Raised and in-situ preverbal foci: a unified prosodic account

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In a nutshell

- Immediately preverbal focus placement, common especially in V-final languages, results from two different syntactic configurations cross-linguistically:
  - functional Spec-Head configuration (=**raised**)
  - displacement of intervening material (= **in-situ**)
- We offer a **unified account**, based on the **prosodic requirements** of preverbal foci, by bringing together two independent existing proposals:
  - Focus-as-Alignment (Féry 2013)
  - Flexible Intonational Phrase (ι)-mapping hypothesis (Hamlaoui & Szendrői 2015).

→ Immediately preverbal focus placement is **not a grammatical primitive**; it represents coincidentally identical outcomes of two different processes.

Immediately preverbal focus

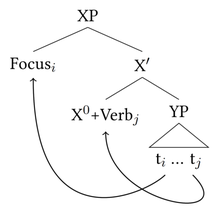
Numerous languages, especially V-final ones, have a requirement/strong preference for placing narrow foci into the immediately preverbal position:

(1) a. XP Foc V b. *Foc XP V c. *XP V Foc

Some examples: Basque (Hualde et al. 1994), Chechen (Komen 2007), Eastern Armenian (Comrie 1984), Gujarati (Kim 1988), Hindi (Mahajan 1990), Ingush (Nichols 2011), Kashmiri (Bhatt 1999), Malayalam (Jayaseelan 1996), Iron Ossetic (Abaev 1939), Persian (Kahnemuyipour 2001), Turkish (Erguvanlı 1984), etc.

Raised preverbal foci

- Focus moves to a dedicated Spec, FP;
- Verb raises to F^0, creating adjacency;
- Hungarian (Bródy 1990), Malayalam (Jayaseelan 1996), Persian (Karimi 2008).



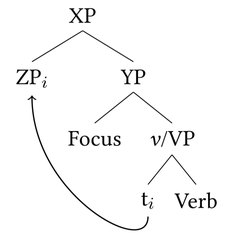
Hungarian: focus surfaces higher than the verbal modifier.

(2) a. *Tavaly* [$_{FocP}$ ***MARI-T***$_i$ ***szerette*** [$_{PredP}$ *meg* [$_{VP}$ *Péter* t$_j$]]]
last_year Mary-ACC love.PST VM Peter
'Last year, Peter fell in love with **MARY**.'

b. **Tavaly* [$_{FocP}$ [$_{PredP}$ *meg* ***szerette*** [$_{VP}$ *Péter* ***MARI-T***]]]
last_year VM love.PST Peter Mary-ACC
('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 periphery;
- Hindi (Mahajan 1990), Turkish (Şener 2010), Basque (Arregi 2002), Georgian (Borise 2019)



Georgian:

(3) *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.

(4) *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.'

Focus-as-Alignment (Féry 2013)

- Focused constituents align with edges of Intonation Phrases (ts);
- Alignment is enforced via ALIGN-FOC-ι-R or ALIGN-FOC-ι-L constraint:

(5) ALIGN-FOC-ι-R/L
Align a focus with the right/left boundary of ι

{... FOC}$_ι$ {FOC ...}$_ι$

- The need for ι-edge-alignment may trigger permutations of word order;
- Nuclear stress, in languages that have it, also aligns with an ι-edge, enforced by H-ι-R or H-ι-L constraint:

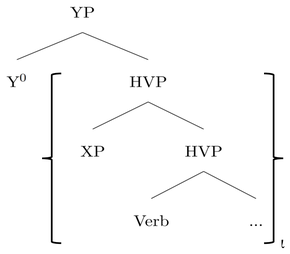
(6) H-ι-R/L
Align the right/left boundary of ι with its head

{x x $\overset{X}{x}$}$_ι$ {$\overset{X}{x}$ x x}$_ι$

- Focus-as-Alignment is superior to traditional Focus-as-Prominence analyses (Jackendoff 1972; Reinhart 1995, a.o.) because it accounts for languages in which foci are not aligned with nuclear stress (e.g., Nłe?kepmxcin/Thompson River Salish: Koch 2008) and languages with no evidence for nuclear stress (e.g., Georgian: Zhghenti 1963, 1965)

Flexible ι-mapping hypothesis (Hamlaoui & Szendrői 2015)

- ι is commonly taken to correspond to a 'clause', but the syntactic counterparts of ι vary: CP (Truckenbrodt 2005), TP (Zerbian 2006), phase (Cheng & Downing 2007), etc..
- According to the flexible ι-mapping hypothesis, ι corresponds to the highest projection that hosts overt verbal material ("the verb, verbal inflection, an auxiliary, or a question particle"), including its specifier (=HVP).
- E.g., in Hungarian narrow focus, HVP=FocP=ι; in English wh-questions and German V2 clauses, HVP=CP=ι, etc.



- The alignment is enforced by ALIGN-HVP-ι-R and ALIGN-HVP-ι-L constraints:

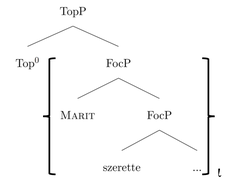
(7) ALIGN-HVP-ι-R/L
Align the left/right edge of the HVP with the left/right edge of an ι.

Proposal

We propose that Focus-as-Alignment and the flexible ι-mapping hypothesis work together: foci align with ι-edges, and the size of ι is determined by the HVP.

Raised preverbal foci: analysis

- Raised preverbal foci are aligned with the **left** ι-edge (ALIGN-FOC-ι-L);
- Raised preverbal foci are housed in the specifier of a dedicated XP, with X^0 attracting the verb → XP is the HVP;
- Verb raising determines the size of the ι (ALIGN-HVP-ι-R/L) and creates the Spec,HVP position, aligned with the left ι-edge, which the focused constituent raises to occupy.
- In languages where narrow foci bear nuclear stress, H-ι-L is also active.



Hungarian

(cf. (2a); focus = SMALL CAPS, nuclear stress = **boldface**):

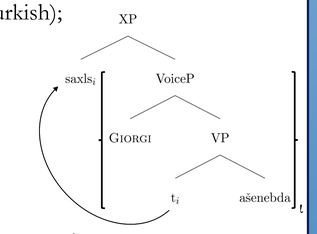
(8)

[meg szerette Péter MARIT] (Foc = Marit)	ALIGN-HVP-ι-L	ALIGN-FOC-ι-L	H-ι-L	STAY
a. ☞ {[**MARIT** szerette [meg Péter]]}$_ι$				**
b. {[**meg** szerette Péter MARIT]}$_ι$		*!		
c. {[meg szerette Péter **MARIT**]}$_ι$		*!	*	
d. [**MARIT** {[meg szerette Péter]}$_ι$]	*!	*	*	*

- The same analysis applies to preverbal foci in Iron Ossetic (Borise & Erschler 2021) and Eastern Armenian.

In-situ preverbal foci: analysis

- In-situ preverbal foci are aligned with the **right** ι-edge (ALIGN-FOC-ι-R);
- The material intervening between the focus and the verb is displaced (topicalized), to bring focus as close as possible to satisfying ALIGN-FOC-ι-R;
- The position of the verb means that the winning candidate still violates ALIGN-FOC-ι-R, but properly ι-edge-adjacent focus may be excluded because, e.g., (i) topicalization of the verb is not available (Georgian) or (ii) post-verbal focus would be adjoined outside of the core ι (Turkish);
- (H-ι-R ensures that focus carries nuclear stress, if applicable (the verb is rendered 'invisible' for stress placement by high-ranked STRESS-XP, which ensures that XPs but not X^0s carry stress, Truckenbrodt 2006))



Georgian

(cf. (3); focus = SMALL CAPS; Georgian has no nuclear stress):

(9)

Šaršan GIORGI saxls ašenebda. (Foc = Giorgi)	ALIGN-HVP-ι-R	ALIGN-FOC-ι-R	STAY
a. ☞ Šaršan saxls {[GIORGI ašenebda]}$_ι$		*	*
b. Šaršan{[GIORGI saxls ašenebda]}$_ι$		**!	

Conclusions & implications

- The main insight of our approach is that raised preverbal foci align with the left ι-edge, created by the raised verb, while in-situ preverbal foci align with the right ι-edge.
- Providing a unified account for these two configurations without bringing in prosodic requirements would be a challenge.
- Languages in which the verb raises, but foci align with the right ι-edge (ALIGN-FOC-ι-R) are predicted to exist. We have preliminary evidence that Urakhi Dargwa is one.

Selected references: **Bródy, M.** 1990. Some remarks on the focus field in Hungarian. *UCL Working Papers in Linguistics* 2(20), 1–25. **Féry, C.** 2013. Focus as prosodic alignment. *NLLT* 31(3), 683-734. **Hamlaoui, F. & K. Szendrői.** 2015. A flexible approach to the syntax-phonology mapping of intonational phrases. *Phonology* 32(1), 79-110. **Koch, K. A.** 2008. *Intonation and focus in Nɬ̓ɛkepmxcin (Thompson River Salish)*. UBC PhD Thesis. **Legate, J.A.** 2008. Morphological and abstract case. *LI* 39(1). 55–101. **Truckenbrodt, H.** 2006. Phrasal stress. In K. Brown (ed.), *Encyclopedia of Language and Linguistics*, 572–579. Amsterdam: Elsevier.

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