Where does the question begin?: Initial and final intonation cues in Peruvian Spanish interrogatives

Erin O’Rourke
University of Illinois at Urbana-Champaign
eorourke@uiuc.edu

INTRODUCTION
Questions are expressed via several means:
- Lexical (interrogative pronouns)
- Morphological (interrogative suffix)
- Syntactic (inverted word order)
- Suprasegmental (final rising intonation)

Spanish varieties may be characterized by the realization of the final contour

There are at least two basic question types:
- Pronominal questions (contain interrogative pronoun)
- Yes/No questions (allow positive/negative response)

Spanish varieties may be characterized by the realization of the final contour

Pronominal questions
Yes/No questions
Variety
Fall Rise Prototypical Castilian system
Fall Fall Prototypical for Caribbean varieties
Rise Rise Many varieties - expresses politeness for pronouns
Rise Fall (?) (attested?)

Other contours possible:
e.g., Final circumflex, in Yes/No 7s

*Factors to consider: Speech mode (read vs. spontaneous), pragmatics


Other intonation features in interrogatives examined

Higher initial peaks compared to statements (Prieto 2003)
Upstep of nuclear pitch accent, tonal alignment of yes/no questions, interrogative tonal range (Wills 2003, and forthcoming)

RESEARCH QUESTIONS
In addition to the final contour, are there other suprasegmental cues earlier in the interrogative?

Given the variety of realizations of the final contour in dialects Spanish, can the direction of the final contour be influenced in cases of language contact?

EXPERIMENT
Examines interrogatives in two varieties of Peruvian Spanish:
- Lima – 5: all native Spanish speakers
- Cuzco – 15: 7 native Spanish speakers, 5 Quechua-Spanish bilinguals, 3 native Quechua speakers

Read speech mode
Questions written on index cards (followed by target declarative)
- 50 pronominal questions per speaker (e.g., ¿Quién moverá los barriles? – Who will move the barrels?)
- 2 yes/no questions per speaker (e.g., ¿El obrero moverá los barriles? – Will the worker move the barrels?)

Measurements (in Hz)
- Initial F0 height (IT)
- First peak (H1)
- Final F0 height (FT)

Comparisons made
- Of data points (IT, H1, FT) in both question types with broad focus declaratives
- Between variety in relatively less contact with Quechua (Lima) and variety in more contact (Cuzco)
- Comparison within Cuzco according to knowledge of Quechua

RESULTS

Findings
- Compared to broad focus declaratives,
  - Yes/No questions show higher F0 at the very beginning
  - First peak in questions is higher for both question types
  - Both question types end in a rise
  - Differences are significant for groups and individual speakers (although a few individual exceptions are found).

Conclusions
- Questions are signaled earlier in the utterance
- Pro (IT and H1)
- Yes/No (H1)
- Final contour is not influenced by contact with fall from Quechua, rise observed for both Lima and Cuzco, and for all Cuzco groups and individuals

Further study
- Remaining questions:
  - If there is earlier signaling of questions, is this cue used in the perception of questions versus declaratives?
  - If questions are signaled earlier, does the final contour encode more pragmatic meaning in Spanish? Does this account for the degree of variation across dialects and speech modes?
  - Are the earlier cues for questions a shared feature across dialect and speech modes – i.e., a pan-Spanish trait?

REFERENCES

- Tratado de fonología y fonética españolas (SpQu).
- Tratado de fonología y fonética españolas (SpQu).
- Tratado de fonología y fonética españolas (SpQu).
- Tratado de fonología y fonética españolas (SpQu).