

## Introduction

**Information Structure:** Correspondence between the meaningful parts of two or more closely related utterances

In French, at least two types of correspondence have been linked to *prosodic marking*: Contrastive Focus (Jun & Fougeron 2000) and Question-Answer Congruence (Féry 2001).

Does prosodic marking of such correspondences extend to *qu-interrogatives*?

Which phonological architecture can account for the observed forms?

Is there systematic alignment between the edges of information structural domains and the edges of phonological domains?

### Focus in Declaratives and Polar Interrogatives

#### Phonetic correlates

**Post-focal region:** absence of prominent pitch movements (Touati 1987, Di Cristo 1998, Clech-Darbon et al. 1997, Jun & Fougeron 2000)

**Pre-focal region:** reduced amplitude, f0 range (Touati 1987, Jun & Fougeron 2000, Dohen & Loevenbrück 2004)

#### Phonological correlates

Focus marked by specialized prosodic contour - generally higher than in the declarative final AP pattern under broad focus (*Hf* for Jun & Fougeron 2000)

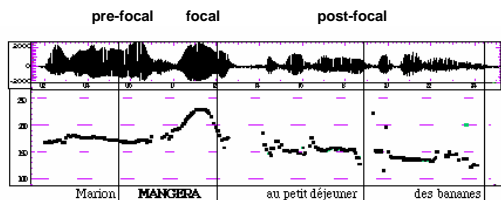
Fewer phrase boundaries internal to focus (Féry 2001)

Phrasing of subject independent of focus (Féry 2001)

Pre-focal region: Reduced number of (AP) phrase boundaries (Jun & Fougeron 2000)

**Example:** "Corrective" contrast in a declarative (from Jun & Fougeron 2000)

(1) Marion ne servira pas au petit déjeuner des bananes...  
...mais Marion *mangera* au petit déjeuner des bananes.



## Methods

### Isolate a Phonological Form

#### Open Issues for French

- What are the components of the prosodic hierarchy?
- How many distinctions within each level?
- What are the reflexes of phrasing at various levels?

#### Inputs to phrasing

- Information structure
- Prosodic constraints (Feldhausen 2008, Prieto 2005)
- Syntax (Truckenbrodt 1999, Selkirk 2000, *i.a.*)
  - Obligatory (i.e., IS-independent) phrase boundary at Subj-VP juncture suggests independent role of syntax in edge specification (D'Imperio & Michelas, *this conference*)
  - Initial rise can disambiguate adjectival scope (Astésano et al. 2007)

### Establish a systematic correlation with meaning-level category

- Production study: Variable context, fixed targets

**Context 1:** Je sais qu'Amélie a vendu la valise *jaune* à Jean à Limoges...

**Context 2:** Je sais qu'Amélie a vendu *la caméra* à Jean à Limoges...

**Target:** ...*mais* à qui est-ce qu'Amélie a vendu *[la valise [marron]]* à Limoges?

- **Meaning-level:** Qu-interrogative establishes a *contrast* with a question to which the speaker already knows the answer
- Well-defined communicative task: Goal-driven, cooperative
- Quantitative phonetic measures test for specific prosodic correlates associated with leftward extension of the contrastive domain
- Prosodic design features
  - Voiceless and plosive segments excluded from target region
  - Post-focal region isolates the effects of meaning-level edge marking from effects associated with the utterance edge
- Conclusions based on robust quantitative differences

### Quantitative Test for Role in Interpretation

- Do listeners make use of the phonological contrast for *distinguishing between categories of meaning*?
- Perception task paradigm: E.g., context matching

## Results

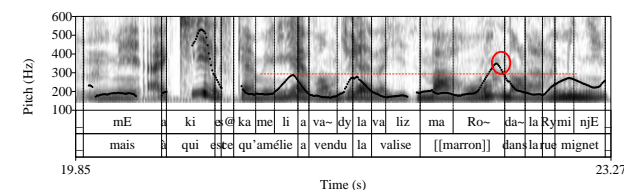
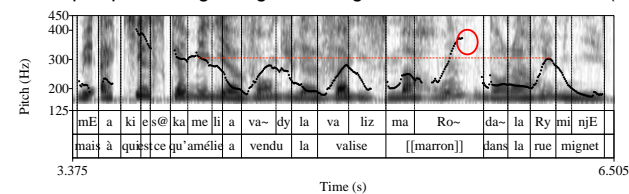
### Convergence with phonetics of focus in declaratives

- *Optional* suppression of tonal prominence following contrastive material
- Non-suppression of tonal features preceding the contrastive material
- Perceptible metrical break at right edge of contrastive domain for single-word focus (i.e., on the adj.)

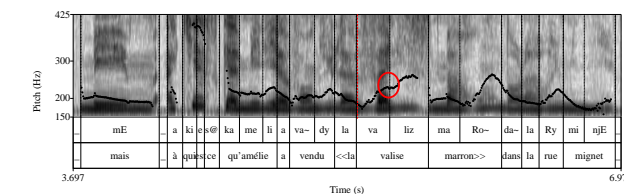
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### Distribution of pitch accents and phrasing suggests a complex interaction between info. structure, phonol. structure and syntax

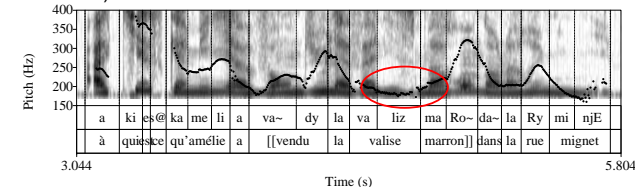
- LH\* upstep at the right edge of a single-word contrast due to H- (or H%)



- Optional initial rise (*H*) at the left edge of the contrastive domain



- Deletion of left and right phrase boundaries only when internal to contrastive domain: Not consistent with simple edge alignment (e.g., VP focus)



## Selected References

Astésano, C., Bard, E. & Turk, A. (2007). Structural influences on initial accent placement in French. *Language and Speech*, 50(3), 423-446

Feldhausen, Ingo. 2008. *The Prosody-Syntax Interface in Catalan*. Doctoral thesis. Humanwissenschaftlichen Fakultät der Universität Potsdam.

Féry, C. (2001). Intonation of focus in French. In C. Féry & W. Sternefeld (Hrsg). *Audiatu Vox Sapientis. A Festschrift for Arnim von Stechow*. Akademie Verlag, Berlin. 153-181.

Jun, S.-A., & Fougeron, C. (2000). A phonological model of French intonation. In A. Botinis (ed.), *Intonation: Analysis, modelling and technology*. Boston: Kluwer. Touati, P. 1987. *Structures Prosodiques du Suédois et du Français*. Lund University Press.

Prieto, Pilar (2005). 'Syntactic and Eurhythmic Constraints on Phrasing Decisions in Catalan'. *Studia Linguistica* 59 (2/3). Merle Horne & Marc van Oostendorp (eds.). Special issue on 'Boundaries in Intonational Phonology'. Oxford: Blackwell, p. 194-222.

Truckenbrodt, H. (1999). On the relation between syntactic phrases and phonological phrases. *Linguistic Inquiry* 30, 219-255