

Between Function and Content

Hagit Borer
 Queen Mary University of London
h.borer@qmul.ac.uk

Outline of Talk

- 1 Slavic prefixes – some facts and puzzles
 - 2 Theoretical Assumptions
 - 3 The syntactic domain of Content
 - 4 On the inut to Content matching
 - 5 The syntactic domain of Content: apparent counterexamples
 - 6 Pluralia Tantum – a case study
 - 7 Back to Slavic perfective prefixes
 - 8 Content across a functional bracket?
- Appendix: Against P movement for prefixes

1 Slavic Prefixes, Preliminaries

1.1 The facts

1.
 - a. $V \rightarrow \textit{imperfective}$
 - b. PREFIX + V $\rightarrow \textit{perfective}$
 - c. V + SEMELFACTIVE $\rightarrow \textit{perfective}$
 - d. PREFIX + V + S-IMPERFECTIVE/HAB $\rightarrow \textit{imperfective}$
 - e. PREFIX [PREFIX + V + S-IMPERFECTIVE/HAB] $\rightarrow \textit{perfective}$
2. (Almost) all prefixes are telic/resultative
 But also, a good number of prefixes can participate in the emergence of non-compositional Content¹

1.2. The Lexical vs. superlexical distinction (Babko-Malaya, 1999; Svenonius, 2005)

3. 'Lexical': telic (resultative); change Content; occur internal to non-eventive (root) nouns, can be embedded under imperfective marking (1d)
 'Superlexical': Compositional, exclude the pattern in (1d) (with the exception of Bulgarian)
4. Lexical prefixes are low and correlate with an event-related PP; Superlexical are higher and adverbial (Svenonius, 2005 and subsequent work).

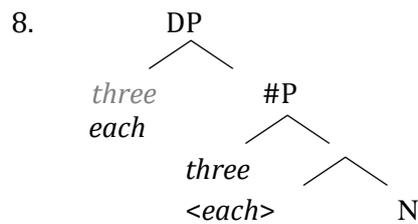
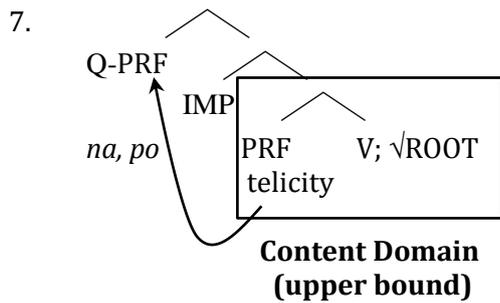
1.3. Slightly different typology, relative to behavior, not tokens:

	T-1	T-2	T-3	T-4 (in Russian, Polish and Czech at most 2-3 (<i>na, po-DIST</i> ; <i>po-ATTN</i>). Possibly up to 9 in Bulgarian)
Telic	yes	yes	yes	yes (<i>except Po-DIST</i>); Quantificational
Content co-extensive with V	no	no	yes	(co-extensive with PRF-V)
Compositional	no	yes	yes	yes
primary imperfective	no	no	yes	n/a
secondary imperfective	yes	yes	no (except Bulgarian)	n/a
merge with secondary imperfective (stacked)	no	no	no	yes
occurs in eventive derivatives	yes	yes	yes	no
occurs in root nouns	yes	yes	no	no

¹ *Content*, and not *Meaning* to distinguish it from facets of interpretation that emerges through the mediation of formal semantics.

Between Function and Content

6. Zero perfectives pattern with type 1 → zero perfective affix (on a par with *sheep, fish, put*)



9. a. F must raise(*each*) → strong determiners (must value both # and D)
 b. F may raise (*three*) → weak determiners (ambiguous, must value #, need not value D); another valuer is needed for D (typically ∃)
 c. F may not raise (must value #; cannot value D. Appears unattested in English)
 (Note that Fusion or Spanning executions are possible as well)

1.4 Evidence for na-raising -

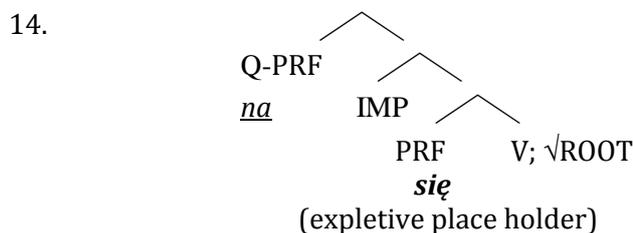
10. a. na binding the DP but not the event when adjacent to V:
 b. na binding the DP but not the event when stacked
 c. na binding the event, but only in the presence of się
 (Filip, 2000, Pereltzweig 2006, Romanova 2006, Lazorczyk 2010)

11. a. na-kupiałam *flamastry/flamastrów.
 na-bought markers.ACC/markers.GEN
 'I bought a lot of markers.'
 #'I did a lot of marker buying.'
 b. na-łuskałam *orzecha / orzechów.
 na-shelled nut.GEN / nuts.GEN
 'I have shelled a good quantity of nuts.'

12. a. student na-roz-wieszał *ogłoszenia / ogłoszeń.
 student na-out/around-hang notices.ACC / notices.GEN
 'A/the student posted a lot of/a number of notices in the hallway.'
 #'A/the student did a lot of posting of notices in the hallway.'
 b. na-za-praszałam *ważnego gościa / ważnych gości.
 na-invited important guest.GEN / important guests.GEN
 'I invited a lot of important guests.'

13. a. na-pociłam się (sporo) przy tym.
 na-sweated REFL.ACC much at this
 'It took quite an effort to do this.' (lit. 'I sweated quite a lot at this.')
- b. na-śmiałam się dziś (jak nigdy).
 na-laughed. REFL.ACC today as never
 'I laughed today a lot/enough (like never before).'

- c. na-męczyłam się (sporo) przy tym.
 na-tired REFL.ACC much at this
 'I went through a lot of trouble with this.'



Following Lazorczyk (2010)

15. Non-raising *na* (types I-II)
 - a. *na-pisałam książkę.*
 PREF-wrote book.sg.ACC
 'I wrote a book.'
 - b. *na-łożyłam ci obiad na talerz.*
 on-put. you.DAT dinner.sg.ACC on plate
 'I put dinner on the plate for you.'

2 Theoretical Assumptions

16. Language variation is contingent on the *properties of functors* (Borer, 1984; sometimes called the Borer-Chomsky Conjecture)
17. Functors spell out transitive functions with a *rigid designation*, by which we mean that their function, whether syntactic and semantic, has a constant felicity value in all possible worlds (see Gajewski 2010).
18. *S-functors*²: underlie canonical functional structure – THE, WILL, PST, EVERY, THREE, VERY, and the structural nodes that correspond to them (e.g. D, T, #, DEG and so on)
19. *C-functors*: a syntactic function that projects a category and defines its complement space as another category (e.g. $C_{N[V]}$ is a function that projects N and defines its complement space as V, and which, in English, may be realized (at the very least) as *-ation -ation, -ment, -er, -ing* etc. and with e.g. *-er* also representing an additional an additional semantic function, $ER_{N[V]}$)

2.1 Some Differences between S-functors and C-functors

20. a. S-functors enter (non-trivial) Extended Projections, Categorizers do not.
 b. (Informally) S-functors select categories (potentially instantiated by a categorizer); C-functors do not select S-functors
 c. Categorial values are never satisfied non-locally (e.g. by discourse antecedents or through Spec-head relations, see (23)-(26))
21. The output of S-functor merger is compositional; the output of C-functor merger need not be.
22. a. C-functors:: Function doesn't predict Form; Form *does* predict Function:
 [V]N-affix may be *ation, ment, ance/ence, al*; but e.g. $/_{\pi}ation/$ always has an N instantiation (although not necessarily exclusively); V-affix may be *ize, -ate, -ify, -en*, but $/_{\pi}ize/$ always has a V instantiation
 b. S-functor-«e» pairs: Function doesn't predict Form; Form *does not* predict Function:
 PL may be *-s, -en, -i* (foci) as well as multiple root allomorphs; $/_{\pi}s/$ may be plural, third person singular, genitive marker. Differently put, syncretism, fusion, etc. are essentially unattested in derivational morphology
23. a. During the summer, water in the pond mostly evaporates (salient: *most water* evaporates)
 b. Water in the pond is mostly lost through evaporation.
 (salient: *most events* of loss are through evaporation; most water not necessarily lost)
24. Most water in the pond mostly evaporates (licit, but *not* a possible reading of (23a-b))
25. a. [# MOST [...
 b. MOST(ly) [# «e» # [...
 (An arrow points from the # under MOST(ly) to the # under «e» #)
26. a. the dog's ear
 b. a dog's ear

² In Borer (2005, 2013) I argue that S-functors are semantic adjunct which value empty heads. This issue is set aside here for presentational reasons.. See reference for a detailed theoretical rationale.

Between Function and Content

27. $[_{D-1}[_{D-2} \text{ THE/A } [(\text{dog's})]] \ll e \gg_D [(\text{ear})]]$


28. **S-functors:** fundamentally a *syntactic realization* of a *semantic function*: syntactically and semantically stable (including Content); phonologically erratic.

C-functors: fundamentally a *syntactic function* with a *phonological realization*: syntactically and phonologically stable; Content-wise erratic (formal semantic status variable.)

2.2 Extended Projections

29. (Informally) -

a. $FC1+FC1+FC1+FC1+FC1+C1(+C2+C3) \leftarrow$ An Extended Projection

vs.

b. $C1+(C2+C3+)^{FC1+FC1+FC1} \dots$ (something else)

30. *Extended Projection*_{Def'}

a. For all X, $X \in \{Ex[W]\}$, X must dominate a W-equivalent C-core

b. The hierarchy of ExP-segment labeling within any extended projection (type) is universally specified

c. Subject to (a,b), every ExP segment is optional, but its presence/absence has interpretational consequences.

31. a. $\emptyset \rightarrow X, X \in \{Ex[N]\} / [______ \{Ex[N]\}]$;

$\emptyset \rightarrow D / [______ \{Ex[N]\}]$

$\emptyset \rightarrow \# / [______ \{Ex[N]\}]$;

$\emptyset \rightarrow Q / [______ \{Ex[N]\}]$;

$\emptyset \rightarrow CL / [______ \{Ex[N]\}]$

b. $\{Ex[N]\}$: {D, Q, #, CL}, order universally fixed

32. ExP segments as self-selecting set (pace the lowest member, a matter to which I return)

2.3 A brief note on roots and categories - locality

33. A. Fact: English past tense and plural marking are *always* regular for derived forms. All irregular cases of past marking and plural marking are root-adjacent.

B. Claim: 'irregular' realizations are stored with roots and can only be instantiated locally. All non-root adjacent contexts revert to default (see also Embick, 2003, 2010).

34. a. $[\sqrt{SOLID}] \text{ IFY }] \text{ PST} \rightarrow \text{solidified}$

b. $[\sqrt{FORM}] \text{ ATION}] \text{ PL} \rightarrow \text{formations}$

35. a. $[\sqrt{SING}] \text{ PST} \rightarrow \text{sang}$

b. $[\sqrt{GOOSE}] \text{ PL} \rightarrow \text{geese}$

36. *Locality lost:*³

$[[\sqrt{SING}] \mathbf{v}] \text{ PST}$

$[[\sqrt{GOOSE}] \mathbf{n}] \text{ PL}$

37. Alternative – contextual categorization:

Extended Projections: $C \rightarrow =X$ in the context of $[_Y Y \in \{Ex[X] \text{ } [_X \sqrt{ROOT} \text{ }]]$

C-functors: $[_X C_{X[Y]} \text{ } [_Y \sqrt{ROOT} \text{ }]]$

38. $[_{=V} \sqrt{SING}] \text{ PST}$

$[_{=N} \sqrt{GOOSE}] \text{ PL}$

³ The paradigm presents a problem for DM, as noted in Embick, 2003, 2010, who proposes to solve it by assuming that zero-realized affixes are structurally transparent in the relevant context. For multiple arguments against zero instantiations of C-functors in English see Borer, 2013

3 The Syntactic Domain of Content

3.1 Delimiting Content by ExP-segments

39. Words (=non-functors) don't actually need to have Content, although they do need to have phonology (and does anything actually follow from that)?

40. a. `Twas brillig, and the slithy toves
Did gyre and gimble in the wabe
- b. `Twas and the (-y) (-s)
Did and in the:
- c. 'joga brillig, dan gox slitho tove
bib gyre dan gimble ni gox wabe
- d. bright and will in sing doves the

Džabbersmok

<http://www76.pair.com/keithlim/jabberwocky/translations>

Maciej Słomczyński

*Było smaszno, a jaszmije smukwijne
S'widrokre, tnie na zegwniku weżały,
Peliczaple stały smutcholijne
I zbla, kinie rykos'wista, kały.*

41.	CONTENT		DERIVED CONTENT	UNDERIVED CONTENT	
	<i>slith</i>	no	<i>slithy</i>	N/A	no
	<i>swarth</i>	no	<i>swarthy</i>	N/A	yes
	<i>blood</i>	yes	<i>bloody</i>	yes	yes
	<i>dirt</i>	yes	<i>dirty</i>	yes	no

42. *the slith/slithy; three slithies; every swarth etc....*

43. *edit-or-y-al-ize*
natur-al-ize
civil-ize-ation
except-ion-al (and compare with special)....

44. i $[(=V) \sqrt{\text{EDIT}}]$ → ±Content; If [-Content] then ii
 ii $[N[=V \sqrt{\text{EDIT}}+\text{or}]$ → ±Content; If [-Content] then iii
 iii $[N/A[N[=V \sqrt{\text{EDIT}}+\text{or}]+\text{y}]$ → ±Content; If [-Content] then iv
 iv $[N/A[N[=V \sqrt{\text{EDIT}}+\text{or}]+\text{y}]+\text{al}]$ → ±Content; If [-Content] then v
 v $[V[N/A[N[=V \sqrt{\text{EDIT}}+\text{or}]+\text{y}]+\text{al}]+\text{ize}]$ → ±Content
45. i $[(=N) \sqrt{\text{CIV}}]$ → ±Content; If [-Content] then ii
 ii $[A[=V \sqrt{\text{CIV}}+\text{il}]$ → ±Content; If [-Content] then iii
 iii $[V[A[=V \sqrt{\text{CIV}}+\text{il}]+\text{ize}]$ → ±Content; If [-Content] then iv
 iv $[N[V[A[=V \sqrt{\text{CIV}}+\text{il}]+\text{ize}]+\text{ation}]$ → ±Content

46. ExP-segment boundaries are absolute barriers to Content compositionality

4 On the input to Content matching

4.1 Contentful C-functors

47. -ist: $C_{N[N]}$ IST
- a. cellist, artist *CELL(O)+IST=CELLIST; ART+IST=ARTIST*
- b. animist; atavist */anim/-IST; /atav/-IST*
- c. existentialist; communist *EXISTENTIAL+IST≠EXISTENTIALIST;*
COMMUNE+IST≠COMMUNIST

Between Function and Content

48. *-able*: C_{A[V]} *ABLE*
 a. drinkable; deliverable *DRINK+ABLE=DRINKABLE; DELIVER+ABLE=DELIVERABLE*
 b. arable, capable, impeccable */arab/-ABLE; /cap/-ABLE*
 c. palatable; suggestible *PALAT+ABLE≠PALATABLE; SUGGEST+IBLE≠SUGGESTIBLE*
49. *And compare with:*
 liquidize; liquefy; liquidate C_{V[N]}: */-ize, -ify, -ate/*
 transmission; transmittal; transmittance C_{N[V]}: */-(a)tion; -al, -anc/*

4.2 The role of phonology

50. a. the selective *transmission* of historical documents
 b. scanning and *transmittal* of documents or parts of documents
 c. a camera system for processing documents for measurement of reflectance and/or *transmittance* of documents
51. a. Several groups ... monitor the sale and *transportation* of seed
 b. The *transportal* of seeds in the wool or fur of quadrupeds.
52. a. the slight *transference* of red pigments from the skins
 b. *transferral* of bread "sponge" from dough mixer to trough prior to fermentation
53. a. the car's *transmission* → *GEARBOX*
 transmittal
 transmittance
- b. public *transportation* *SHARED PASSENGER SERVICE* (North American English only)
 public *transport* (British English only)
 transportal
- c. mass *transit* " (North American English only)
 transition
- d. "Understanding *tránsference* and counter *tránsference*" *TRANSFERENCE*
 *Understanding transferal and counter transferal

5. Domain of Content - apparent counterexamples

54. **Diminutives**
- | | | | |
|--|--------|--|---------------------|
| a. <i>eten-tje</i>
food.DIM
'dinner' | Dutch | b. <i>cas-ino</i>
house.DIM
'brothel' | Italian |
| c. <i>stoł-ek</i>
table.DIM
'chair' | Polish | d. <i>almofad-inha</i>
pillow.DIM
'spoiled person' | Brazilian Portugese |
- (De Belder, Faust and Lampitelli, to appear), (Armelin, 2013),

55. **Pluralia tantum; dualia tantum**
- | | |
|--|--------|
| a. glass-es, brief-s, trouser-s, scissor-s | |
| b. <i>šamayim, ofan-ayim, mispar.ayim</i> | Hebrew |
| ???.DU wheel.DU number.DU | |
| 'sky' 'bicycle' 'scissors' | |

56. **Classifiers:**
- | | | |
|--------------------------|---------------------|-----------|
| <i>tienwoe ki</i> ; | <i>tienwoe tung</i> | Cantonese |
| telephone long | telephone through | |
| 'telephone wire' | 'telephone call' | |
| 'telephone' (instrument) | | |

Between Function and Content

71. Too much chopped nuts *is/??are going stale in my cupboard.
72. [D <<e>> [# <<e>> [CL COUNT <<e>> [=N √TROUSER; √RAPID; √GLASS; √DOG]]]]
73. [=N√TROUSER] → *TROUSER*
[=N√RAPID] → no Content on file (for the nominal instantiation)
[=N√GLASS] → *GLASS*
[=N√DOG] → *DOG*
74. {[=N√TROUSER] → *TROUSER*} –COUNT → Compositional only
{[=N√RAPID] → no Content} –COUNT → Compositional (no Content); *RAPIDS*
{[=N√GLASS] → *GLASS*} –COUNT → Compositional only
{[=N√DOG] → *DOG*} –COUNT → Compositional only
75. {[=N√TROUSER] → [-Content]} –COUNT → no Content on file
{[=N√RAPID] → no Content on file} –COUNT → *RAPIDS*
{[=N√GLASS] → [-Content]} –COUNT → *GLASSES*
{[=N√DOG] → [-Content]} –COUNT → no Content on file
76. The syntactic domain of Content *may*, but need not, include the lowest ExP-segment in the functional sequence.
77. Why only the lowest ExP-segment, architectural reasoning:
a. [√TROUSER] → no categorial label unless it merges with some Y
b. [C_{X[*W*]} [*transform*] –*ation*] is not a maximal projection unless it merges with some Y
→ if the domain of Content requires reference to category labels and to maximal instantiations, the lowest ExP-segment must be included
78. Why only the lowest ExP-segment, inherent reasoning:
In reference to (31), it is inherently true for the lowest item in the architectural sequence that it *never* selects another ExP-segment. It is thus definitionally at a twilight zone between the S-functor and the C-functor system.

7 Back to Slavic perfective prefixes:

Type 1 – Content not co-extensive with V, non-compositional

Type 2 – Content not co-extensive with V, but is compositional nonetheless!

Type 3 – Content co-extensive with V

79. **blogować** to blog' (computerese)
a. *do-blogować* to hit sb. (metaphorically) by blogging (no examples found)
b. *na-blogować* to blog a lot
c. (*nad-blogować*) *not attested*
d. *o-blogować* to blog about
e. *od-blogować* to blog back, to sign off from a blog, to take a break in blogging
f. *po-blogować* to blog for a little while
g. *pod-blogować* ? to send by blogging (1 example found)
i. (*przed-blogować*) *not attested*
j. *przy-blogować* to add to a blog
k. *u-blogować* to manage to blog sth (e.g., a story, 4 pages, etc.)
l. *w-blogować* to blog in
m. *z-blogować* to blog (as pure *perfectivizer*), to put into a blog
n. *za-blogować* to blog – inceptive
o. *prze-blogować* to spend time blogging
q. *roz-blogować* to go on for too long blogging (with the REFL *się*), to spread the habit of blogging
r. *wy-blogować* to produce sth.with blogging, to blog out
s. (*wz-blogować*) *not attested* (Lazarczyk 2010)

Between Function and Content

80. The phonological realization of functors may impacts Content, but their formal semantic as well as syntactic function remain stable.

81. a. *denwa ni *(dai)* b. *denwa ni *(hon)* Mandarin
 telephone two CL telephone two CL
 'two telephones (instruments)' 'two telephone calls'

82. Roots may select their (bleached) PRF realization (e.g. *prze* for *czytała*)
 In the absence of selection, PRF is default (z- in Polish)

By assumption, other perfective realizations are *not* selected by the root.

83. a. $\begin{matrix} \diagup & \diagdown \\ \text{PRF} & /_{\pi}\text{blogować} / \rightarrow \text{BLOG} \\ /_{\pi}\text{z}/ & \end{matrix}$
 root selected, pure perfectivizer

b. $\begin{matrix} \diagup & \diagdown \\ \text{PRF} & /_{\pi}\text{blogować} / \rightarrow [-\text{Content}] \\ /_{\pi}\text{z}/ & \end{matrix}$
 no Content on file for $/_{\pi}\text{zblogować}/$
 \rightarrow Contentless

c. $\begin{matrix} \diagup & \diagdown \\ \text{PRF} & /_{\pi}\text{blogować} / \rightarrow \text{BLOG} \\ /_{\pi}\text{roz}/ \rightarrow \text{TOO LONG} & \end{matrix}$
 compositional: *BLOG TOO LONG*

c. $\begin{matrix} \diagup & \diagdown \\ \text{PRF} & /_{\pi}\text{blogować} / \rightarrow \text{BLOG} \\ /_{\pi}\text{od}/ \rightarrow \text{BACK} & \end{matrix}$
 compositional: *BLOG BACK*

84. a. $\begin{matrix} \diagup & \diagdown \\ \text{PRF} & /_{\pi}\text{czytała} / \rightarrow \text{READ} \\ /_{\pi}\text{prze}/ & \end{matrix}$
 root selected, pure perfectivizer

b. $\begin{matrix} \diagup & \diagdown \\ \text{PRF} & /_{\pi}\text{czytała} / \rightarrow [-\text{Content}] \\ /_{\pi}\text{prze}/ & \end{matrix}$
 no Content on file for $/_{\pi}\text{przeczytała}/$
 \rightarrow Contentless

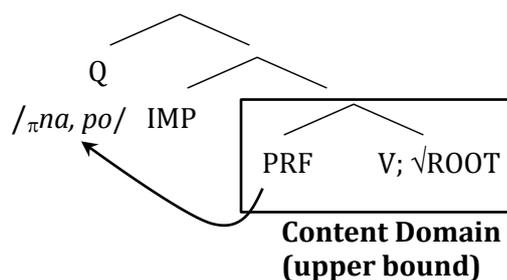
c. $\begin{matrix} \diagup & \diagdown \\ \text{PRF} & /_{\pi}\text{czytała} / \rightarrow \text{READ} \\ /_{\pi}\text{roz}/ & \end{matrix}$
 (compositional)

d. $\begin{matrix} \diagup & \diagdown \\ \text{PRF} & /_{\pi}\text{czytała} / \rightarrow [-\text{Content}] \\ /_{\pi}\text{roz}/ & \end{matrix}$
 $/_{\pi}\text{rozczytała} / \rightarrow \text{DECODE}$

e. $\begin{matrix} \diagup & \diagdown \\ \text{PRF} & /_{\pi}\text{czytała} / \rightarrow \text{READ} \\ /_{\pi}\text{od}/ & \end{matrix}$
 (compositional)

f. $\begin{matrix} \diagup & \diagdown \\ \text{PRF} & /_{\pi}\text{czytała} / \rightarrow [-\text{Content}] \\ /_{\pi}\text{od}/ & \end{matrix}$
 $/_{\pi}\text{odczytała} / \rightarrow \text{PRESENT}$

85. *na, po* are spelled out in the context of adjacency to IMP



8 Content across a Functional Bracket?

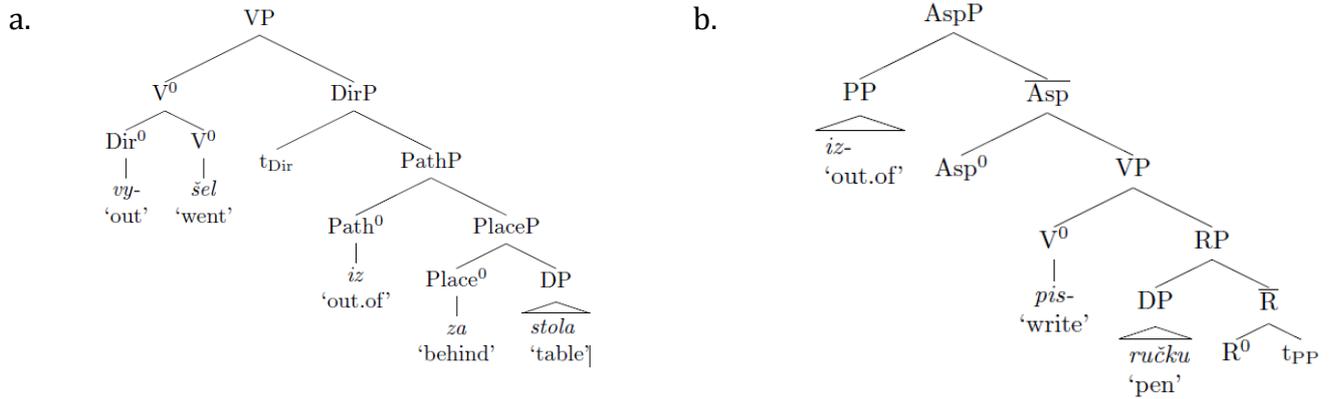
I assume, in line with the detailed discussion in Borer (2013) that in argument structure derivatives, verbal extended projections are preserved, thereby allowing both pure perfectivizers and imperfective to occur, but with compositional meaning only. Outer aspect (or grammatical aspect) can be independently shown to be excluded from the domain of such derivatives, however, accounting for the absence of stacked prefixes in such derivatives.

86. If PRF is part of the verbal extended projection, how come it can be found within root nouns?⁴
87. a. *na-pis* an inscription, caption (cf. *na-pisać* 'to write-telic')
 b. *przy-pis* footnote (cf. *przy-pisać* 'to attribute')
 c. *za-pis* a note, record (cf. *za-pisać* 'to write down')
 d. *wy-pis* a copy of an official document, hospital discharge (cf. *wy-pisać* 'to write out, to discharge from hospital')
 f. *prze-pis* recipe (cf. *prze-pisać* 'copy, prescribe') Polish, Lazorczyk (2010)
88. a. rapids boat; glasses frame; briefs design
 b. lice infected; pants pocket
89. *bet xolim*; *ben mitzvot*;
 house sick.pl son commandments
 'hospital' '13-year old boy'
90. a. [D *the* [#*three* [CL *cat-s* [~~*eat*~~]]];
 F F F
 [D [#*many* [CL *factor-s* [~~*factor*~~]]]
 F F F
 b. [D *the* [#*three* [CL *rapid-s* [~~*rapid*~~]]];
 F F F
 [D [#*many* [CL *scissor-s* [~~*scissor*~~]]]
 F F F
91. a. [N2 [CL *briefs* [=N1 ~~*brief*~~]] *design*]; [N2 [CL *pant-s* [=N1 ~~*pant*~~]] *pocket*]
 NF NF
 b. [N1 *bet-* [CL *xolim* [=N2 ~~*xole*~~]]]; [N1 *ben-* [CL *mitzv.ot* [~~*mitzva*~~]]]
 NF NF
 (house) (patient) (son) command.f
HOSPITAL 13 YEARS OLD BOY
92. Contextual Functors (following suggestions in Booij 1996):
 For any S, $S \in \{Ex[X]\}$ S cannot constitute a licit extended projection iff for all $y, y \in \{Ex[X]\}$, S does not select y (recall that all ExP-segments are optional, but their presence/absence has interpretational costs).
93. → The lowest member of any functional sequence is only an active member of an extended projection if dominated by some other member of that projection
94. → Within compounds, plural marking doesn't constitute a (nominal) extended projection, and as a result, doesn't block Content searches which include both the head and the non-head
95. → PRF only counts as an ExP-segment (of a verbal projection) if dominated by a member of Ex[V]. Absent such structure, its complement domain need not be V, but, rather, becomes dependent, categorially, on whatever ExP-segments merge above PRF.
- 'Inflection inside derivation':
- a. in compositional cases, will bring in the full functional sequence above the relevant 'inflection' morph'
- b. In non-compositional cases, may only include the lowest possible instantiation of the functional sequence.

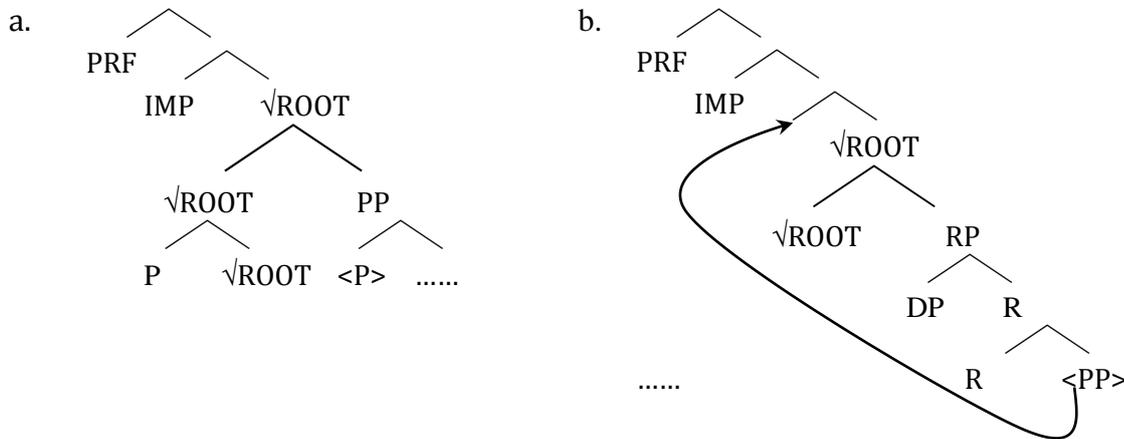
⁴ eventive derivatives, See Borer (2013) for extensive discussion of verbal Extended Projections within argument structure derivatives.

Appendix A: Against P Movement for Perfective Prefixes

A1. Svenonius (2005):



96.



- A2. A. Why (and how) does P merge below IMP?
- B. And if it merges with the root, how much structure for roots?
- C. And since it seems to check some sort of aspectual structure at least in *one* of these structures, why not merge it there directly?
- D. In English particle constructions, obligatory telicity emerges only when the P does *not* incorporate/move. What, then, motivates the movement in Slavic?
- A3. A. Why are lexical prefixes obligatorily non-compositional?
- B. And why, even when their meaning is predictable, it nonetheless deviates from that of the prepositions?

A4. P	Meaning	Prefix	Meaning (canonical)
<i>do</i>	to	√	reach a goal, add something
<i>na</i>	on	√	a lot, to satisfaction
<i>nad</i>	over	√	diminish size e.g., <i>nad-gryźć</i> 'to take a bite of sth' (<i>gryźć</i> 'to bite, to chew')
<i>o</i>	above, around	√	directs the activity downward or backward
<i>od</i>	from, away from	√	undoing sth, taking sth away. Also re-doing sth, gaining sth
<i>po</i>	over	√	some, a little, DISTRIBUTIVE marker, inceptive wrt verbs of motions and states (*after)
<i>pod</i>	under, below	√	up to, cause sth, increase intensity or fulfilment

<i>przed</i>	before	----	
<i>przy</i>	at, near	√	reach a spatial goal
<i>u</i>	away	√	
<i>w(e)</i>	in	----	
<i>z(e)</i>	from, with	√	complete (default pure perfectivizer in Polish)
<i>za</i>	behind, for	√	inceptive marker
----	----	<i>ob</i>	around (historically an allomorph of <i>o</i>)
<i>(przez)</i>	through, by	<i>prze</i>	through, over
----	----	<i>roz</i>	spreading, separating, distributing
----	----	<i>wy</i>	out
----	----	<i>wz</i>	upward; increase or intensification; used with some verbs as inceptive

- A5. a. John wrote down poetry (for four hours/*in four hours).
 b. John wrote down two pages of his article (in four hours/?for four hours).
 c. John heated up the pot (for ten minutes/in ten minutes).
 d. John heated up water (for ten minutes/in ten minutes). (Vitkova, 2004,cited in Svenonius, 2005)
- A6. a. *Jessica wrote poetry down (for four hours/in four hours).
 b. Jessica wrote two pages of her article down (in four hours/*for four hours).
 c. Jessica heated the pot up (*for ten minutes/in ten minutes).
 d. *Jessica heated water up (for ten minutes/in ten minutes).

References

- Armelin, Paula Gabbai (2013) 'The non-compositional domain: diminutives and augmentatives in Brazilian Portuguese.' Ms. Faculdade de Filosofia, Letras e Ciências Humanas – Universidade de São Paulo
- Babko-Malaya, Olga (1999). Zero Morphology: a Study of Aspect, Argument Structure and Case. Ph.D. thesis, Rutgers, New Brunswick, New Jersey.
- Booij, Geert. (1996). 'Inherent vs. contextual inflection and the split morphology hypothesis', Yearbook of Morphology 1995. Dordrecht: Kluwer, 1–16.
- Borer, Hagit (1984) Parametric Syntax. Dordrecht: Foris Publications.
- Borer, Hagit. (2005). In Name Only, Structuring Sense Vol. I, Oxford: Oxford University Press
- Borer, Hagit. (2013). Taking Form, Structuring Sense Vol. III. Oxford: Oxford University Press
- De Belder, Marijke, Noam Faust and Nicola Lampetti (to appear) 'On a high and low diminutive.' In Alexiadou, Artemis, Hagit Borer and Florian Schaeffer The Roots of Syntax, the Syntax of Roots, Oxford: Oxford University Press.
- Déchainé, Rose-Marie. (1993). 'Predicates Across Categories', Ph.D. dissertation, University of Massachusetts at Amherst.
- Embick, David. (2003). 'Locality, listedness, and morphological information', *Studia Linguistica* 57:143–169.
- Embick, David. (2010). Localism vs. Globalism in Morphology and Phonology. Cambridge, MA: MIT Press.
- Filip, Hana (2000). 'The quantization puzzle.' In Events as Grammatical Objects, edited by Carol Tenny and James Pustejovsky, pp. 39–96. CSLI, Stanford, CA.
- Gajewski, Jon. (2010). 'L-Triviality and Grammar', talk presented at the University of Southern California, April 2010.
- Kiss, Tibor (2011). 'Reconstituting Grammar: Hagit Borer's Exoskeletal Syntax.' A Review Article. *Linguistische Berichte* 225
- Lazarczyk, Agnieszka. (2010). 'Decomposing Slavic Aspect: The Role of Aspectual Morphology in Polish and Other Slavic Languages', Ph.D. dissertation, University of Southern California.
- Pereltsvaig, Asya (2006). 'Small Nominals.' *Natural Language and Linguistic Theory* 24(2) , 433-500.
- Romanova, Eugenia (2007). Constructing perfectivity in Russian. Ph.D. Dissertation. University of Tromsø.
- Svenonius, Peter (2005) 'Slavic Prefixes inside and outside VP.' In Svenonius, Peter (Ed.). *Nordlyd* 32.2: Special issue on Slavic prefixes. University of Tromsø, Tromsø.
- Vitkova, Polya (2004). The Interaction of English Particles, Bulgarian Prefixes, and Telicity. Master's thesis, Universitetet i Tromsø
- Wechsler, Stephen. 2008. 'Dualist Syntax'. In: Müller, Stefan (Ed.). Proceedings of HPSG 2008, Keihanna, Japan, p. 294-304.