

Raised and in-situ preverbal focus in verb-final languages: a unified account

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1. Introduction

In many OV languages, narrow foci appear **immediately preverbally**, preferentially or obligatorily (Kim 1988; Kidwai 1999; van der Wal 2012, a.o.):

(1) a. XP FOC Vb. *FOC XP Vc. (*XP V FOC)

(2) (Who did Peter fall in love with last year?)

Hungarian

a. *Tavaly MARI-T_j szerette meg Péter.*
 last_year Mary-ACC love.PST VM Peter
 ‘Last year, Peter fell in love with MARY.’

b. **MARI-T_j tavaly szerette meg Péter.*
 Mary-ACC last_year love.PST VM Peter
 (‘Last year, Peter fell in love with MARY.’)

(3) (Who was building a house last year?)

Georgian

a. *Šaršan saxl-s_i GIORGI a-šen-eb-d-a.*
 last_year house-DAT Giorgi.NOM VER-build-SF-SM-IPFV.3SG
 ‘Last year, GIORGI was building a house.’

b. **Šaršan GIORGI saxl-s_i a-šen-eb-d-a.*
 last_year Giorgi.NOM house-DAT VER-build-SF-SM-IPFV.3SG
 (‘Last year, GIORGI was building a house.’)

Some other languages with immediately preverbal focus:

- Basque (Arregi 2002; Elordieta 2001; Ortiz de Urbina 2002)
- Chechen (Komen 2007)
- Eastern Armenian (Comrie 1984; Dum-Tragut 2009; Megerdooonian & Ganjavi 2000)
- Hindi (Mahajan 1990; Dayal 1996; Kidwai 2000; Manetta 2010)
- Ingush (Nichols 2011)
- Kashmiri (Bhatt 1999; Munshi & Bhatt 2009; Manetta 2011)
- Malayalam (Jayaseelan 1996; 2001; 2003)
- Iron Ossetic (Abaev 1939; Erschler 2008; 2012; Lyutikova & Tatevosov 2009)
- Turkish (Erguvanli 1984; Erku 1983; Göksel & Özsoy 2000; İşsever 2003; Öztürk 2004; Şener 2010; Kamali 2011)
- ...

Syntactically, **focus-verb adjacency in OV languages may be derived in more than one way:**

- i. via a functional Spec-Head configuration (=raised)
- ii. via displacement of intervening material (= **in-situ**).

Whether a language with preverbal focus uses (i) or (ii) can be determined based on e.g., scope facts, the position of the Foc+V string in the clause, and verb-inversion phenomena.

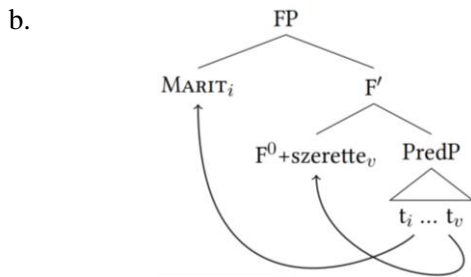
Raised preverbal foci:

- The focused constituent is moved to a specifier of a dedicated projection, FP;
- The verb is raised to F⁰, thereby creating adjacency.
- Some examples: Hungarian (Bródy 1990), Malayalam (Jayaseelan 1996)

Hungarian: focus surfaces higher than the verbal modifier (VM) → Hungarian immediately preverbal foci are **raised**.

(4) a. (Who did Peter fall in love with last year?)

Tavalý [FocP *MARI-T_i* *szerette_v* [PredP *meg* t_v *Péter* t_i]]
 last_year Mary-ACC love.PST VM Peter
 ‘Last year, Peter fell in love with MARY.’



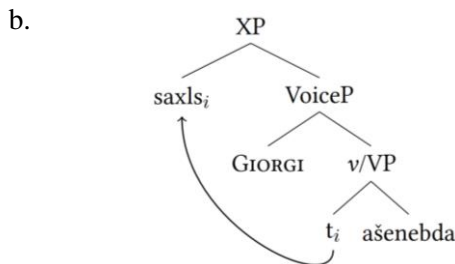
In-situ preverbal foci:

- Neither focus nor verb undergo dedicated movement;
- Adjacency results from the displacement of intervening material to the left/right;
- Some examples: Hindi (Mahajan 1990; Dayal 1996), Turkish (Şener 2010), Georgian (Borise 2019)

Georgian:

(5) a. (Who was building a house last year?)

Šaršan *saxl-s_i* [VoiceP *GIORGI* t_i *a-šen-eb-d-a*].
 last_year house-DAT Giorgi.NOM VER-build-SF-SM-IPFV.3SG
 ‘Last year, GIORGI was building a house.’



Georgian subjects are in situ (Legate 2008; Nash 2017); negative indefinites are uniformly in situ (Borise 2019); preverbal foci are below negative indefinites → Georgian immediately preverbal foci are **in situ** (data in Appendix).

- Despite the surface similarity, these two syntactic configurations are quite different, and seem like coincidentally identical outcomes of two different syntactic processes.
- The question is then: is a **unified account possible**?
- We show that the two types of preverbal focus have a prosodic requirement in common: they align with an edge of an Intonational Phrase.

2. Outline of the analysis

Analytical components:

1. Focus as prosodic alignment (Féry 2013)
 - a. **Main idea:** a focused constituent aligns with the right or left edge of an Intonational Phrase.
2. Flexible *l*-mapping hypothesis (Hamlaoui & Szendrői 2015; 2017):
 - a. **Main idea:** the size of the Intonational Phrase (*l*) is determined by the syntactic height of the verb.

Main claim:

- raised preverbal foci align with **left** edges of Intonational Phrases (*l*_S);
 - Some examples: Hungarian (Uralic), Eastern Armenian (Indo-European), Iron Ossetic (Eastern Iranian)
- in-situ preverbal foci align with **right** edges of Intonational Phrases (*l*_S).
 - Some examples: Turkish (Turkic), Uyghur (Turkic), Georgian (Kartvelian)

(6)

Raised:

(Foc ...)_{*l*}

In-situ:

(... Foc)_{*l*}

3. Focus-as-Alignment (FA) model (Féry 2013)

- A focused constituent is preferably aligned prosodically with the **right or left edge of a prosodic domain**: an intonation phrase (or, sometimes, a prosodic phrase).

This approach goes against the traditional assumption that prominence is an intrinsic and/or the only necessary prosodic correlate of focus (Jackendoff 1972; Reinhart 1995; Truckenbrodt 1995; Zubizarreta 1998; Gussenhoven 2008; Büring 2010, a.o.) = **Focus-as-[acoustic]-Prominence (FP)** model.

Crucial evidence in favor of FA as opposed to FP:

- languages in which foci are aligned with prosodic boundaries but not pitch accents/nuclear stress: Nleʔkepmxcin/Thompson River Salish (Koch 2008a; 2008b).
- languages with no evidence for nuclear stress: French (Féry, Hörnig & Pahaut 2010); Georgian (Dzidziguri 1954; Alkhazishvili 1959; Zhghenti 1963; 1965a).

Constraints used in the FA approach:

(7) ALIGN-FOCUS

a. ALIGN-FOC-*l*-R

Align a focus with the **right** boundary of an Intonational Phrase.

- b. ALIGN-FOC-*t*-L
Align a focus with the **left** boundary of an Intonational Phrase.

Alignment of a prosodic boundary with the locus of prosodic prominence (e.g., a nuclear pitch accent):

- (8) ALIGN-HEAD
 - a. H-*t*-R
Align the **right** boundary of every Intonational Phrase with its head [the most prominent phonological phrase].
 - b. H-*t*-L
Align the **left** boundary of every Intonational Phrase with its head [the most prominent phonological phrase].

Italian: right-alignment

- (9) (Who has laughed?)
 - a. (*Ha riso GIANNI*)_{*t*}
has laughed John
'JOHN has laughed.'
 - b. ??(*GIANNI ha riso*)_{*t*}
John has laughed
'JOHN has laughed.'

(10)

T1	<i>Gianni ha riso</i> (Focus = Gianni)	ALIGN-FOC- <i>t</i> -R	H- <i>t</i> -R	CWO
a.	(<i>Ha riso GIANNI</i>) _{<i>t</i>}			*
b.	(<i>GIANNI ha riso</i>) _{<i>t</i>}	*!	*	
c.	(<i>Gianni ha RISO</i>) _{<i>t</i>}	*!		

Hungarian: left-alignment

- (11) (Did the man kick a table?)
*Nem, (egy SZÉKET rúgott fel a férfi)*_{*t*}
no, a chair kicked PRT the man
'No, the man kicked A CHAIR.'

Assumption: canonical word order within the VP/PredP is **VSO** (Szendrői 2003: 64)

(12)

T4	<i>felrúgott a férfi egy szeket</i> (Foc = egy szeket)	ALIGN-FOC- <i>t</i> -L	HEAD- <i>t</i> -L	CWO
a.	(<i>EGY SZEKET rúgott fel a férfi</i>) _{<i>t</i>}			*
b.	(<i>egy szeket RÚGOTT FEL a férfi</i>) _{<i>t</i>}		*!	*
c.	(<i>a férfi felrúgott EGY SZEKET</i>) _{<i>t</i>}	*!	*!	*
d.	(<i>FELRÚGOTTa férfi egy szeket</i>) _{<i>t</i>}	*!		
e.	(<i>FELRÚGOTT egy szeket a férfi</i>) _{<i>t</i>}	*!		*

Why the FA model alone is not enough to account for preverbal focus placement:

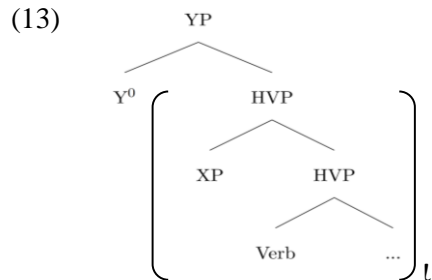
- No principled account of the syntactic constituent that *t* corresponds to: “clause”, but e.g., in Hungarian it may be PredP or FocP, depending on context.
- No account of focus-verb adjacency as such (e.g., in Hungarian).

4. Flexible *ι*-mapping hypothesis (Hamlaoui & Szendrői 2015; 2017)

Intonational Phrases (*ι*s) are commonly taken to correspond to ‘clauses’, but there is no unanimity on the exact syntactic counterpart of *ι*: CP (Truckenbrodt 2005), TP (Zerbian 2006), phase (Cheng & Downing 2007), etc.

The Flexible *ι*-mapping hypothesis:

- *ι* corresponds to the highest projection that hosts overt verbal material (“the verb itself, the inflection, an auxiliary, or a question particle”), together with its specifier (=HVP, ‘highest verbal projection’)
- That is, the size of *ι* is relative/flexible and does not rigidly correspond to a syntactic projection (e.g., CP, TP and/or vP).



The proposal is based on Hungarian narrow focus (HVP=FocP= *ι*), English wh-questions /German V2 clauses (HVP=CP=*ι*), and Bàsàá (Bantu) zero-coded passives (HVP=TP=*ι*).

(14) Syntax-prosody mapping:

1. ALIGN-HVP-L
Align the left edge of the highest projection whose head is overtly filled by the verb, or verbal material, with the left edge of an *ι*.
2. ALIGN-HVP-R
Align the right edge of the highest projection whose head is overtly filled by the verb, or verbal material, with the right edge of an *ι*.

In **Hungarian**, topics do not form an *ι* with the verb, but narrow foci (obligatorily preverbal) do.

- (15) a. [_{TopP} A *postás-t*_o [_{TopP} a *kutya*_s _ι([_{PredP} *meg-harapta*_v [_{VP} t_s t_v t_o]]])_ι
the postman-ACC the dog.NOM VM-bite.PST
‘The dog bit the postman.’
- b. [_{TopP} *Péter*_s _ι([_{FocP} *MARI-T*_o *szere*_v [_{PredP} *meg* [_{VP} t_s t_v t_o]]])_ι
Peter Mary-ACC love.PST VM
‘Peter fell in love with MARY.’

5. Raised preverbal foci: analysis

- Following Hamlaoui & Szendrői (2015), we take an Intonational Phrase (*ι*) to correspond to the highest syntactic projection that hosts verbal material, including its specifier (=HVP).
- Following Féry (2013), we assume that focused constituents align with prosodic (*ι*) edges.

Proposal:

- Raised preverbal foci are aligned with the **left** *ι*-edge (Align-Foc-*ι*-L);

- A narrowly focused constituent raises to the specifier of a dedicated XP, with X⁰ attracting the raised verb.
- The XP that hosts the verb determines the height of the left *ι*-edge (ALIGNHVP-L): XP is the HVP.
 - More specifically: verb movement creates the left *ι*-edge that the focused constituent can then align with.
- If a raised focus is prosodically prominent (which is optional), that is due to H-*ι*-L.

Languages of this type: Hungarian, Eastern Armenian, and Iron Ossetic.

5.1. Hungarian

The OT analysis in (12) still stands, but there are also two high-ranking constraints that mandate that the size of *ι* corresponds to the HVP, ALIGNHVP-L and ALIGNHVP-R (instead of stipulating its correspondence to different syntactic projections in different contexts).

- (16) (Did the man kick a table?) =(11)
Nem, [_{FocP} *egy SZÉKET rúgott* [_{PredP} *fel a férfi*]]
 no, a chair kicked PRT the man
 ‘No, the man kicked A CHAIR.’

(17) (focus = SMALL CAPS, nuclear stress = **boldface**):

fel rúgott a férfi egy széket (Foc = egy széket)	H- <i>ι</i> -L	ALIGN HVP-L	ALIGN- FOC- <i>ι</i> -L
a. [☞] (EGY SZÉKET <u>rúgott</u> fel a férfi) _i			
b. (fel rúgott a férfi EGY SZÉKET) _i			*!
c. (fel rúgott EGY SZÉKET a férfi) _i			*!
d. (EGY SZÉKET <u>rúgott fel</u> a férfi) _i	*!		

5.2. Eastern Armenian and Iron Ossetic

- different diagnostics for verb and focus movement (in Appendix 1):
 - Eastern Armenian: inversion of Aux and V
 - Iron Ossetic: ordering restrictions
- probably different landing sites, different syntactic derivations, ...
- **but prosodically:** same explanation as for Hungarian

- (18) **Eastern Armenian** (What did the workers begin to destroy?)
 [_{Banvornerě} [_{T'ATRONI BEMĚN_j} en_v [_{sksel} t_v [_{k'andel t_j}]]]].
 worker.PL.DEF theater.DAT stage.DEF.LNK COP.3PL begin.PTCP destroy.INF
 ‘The workers began destroying THE THEATER STAGE.’ (Serine Avetisyan, p.c.)

(19) (focus = SMALL CAPS, nuclear stress = **boldface**):

<i>Banvornerě sksel en k'andel t'atroni bemě</i> (Foc = t'atroni bemě)	H- <i>ι</i> -L	ALIGN HVP-L	ALIGN- FOC- <i>ι</i> -L
a. [☞] Banvornerě (T'ATRONI BEMĚN <u>en</u> sksel k'andel) _i			
b. (Banvornerě T'ATRONI BEMĚN <u>en</u> sksel k'andel) _i		*!	*
c. (Banvornerě T'ATRONI BEMĚN <u>en</u> sksel k'andel) _i	*!	*	*
d. (Banvornerě sksel <u>en</u> k'andel T'ATRONI BEMĚ) _i	*!	*	*

(20) **Iron Ossetic** ('Who believes Alan today?')

- a. *abon Alan-əl MƏDINƏ ɛwwænd-ə.*
today Alan-SUP Madina believe-PRS.3SG
'MADINA believes Alan today.'
- b. **abon MƏDINƏ Alan-əl ɛwwænd-ə.*
today Madina Alan-SUP believe-PRS.3SG
- c. **Alan-əl MƏDINƏ abon ɛwwænd-ə.*
Alan-SUP Madina today believe-PRS.3SG

(21) (focus = SMALL CAPS, nuclear stress = **boldface**):

<i>abon Mədinə Alanəl ɛwwəndə</i> (Foc = <i>Mədinə</i>)	H- <i>l</i> -L	ALIGN- HVP-L	ALIGN- FOC- <i>l</i> -L
a. [☞] <i>abon Alanəl (MƏDINƏ ɛwwəndə)_i</i>			
b. <i>(abon Alanəl MƏDINƏ ɛwwəndə)_i</i>		*!	*
c. <i>(abon Alanəl MƏDINƏ ɛwwəndə)_i</i>	*!	*	*
d. <i>(abon MƏDINƏ Alanəl ɛwwəndə)_i</i>	*!	*	*

Predictions & further issues:

1. Raised foci are in a Spec-Head (i.e., syntactic) configuration with the verb ⇒ no phrasal material should be possible to insert between Spec, XP and X⁰ (unless multiple specifiers are assumed).
 - a. This prediction is borne out in Hungarian, Iron Ossetic (with some exceptions), and Eastern Armenian.
2. Showing that H-*l*-L is operative in non-focal contexts as well, determining the location of default prominence/nuclear stress (NS), would strengthen the argument for edge-alignment of prominence. But this is hard to verify, unfortunately:
 - a. In Hungarian, there is no agreement on the workings on NS (Vogel & Kenesei 1987; Varga 2002; Szendrői 2003, a.o.).
 - b. No claims have been made about NS in broad-focus declaratives in Iron Ossetic (as far as we know), and speakers have no consistent intuitions about NS (David Erschler, p.c.).
 - c. The situation in Eastern Armenian is not entirely clear: "A declarative sentence usually has neutral prosody, without any emphasis and without a special pitch. In unmarked, neutral word order the logical stress lies on the predicate." (Dum-Tragut 2009: 395).

6. In-situ preverbal foci: analysis**Proposal:**

- In-situ preverbal foci are aligned with the **right** *l*-edge (ALIGN-FOC-*l*-R);
- Neither the focused constituent nor the verb undergo dedicated (focus-related) movement;
- The material intervening between the focus and the verb is displaced (e.g., topicalized), to bring focus as close as possible to satisfying ALIGN-FOC-*l*-R;
- The position of the verb means that the winning candidate still violates ALIGN-FOC-*l*-R.

Languages of this type: Turkish and wider Turkic (e.g., Uyghur), Georgian.

6.1. Turkish

(22) ('When did Ali leave the book here?')

- a. *Ali buraya kitabı SABAH bıraktı.*
Ali here book.ACC morning put.PST
'Ali left the book here IN THE MORNING.'
- c. *Ali SABAH bıraktı kitabı buraya.*
Ali morning put.PST book.ACC here
'Ali left the book here IN THE MORNING.'
- d. *Ali SABAH bıraktı buraya kitabı.*
Ali morning put.PST here book.ACC
'Ali left the book here IN THE MORNING.' (İşsever 2003)

Clausal architecture:

- There is agreement in the literature that Turkish does not have a dedicated focus projection (Butt & King 1996; Göksel & Özsoy 2000; Şener 2010, a.o.);
- Postverbal constituents result from movement (Öztürk 2013) and are outside of the core *ι*;
 - postverbal material is also strictly deaccented (Özge & Bozsahin 2010); even lexical accents are removed (Güliz Günes, p.c.)
 - the syntax of Turkish does not allow for generating post-verbal material that is within the core *ι*; all postverbal material is outside of the core *ι*.

(23) (([CP [CP ...]]_{ι-core} adjunct(s)))_{ι-max}

- Constraints ALIGN-FOC-*ι*-R, ALIGN-HVP-R, and H-*ι*-R refer to the core *ι*, not the maximal *ι* (cf. also Szendrői 2003).

Additional constraints (high-ranking):

Given (23), which illustrates the strict extrametricality of post-verbal material in Turkish, we propose that the following constraint is in operation:

(24) FOC_{ι-core}

A narrowly focused constituent must be contained within the core *ι*.

Following Truckenbrodt (2006), we assume that the stress on the level of *ι* cannot target X⁰s (e.g, a verb), only XPs, because X⁰s do not carry stress on the lower level of prosodic phrasing (*φ*). This means that a verb is prosodically 'invisible' for H-*ι*-R. This is taken care of by a high-ranked constraint STRESS-XP.

(25) STRESS-XP

Each XP contains phrasal (i.e., *φ*-level) stress. "If each XP must contain p[hrasal]-stress, it follows that the argument XP must contain p-stress, but the head (non-XP) need not."

(26) (focus = SMALL CAPS, nuclear stress = **boldface**):

<i>Ali sabah buraya kitabı bıraktı</i> (Foc = <i>sabah</i>)	STRESS- XP	FOC _{ι-core}	ALIGN- HVP-R	ALIGN- FOC- <i>ι</i> -R	H- <i>ι</i> -R
a. [☞] ((Ali SABAH <i>buraktı</i>) _{ι-core} <i>kitabı buraya</i>) _{ι-max}				*	*
b. ((SABAH <i>Ali buraktı</i>) _{ι-core} <i>kitabı buraya</i>) _{ι-max}				*!*	*
c. ((Ali SABAH <i>buraktı</i>) _{ι-core} <i>kitabı buraya</i>) _{ι-max}	*!			*	
d. ((Ali <i>buraktı</i>) _{ι-core} <i>kitabı buraya</i> SABAH) _{ι-max}		*!		*	*

6.2. Wider Turkic (Uyghur and Kazakh)

As far as we can tell, Uyghur (and Kazakh) work in the exact same way as Turkish, with respect to preverbal focus placement. There are some differences in the restrictions on postverbal elements (more leniency) and the possibility of clause-initial focus.

6.3. Georgian

Differences from Turkish:

- No evidence for nuclear stress (Dzidziguri 1954; Alkhazishvili 1959; Zhghenti 1963; 1965b)
- In addition to immediately preverbal foci, postverbal foci are allowed.
- SOV and SVO both are unmarked

Preverbal focus:

(27) ('What did grandma clean yesterday?')

- a. *Gufin bebia SAMZAREULO-S a-lag-eb-d-a.*
 yesterday grandma.NOM kitchen-DAT VER-clean-SF-SM-IPFV.3SG
 'Grandma cleaned THE KITCHEN yesterday.'
- b. **Bebia SAMZAREULO-S gufin a-lag-eb-d-a.*
 grandma.NOM kitchen-DAT yesterday VER-clean-SF-SM-IPFV.3SG
 ('Grandma cleaned THE KITCHEN yesterday.')

Postverbal focus:

(28) ('What did grandma clean yesterday?')

- a. *Gufin bebia a-lag-eb-d-a SAMZAREULO-S.*
 yesterday grandma.NOM VER-clean-SF-SM-IPFV.3SG kitchen-DAT
 'Grandma cleaned THE KITCHEN yesterday.'
- b. *Bebia a-lag-eb-d-a gufin SAMZAREULO-S.*
 grandma.NOM VER-clean-SF-SM-IPFV.3SG yesterday kitchen-DAT
 'Grandma cleaned THE KITCHEN yesterday.'

In the absence of evidence for nuclear stress, STRESS-XP AND H-*l*-R is low-ranked in Georgian, and H-*l*-R applies vacuously.

Like in Turkish, Constraints ALIGN-FOC-*l*-R and ALIGN-HVP-R refer to the core *l*, not the maximal *l*.

We propose that the possibility of both preverbal and postverbal narrow foci stems from the constraint FOC-*l*-core being not operative/low-ranked.

(29) **Object focus** (focus = SMALL CAPS; no nuclear stress):

<i>gufin dilas bebia samzareulos alagebda</i> (Foc = <i>samzareulos</i>)	ALIGN-HVP-R	ALIGN-FOC- <i>l</i> -R
a. $\text{☞} (Gufin dilas (bebia SAMZAREULOS alagebda)_{l-core})_{l-max}$		*
b. $\text{☞} (Gufin dilas (bebia alagebda)_{l-core} SAMZAREULOS)_{l-max}$		*
d. $(Gufin dilas (SAMZAREULOS bebia alagebda)_{l-core})_{l-max}$		*!*

(30) **Subject focus** (focus = SMALL CAPS; no nuclear stress):

<i>gufin dilas bebia samzareulos alagebda</i> (Foc = <i>bebia</i>)	ALIGN-HVP-R	ALIGN-FOC- <i>l</i> -R
a. ☞ (<i>Gufin dilas (samzareulos BEBIA <u>alagebda</u>)_{<i>l</i>-core})_{<i>l</i>-max}</i>)		*
b. ☞ (<i>Gufin dilas (samzareulos <u>alagebda</u>)_{<i>l</i>-core} BEBIA)_{<i>l</i>-max}</i>)		*
d. (<i>Gufin dilas (BEBIA samzareulos <u>alagebda</u>)_{<i>l</i>-core})_{<i>l</i>-max}</i>)		*!*

Predictions & further issues:

1. Because focus-verb adjacency in the case of in-situ preverbal foci is achieved via displacement of intervening material, we predict that the elements that cannot move out (e.g., for independent syntactic reasons) would remain as interveners. We have preliminary evidence that this is indeed the case – cf. (42a) for Georgian and are gathering further data (e.g., with respect to secondary predicates).
2. Why is there no pre-focal deaccenting in languages with raised preverbal focus (i.e., the mirror image of languages with deaccented postverbal constituents?)

7. Beyond preverbal focus

Our account predicts that ‘mixed languages’ might exist:

1. those in which the verb raises on the left side of the clausal spine (and ‘raises’ the left *l*-edge), but foci align with the right edge via ALIGN-FOC-*l*-R.
2. those in which the verb does not raise on the left side of the clausal spine (e.g., because the verb itself (a) stays low or (b) raises to a head on the right), but foci undergo raising in order to align with the left *l*-edge via ALIGN-FOC-*l*-L.

We have some preliminary evidence that Urakhi Dargwa (Daghestanian) is a language of the first type.

7.1. Urakhi Dargwa

As far as we can tell, Urakhi Dargwa is a typical verb-final language with in-situ preverbal focus:

(31) *Хьунуйин муруйс даг савгъат битхьиб.*

Woman.ERG man.OBL yesterday present.ABS gave

‘Yesterday a/the woman gave a/the man a/the present.’ (Dzhuma Abakarova, p.c.)

(32) (Who gave the present to the man?)

Муруйс даг савгъат ХЬУНУЙИН битхьиб.

Man.OBL yesterday present.ABS woman.ERG gave

‘Yesterday a/the WOMAN gave a/the man a/the present.’

However, it also allows for a construction with a raised/second-position verb and right-aligned focus:

(33) (Who gave the present to the man?)

a. *Савгъат битхьиб даг муруйс ХЬУНУЙИН.*

Present.ABS gave yesterday man.OBL woman.ERG

‘Yesterday a/the WOMAN gave a/the man a/the present.’

b. *Даг битхьиб муруйс савгъат ХЬУНУЙИН.*

Yesterday gave man.OBL present.ABS woman.ERG

‘Yesterday a/the WOMAN gave a/the man a/the present.’

Such configurations are predicted to exist under our approach, but are unexpected otherwise.

8. Conclusions

- Bringing together the FA (Féry 2013) and HVP (Hamlaoui & Szendrői 2015) approaches allows for providing a unified account of immediately preverbal focus placement, common especially in verb-final languages, even though the two types of foci, raised and in-situ, have different syntax.
- The main insight of the current approach is that raised preverbal foci align with the left edge of ι , created by the raised verb, whereas in-situ preverbal foci align with the right edge of ι , with the verb unable to ‘get out of the way’ for the purposes of focus-edge alignment.
- Providing a unified account for these two configurations without bringing in prosodic requirements would be a challenge.
- Additionally, we can model post-verbal focus placement in otherwise verb-final languages, such as Georgian.
- Our approach also makes predictions about languages in which verbs and foci align with different edges of ι , which we show to be borne out.

Thank you for your attention!

Appendix 1. Further syntactic data

A1.1 Eastern Armenian

(34) (Who drew the monasteries of Dilijan?)

Dilidžan-i vank^h-er-ə ARA-N e nkarel.
 dilijan-GEN monastery-PL-DEF Ara-DEF COP.3SG.PRES draw.PTCP
 ‘ARA drew the monasteries of Dilijan.’ (Hodgson 2013)

Evidence for focus movement: focus placement in the context of complex verbs (copula + finite verb): the copula undergoes obligatory inversion in focus contexts, and adjacency between the copula and the narrowly focused constituent is required (Serine Avetisyan, p.c.). Narrowly focused constituents are prosodically prominent.

(35) [*Banvornerě sksel en [k’andel t’atroni bemě]*].
 worker.PL.DEF begin.PTCP COP.3PL destroy.INF theater.DAT stage.DEF
 ‘The workers began destroying the theater stage.’ (Dum-Tragut 2009: 556)

(36) (What did the workers begin to destroy?)

a. [*Banvornerě [T’ATRONI BEMĚ_j en_v [sksel t_v [k’andel t_j]]]*].
 worker.PL.DEF theater.DAT stage.DEF.LNK COP.3PL begin.PTCP destroy.INF
 ‘The workers began destroying THE THEATER STAGE.’ (Serine Avetisyan, p.c.)

b. (Who began to destroy the theater stage?)

[*BANVORNERĚN en_v [t’atroni bemě sksel t_v [k’andel]]*].
 worker.PL.DEF.LNK COP.3PL theater.DAT stage.DEF begin.PTCP destroy.INF
 ‘THE WORKERS began destroying the theater stage.’ (Serine Avetisyan, p.c.)

A1.2 Iron Ossetic

Evidence for focus movement: when co-occurring with negative indefinites and *wh*-phrases, the strict *focus* >> *wh* >> *neg* >> *V* order suggests that the elements in the preverbal cluster take up their surface positions via movement (Borise & Erschler forthcoming).

- (37) [_{CP} *nɐ*=*χɛzɑr-ə* [_{FocP} *ɐrmɛft alan-əl* [_{WP} *tʃi* [_{NegP} *nik^wə* [_{Neg'} *ɐwwɛnd-ə*]]]]]]]?
 our=house-LOC only A.-SUP who never believe-PRS.3SG
 ‘In our family, who never believes only Alan?’

A1.3 Turkish

- (38) (‘When did Ali leave the book here?’)
Ali kitabı buraya SABAH bıraktı.
 Ali book.ACC here morning put.PST
 ‘Ali left the book here IN THE MORNING.’ (İşsever 2003)

Evidence for non-raised status of preverbal foci: the placement of pre-focal and post-verbal elements is determined by strict IS-requirements on what can precede foci (contrastive and aboutness topics) and follow the verb (given, backgrounded information). The order of pre-focal and post-verbal constituents is flexible.

A1.4 Uyghur

Fewer restrictions on postverbal elements in Uyghur (data by Xiayimaierdan Abudushalamu, p.c.):

- (39) (What happened?)
Oqutghuchi tünügün (bir) kitabni baligha bärdi.
 teacher.NOM yesterday one/a book.ACC child.DAT give.PST.3SG
 ‘A teacher gave a child a book yesterday.’
- (40) (Who gave a book to a child yesterday?)
- Tünügün kitabni baligha OQUTGHUCHI bärdi.*
 yesterday book.ACC child.DAT teacher.NOM give.PST.3SG
 ‘A TEACHER gave a child a book yesterday.’
 - (Who gave a book to a child yesterday?)
Baligha tünügün kitabni OQUTGHUCHI bärdi.
 child.DAT yesterday book.ACC teacher.NOM give.PST.3SG
 ‘A TEACHER gave a child a book yesterday.’
 - (Who gave a book to a child yesterday?)
**Tünügün baligha OQUTGHUCHI kitabni bärdi.*
 yesterday child.DAT teacher.NOM book.ACC give.PST.3SG
 ‘A TEACHER gave a child a book yesterday.’
 - (Who gave a book to a child yesterday?)
 ?? *Tünügün baligha kitabni bärdi OQUTGHUCHI.*
 yesterday child.DAT book.ACC give.PST.3SG teacher.NOM
 ‘A TEACHER gave a child a book yesterday.’

A1.5 Georgian

Evidence for non-raised status of foci:

- Georgian subjects are in situ (Legate 2008; Nash 2017);

- negative indefinites are uniformly in situ (Borise 2019);
- preverbal foci are below negative indefinites
→ Georgian immediately preverbal foci are **in situ**.

(41) (What did no-one buy today?)

Dghes [_{VP} *ara-vin* [_{VP} *P'AMIDOR-I* (*ar*) *i-q'id-a*]].
today NEG-who tomato-NOM NEG VER-buy-AOR.3SG
'No-one bought TOMATOES today.'

(42) (Who bought nothing?)

a. ?*MANANA-M* *ara-per-i* *ar* *i-q'id-a*.
Manana-ERG NEG-thing-NOM NEG VER-buy-AOR.3SG
'MANANA bought nothing.'

b. (What did no-one buy?)

**GHVINO* *ara-vin* *ar* *i-q'id-a*.
wine.NOM NEG-who NEG VER-buy-AOR.3SG
('No-one bought WINE.')

Appendix 2. Overview of the existing work on the topic of focus-verb adjacency

Why does focus want to be adjacent to the verb? (NB: preverbal in OV and postverbal in VO) (van der Wal 2012):

1. **Functional answer:** because a (stressed) element is more prominent if adjacent to the verb, as finite verbs are hard to focus and prosodically weak (cf. Hyman & Watters 1984: 263; Erteschik-Shir 1997; Frascarelli 2000)
2. **Historical answer 1:** because of reanalysis of the canonical object position as focus position since the object is the canonical focus.
3. **Historical answer 2:** because of a change from biclausal cleft to monoclausal focus construction, where the focus used to be the predicate of the cleft (cf. Harris & Campbell 1995).
4. **Cartographic answer 1:** because FocP is immediately adjacent to the projection where the verb ends up (Jo 1995; Aboh 2007; Mycock 2007; Cruschina 2012).
5. **Cartographic answer 2:** because the verb moves to Foc^o → inverse question 'why does the verb want to be adjacent to focus?' (Ortiz de Urbina 1995; Bródy 1990; 1995; É. Kiss 1998; Skopeteas & Fanselow 2010).
6. **Syntactic answer 1:** because T (or V) has/inherits a [+focus] feature, either to assign to an XP, or to check the [+focus] feature of an XP in specTP (or VP) (Horvath 1981; 1986; Tuller 1992; Frascarelli 1999; Kidwai 1999; Miyagawa 2010).
7. **Syntactic answer 2:** because a focus operator associates with most deeply embedded element, which is adjacent to the verb (Hyman & Polinsky 2010).
8. **Interface answer 1:** because that is where the (default sentence) stress falls, and focus wants to be stressed (Vallduví 1995; Arregi 2001; Ishihara 2001; Szendrői 2003).
9. **Interface answer 2:** Because the VP domain is mapped to a focus interpretation at the interface (Buell 2006; Cheng & Downing 2007; Van der Wal 2009; Good 2010; cf. Diesing 1992).
10. **Pessimistic answer** 😞: It doesn't; it is just a coincidence.

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