The prosody of interrogatives in French

Claire BEYSSADE
Elisabeth DELAIS-ROUSSARIE
Jean-Marie MARANDIN

Introduction (1)

Aim of the talk:
- compare the intonation of declaratives and the intonation of interrogatives;
- show the resemblances and differences pertaining to the association of the nuclear contour and the utterance.

Declaratives and interrogatives refer to two sentence types defined as the association of a type of semantic content (proposition vs propositional abstract) and various syntactic forms.
(Ginzburg & Sag 2001; Beyssade & Marandin 2006)

Introduction and objectives (2)

Our proposal is based on the analysis of 265 interrogatives recorded in various situations. They are drawn from the following corpora:
- Ester (radio news/talk shows) 10 h, 175 tokens.
- Corpus MdF (phone calls, CA type corpus) 1 h, 15 tokens.
- Corpus CP (recorded texts for laboratory phonology experiment) 60 tokens.
- Corpus ACI (elicited utterances recorded in psycholinguistic experiments) 20 tokens.

Outline of the talk

- Assumptions
- From declarative to interrogative sentences
- Analysis of the data
- Conclusion

Background : the melodic profile

Metrical Representation
Intonational representation
by fusion
MELODIC PROFILE

Metrical representation

Le jeune frère de Marie est venu.

Le jeune frère) de marie) est venu) X X X

Realization F0 movement, Duration, etc.
Intonational representation

The intonational representation involves three zones:
- **Prenuclear Domain**: The prenuclear domain is metrically structured; the metrical structure is marked by pitch variations that are not contrastive.
- **Nuclear Domain**: Its extension is limited to three acccentual phrases (AP) at most; it is the association domain for the nuclear contour; nuclear contours are contrastive (hence meaningful); its right or left edge is determined by a partition in the content of the utterance.
- **Postnuclear Domain**: The postnuclear domain involves change in register (compression, direction).

Nuclear contours

Form of the Nuclear Contour:

\[
\begin{array}{ccc}
T^- & T^* & T^% \\
\end{array}
\]

**Inventory**

\[
\begin{array}{ccc}
H- & L^* & T^% \\
L- & H^* & T^% \\
L- & HL^* & T^% \\
L- & H+L^* & T^% \\
\end{array}
\]

Le jeune frère de Marie est venu. (answer to Who came ?)

Le jeune frère de Marie est venu.

From Declaratives to interrogatives

In declaratives:

The propositional content is partitioned into a functional part and an argument (i.e. Jackendoff, 1972; Jacobs, 1984).

Such a partition corresponds to the Focus/Background partition: the argument is the Focus.

Example:

Qui est venu ? Marie est venue.

Qu’est-ce qui se passe ? Marie est venue.

Marie est venu.

From declaratives to interrogatives

- The right edge of the Focus coincides with the right edge of the nuclear domain.
- The right edge of the nuclear domain is the anchoring site of the pitch accent of the nuclear contour.

Marie est venue. (all focus)

Marie est venue. (narrow focus)

From declaratives to interrogatives

- Does this analysis extend to interrogative sentences?
- What is the partition of the content in interrogatives?
- What is the contribution of the content partition to the delimitation of the Nuclear Domain and accordingly, to the association of the Nuclear Contour?
**WH-Interrogatives (1)**

The content of WH-interrogatives is partitioned into a functional part and a restriction (Krifka, 2001).

<Propositional Abstract, Restriction on the Argument>

In WH-interrogatives, the restriction is contributed by the WH-expression.

**WH-Interrogatives (2)**

Example: Qui est venu?

\[
\text{Qui est venu} \quad \text{Restriction} \quad \text{Function}
\]

< \lambda x. venir (x) , \{x : \text{human}\} >

The XP contributing the restriction (i.e. the WH) determines the left edge of the Nuclear Domain and the anchoring site of the phrasal tone of the Nuclear Contour.

**Wh-interrogative / falling contour**

\[\text{Finalement, qui mon frère a-t-il emmené à Boulogne ?}\]

\[\text{Finalement} (\text{qui mon frère a-t-il emmené}) à Boulogne)\]

\[\text{Finalement, (qui mon frère a-t-il emmené à Boulogne}\]

**Wh-interrogative / rising contour**

\[\text{Qu’en est-il exactement ? (Ester)}\]

\[\text{Qu’en est-il exactement}\]

\[\text{[ Qu’en est-il exactement}\]

\[\text{L-} \quad \ldots \quad \text{H+ H%}\]

**Polar interrogatives (1)**

The content of polar interrogatives is partitioned into a proposition and a restriction (Krifka 2001 simplified here). The restriction pertains to the polarity of the proposition (positive or negative). It corresponds to the two answers yes and no.

<Proposition, (oui, non)>

As we saw above for declaratives, propositions can be partitioned. The type of partition gives rise to two types of questions.

**Polar interrogatives (2)**

- Polar partial question (or Narrow Focus question): a part of the content is specifically questioned.
- Polar total question (or All Focus question): the whole content is questioned.

Example: Est-ce que Marie est venue?

Partial (narrow focus) \quad \text{Total (all focus)}

\[\text{< \lambda x venu (x), Marie>, \{oui, non\}}\]

\[\text{<< \lambda pp, venu (marie) >, \{oui, non\} >}\]

\[\text{Est-ce que Marie est venue}\]

\[\text{Est-ce que Marie est venue}\]

\[\text{H-} \quad \text{L-}\]
Partial polar question
The XP contributing the argument (in the propositional part of the content) indicates the LEFT edge of the Nuclear Domain and the anchoring site of the phrasal tone of the Nuclear Contour.

Est-ce que l’armée américaine sera là aussi ? (Ester)
Est-ce que l’armée américaine) sera là) aussi )
Est-ce que ( l’armée américaine sera là aussi
H- .... L* L%

Total polar question
The left edge of the Nuclear Domain corresponds to the AP including the lexical identifier of the sentence type (est-ce que; the verb with encliticized subject pronoun).

Est-ce qu’il y a un magasin de vélos dans la ville ?
Est-ce qu’il y a) un magasin) de vélos) dans la ville)
(Est-ce qu’il y a un magasin de vélos dans la ville
H- ....... L* L%

In a nutshell (1)
• In both declaratives and polar interrogatives, the Nuclear Contour goes to the argument. In both cases, the argument may be either a part of the content (Narrow focus) or the whole content (All focus).
• In WH-interrogatives, the Nuclear Contour goes to the restriction.

Conclusion (1)
In interrogatives as well as in declaratives, the association of the Nuclear contour is determined by the partition of the semantic content conveyed by the sentence.
Differences :
– In declaratives, the partition contributes the right edge of the nuclear domain;
– In interrogatives, the partition contributes the left edge of the nuclear domain;
– In declaratives, the partition determines the anchoring of the pitch accent of the nuclear contour;
– In interrogatives, the partition determines the anchoring of the phrasal accent of the nuclear contour.

Conclusion (2)
Resemblance :
The contour goes to the part of the content that is specifically affected by the illocutionary act : the focus of asserting or the focus of questioning. This is the case even with utterances used indirectly (questioning declaratives or asserting interrogatives).