

# There is no post-focal de-phrasing in English



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## Overview

**Research question:** Does every *phrase* have a *head*?  
What marks the head of a phrase?

- If every intermediate phrase (iP) has a head, and the head must be marked by pitch accent, every iP must have a pitch accent (Beckman 1996)
- *Prediction:* constraints that affect pitch accent (e.g. focus) can affect phrasing

**Preview of the results:**

- iP boundaries are retained post-focally (in the absence of pitch accents), contra this prediction
- Post-focal material is shortened in general
- It is not clear if there are still prominence distinctions post-focally

**Implication:** Headedness can still be maintained if the head of an iP could be marked by something other than pitch accent (e.g. phrasal stress)

## Broad focus

**Different syntaxes lead to different prosodies**

(Price et al. 1991 and Norcliffée & Jaeger 2005)

(1) a. *Verb + Particle (VPart)*

Fréddie's been thinking óver <sub>iP</sub>)(<sub>iP</sub> the problém.

H\* H\* L- H\*

b. *Verb + Preposition (VPrep)*

Fréddie has been thinking <sub>iP</sub>)(<sub>iP</sub> over the lást hour.

H\* H\* L- H\*

**Prominence and phrasing are reflected in length:**

- Pre-boundary lengthening (Price et al. 1991; Wightman et al. 1992; Shattuck-Hufnagel & Turk 1996)
- Lengthening due to accentuation (Dimitrova & Turk 2012)

**Predictions:**

(1) a. *Verb + Particle*

b. *Verb + Preposition*

th in k ing ó v er <sub>iP</sub>) th ín k ing <sub>iP</sub>) o v er  
V1 V2 P1 P2 V1 V2 P1 P2

- Length of V1 is longer in **VPrep** than in **VPart**
- Length of P1 is longer in **VPart** than in **VPrep**
- Ratio of V2/P2 is larger in **VPrep** than in **VPart**

## After narrow focus

**See if the prominence/phrasing distinctions continue to be distinguished post-focally:**

(1) a. *Verb + Particle*

Fréddie<sub>F</sub> has been thinking óver ?)(? the problém.

H\*

b. *Verb + Preposition*

Fréddie<sub>F</sub> has been thinking ?)(? over the lást hour.

H\*

**If phrasing distinctions still exist post-focally:**

- V2/P2 is larger in **VPrep** than in **VPart**
- There is no post-focal de-phrasing

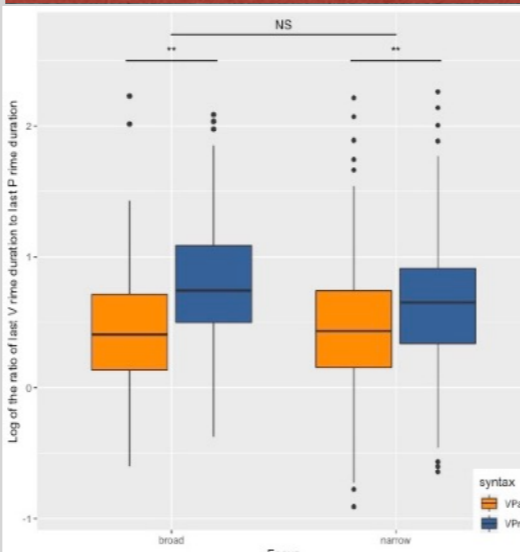
**If prominence distinctions still exist post-focally:**

- Length of V1 is longer in **VPrep** than in **VPart**
- Length of P1 is longer in **VPart** than in **VPrep**
- Prominence can be realized by phrasal stress

## Methods

- Production study with 13 participants
- 4 conditions: Syntax (VPart and VPrep) x Focus (broad and narrow)
- 80 target sentences (20 sets x 4 conditions)
- Measured the duration of V1, V2, P1, P2
- Linear mixed effects models ('lmer' & 'lmerTest')

## Results: V2/P2



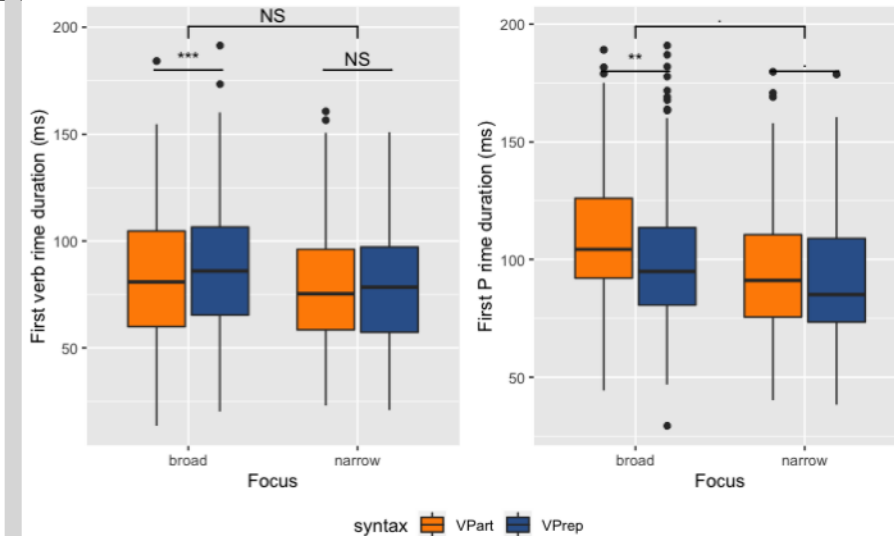
**Broad focus:**

- V2/P2 in **VPart** is 70% of V2/P2 in **VPrep** ( $p < 0.01$ ) (expected)

**Post-focally:**

- V2/P2 in **VPart** is 78% of V2/P2 in **VPrep** ( $p < 0.01$ ) -> no de-phrasing
- Difference between **VPart** & **VPrep** does not differ from broad focus

## Results: V1 & P1



**Broad focus:**

- V1 is 5.3ms longer in **VPrep** than **VPart** ( $p < 0.001$ ) (expected)
- P1 is 10.6 ms longer in **VPart** than **VPrep** ( $p < 0.01$ ) (expected)

**Post-focally:**

- The difference in V1 duration between **VPrep** and **VPart** is not significant, but this difference does not differ significantly from the difference in broad focus. Same for P1
- All the measured rimes are shorter post-focally than in broad focus, except P2

## Discussion

- No post-focal de-phrasing; there are iP's without pitch accent
- Unclear if prominence distinctions are retained post-focally
- If they are, then post-focal iP's still have heads (maintaining headedness), which are marked by phrasal stress instead of pitch accent
- The whole sentence is one intonational phrase (IP) and headed by the focused subject
- Pitch accent is assigned to the head of IP

I thank my research assistants Aquila Simmons and Kitty Zeng for their help. Thanks are also due to Athulya Aravind, Charles Chang, Edward Flemming, Martin Hackl, Michael Kenstowicz, David Pesetsky, Roger Schwarzschild and the audience of MIT Phonology Circle for feedback.

References are available by email on request.