

Dime una cosa: Are wh-in situ questions different in Spanish? Evidence from intonation

Background: This project investigates the intonational characteristics of wh-in situ questions (as in (1)) in Northern Peninsular Spanish (NPS). These questions can be used with three distinct pragmatic readings: (i) information-seeking, (ii) echo-repetition, and (iii) echo-surprise. Although syntactic analyses are available to explain the defining properties of information-seeking wh-in situ (Uribe-Etxebarria 2002, Etxepare & Uribe-Etxebarria 2005, Reglero 2007, Reglero & Ticio 2013), and how they differ from their echo counterparts (Chernova 2013, Reglero & Ticio 2013), there is no thorough acoustic description of their intonational properties, or how these interact with the syntactic component.

Main goal and hypotheses: The main goal of this project is to provide a detailed acoustic analysis of wh-in-situ questions in Spanish to investigate the following hypotheses:

Hypothesis 1: Information-seeking wh-in-situ will have different intonational properties from echo questions. Impressionistic reports mention that the former carry ‘extra stress’ (Uribe-Etxebarria 2002, Reglero & Ticio 2013), while the latter are characterized by ‘strong upward intonation’ (Contreras 1999). In addition, as shown by Reglero & Ticio (2013), there are clear syntactic differences between the two, since only the former requests new information and can be introduced by the sequence *dime una cosa* ‘Tell me something’ (2a); the second is heavily dependent on a previous context and cannot be introduced by this sequence (2b).

Hypothesis 2: Echo-repetition wh-in-situ will have different intonational properties from echo-surprise questions. Impressionistic accounts report stronger stress on echo-surprise wh-phrases cross-linguistically (Bošković 2002; Sobin 2010). In addition, Bošković (2002) reports differences in grammaticality judgments between the two types of echo-repetition wh-in situ questions in Slavic languages, with echo-surprise judged more acceptable in situ.

Methodology: The intonation of 120 wh-in situ questions from a contextualized elicitation task was analyzed acoustically from 4 female NPS participants following Spanish ToBi conventions (Aguilar et al. 2009). We report the following measurements (i) *Global tonal range* (the difference in Hz between the lowest Low tone of the first pre-nuclear accent and the highest High of the final boundary); (ii) *Local tonal range* (the difference in Hz between the lowest Low tone in the nuclear configuration and the highest High of the final boundary); (iii) *Percentage of raising (HH%) final boundary contours*, and (iv) *Duration ratio* (the duration of the wh-in situ phrase relative to the total sentence duration).

Results: Information-seeking wh-in situ shows a reduced tonal range compared with echo questions. In addition, they are the most likely to end in a raising contour (Table 1). This provides evidence for intonational differences between the two types of wh-in situ in Spanish (Hypothesis 1). In addition, there is some evidence that echo-repetition and echo-surprise questions are intonationally different in Spanish, as predicted by Hypothesis 2. Specifically, the former have a lower tonal range, are less likely to end in a raising contour, and have the lowest duration range from all wh-questions (Table 1).

Implications: The results obtained have implications for syntactic analyses of wh-in situ in Spanish. In particular, it validates recent claims that information-seeking wh-in situ questions are a completely different phenomenon from echo questions (Reglero & Ticio 2013). Further implications for the interaction between intonation and focus, and its consequences for movement and non-movement analyses of wh-in situ, will also be explored.

Examples (adapted from Reglero & Ticio 2013)

- (1) Wh-in situ question ¿Tu padre compró qué?
your father bought what?
- (2) Acceptability of wh-in situ questions with Dime una cosa 'Tell me something'
- a. Information-seeking (uttered in an out-of-the-blue context)
Dime una cosa: ¿María se tomó un té con quién?
tell-me one thing Mary CL had a tea with who?
- b. Echo-repetition
Speaker 1: *María se tomó un té con Cleopatra.*
Mary CL had a tea with Cleopatra
Speaker 2: *Dime una cosa: ¿María se tomó un té con QUIÉN?
tell-me one thing Mary CL had a tea with who?

Table 1: Intonational differences in Spanish wh-in situ questions

	Information-seeking	Echo-repetition	Echo-surprise
Local tonal range	144 Hz	163 Hz	192 Hz
Global tonal range	133 Hz	154 Hz	172 Hz
Percentage of final raising (HH%) contours	75%	45%	60%
Duration ratio	31%	18%	27%

Selected references

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