

In this talk (based on Zanon (forthcoming), Zanon and Hsu (2019) with amendments and extensions):

EMPIRICALLY:

- Compare the distribution of *only* [Eng] / *tol'ko* [Rus] / *zhiyou* [Chn]

PROPOSAL IN A NUTSHELL:

- In all three languages *only* identifies the edges of phasal domains
- Phases are dynamic: a particular XP may serve as a phase depending on a particular syntactic configuration / availability of functional material in a language
- In Rus and Chn overt focus movement to *only* is obligatory; in English it is not
- Rus *tol'ko* and Eng *only* can adjoin to the phasal edges in the nominal, verbal, and sentential domains; in Chn *only* is eligible for adjunction to the verbal and sentential, but not nominal domains.

1. Preliminaries:

Basic facts about ONLY

Eng

☞ **Long-distance association (including into islands)**

- (1) a. John **only** introduced [BILL]_F to Sue.
b. John **only** introduced Bill [TO SUE]_F.

(If John introduced Bill and Arnold to Sue (with no further social pleasantries), then (1b) would be true, but (1a) would be false. => Truth conditionally distinct)

- (2) John **only** introduced [a man [that [JILL]_F admires]] to Sue.

Different analyses are pursued for these: in-situ treatments (Rooth 1985) or movement of the focused associate in LF (Drubig 1994, Krifka 1996, Tancredi 1990, 2004, Wagner 2006, a.o.).

☞ **Licensing of NPIs**

Wagner (2006): *only* can license NPIs only in its 'syntactic' scope (identified by brackets below), but not in its restrictor.

- (3) a. Only John [ate any kale].
b. ***Only any student** [ate kale].

☞ **C-command requirement**

Focalizing adverb must c-command the associate (see, e.g. Jackendoff 1972).

- (4) a. *[JOHN]_F only saw Mary.
 b. John only saw [MARY]_F.

☞ **Two “onlys” of English: constituent and adverbial**

- (5) a. John only saw [MARY]_F. ☞ adverbial
 b. John saw only [MARY]_F. ☞ constituent

Two properties distinguish them (apart from adjacency):

[i] Constituent *only* induces ambiguity; adverbial *only* has surface scope (Taglicht 1984).

- (6) a. They were advised to learn [**only** [SPANISH]_F]. [constituent]
 [i] advised > only: They were advised not to learn a language other than Spanish.
 [ii] only > advised: They were not advised to learn any language other than Spanish.
 b. They were advised to **only** learn [SPANISH]_F. advised > only [adverbial]
 b. They were **only** advised to learn [SPANISH]_F. only > advised

[ii] Constituent *only* may appear between the preposition and the DP:

- (7) a. We escaped with **only one broken window**. [www]
 b. ...connected **to** only this specific account.
 c. ...display data **about** only this gender
 d. Monocular vision (sight **in** only one eye)...

NB! There are restrictions on this: not every PP behaves in this way (I'll return to this point).

Rus

☞ **Distance association is prohibited**

In Russian, the focused element must be adjacent to *only*. Consider (8): the focused associate cannot be separated from *only* by anything.

- (8) a. *Andrej tol'ko ispek [PIROG]_F dlja sestry. [Rus]
 Andrej only baked pie for sister
 Intended: 'Andrej only baked [A PIE]_F for his sister.'
 b. *Andrej **tol'ko** ispek pirog [DLJA SESTRY]_F.
 Andrej only baked pie for sister

Examples in (9) demonstrate the possible grammatical renditions of the same sentence.

- (9) a. Andrej **tol'ko** [PIROG]_F ispek dlja sestry.
 Andrej only pie baked for sister
 b. Andrej **tol'ko** [DLJA SESTRY]_F ispek pirog.
 Andrej only for sister baked cake

Prohibition on the association of *only* with constituents inside the islands. This is an instance of a complex NP:

- (10)a is * because *only's* associate is not adjacent to it;
- (10)b is * because of the island violation.

- (10) a. *Ja **tol'ko** znaju čeloveka, kotoryj vyraščivaet [ABRIKOSY]_{Foc}.
 I only know man who grows apricots
 'I only know a man who grows APRICOTS.'
- b. *Ja tol'ko [ABRIKOSY]_i_{Foc} znaju mužčinu, kotoryj vyraščivaet t_i.
 I only apricots know man who grows
 'I only know the man who grows APRICOTS.'

☞ Licensing of NPIs

Rus is a negative concord language, so it does not have the precise equivalent of Eng weak NPIs like *any*. I put this issue aside here (see Perelstvaig (2000) on polarity sensitive items in Rus).

☞ Two *tol'kos*?

So far, we have seen one order (only+XP>V), cf. now (11):

- (11) a. John only eats [BANANAS]_F.
 b. John eats only [BANANAS]_F.
 c. Džon est tol'ko [BANANY]_F.
 John eats only bananas
 e. Džon [tol'ko [BANANY]]_F est/
 John only bananas eats

Recall that in English, constituent *only* induces scope ambiguity. In Rus, the judgements are split. Most of my consultants only accept the interpretation equivalent to *they advised them to only learn Spanish*, but some admit the reading *they only advised them to learn Spanish*.¹ If scope ambiguity can serve as a diagnostic for the base-generated position of *only*, then (12) indicates that Rus *only* is eligible to adjoin to the nominal expressions directly.

- (12) Im posovetovali učit' **tol'ko** [ISPANSKIJ]_F.
 them_{DAT} advised to.learn only Spanish
 'They counselled them to learn only Spanish.'
 [i] and no other language
 [ii] but they said nothing about French.

On the other hand, Rus does not allow for *only* to appear with P and its complement. *Only* must precede the preposition. In this case, any constituent of the NP can be associated with *tol'ko*.

- (13) a. *dlja **tol'ko** moej sestry
 for only my sister
 b. **tol'ko** dlja [MOEJ]_F sestry
 c. **tol'ko** dlja moej [SESTRY]_F

¹ In fact, my English informants likewise have a difficulty with getting an inverse scope in *Mary was counselled to learn only Spanish*.

(14)a. ...vzaimodeistvuet **tol'ko** s krupnymi finansovymi gruppami
 interacts only with large financial groups
 'interacts only with the large financial groups'

b. *s **tol'ko** krupnymi finansovymi gruppami / s očen' krupnymi...
 very large

c. *s krupnymi **tol'ko** finansovymi gruppami

Despite the latter, I will show that ONLY is, in fact, eligible to adjoin to TNP². The argument has to do with the *status of prepositions*: I will show that Ps always extend the nominal domain in Rus; and can do so in English as well.

Chn

☞ Distance association is prohibited

Chinese evinces the same requirement as Russian: namely, the focused constituent must be adjacent to the focalizing adverb.

(15)a. *Zhangsan **zhiyou** kao [DANGAO]_F gei jiejie.
 Zhangsan only bake cake for sister

b. *Zhangsan **zhiyou** kao dangao [GEI JIEJIE]_F.
 Zhangsan only bake cake for sister

(16)a. Zhangsan **zhiyou** [DANGAO]_F kao gei jiejie.
 Zhangsan only cake bake for sister

b. Zhangsan **zhiyou** [GEI JIEJIE]_F kao dangao.
 Zhangsan only for sister bake cake

☞ One *zhiyou*: adverbial (see also Erlewine 2014, 2016)

First, consider the word order facts. The postverbal *only*-complexes are bad in Chn (cf. (16)).

(17)a. *Zhangsan **kao** zhiyou [DANGAO]_F gei jiejie.
 Zhangsan baked only cake for sister

b. *Zhangsan **kao** dangao zhiyou [GEI JIEJIE]_F.
 Zhangsan baked cake only for sister

Cf. Rus, where only+XP>V and V>only+XP orders are possible:

(18)a. Andrej **tol'ko** [PIROG]_F ispek dlja sestry.
 Andrej only cake baked for sister

b. Andrej **tol'ko** [DLJA SESTRY]_F ispek pirog.
 Andrej only for sister baked cake

c. Andrej ispek **tol'ko** [PIROG]_F dlja sestry.
 Andrej baked only cake for sister

d. Andrej ispek pirog **tol'ko** [DLJA SESTRY]_F.
 Andrej baked cake only for sister

² TNP = traditional noun phrase; pretheoretical nomenclature I will use to refer to DP/NP.

These facts suggest the following:

- *Zhiyou* is base-generated as an adjunct to the XP-associate;
 ➡ **not available for Chn *zhiyou***
- *Zhiyou* may be generated as an adjunct to VP with subsequent movement of the focused constituent
 ➡ **available for Chn *zhiyou***

There is **another position** available for the *zhiyou*-complexes – namely, on the edge of CP (data below from Erlewine 2016). Just like in the cases above, movement to *only* is obligatory. We also get surface scope.

- (19) *Zhiyou* [CHA]_F mei-ge keren dou he t_i. (only>every)
 Only tea every guest all drink
 'Only tea is such that every guest drinks it.'

In cases of subject focus association, the same mechanism applies: the subject moves to the the CP-adjoined *only*. This is particularly obvious in cases of high sentential adverbs like *certainly* in (20)b.

- (20)a. *Zhiyou* [ZHANGSAN]_F kao dangao gei jiejie.
 Only Zhangsan bake cake for sister
 b. *Zhiyou* [ZHANGSAN]_F, kending, kao dangao gei jiejie.
 Only Zhangsan certainly bake cake for sister

Second, just like in Russian, *zhiyou* cannot intervene between the head of PP and its complement:

- (21) *Zhangsan dui *zhiyou* [LISI]_F reng-le qiu. (Erlewine 2016)
 Zhangsan to only Lisi throw_{PERF} ball
 Intended: 'Zhangsan threw a ball at only Lisi.'

Third, we do not get ambiguity with *zhiyou*:

- (22) Wo zhidao ta *zhiyou* [XIBANYAWEN]_F cai xue-guo.
 I know he only Spanish then learn-ASP
 'I knew that he had only learnt Spanish.'
 OK *knew*>*only*; **only*>*knew*

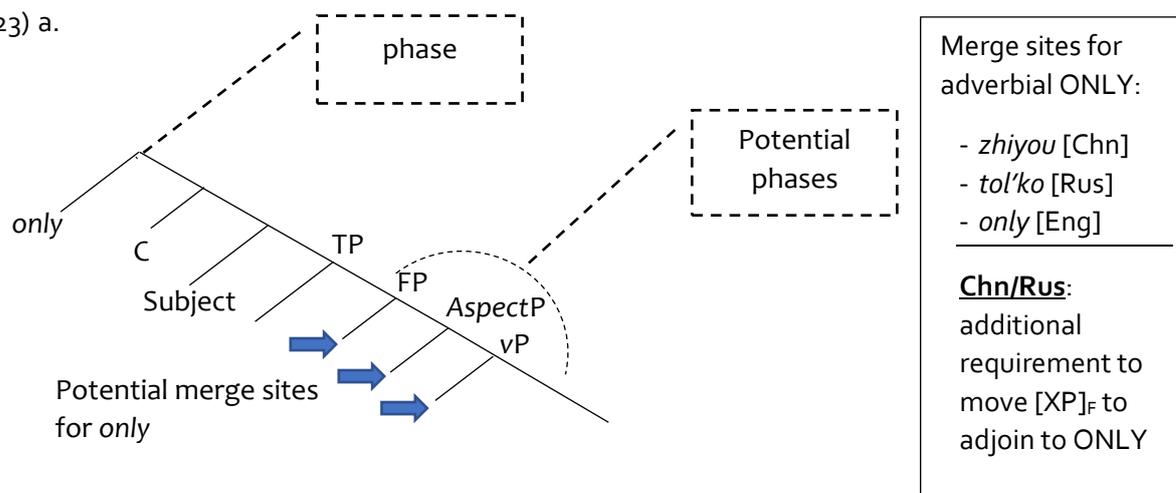
In what follows I offer a unified account of the observed facts. I defend the following analysis:

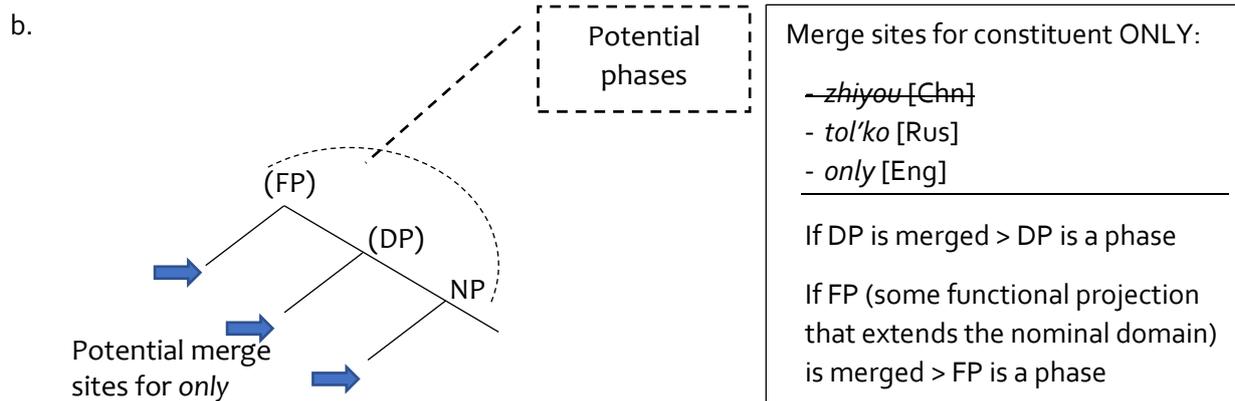
- ONLY in all three languages **adjoins to phasal edges**.
- Chn *zhiyou* may adjoin in the sentential and verbal domains. This is motivated by the following:
 - (a) Word order facts (*zhiyou* must appear in the specific positions along the sentential spine).
 - (b) Lack of ambiguity conventionally attributed to the constituent ONLY.
 - (c) Impossibility of adjoining *zhiyou* to the complement of P.
- Rus/Eng *tol'ko/only* can adjoin in the nominal, verbal, and sentential phasal domains.
 - (a) Word order and interpretation facts indicate that *only/tol'ko* can be constituent => obtains in situations when V>only+XP.
 - (b) In the verbal domain: adverbial *only* can associate with a constituent long-distance; in Rus, it may not (the focalized associate must move to *tol'ko*).
 - (c) I am delaying the discussion of the C-domain.
- Rus/Chn require overt movement **to** the focalizing adverb; Eng does not.
- **Phases** are dynamic/contextual: may differ depending on a particular configuration resulting from Merge & the language-specific inventory of functional projections

This is summarized below:

Adjunction site	C-domain	V-domain	N-domain
<i>Only</i>	✓	✓	✓
<i>Tol'ko</i>	✓	✓	✓
<i>Zhiyou</i>	✓	✓	*
Movement to ONLY in syntax	Required		Not required
<i>Only</i>			👍
<i>Tol'ko</i>	👍		
<i>Zhiyou</i>	👍		

(23) a.





Why should ONLY adjoin strictly to phases?

Biberauer (2018): "Outermost phase edges are domains specifically reserved for the integration of elements marking speaker-/hearer-related perspective. These elements **thus serve as a key acquisition cue as to the location of phase edges.**"

- This naturally entails that the phases are not "fixed" (as in Chomsky 2000, 2001). If they were fixed, then there would be no need to clue the speaker to the size of phases in her languages.
- Rus/Chn encode focus in the verbal and sentential domains (for Slavic, see Stjepanović 1999, Stepanov 1998, a.o.; for Chn – Ernst and Wang 1995)

2. Theoretical assumptions

Dynamic phases & structure of TNP

I adopt Bosković's (2014) dynamic approach to phases: the highest phrase in the extended domain of a lexical head functions as a phase (the highest projection within a clause = sentential domain). A particular XP may or may not be a phase, contingent on its syntactic context. For example, within the domain of N, NP, DP or FP can in principle serve as a phase, depending on the availability of functional elements in the language and the specific configurations resulting from Merge. Similar reasoning is extended to the verbal domain: *vP* or *AspectP* can constitute a phase. The evidence for this is adduced from the ellipsis and extraction facts.

Consider, for instance the contrast between BCS (24)a and Eng (25). First, Bošković argues that TNPs in Eng and BCS differ with respect to their categorial status: BCS does not project DP, while English does. If so, in configurations like (24)a, NP constitutes a phase, as it is the highest projection within the domain of N. In Eng (25), DP is a phase. The extraction facts follow: a constituent must pass through the SPEC of a phase and cross a phrasal boundary. This conspiracy is precisely what gives Abels' (2003) (26). The same logic extends to the examples under consideration: in BCS [ovog studenta] must pass through the SPEC of its phase – the NP. But this movement is too short – the extractee is a phasal complement. Therefore, such extraction is illicit. In English, on the other hand, both restrictions are complied with: the *of*-phrase can be extracted (the movement passes through the SPEC of DP and crosses a phrase boundary).

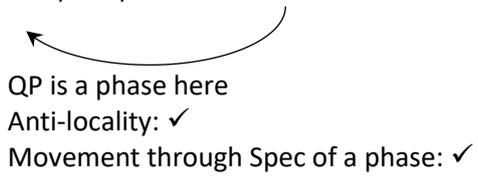
(24)a. ?*Ovog studenta_i sam pronašla [NP sliku t_i] [BCS]
 this_{GEN} student_{GEN} am found picture_{ACC}
 'Of this student I found the picture.'

b. Pronašla sam sliku ovog studenta.

(25) Of which city_i did you witness [DP the [NP destruction t_i]]? [Eng]
 (26)*[His mother likes Mary]_i everyone believes that t_i. (Abels 2003)

What is particularly interesting though is BCS (27). Here, the NP is augmented by the QP. On Bošković's treatment, this QP serves as a phase. In this configuration the extraction of the complement NP is licit. That is because the moved constituent complies with PIC and anti-locality: to wit, it crosses a phrasal boundary (NP headed by *pictures*) and stops in the SPEC of the phase – QP.

(27)a. Ovog studenta_i sam pronašla mnogo/deset slika t_i
 this_{GEN} student_{GEN} am found many/ten pictures_{GEN}
 b. [QP many [NP pictures [NP this student]]]

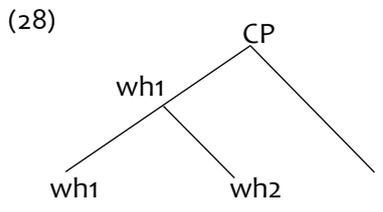


On Bošković's account, **each lexical head**, i.e. N, P, A, V, project a phase.

⇒ As we will see shortly, an amendment is required. Namely, I will argue that **P may be interpreted as a functional projection within the nominal domain**.

Movement to ONLY

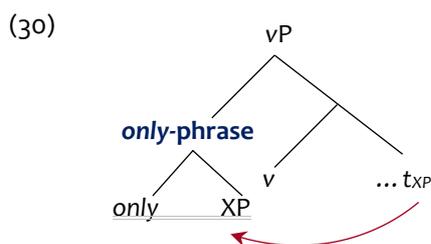
Rudin (1988) proposes the structure below for Bulgarian multiple wh-fronting configurations: here, the second wh-constituent right-adjoins to the first one in the manner demonstrated in (28). The crucial property of such clusters is that they form a structural unit that cannot be split. In Bulg MWh (29)a, for instance, the initial wh-cluster is impenetrable by the parenthetical, unlike in its close kin, BCS in (29)b (for alternatives on MWh, see Bošković 2002, Richards 1999, 2001).



(29) a. ?*Koj, spored tebe, kakvo e kazal? [Bulg]
 who according to you what has said
 'Who, in your opinion, said what?'

b. Ko, po tebi, šta pije? [BCS]
 who by you what drinks
 'Who, according to you, is drinking what?'

And this is exactly what I assume for Rus/Chn movement to *only* (where applicable):



Analysis

Nominal domain

I hope to have convinced you that Chn does not adjoin *zhियou* to the TNP (we will come back to the pre-subject ONLY). We can confine our attention to Eng and Rus here.

We have the following generalizations:

	Eng	Rus
Word order: V > only [XP] _F	✓	✓
... V _[CP(non-finite)] only [XP] _F results in ambiguity	✓	✓
See Appendix on this.		
P only DP	✓	*

Word order

⇒ **Eng**

Earlier, it was said that P > only > DP order is fine in English. But there actually are some restrictions on such combinations. Examples (31)a/c/d are from Rooth 1985 (but see Bayer 1996 for a challenge on judgments). Apparently, ONLY cannot precede the DP in certain contexts, after all:

- (31) a. John spoke to **only** Mary.
 b. He came with **only** the bare essentials.
 c. *The library is closed on **only** the Sunday.
 d. *Children play in **only** the commons.

My observation here is that the examples in (31) correlate with (32): *only* cannot adjoin to the DP that resists extractions in the P-stranding contexts.

- (32) a. Who_i did John speak to t_i?
 b. What did he come with?
 c. *What is the library closed on?
 d. ?*What do children play in?

There is an old analysis by Hornstein and Weinberg (1981) of P-standing that relies on two mechanisms: a) restructuring, and b) case. In situations like (33)a, restructuring (indicated by the

brackets) takes place; the moved element is assigned objective case. In (33)b, restructuring does not take place. In this situation, *what time* is assigned an oblique case. The filter $*[_{NP} e_{[OBL]}]$ then rules out examples like (33)b.

- (33) a. Who_i did John [talk about] $t_{i+[OBJ]}$?
 b. *What time_i did John arrive [at $t_{i+[OBL]}$]?

- Something along these lines seems intuitively right: there is this connection between the inherent case (oblique) assigned by the preposition and the extractability/phasehood. Here is my proposal:

Bošković (2014): PP (or possibly additional functional structure above it) is a phase in the domain of P. That is because for him, **every** lexical head projects a phasal domain. ☞ My take: **not always**.

[Option A] PP is part of the nominal phasal domain.
 In this situation, P extends the domain of N. This precludes the reanalysis along the lines of H&W.

[Option B] PP constitutes a separate phasal domain.
 This enables the reanalysis.

☞ Option A and Option B are available in Eng; only Option A is available in Rus.

Let us look at Eng first. In situations like (33)a:

(34)...[PP about [DP ... [NP...]]]

- ⇒ DP is the phase in the domain of N
- ⇒ PP (with additional functional structure above it, see Bošković 2014, Riemsdijk 1990, Rooryck 1996, Koopman 2000, and references therein) is the phase in the domain of P
- ⇒ Reanalysis with V is possible => extraction of DP is allowed

But in situations like (33)b:

(35)...[PP at [DP ... [NP...]]]

- ⇒ PP is the phase in the domain of N
- ⇒ No reanalysis with V => extraction of DP is banned

Hornstein and Weinberg (1981) observe that P+NP configuration in both (36)a/b results in ambiguity. On my account, the ambiguity hinges on the phasal status of P:

- P can form its separate phasal domain (in which case, it is subject to reanalysis :: meaning “decided to buy a boat”) **or**
- P can extend the domain of N (in which case, reanalysis is not possible :: meaning “decided while standing on the boat”).

In the P-stranding context (36)c, the ambiguity disappears. The second reading is impossible because P extends the domain of N and renders its complement inextricable.

- (36)a. John decided on the boat.
 b. On what did John decide?
 Both are ambiguous: while standing on the boat / decided to buy a boat

- c. What did John decide on?
 Unambiguous: decided to buy a boat

We now have the following prediction:

- ⇒ in configuration [P only DP], we expect to see no ambiguity (P constitutes its separate domain => subject to reanalysis with V)
- ⇒ in configuration [only P DP], we expect ambiguity (P extends the domain of N)

This is borne out in (37):

- (37) a. He decided on only the boat
 Unambiguous: ... but he is still thinking about the house.
 ≠ he decided only while standing on the boat.

- b. He decided only on the boat.
 Ambiguous: ...but he is still thinking about the house.
 ...he didn't make any decisions on solid ground.

Finally, Rooth (1985) points out that the ungrammatical sentences in (31) improve if the measure/degree phrase is introduced, as in (38). My intuition here is that ONLY adjoins to this degree phrase (note: one does have to assume that *some/two* are phrasal), which, in turn, appears to project its own phasal domain.³

- (38) a. The library is closed on **only** some Sundays.
 b. Children play in **only** two parks.

(39) [DP [FP *only* some/two] parks]

⇒ **RUS**

Recall that in Rus the preposition cannot be separated from its complement by *only*. My objective is to show that Rus prepositions extend the nominal domain. That Ps are functional elements is not theoretical heresy: see, e.g., Baker (2004), Emonds (1985), Grimshaw (1991). Furthermore, Lamontagne and Travis (1987) show that prepositions are closely related to case markers (and to the functional category KP). In fact, some languages encode what is typically conveyed in Eng by prepositions via variable case assignment, as in Hungarian (40).

- (40) a. A részeg szépen aludt a kukában. (Fowler & Yadroff 1993)
 the drunk prettily slept the dumpster_{INESSIVE}
 'The drunk was sleeping prettily in the dumpster.'
 b. A részeg szépen aludt a kukán.
 the drunk prettily slept the dumpster_{SUPERESSIVE}
 'The drunk was sleeping prettily on the dumpster.'
 c. A részeg szépen aludt a kukánál.
 the drunk prettily slept the dumpster_{ADRESSIVE}
 'The drunk was sleeping prettily by the dumpster.'

³ In fact, those types of quantifiers appear to behave like nominals in other contexts:

- (i) a. Give me some.
 b. Show them two (of these).

And, in fact, in Slavic, we see a number of facts that appear to motivate the treatment of prepositions as functional material over NP that is linked to case and semantic properties of nominal expressions.

[a] Ps that do not assign case

Some prepositions participate in constructions that assign variable cases depending on the verb (accusative for directional verbs and locative/instrumental for positional ones in (41)). Note also that the adverbial “there” appears with no preposition though its form depends on the directional/locational properties of the verb.

(41)a.	xodit	v	les	//	živet	v	lesu
	goes	in	forest _{ACC}		lives	in	forest _{LOC}
	b. xodit	na	stadion	//	zanimajetsja	na	stadione
	goes	to	stadium _{ACC}		works.out	on	stadium _{LOC}
	c. xodit	tuda	//	zanimajetsja	tam		
	goes	to.there _{ADV}		works.out	in.there _{ADV}		

These prepositions appear to be “transparent” for case assignment: in such cases, the contribution of the preposition is to encode certain spatial properties of the NP. At the risk of oversimplifying, *na* is selected when the NP denotes open spaces or events, while *v* is selected for closed spaces. Cf. Finish that encodes both functions via case (data from Ilola 1995):

(42)a.	Kissa	istuu	huoneessa.	(in+place)	[Finnish]
	cat	sits	room _{INESSIVE}		
	b. Kissa	istuu	lattialla.	(on+place)	
	cat	sits	floor _{ADESSIVE}		
	c. Koška	sidit	v	komnate.	[Rus]
	cat	sits	in	room _{LOC}	
	d. Koška	sidit	na	polu.	[Rus]
	cat	sits	on	floor _{LOC}	

Additionally, certain PPs, participating in durative constructions, hinge on the aspectual properties of the verb: in (a) an imperfective requires a bare measure phrase; the perfective in (b) necessitates a PP headed by *za*. The telic imperfective in (c) requires a preposition *na*. Crucially though all of them require accusative. In a sense, a combination with the verb requires both components—the right case on the NP and the right preposition.⁴

(43)a.	Ivan	delal	rabotu	(*za)	dva	časa	/vsju	noč'.
	Ivan	did _{IMPERF}	work	for	two _{ACC}	hours	/all _{ACC}	night _{ACC}
								'Ivan was doing work for two hours / all night.'
	b. Ivan	sdelal	rabotu	*(za)	dva	časa	/za	noč'.
	Ivan	did _{PERF}	work	for	two _{ACC}	hours	for	night _{ACC} .
								'Ivan did his work in two hours / in a night.'
	c. Ivan	prihodil	na	dva	časa	/na	ves'	den'.
	Ivan	stopped.by	for	two _{ACC}	hours	for	all _{ACC}	day _{ACC}

⁴ Incidentally, both *na* and *za* participate in variable case assignment (locative vs. directional constructions).

'Ivan stopped by (and spend) two hours/ all day.'

Finally, as has been pointed out in a number of works (Svenonius 2003, Ramchand 2004, and references therein), most Russian verbal prefixes have a homophonous prepositional form. There is much work that has been done on the prefixation in the verbal domain.⁵ The important point for the present purposes is the parallelism we see in the verbal and nominal domain.⁶

- (44) a. v-pustit' v dom
 in-let in house_{ACC}
- b. do-letet' do Moskvj
 as.far.as-fly as.far.as MOSCOW_{GEN}
- c. za-vernut' za ugol
 behind-turn behind corner_{ACC}
- d. oto-jti ot doma
 away-step away home_{GEN}

[b] Ps that are "hidden" or optional

Fowler and Yadroff (1993) point out that colloquial Rus allows constructions that alternate between bare NPs and PPs:

- (45) a. napisat'/ poslat'/ peredat'/ otpravit' pis'mo (k) materi
 write/send/hand/dispatch letter (to) mother
 'write/send/give (via someone)/dispatch a letter to mother'
- b. slux dostig (do) našix ušej
 rumor reached (to) our ears
- c. cto kasaetsja (do) menja, to...
 what touches (to) me then
 'as for me,...

F&Y further show that nominals like *all night* (Acc) evince variable behavior depending on the predicate. Examples in (46) showcase the proposed taxonomy for Russian. Various properties distinguish the measure phrases below (orthogonal for present purposes). What is important is that for (46)b/c, they propose two possible solutions in (47), i.e. they assume some functional structure over these bare NPs.

- (46) a. Policejskij provel vsju noč' v zasade. [argument]
 policeman spent all night in ambush
 'The policeman spent all night in ambush.'
- b. Policejskij prosidel vsju noč' v zasade. [quasi-arg.]
 policeman sat.through all night in ambush
 'The policeman sat through the whole night in ambush.'

⁵ Many argue that certain prefixes original lower in PP/RP and move to V (see, e.g., Fowler 1996, Rojina 2004, Svenonius 2003).

⁶ In fact, this type of concord seems reminiscent of Bantu hyperagreement, to use Carstens' term.

c. Policejskij sidel vsju noč' v zasade. [non-argument]
 policeman sat all night in ambush
 'The policeman sat the whole night in ambush.'

- (47) a. [PP [P DUR [NP vsju noč']]]
 b. [KP K [NP...]]

Finally, some constructions have no obvious case assigners and no prepositions. The logical extension of the treatment above entails positing a functional projection headed by a null head above these nominals:

- (48) a. Ivan idet lesom.
 Ivan walks forest_{INST}
 'Ivan is walking through the forest.'
- b. Ona rodilas' tret'ego janvarja.
 she was.born third_{GEN} January_{GEN}
 'She was born on January 3.'
- c. Ona srednego rosta.
 she average_{GEN} height_{GEN}
 'She is of average height.'

⇒ All of this is to say that there is indeed a connection between case and the preposition. Some contexts apparently necessitate null K/P; some enable (optional) spellout of P. This means that prepositions in Rus are really just a (partial) realization of case.

[c] Ps as the only realization of case

There is substantial crosslinguistic evidence provided by BCS⁷ that Ps in Slavic are part of the nominal domain. In BCS, higher numerals (from 5 and henceforth) resist declension (Franks 1995 and Bošković 2006 argue that this is because they are caseless/frozen forms). However, these numerals assign Gen Pl to their complements. Consider now what happens in the contexts where the V assigns inherent case – *ovladati* takes INST, as attested by (49)a. Observe that in such situations, the numeral is illicit.

- (49) a. On je ovladao zemljom.
 he is conquered country_{INST}
 'He conquered a country.'
- b. *On je ovladao pet zemalja.
 he is conquered five countries_{GEN.PL}

What is telling however is that BCS offers a rescue strategy in (50). The inserted preposition (*sa* 'with' normally "takes" Inst complements) apparently *functions* as a realization of Inst case.

⁷ Unfortunately, this is not testable for Rus, as numerals decline. So, Rus equivalent of (49)b is (i):

- (i) On ovladel pjat'ju stranami.
 He conquered five_{INST} countries_{INST}

What is crucial for the present purposes is that BCS behaves just like Rus wrt ONLY in the nominal domain: i.e., it does not allow the following:

- (ii) *Pričao je sa samo studentom.
 Talked Aux with only student

- (50)a. On je ovladao **sa** pet zemalja.
 he is conquered with five countries_{GEN.PL}
- b. *On je ovladao **sa** zemljom.
 he is conquered with country_{INST}

In fact, this strategy is available even for indeclinable nouns (Bošković 2006):

- (51)a. *Džokej je ovladao Meri.
 jockey is conquered Meri
 'The jockey conquered Meri.'

b. Džokej je ovladao **sa** Meri.

(52) V [_{PP} sa_{INST} [_{OP} pet zemalja]]

Consider also (53).

The verb here assigns dative, an inherent, lexically specified case. The contrast between (a) and (c) suggests that Vs and Ps differ in the following way: lexical case **must** be assigned by the V, but need not be by the P. And so, the two cannot be treated in the same way.

- (53)a. *On pomaže pet ljudi.
 he helps five people
- b. On pomaže ljudima.
 he helps people_{DAT}
- c. prema pet ljudi
 towards five people
- d. prema ljudima
 towards people_{DAT}

Consider also the following paradigm for Rus that brings it closer to home:

In situations where the head noun assigns an oblique case, we get (54).

- (54)a. (Emu dovereli) upravljenie **tol'ko** NOVOJ fabrikoj.
 To.him entrusted management only new_{INST} factory_{INST}
- b. ?*(Emu dovereli) **tol'ko** upravljenie NOVOJ fabrikoj.

In such contexts, the overt extraction out of the inherently-marked complement is fine:

- (55) Emu [_{NOVOJ}]_i doverili [upravljenie [_{t_i} fabrikoj]].
 To.him new entrusted management factory

On the analysis entertained here ONLY can adjoin to phases.

- The inherently marked complements feature more structure above the complement – whether it is a KP or PP is immaterial (Talić 2013 argues that it is a PP). The crucial point is that this additional layer enables the extension of the nominal domain. In this, it is functionally equivalent to the INST-assigning context we saw earlier in BCS. It is this

additional structure that enables the extraction in such contexts as well (for approaches to this see Bošković 2013a, Talić 2013).

(56)[N [_{FP} [_{NP₂} ...]]] ➔ inherently marked complements

[d] Approximative inversion

In approximative inversion contexts, the PPs behave like the prepositionless NPs:

- (57) a. On otdal svoj laptop [za pjat' knjig] (no inversion)
 he traded self's laptop for five books
 'He traded his laptop for five books.'
 b. On otdal svoj laptop [knjig **za** pjat'] (approximative inversion)
 'He traded his laptop for approximately five books.' (Yadroff and Billings 1998)
- (58) a. On kupil [pjat' knjig]
 he bought five books
 b. On kupil [knjig **pjat'**].
 'He bought approximately five books.'

I conclude then that the preposition in Rus is a functional element that belongs in the nominal domain. It follows that Rus does not have an option in (34): PPs belong in the nominal domain, as in (35). If so, the facts with *only* are straightforward: *only* adjoins to phases. P, when present, heads the phase in the extended domain of N. Therefore, *only* is eligible strictly on its edge.

ONLY inside the NP

Observe that neither language tolerates ONLY as an adjunct inside the TNP. This distinguishes ONLY from a more conventional modifier like VERY in (60). If it is indeed the case that As project phrases that can be phases, then we have to assume that *only* does not adjoin in this domain. Note also, that a segment of the TNP does not constitute a phase.

- (59) a. *pretty only old car [Eng]
 b. *krasivaja tol'ko staraja mašina [Rus]
 c. *piaoliang, zhiyou lao-de che [Chn]
- (60) a. pretty very old car [Eng]
 b. krasivaja očen' staraja mašina [Rus]
 c. piaoliang, hen lao-de che [Chn]
- (61) a. #The car is only new (, but it's not red or shiny).
 b. #Mašina tol'ko novaya (, no ona ne krasnaja i ne blestjaščaja)

Verbal domain

All three languages are relevant for the ensuing discussion.

I aspire to show that:

- Movement **to ONLY** is involved in Rus/Chn: whenever ONLY is generated in the verbal domain movement to it is required for focus reasons.
- Phases in the verbal domain are variable in the languages under consideration.
- ONLY adjoins to the outermost edge of the domain

Movement

We have already seen the Chn word order pattern (the baseline is repeated below) which demonstrates that objects must move to ONLY.

- (62)a. Zhangsan zhiyou [DANGAO]_F kao gei jieje.
 Zhangsan only cake baked for sister
- b. Zhangsan zhiyou [GEJ JIEJIE]_F kao dangao.
 Zhangsan only for sister baked cake
- c. *Zhangsan kao zhiyou [DANGAO]_F gei jieje.
 Zhangsan baked only cake for sister
- d. *Zhangsan kao dangao zhiyou [GEJ JIEJIE]_F.
 Zhangsan baked cake only for sister

Chn *zhiyou*-complexes can appear in precisely the same situation as preposed objects which are argued to be displaced for focus reasons. (63) shows the pattern with focused objects. Note that in cases of extractions out of embedded clauses, the focalized element cannot appear before the matrix verb.

- (63) a. Wangwu shuo Lisi du-wan le **naben xiaoshuo**.
 Wangwu say Lisi read-finish PRF that-CL novel
 'Wangwu said that Lisi finished reading that novel.'
- b. Wangwu shuo **naben xiaoshuo** Lisi du-wan le.
- c. **Naben xiaoshuo** Wangwu shuo Lisi du-wan le.
- d. Wangwu shuo Lisi **naben xiaoshuo** du-wan le.
- e. * Wangwu **naben xiaoshuo** shuo [Lisi du-wan le]. (Ernest and Wang 1995)

This pattern is replicated with *zhiyou* provided the usual restrictions are complied with: (a) is bad because the NP fails to move to ONLY; (b) is bad because *zhiyou* is not adjoined to VP; the rest of the paradigm tracks the pattern in (63): *zhiyou* is available in precisely those situations where focus preposing is acceptable. Why the NP_F is ineligible to appear before the matrix verb is an interesting question, but one I am not prepared to answer.

- (64) a. * Wangwu shuo Lisi **zhiyou** du-wan le **naben xiaoshuo**.
 b. *Wangwu shuo Lisi du-wan le **zhiyou** **naben xiaoshuo**.
 c. Wangwu shuo [_{CP} **zhiyou** **naben xiaoshuo** Lisi du-wan le].
 d. [_{CP} **Zhiyou** **naben xiaoshuo** Wangwu shuo Lisi du-wan le].
 e. Wangwu shuo Lisi [_{VP} **zhiyou** **naben xiaoshuo** du-wan le].

f.* Wangwu [_{VP} **zhiyou** **naben xiaoshuo** shuo [Lisi du-wan le]].

Rus ONLY is a little more elusive in the verbal domain. Being the language that makes liberal use of LBE, it enables extractions in (65)b/c. Compare this to (66). Here, ONLY is adjoined in the sentential and verbal domains. The ungrammatical instance in (66)a results from the failure to move to ONLY. The example in (66)b tells us two things: (a) recall that earlier I showed that ONLY does not adjoin to Adj. This means that it must be base-generated external to NP; and (b) movement to it is required (cf. (66)c).

- (65) a. Ty zaprosil [očēn' bol'suju_i tsenu] za škury.
 you asked very big price for pelts
- b. Očēn'_i ty [t_i bol'suju_j] za škury [t_j tsenu] zaprosil. [RNC]
 very you big for pelts price asked
 'You ask for too big a price for the pelts.'
- c. [Očēn' bol'suju_j] ty zaprosil [t_i tsenu] za škury.
- (66) a.* Tol'ko Ivan [DOROGIE_i]_F pokupaet [t_i mašiny].
 only Ivan expensive buys cars
 Intended: 'Ivan buys only EXPENSIVE cars.'
- b. Ivan tol'ko [DOROGIE_i]_F pokupaet [t_i mašiny].
 Ivan only expensive buys cars
- c. *Ivan tol'ko pokupaet [DOROGIE_F mašiny].
 Ivan only buys expensive cars

Similarly for (67), the NP-associate has a requirement to move to *tol'ko*. This is in contrast to conventional attributive modifiers in (a). These are generated inside the NP and can be extracted in the LBE fashion.

- (67) a. Vy svežuju_i kupili [t_i rybu]?
 you fresh bought fish
 'Did you buy FRESH fish?'
- b. *Vy tol'ko kupili [RYBU]_F?
 you only bought fish
 Intended: 'Did you only buy FISH?'
- c. Vy tol'ko [rybu]_i kupili t_i?

Finally, preverbal *tol'ko* enables head focus, in which case I assume that ONLY associated with the V without movement.

- (68) Ivan tol'ko [PEREVODIT]_F knigi (on ix ne pišet).
 Ivan only translates books he them neg writes

⇒ **Intermediate summary:**

- *Zhiyou/tol'ko* impose an adjacency requirement captured formally as a movement operation that moves a focal associate to the focalizing adverb.⁸

Variability of phases

[a] parallelism with ellipsis facts

English imposes the following restrictions on the position of ONLY within a clause. Epistemic and high sentential adverbs (*probably, intentionally*) must precede *only*, while VP-adjoined manner ones (*mildly*) must follow it. If the verb does not move beyond vP (as is standard wisdom), these facts follow on the account entertained here. As ONLY identifies the edge of the verbal domain, we expect for it to follow adverbs that belong in the sentential domain. Observe also that ONLY is not ideal before the modals/auxiliaries.

- (69) a. John {?*only/probably} should (only) introduce [BILL]_F to Sue.
 b. John {intentionally/*mildly} only insulted [MARY]_F. (McCawley 1996)

Consider now this (from Bošković 2014). He argues that ellipsis is parasitic on phasehood: only phases and their complements can be elided. In (70), for instance, the higher AspectP projection is taken to be a phase in the domain of V (highlighted in (71) below). So, (70)a is bad, because the ellipsis targets neither a phase nor its complement; in (70)b, the phase is elided; and in (70)d the ellipsis targets a phasal complement (on the assumption that BE moves to -en).

- (70) Jane_i must have been hassled by the police, and Sue
 a. *must too.
 b. must have too.
 c. must have been too.

(71) Jane_i must [_{VP_{F1}} have [_{AspectP} en [_{VP_{F2}} be [_{VP} hassled *t_i* by the police]]]]].

If this is right, we expect a certain pattern for ONLY in English. Namely, if ONLY adjoins strictly to phases, we expect the following. Since AspectP is a phase here, ONLY may surface after the Aux. On the other hand, the appearance of ONLY before any of the lower functional projections is expected to be bad. In the nominal domain, we predict the felicity before and after the P (the latter should be good, since P-stranding is possible: *Who has Betsy been being hassled by?*)

(72) [_{TP} Betsy_i has [_{VP_{F1}} *t_{have}* [_{AspectP} en [_{VP_{F2}} be [_{VP} hassled *t_i* [_{PP} by [_{DP} the police]]]]]]].
 ^*only ^✓only ^*only ^✓only ^✓only

This is borne out (the judgments are not robust, but I suspect this is due to the processing difficulty – the informant’s comment: “And I can’t make a normal sounding sentence?”)

⁸ The Chn data suggests incidentally that *zhiyou* is not simply an allomorph of *zhi* [contra Erlewine (2016)]. *Zhi* is a focalizing adverb that can associate with an XP_F across the interveners. It is also the element that enables head-focus association. *Zhiyou*, on the other hand, associates with constituents and requires adjacency.

- | | | | | | |
|-------|-----------|----------|----------|--------------------|----------------------|
| (i) | Lisi shuo | Zhangsan | zhi | he | [CHA] _F . |
| | Lisi said | Zhangsan | ZHI | drink | tea |
| (ii) | *Lisishuo | Zhangsan | zhiyou | he | [CHA] _F . |
| | Lisi said | Zhangsan | ZHIYOU | drink | tea |
| (iii) | Lisi shuo | Zhangsan | zhi(you) | [CHA] _F | he |
| | Lisi said | Zhangsan | ZHI | tea | drink |

- (73) a. Betsy ^{??}ONLY has been being hassled [BY THE POLICE]_F.
 b. Betsy has ONLY been being hassled [BY THE POLICE]_F.
 c. Betsy has been ^{*?}ONLY being hassled [BY THE POLICE]_F.
 d. Betsy has been being ^{??}ONLY hassled [BY THE POLICE]_F.
 e. Betsy has been being hassled ONLY [BY THE POLICE]_F.
 f. [?]Betsy s being hassled by ONLY [THE POLICE]_F. (not the FBI).

Once the processing difficulty is removed, though, the judgments become pretty robust:

- (74) John [_{TP}([?]*only) must [_{VP}(only) show [_{DP}(only) HIS ID]_F]].
 John [_{TP} (*only) must [_{AspP}(only) be [_{VP}([?]*only) spending time [_{DP}(only) WITH HIS FAMILY]_F]].

[b] BA-construction in Chn

An interesting pattern is furnished by Chn. Normally, *zhiyou*-complexes must appear immediately before the verb. This is not surprising in view of the standard take on V-movement in Chn: Vs are said not to cross the vP boundary (Huang 1991). However, there are a number of constructions that enable us to posit larger domains for V.

Consider first the **BA-construction**. The addition of BA, as in (75), is said to affect the referential properties of the NP and induce the telic interpretation of the predicate: “The object of *ba* is typically, though not always, the object of a verb. In some intuitive sense this object is “disposed” or “affected” in the event described.” (Huang, Li & Li 2006: 153). The object must appear right after BA.

- (75) a. Zhangsan [*ba* na.ben.shu-neirong bei shu le].
 Zhangsan BA that.CL.book-content memorize well ASP
 b. Zhangsan [bei shu le na.ben.shu-neirong].
 c. *Zhangsan [*ba* bei shu le na.ben.shu-neirong].

I will not pretend to give a coherent overview of the available analyses, as there are too many (see, e.g., Li and Thompson (1981), Sybesma (1999), Travis (1984), Yang (1995), Zou (1995), a.o.). Many proposals regarding the categorial status of BA have been made: BA is a dummy case assigner (Huang 1982); BA is inserted in the head of CAUSE phrase in the absence of V-raising (Sybesma 1999); BA heads a functional projection above VP (Zou 1995). For explicitness, the analysis I will adopt here is from Huang, Li and Li (2009). They argue for the structure in (76).⁹ What is crucial for our purposes is the fact that there is some functional material about the vP that extends the domain of V, as in (77).

- (76) [_{baP} Subject [_{ba}ba [_{VP} NP [v [_{VP} V XP]]]]]
 (77) [_{baP} only ba [_{VP} NP [v [_{VP} V XP]]]]

We now have a prediction: namely, *zhiyou* complexes are expected to appear before BA-constructions. According to the analysis above, a focalized associate must be adjacent to *zhiyou*. This is indeed the case but with an unexpected curveball. The baseline example is in (78).

⁹ BA, according to them, does not assign any theta-roles. It serves to assign case. On the other hand, the intuitive understanding of this constructions entails a reference to theta-properties. The post-BA constituent is said to be “affected”.

Another interesting context that extends the domain has to do with modals of various flavors in Chn and Eng. The generalization is this: ONLY follows epistemics but not dynamic modals. Deontic modals may be either preceded or followed by *zhiyou*-complexes.

Just a quick note on nomenclature (extremely simplified):

- (83)a. The lights are on: John must be home. [epistemic]
 (necessity or possibility of the prejacent proposition according to speaker's beliefs or knowledge)
- b. Johnny, you must do your homework or else! [deontic]
 (necessity or possibility of the acts according to a set of norms or rules)
- c. Johnny was able to turn the lights on. [dynamic]
 (physical necessity or possibility)

Back to Chn: a modal like *keyi* is interpreted differently if it precedes or follows the *only*-complex. It is understood as a deontic modal in (a) (before the *only*-complex), but as a dynamic modal in (b) (after the *only*-complex):

- (84)a. Ta *keyi*_{DEONTIC} *zhiyou* lunwen jintian jiao (Qita-zuoye xia-zhou jiao).
 he can only paper today submit other-homework next-week submit
 'He can/is allowed to submit only the paper today. (He can submit his other assignments next week).'
- b. Ta *zhiyou* lunwen *keyi*_{DYNAMIC} jintian jiao (Qita-zuoye dou hai mei xie).
 He only paper can today submit other-homework all yet not write
 'He can/is able to submit only the paper today. (He hasn't finished writing any other assignments).'

Consider also the pattern with epistemic/deontic readings of *yinggai*:

- (85)a. Ta *yinggai*_{EPISTEMIC} *zhiyou* Meiguo qu-guo (,Yingguo mei qu-guo).
 he should only USA go-ASP UK not go-ASP
 'He should have been to only the USA and hasn't been to UK.'
- b. *Ta *zhiyou* Meiguo *yinggai*_{EPISTEMIC} qu-guo (,Yingguo mei qu-guo).
 he only USA should go-ASP UK not go-ASP
 'He should have been to only the USA and hasn't been to UK.'
- c. Ta *zhiyou* Meiguo *yinggai*_{DEONTIC} qu (, qita-difang bu xuyao qu).
 he only USA should go other-place not need go
 'He should only go to the USA (no need to go to other places).'

The analysis here would then entail the following: dynamic modals always extend the phasal domain of V; deontics may do so; but epistemics belong in the sentential domain.

- (86) [TP epistemic] [ModP₁ deontic] [ModP₂ dynamic]
 ^ never extend the domain ^ may extend the domain ^ always extend the domain

The insight is roughly in line with Tsai's (2015) proposal regarding the modality spectrum of Chn. The core of Tsai's proposal is to allocate different types of modals to different domains: so,

epistemics are argued to belong in complementizer layer, deontic modals in the inflectional layer, and dynamic modals in the lexical layer. Observe that this in line with my proposal insofar as dynamic and epistemic modals are concerned.

As is well known, deontic modals are peculiar to begin with. For instance, in Eng, universal deontics like *must*, *should* take wide scope wrt negation, while *need to/have to* take narrow scope (Iatridou & Zeijlstra 2013). Consider further the paradigm in (87): on the deontic interpretation *only* must precede *need*, but follow *must/need(subjunctive)*. On the account defended here: $need_{DEONTIC}$ belongs in the extended domain of V, but $must_{DEONTIC}$ and $need_{SUBJ}$ do not. *Have to* in (89) patterns with deontic *need*.

- (87) a. He only needs to read this paper. [deontic]
 b. *He needs only to read this paper. [deontic]
 c. He need(s) only read this paper. [subjunctive]

- (88) a. He must only read this paper.
 b. *He only must read this paper.

- (89) a. He only has to read this paper.
 b. *He has to only read this paper.

Summary:

- Three contexts of domain extension have been discussed: Aspectual middle field in Eng, BA-constructions in Chn, and modals in Eng/Chn
- All these provide evidence that in situations where the domain of V is extended, ONLY must adjoin to the edge of phase

CP domain

[a] NPI licensing

Consider (90). The contrast between (90)a/b suggest that a c-commanding antecedent in an A-bar position is necessary to license these NPIs. This, in turn, means that the subject in (90)c is not is Spec, TP.

- (90) a. Only pennies did we share with a soul.
 b. *We shared only pennies with a soul.
 c. Only Francis gave pennies to a soul. (Progovac 1992/ Branigan 2020)

Here are the more conventional NPIs evincing the same behavior:

- (91) a. Only John did we introduce to anybody.
 b. *We introduced only John to anybody.
 c. Only John introduced Sue to anybody.

Wagner's (2005) (92) demonstrates that the **vP-adjoined** ONLY can license NPIs:

- (92) a. John only gave *any* kale to his friends.
 b. John only gave kale to *any* of his friends.

My pattern in (93) demonstrates that **the constituent** *only* cannot license NPIs. The standard practice is to assume that in ditransitive situations, one of the objects is generated higher. Now, if the NPI licensing were strictly a c-command requirement, the following are then surprising:

- (93) a. *John gave any friends **only** kale.
 b. ?*John gave **only** his friends any kale.
 c. *John gave **only** kale to any friends.
 d. *John gave any kale **only** to his friends.

So, from (93), we can conclude that the C-command requirement is insufficient. The generalization here is that the constituent ONLY in the A-position does not license NPIs. If true, this means that the subject in (90)c and (91)c, is CP-adjoined.

Two additional pieces of evidence in favor of the latter. In both (94) and (95), ONLY is not spectacular. Cf. the examples in (94): (b) and (c) appear to be equally degraded, which I attribute to the presence of two peripheral elements: in (b), it is the topic and only+John. In (95), the subject is in Spec, TP (see Rizzi 1997): the degradedness is because it stays in situ.

With topics:

- (94) a. ?To Mary, John gave a book.
 b. ?*To Mary, only [JOHN]_F gave a book.
 c. ?*To Mary, that book, John gave.

With a complementizer FOR:

- (95) ?*It is important for [only [MARK]_F to see Jim].

- ⇒ The conclusion here is this ONLY+subject is special in that it **cannot stay** in an A-position.
- ⇒ How do we get ONLY+subject?
 Two alternatives: ONLY adjoins to the subject DP ✓
 Subject DP moves to adjoin to ONLY

[b] pre-subject ONLY and complementizers

- ⇒ **THAT** is obligatory if the associate is the object (it can also associate with the subject in (96)c).

- (96) I didn't say Jim saw Emily...
 a. *I said only [Jim saw [MARK]_F].
 b. ?I only said [Jim saw [MARK]_F].
 c. I (only) said (only) [that Jim saw [MARK]_F].

- ⇒ **THAT** is optional if the associate is the subject.

- (97) a. I said only [MARK]_F saw Jim.
 b. ?I only said [MARK]_F saw Jim.

THAT-less clause in (96)a is a TP (Doherty 1997, Bošković 1997, and references therein).
 THAT-clause in (96)c is a CP (the standard assumption).

Proposal: TP is not a phase. For one, extraction *of* TP is impossible whether or not it is dominated by CP (Bošković 2013b, Abels 2003): see (98). Given that only phases are eligible for movement (in addition to Chomsky (2000, 2001), see Matushansky 2005, Legate 2014, Bošković 2015, a.o.), it follows that a bare TP (undominated by CP) is not a phase.

- (98) a. *[Peter likes Mary] is widely believed that. (Bošković 2013b)
 b. *[Peter likes Mary] is widely believed.

⇒ I.e., for Bošković, IP is a phase if it is the highest projection in the sentential domain.

I suggest that this is not so: **CP** is the phase in the sentential domain.

If so, we get the following: in the non-sentential domain, the highest projections in the domain of a lexical head functions as a phase, but in the sentential domain, the phase is fixed.

If so, (96) and (97) are straightforward:

- (96)a is bad because ONLY adjoins to a non-phase (TP).
- (96)b is fine because ONLY here IDs the edge of a phase (vP).
- (96)c is fine because ONLY is on the edge of a phase (CP).
- (97)a is fine because ONLY adjoins to the subject. Given my earlier proposal that subject ONLY-phrases cannot stay in-situ, however, we have to assume a subsequent structure building operation to accommodate the subject ONLY-complex. This is akin to the proposal in Bošković (1997): the CP with a null C is possible as long as there is something at the edge of that CP. Now, of course, if ONLY+subject moves to CP, then this structure building operation is required.
- The crucial point: ONLY+subject features a constituent ONLY, but this constituent cannot stay in SpecTP => it has a requirement to move to CP.

Russian periphery

The following Rus pattern provides evidence for the claim that ONLY+subject cannot stay in SPEC,TP.

Polar interrogatives in Russian:

- formed by introducing a question enclitic *li*, which imposes a strict one prosodic word (1W) requirement on its host.
- depending on the nature of the fronted material:
 - ⇒ "neutral" Y/N question in (99)a [V+li]
 - ⇒ a cleft-like Y/N interrogative [XP+li]. XP is focused in (99)b/c.

- (99) a. (Ja ne znaju,) kupil li Ivan mašinu.
 I neg know bought Q Ivan car
 'I don't know whether Ivan bought a car.'
- b. (Ja ne znaju,) Ivan li kupil mašinu.
 'I don't know whether it was Ivan who bought the car.'
- c. (Ja ne znaju,) novuju li mašinu Ivan kupil.
 'I don't know whether it was the NEW car that Ivan bought.'

- (100) demonstrates 1W prosodic requirement:

(100) *Ja ne znaju, novuju mašinu li Ivan kupil.

- *li* is in C°.
- V adjoins to C in (101)a, serving as a proper host for *li* in PF.
- XPs move to Spec, CP in (101)b. If this XP contains several stressed elements, *li* is placed to the left of the first stressed one, as in (101)c.

(101) a. [bought *li*_C] → syntax output, no need to rearrange in PF
 b. [new car *li* ...] → syntax output
 c. [new *li* car] → PF rearrangement to satisfy 1W of *li*

Now, the crucial point is this. The subject with ONLY and the pre-li verb feels odd:

(102) Ja ne znaju...
 I neg know
 a. ?*posmotrel li **tol'ko** IVAN_F étot fil'm
 watched Q only Ivan this movie
 b. posmotrel li Ivan étot fil'm
 watched Q Ivan this movie

This is surprising given the felicity of (103).

(103) Tol'ko [IVAN]_F posmotrel étot fil'm.
 Only Ivan watched this movie

But, given my proposal, this is not all that unexpected. The oddity of (102) stems from the fact that the subject here is *in situ* (just like the Eng subject in FOR-clauses we saw earlier). Here is what happens when it moves to an A-bar position though:

- The ONLY+XP complex moves to Spec,CP; PF rearrangement is possible here. Placing *li* to the immediate left of the stressed element leaves it with exactly one prosodic host: namely, *only*.

(104) Ja ne znaju...
 I neg know
 a. tol'ko li IVAN_F posmotrel étot film.
 only Q Ivan watched this movie

(105) a. [_{CP} ONLY + XP *li* [_{TP} ... **VERB** [_{VP} ...]]]
 b. ONLY li XP → PF rearrangement; 1W of *li* is satisfied

Chn "complementizers?"

Yinwei 'because' is treated as some version of C (Gasde and Paul 1996, Lin 2006). The subject must be out of the *because* clause in case it is preceded by *zhiyou*.

(106) a. Zhiyou Zhangsan₁ [**yinwei** (e₁) zao dao], (ta) mei you shijian chifan.
 only Zhangsan **because** early arrive he not have time (to)eat
 b. ?*yinwei ZHIYOU Zhangsan zao dao, ta mei shijian chifan

c. **yinwei** Zhangsan zao dao, (ta) mei you shijian chifan.

Summary:

1. In Eng/Rus pre-subject ONLY merges with a subject NP/DP => obligatory association with it.
2. The resulting complex however must be *ex situ*, in an A'-position (for reasons I am investigating => happy to talk about some potential explanations).
3. In Chn, the CP-adjoined ONLY requires movement **to** it.

3. Conclusion

- ⇒ Phases are dynamic/contextual (the highest projection within an extended domain of a lexical head & CP);
- ⇒ ONLY ids the edge of a phase in all three languages;
- ⇒ ONLY may be eligible to adjoin in the nominal domain (Rus/Eng) or verbal/sentential domains (Chn/Eng/Rus)
- ⇒ Movement to ONLY is required in overt focus movement languages (Rus/Chn).

Appendix:

INTERPRETATION FACTS ARE NOT AS CLEAR AS REPORTED

My informants have a hard time getting the wide scope interpretation in finite clauses (it's admitted reluctantly by some):

- (1) I know that John learned [**only** [SPANISH]_F].
know >only
%only>said

Bayer (1996: 215) reports that the configurations in which SPEC, CP is filled yield unambiguous results.

- (2) a. The students asked us [where to study **only** [SYNTAX]_F].
b. The students asked us [where they could study **only** [SYNTAX]_F].
asked>only
#only>asked

German (3)a is reported to be ambiguous. However, this ambiguity disappears if the embedded CP is extraposed in the manner of (3)b. Buring and Hartmann (2001) attribute this distribution to syntactic ambiguity: in (3)a, *only* is generated on the edge of the matrix VP, while in (3)b *nur* is adjoined to the higher CP. If B&H are correct, then we may question whether ambiguity is a reliable diagnostic for the nature of ONLY to begin with.

- (3) a. (weil) ich nur [GERDA]_F geküsst zu haben bereue.
because I only Gerda kissed to have regret
'I only regret to have kissed Gerda.'

- [i] √ I regret to have kissed nobody but Gerda.
[ii] √ Gerda is the only person that I regret to have kissed.

[_{VP} nur [_{CP} [_{GERDA}]_F geküsst zu haben] V]]

b. (weil) ich es _{t_{CP}} bereue [nur [_{GERDA}]_F geküsst zu haben].
 I it regret only Gerda kissed to have

[i] √ I regret to have kissed nobody but Gerda. regret>only
 [ii] #Gerda is the only person that I regret to have kissed.

[_{VP} V [_{CP} nur [_{GERDA}]_F geküsst zu haben]]]

Consider now what we learn from Rus. The judgments for Russian are as iffy as they are for Eng: apparently, wide scope is available to some speakers though not all.

- (4) Ja znaju, čto Ivan vjučil tol'ko ispanskij.
 I know that Ivan learned only Spanish
 = I know that he learned no other language.
 %I only know that he learned Spanish (but maybe he also learned French).

On the other hand, with an emotive verb like *regret* ambiguity disappears in both languages:

- (5) a. Ja žaleju, čto posteloval tol'ko Mašu. regret>only [Rus]
 I regret that kissed only Masha

[i] √i nikogo bol'she.
 and no one else

[ii] #no ne žaleju, čto potseloval Anastasiju.
 but neg regret that kissed Anastasia

- b. Ja tol'ko Mašu žaleju, čto posteloval only>regret
 I only Masha regret that kissed

[i] #i nikogo bol'she.
 and no one else

[ii] √no ne žaleju, čto potseloval Anastasiju.
 but neg regret that kissed Anastasia

- (6) I regret that I kissed only Mary.
 [i] I should've kissed Jane, too!
 [ii] #, but I don't regret having kissed Anastasia.

⇒ By and large, it looks like Rus patterns with Eng. Pending further evidence, hence, we can conclude that some baseline facts related to interpretation align Eng and Rus: both languages evidently allow for ambiguity if ONLY is adjoined in the nominal domain.

RUSSIAN COMPLICATIONS:

V-MOVEMENT?

The status of V-raising in Russian is subject to some debate: for the most part, the field converges on the analysis under which Vs *do* move. The outstanding questions are: [i] what is the landing site for this movement; and [ii] is this movement obligatory? Bailyn (1995) and Gribanova (2013), for instance, argue that Vs in Russian move out of VP, though not as high as T. King (1995) endorses the view that they do raise to T. Some experimental studies (Kallestinova and Slabakova 2008) indicate that the standard adverb placement test yields ambiguous results for Russian: speakers, apparently, allow postverbal adverbs (which is standardly taken to be symptomatic of verb raising) under certain pragmatic conditions.

Consider now (1)a: the modal is arguably in T here. The position of the *only*-complex is highly flexible, as demonstrated schematically in (1)b. Of course, the trouble with Rus is its legendary scrambling capabilities. If so, at least some of the orders in (1)b (=2) must be attributed to the scrambling of the ONLY-constituent.

- (1) a. Ivan budet/možet est' [tol'ko organičeskie produkty].
 Ivan will/can eat_{INF} only organic food
- b. ?[only+XP] Ivan [only+XP] will/can [only+XP] to.eat
- (2) a. Ivan budet/možet est' [tol'ko organičeskie produkty].
 b. Ivan budet/možet [tol'ko organičeskie produkty] est'.
 c. Ivan [tol'ko organičeskie produkty] budet/možet est'.
 d. ?[Tol'ko organičeskie produkty] Ivan budet/možet est'

Head and VP focus are possible if ONLY is adjacent to the head. This suggest that the position preceding the infinitive is the one that delineates the verbal domain.

- (3) Ivan (*tol'ko) možet tol'ko valjat' duraka / PODNJAT' zarplatu.
 Ivan only can only roll fool / raise salary

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