns chiefly English and Polish data but it also has a more universal flavor:

- (1) Jan obiecał Marii umyć ręce.  
Jan-NOM promised Maria-DAT wash-INF hands  
'John promised Mary to wash his hands.'

The latest version of the Control-as-Movement approach to control across an object and Control Shift appears in Hornstein and Polinsky (2010). To deal with both problems, they follow Baker (1997) and propose to introduce a fine-grained mapping from the semantic to the syntactic frame:

- (2) a.  $[_{VP} DP_o [V' V_{persuade} [_{infinitive} PRO... ]]]$  affected/patient  
b.  $[_{VP} [_{PP} DP_o] [V' V_{promise} [_{infinitive} PRO... ]]]$  goal/path/location

The contrast between (2a-b) has consequences for the mechanics of movement from the position indicated as PRO and the computation of proper movement and closeness: (a) the DP embedded within PP does not interfere with the raising from the position of PRO (b) it does not undergo Wh-movement and (c) it does not undergo Heavy NP-shift. However, this solution fits poorly with Polish morphosyntax, where the surface indirect object of *obiecac* 'promise' behaves just like the object of *kazać* 'tell': they can both undergo Wh-movement and Heavy NP-shift. Thus, from the empirical perspective, a silent PP could as well be placed within the projection of both. But certainly this step immediately raises awkward questions for the MTC approach. As for Control Shift, Polish has a series of verbs that allow for both Subject and Object Control readings (Bondaruk 2004). A particular problem appears with the verb *prosić* 'ask': it allows for object shift, takes its object in Accusative, whose structural case nature is confirmed by the fact that it shifts to Genitive under negation:

- (3) a. Dzieci<sub>1</sub>  $[_{VP} prosiły [_{VP} [nauczycielkę_{ACC} pływania]_2 [V' t_{prosiły} [żeby PRO_1 skakać z wieży]]]]$   
children-NOM asked teacher-ACC swimming-GEN so-that jump-INF from tower  
'The children asked the swimming teacher to jump from the tower.'  
b. Dzieci<sub>1</sub>  $[_{VP} nie prosiły [_{VP} [nauczycielki_{GEN} pływania]_2 [V' t_{prosiły} [żeby PRO_1 skakać z wieży]]]]$   
children-NOM not asked teacher-GEN swimming-GEN so-that jump-INF from tower  
'The children didn't ask the swimming teacher to jump from the tower.'

The Accusative-to-Genitive shift shows that the object of *prosić* 'ask' cannot be placed within any PP, as Accusative-marked prepositional complements are insensitive to Neg placement.

Instead of encapsulating the object within the (silent) PP. I present two proposals: one based on Late Merge, building on work by Stepanov (2001,2007) and Ussery (2008), and the other on Smuggling, c.f. Collins (2005a,b).

Stepanov accounts for the islandhood of adjuncts and lack of intervention effects caused by Dative-marked indirect objects in Russian and the PP-experiencer of *seem* in English by allowing these constituents to be merged late in the derivation via pair-Merge, a structure-building option that clashes with Least Tampering of (Chomsky 2000) and is delayed for economy reasons. I adopt this view and propose (4):

- (4) Extended Late Adjunction Hypothesis (ELAH):

As its idiosyncratic property the head V of *promise*-class verbs can assign its theta role to an argument  $\alpha$  either in the position of its specifier [ $_{VP} \alpha$  [ $_{V'} V \beta \dots$ ]] or adjunct [ $_{VP} \alpha$  [ $_{VP} \dots V \beta \dots$ ]];  $\alpha$  must be assigned a theta role during the construction of the vP phase. The application of ELAH is limited to *promise*-type predicates and reflects their lexical idiosyncrasy. Such a lexical restriction on Hornstein and Pollinsky's (2) seems unavoidable as well, as the direct object of *tell* bears a clear Goal interpretation, though it is not placed within a PP in their account.

As phase heads bear the EPP/EF property which must be satisfied immediately upon merger, an argument can be late adjoined only when its features can be satisfied in-situ. Under ELAH the run of the derivation is determined by lexical properties of the control predicate and the timing of the interaction between its arguments and (functional) elements placed on the main spine of the derivation. ELAH achieves for languages with bare nominal object what the silent PP hypothesis could not have achieved: it accounts for an MLC compatible movement of the controller, availability of Wh-movement for the intervening object and structural case checking.

First, there is no MLC effect with Subject Control across the object, as the surface indirect object is not there to interfere with the raising of the controller at the point of movement. Consider the derivation of (1):

- (5) a. [ $_{VP}$  obiecał $_{[+S/G]}$  [ $_{TP}$  Jan [ $_{VP}$  umyć ręce]]]  
 b. [ $_{VP}$  V $_{[+Ag]}$  [ $_{VP}$  obiecał $_{[+S/G]}$  [ $_{TP}$  Jan [ $_{VP}$  umyć ręce]]]]]  
 c. [ $_{VP}$  Jan [ $_{V'}$  V $_{[ok.Ag]}$  [ $_{VP}$  obiecał $_{[+S/G]}$  [ $_{TP}$  <Jan> [ $_{VP}$  umyć ręce]]]]]]]  
 d. [ $_{VP}$  Jan [ $_{V'}$  V $_{[ok.Ag]}$  [ $_{VP}$  Marii $_{[+DAT]}$  [ $_{VP}$  obiecał $_{[ok.S/G]}$  [ $_{TP}$  <Jan> [ $_{VP}$  umyć ręce]]]]]]]]]

As Stepanov (2001, 2007) observes, every single case of adjunction violates Least Tampering because the adjoined element does not c-command any other element within its sister domain, as it is not dominated, but only contained within a segment. Only when another category is set-merged on top of it can the adjunct establish its c-command domain. As every adjunction violates Least Tampering, it can apply at any depth within the phase under construction. The derivation in (5) is applicable to the examples showing control shift and Genitive of Negation in (3), as the object *trenerkę*<sub>ACC</sub> 'coach' is merged late, once the cyclic stage in the construction of the vP phase has been completed. This operation does not influence its case valuation requirement, as the structural case is valued in situ by v (or v + Neg), as if it were merged cyclically.

Finally, ELAH provides account for Wh-movement of the surface indirect objects in Polish Subject Control constructions. Their subsequent movement beyond the vP phase and feature composition ([+wh]) require early Merge, yet their presence in the phrase marker does not hinder the raising of the subject controller across them. Any intervention effect in this case is only apparent in the framework of Chomsky (2006), as both the subject and the indirect object [+wh] are attracted by v and at the vP phase level the copy of the object does not block subject raising.

ELAH postulates different derivation 'times' for the cyclically and the late-merged objects and is related to other minimalist approaches dealing with properties of experiencers in raising constructions Kitahara (1997), Epstein (et.al. 1998) and Boeckx (1999) or objects in Subject Control (Ussery 2008).

Apart from its obvious countercyclic character, the approach based on ELAH faces the following challenge: it is indeterminate w.r.t. the argument/adjunct status of the indirect object. It is merged late like an adjunct but otherwise it has a status of an argument, as it can (improperly) bind nominal elements in its sister domain:

- (6) \*Jan<sub>2</sub> obiecał jej<sub>1</sub> [ t<sub>2</sub> pozdrowić Marię<sub>1</sub>].  
 Jan-NOM promised her-DAT greet-INF Maria-ACC

For this reason I also explore one more alternative: a smuggling approach based on Collins (2005a,b) and producing the effect obtained by base generation in Larson (1991) and Bowers (2008). Consider example (7) with *promise* again and its derivation with three pivotal steps: (8c) the subject raises to [spec,V] (the step forced by EPP on V), (8d) the infinitive raises to [spec,X] and (8f-g) the key VP smuggling step.

(7) Piotr obiecał jej zjeść rybę.

Piotr.NOM promise.past her.DAT eat.inf Fish.ACC

‘Piotr promised her to eat the fish.’

(8)

a. [<sub>CP</sub> Piotr zjeść rybę]

b. [<sub>VP</sub> obiecał [<sub>CP</sub> Piotr zjeść rybę]]

c. [<sub>VP</sub> Piotr [<sub>V'</sub> obiecał [<sub>CP</sub> ~~Piotr~~ zjeść rybę]]]

d. [<sub>XP</sub> [<sub>CP</sub> ~~Piotr~~ zjeść rybę] [<sub>X'</sub> X [<sub>VP</sub> Piotr [<sub>V'</sub> obiecał **CP**]]]]

e. [<sub>AppIP</sub> jej Appl [<sub>XP</sub> [<sub>CP</sub> ~~Piotr~~ zjeść rybę] [<sub>X'</sub> X [<sub>VP</sub> Piotr [<sub>V'</sub> obiecał **CP**]]]]]

f. [<sub>YP</sub> Y [<sub>AppIP</sub> jej Appl [<sub>XP</sub> [<sub>CP</sub> ~~Piotr~~ zjeść rybę] [<sub>X'</sub> X [<sub>VP</sub> Piotr [<sub>V'</sub> obiecał **CP**]]]]]

g. [<sub>YP</sub> [<sub>VP</sub> Piotr [<sub>V'</sub> obiecał **CP**]] [<sub>Y'</sub> Y [<sub>AppIP</sub> jej Appl [<sub>XP</sub> [<sub>CP</sub> ~~Piotr~~ zjeść rybę] [<sub>X'</sub> X **VP**]]]]]

h. [<sub>VP</sub> Piotr [<sub>V'</sub> v [<sub>YP</sub> [<sub>VP</sub> ~~Piotr~~ [<sub>V'</sub> obiecał **CP**]]] [<sub>Y'</sub> Y [<sub>AppIP</sub> jej Appl [<sub>XP</sub> [<sub>CP</sub> ~~Piotr~~ zjeść rybę] [<sub>X'</sub> X **VP**]]]]]]]

i. [<sub>TP</sub> Piotr [<sub>T'</sub> T [<sub>VP</sub> ~~Piotr~~ [<sub>V'</sub> v [<sub>YP</sub> [<sub>VP</sub> ~~Piotr~~ [<sub>V'</sub> obiecał **CP**]]] [<sub>Y'</sub> Y [<sub>AppIP</sub> jej Appl [<sub>XP</sub> [<sub>CP</sub> ~~Piotr~~ zjeść rybę] [<sub>X'</sub> X **VP**]]]]]]]

This derivation does not require Late Merge or late labeling, satisfies Least Tampering, MLC/RM and avoids the argument/adjunct ambiguity of the indirect object of *promise*, although it runs afoul of the Freezing Principle of Mueller (1998). Object Control verbs can have a similar derivation, but without the key movement step in (8c). The [+EPP] property on V appears to be the pivotal lexical property of *promise*-type verbs.

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# The Russian prefix *po-*

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The prefix *po-* is one of the most productive verbal prefixes in Russian. Ožegov/Švedova (1994) list 968 lexical-semantic variants of *po-*verbs.

Krongauz (1997) discusses the traditional problems arising for aspectology with regard to prefixation – “pure aspect pairs and the meaning of the prefix”, “the semantics of the prefix and Aktionsarten”, “the role of the prefix in secondary imperfectives” – concluding: “на сегодняшний день (как это не странно звучит при том количестве научных работ, которые посвящены этой тематике) не существует общепринятого решения ни одной из названных проблем, что в наибольшей степени связано с отсутствием удовлетворительных описаний приставок и, тем самым, с невозможностью тотальной проверки выдвинутых гипотез.” (Krongauz 1997:81)

Meanwhile minimalist approaches have been suggested involving the decomposition of prefixes and verb phrases in order to solve the problems mentioned above. Some proposals were presented at FDSL conferences (e.g., FDSL 5 – Svenonius; FDSL 7 – Biskup). The initial idea was that there are two classes of (Russian) prefixes – lexical (LP) and superlexical (SLP) prefixes. Svenonius (2004) argued that LPs originate VP-internally, whereas SLPs originate outside the VP. In connection with this distinction it is supposed that SLPs demonstrate a number of special characteristics (see, e.g., Romanova 2006): (i) an SLP-verb has never an idiomatical interpretation; (ii) SLP-verbs usually do not form secondary imperfectives; (iii) SLPs can be stacked; (iv) SLPs have an operator meaning and induce different aktionsarts (delimitative, attenuative, distributive, cumulative, etc. in Isačenko’s terminology); (v) an SLP-verb does not undergo any valency change.

But these different characteristics of LPs and SLPs did not stand up to closer examination. Biskup (2009) shows for a number of Russian and Czech prefixes that there are no clear differences between LPs and SLPs with regard to these and further characteristics: SLPs also can license arguments and case, they can be interpreted idiomatically, form secondary imperfectives, etc. Therefore Biskup considers superlexical prefixes as a subset of lexical prefixes and analyzes SPLs and LPs in the same way. He argues that verbal prefixes and prepositions are identical elements, namely Ps. Verbal prefixes are spellouts of a preposition incorporated into the verb. For the rich internal structure of PPs he proposes that in addition to the standardly assumed locative and directional projection and in addition to degree adjuncts, PPs contain a T(ense)-head bearing a valued T-feature and unvalued phi-features. T is responsible for the case assignment. Syntactically, case on the prepositional complement is a reflection of the Agree operation between T-features and phi-features on the complement and T-head and semantically, it is a reflection of semantic features of the decomposed preposition. Since all proposals so far have been illustrated with different prefixes and different simplex verbs (where they work, so to speak), I will examine this framework with the various prefixations with *po-* (traditionally assumed as having purely perfectivizing, inchoative, delimitative, ingressive meanings).

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