

VOWEL HARMONY AND COARTICULATION IN NORTHERN VALENCIAN

Ricard Herrero
Universitat Catòlica de València
ricard.herrero@ucv.es

Jesús Jiménez
Universitat de València
jesus.jimenez@uv.es

SUBJECT: Realization of final /a/ vowels in the Northern Valencian varieties of Borriana and Nules.
GOALS: (a) To demonstrate that Borriana variety displays Round vowel harmony from stressed /ó/ to a posttonic /a/ (context /ó/+a/: *pistola* [pistólo]), whereas Nules variety only shows high coarticulation levels in the same environment.
(b) To establish if there are similar processes with /é/ (context /é/+a/: *terra*), and with /ó/, in non-prototypical harmonic environments: across another vowel, *catòlica*, and across word-boundaries, *correspon-la*.

1. INTRODUCTION

(a) Sequences analyzed:

Final unstressed /a/, in the same consonantal environment
...after the stressed vowels [ɔ] and [ɛ], which can appear

- Prototypically: In contiguous syllables: *pistola*, *terra*
- Non-prototypical cases:
 - Separated by another vowel & syllable: *catòlica*
 - Separated by a morphological word-boundary: *correspon-la*

(b) Sample description

7 male subjects from each variety, above 65-years old, with no studies in Valencian Catalan
Two tokens of each context (if possible):

Reference context for comparison, /á/+a/: *tara*, *Sara*

Prototypical harmonic contexts

Context /ó/+a/: *pistola*, *cassola*

Context /é/+a/: *terra*, *serra*

Non-prototypical contexts:

Context /ó/+V+a/: *catòlica*, *històrica*

Context /ó/#a/: *correspon-la*

2. ROUND VOWEL HARMONY AND COARTICULATION IN PROTOTYPICAL CONTEXTS

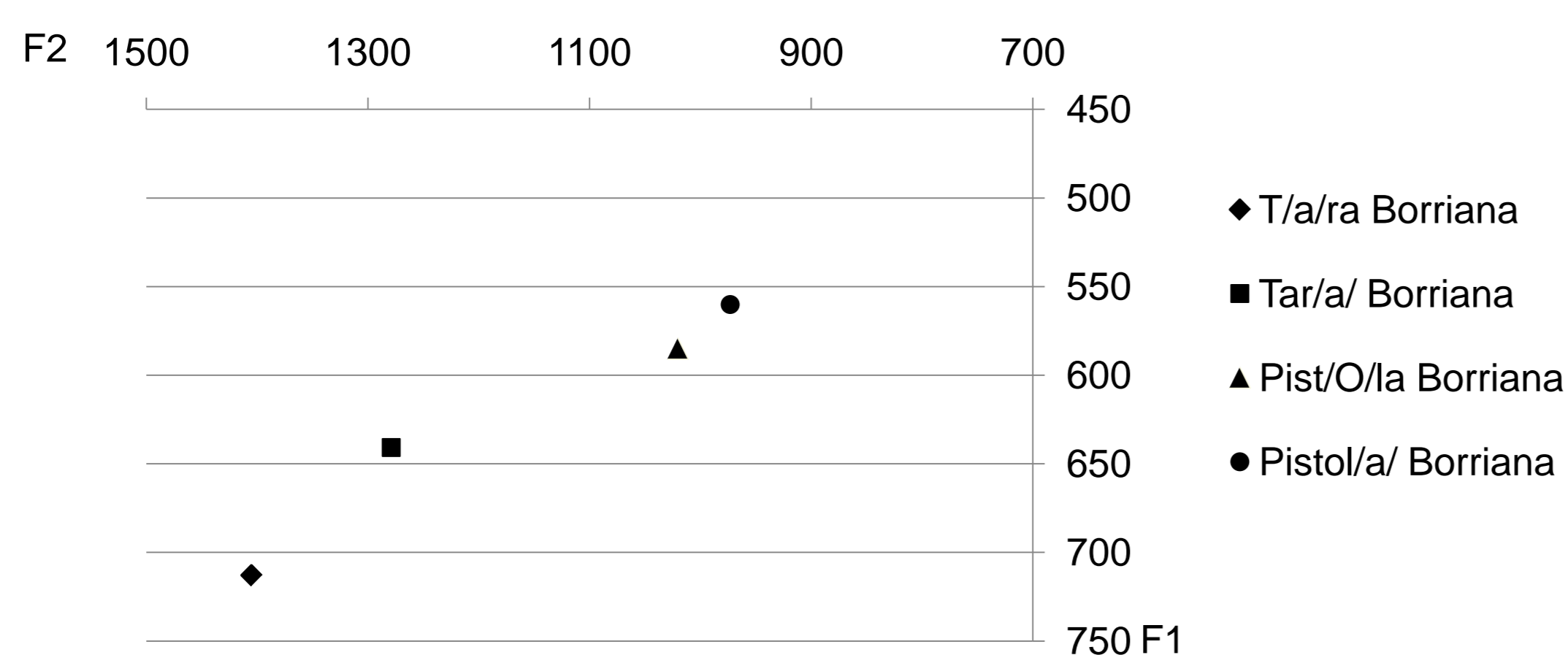
2.1. Borriana variety

➤ Environment /á/+a/:

- Unstressed /a/ is significantly less open and more backed than its stressed counterpart.

➤ Environment /ó/+a/:

- Unstressed /a/ is significantly different in F1 and F2 from unstressed /a/ in the context /á/+a/.
- The F1 value for unstressed /a/ is statistically non different from stressed /ó/; both vowels differ in F2, but /a/ is less centralized, echoing thus the shift from stressed to unstressed vowels in the context /á/+a/.



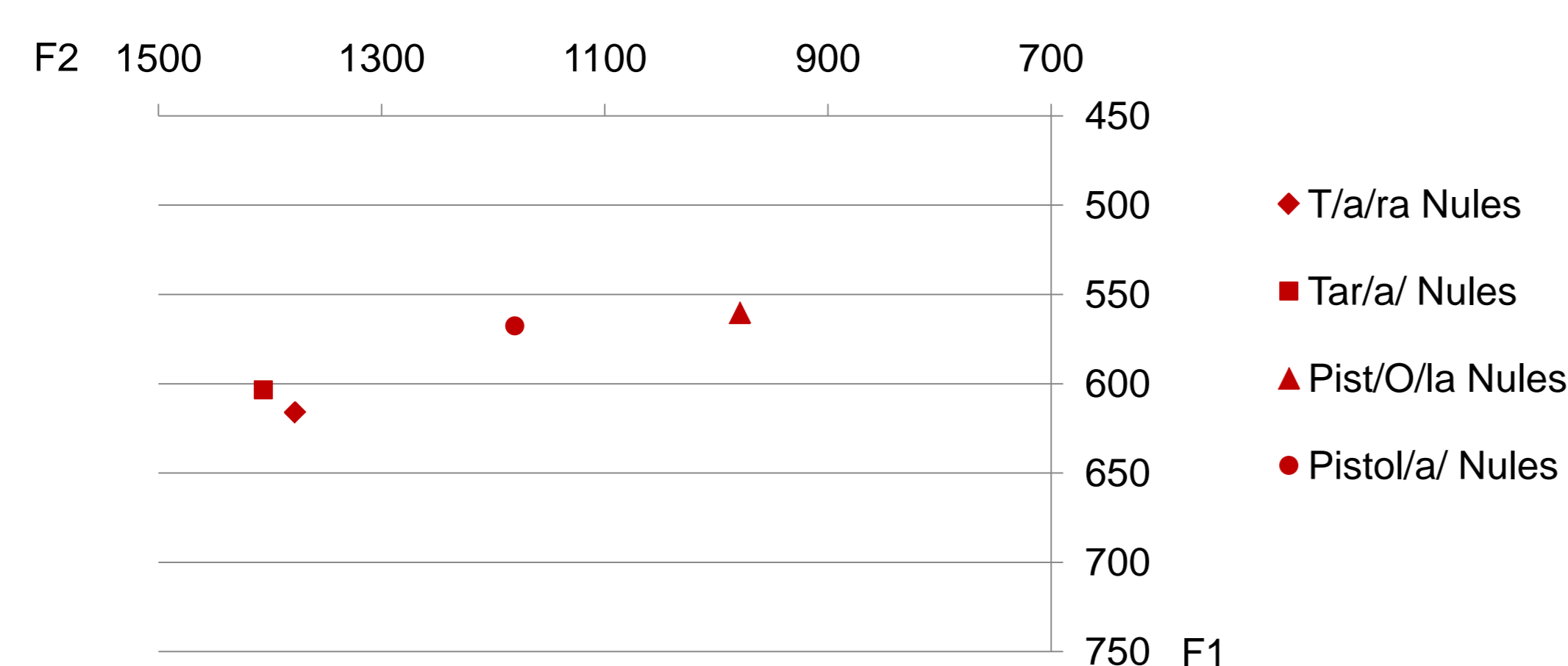
2.2. Nules variety

➤ Environment /á/+a/:

- Non-significant differences in F1 and F2 between both vowels.

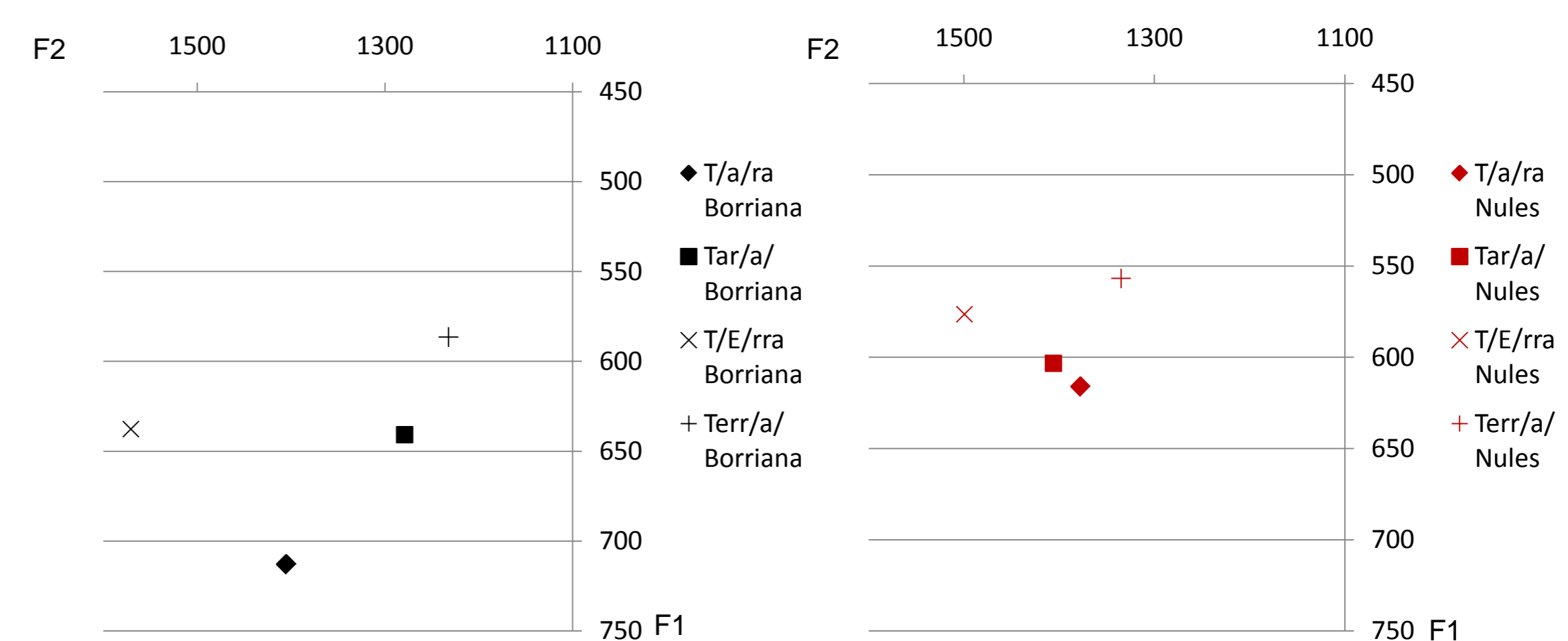
➤ Environment /ó/+a/:

- Unstressed /a/ F1 value is not significantly different from stressed /ó/ nor from unstressed /a/ in the context /á/+a/.
- Unstressed /a/ F2 value, intermediate between that of stressed /ó/ and that of unstressed /a/ in the context /á/+a/, is significantly different from the F2 value of the last two vowels.



3. FRONT VOWEL HARMONY AND COARTICULATION

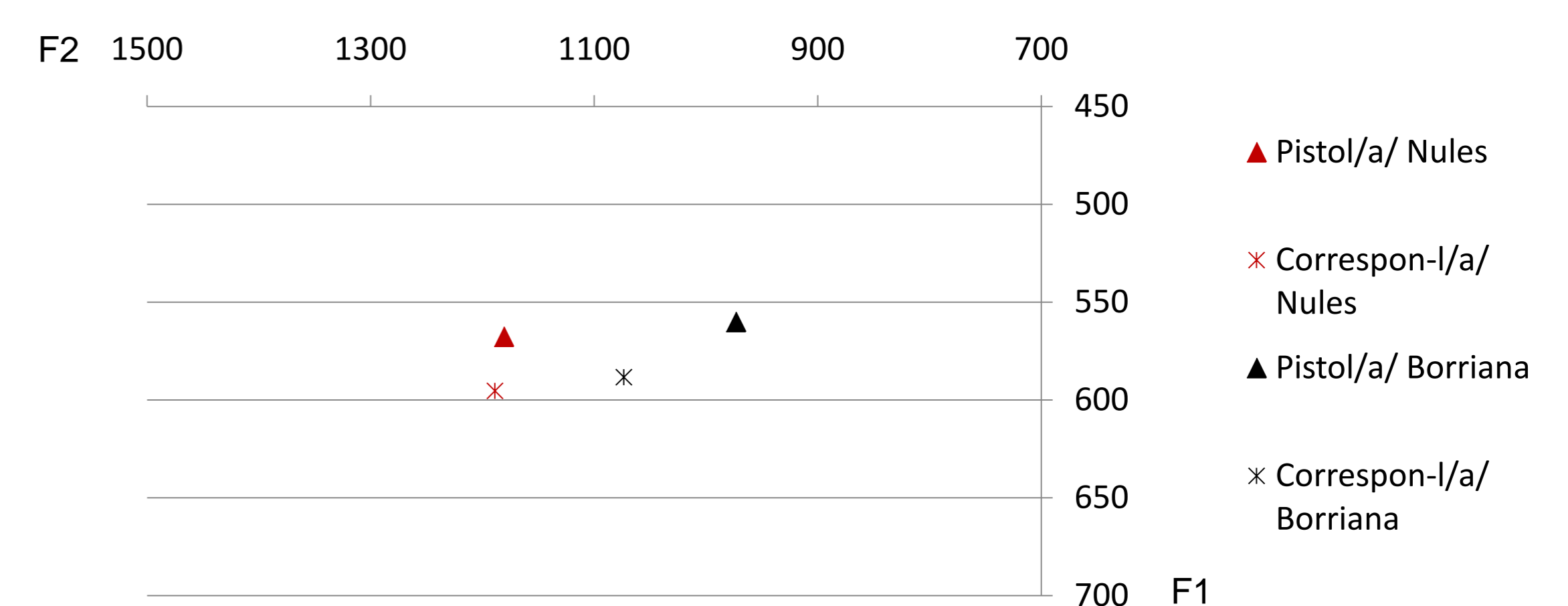
➤ Neither in Borriana nor in Nules is there a fronting of /a/ in the context /é/+a/ comparable with the rounding of /a/ in the context /ó/+a/. However, in this context /a/ is distinctly more closed in both varieties than unstressed /a/ in the environment /á/+a/.



4. ROUND VOWEL HARMONY AND COARTICULATION IN NON-PROTOTYPICAL CONTEXTS

➤ Across vowels, that is, in the environment /ó/+V+a/ (*catòlica*), neither of the varieties displays significant assimilatory effects stemming from /ó/. Posttonic /i/, though, influences slightly the F1 value of /a/.

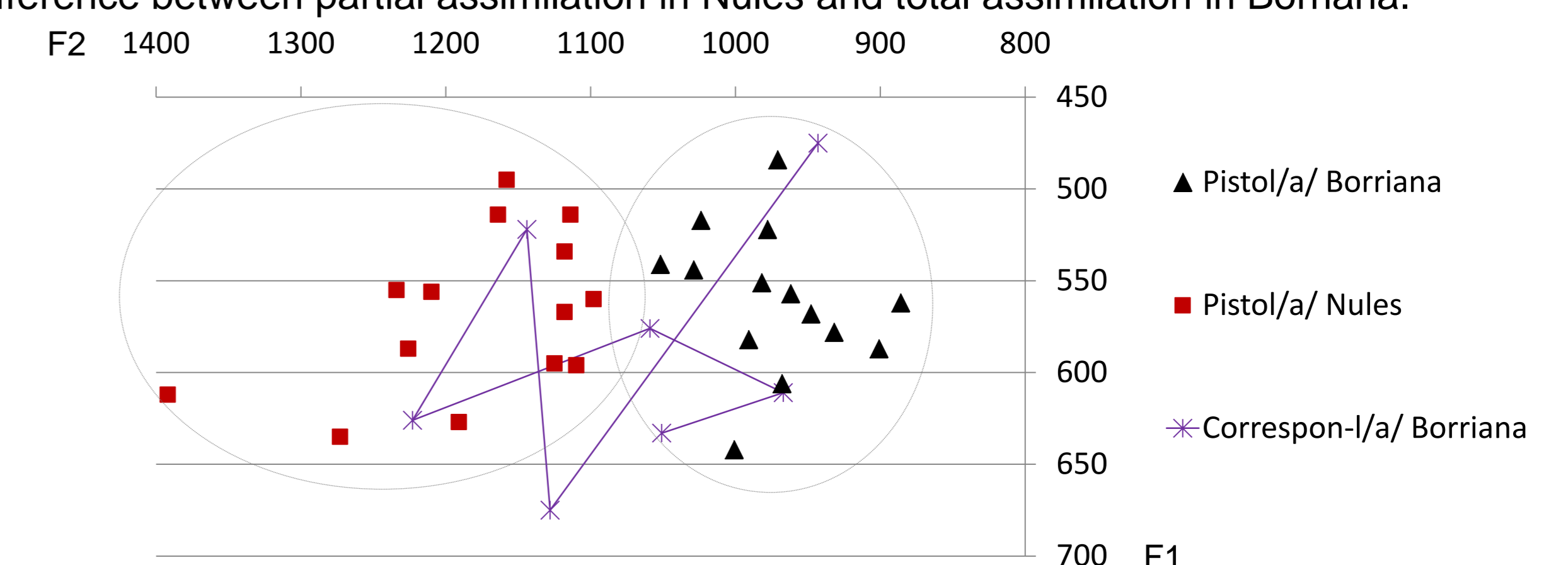
➤ In the context /ó/#a/ (*correspon-la*) Nules variety values coincide with those of the harmonic environment /ó/+a/, whereas Borriana variety values for that context are somewhere between those of Nules /ó/+a/ and /ó/#a/ contexts and those of Borriana harmonic context /ó/+a/.



➤ Hence, there appears to be a gradation from total assimilation (in Borriana *pistola*) to partial assimilation (in Nules *pistola*), being the Borriana form *correspon-la* the intermediate stage.

➤ However, when we look at the whole range of occurrences of Borriana *correspon-la*, the values appear dispersed. In fact, it seems that for some Borriana speakers, *correspon-la* is exactly as *pistola*; for others, instead, there is only coarticulation (partial assimilation), as in Nules *pistola*.

➤ Although more data would be required, this difference could indicate that there is a conceptual difference between partial assimilation in Nules and total assimilation in Borriana.



5. CONCLUDING REMARKS

➤ In the prototypical harmonic context /ó/+a/, both varieties display different degrees of assimilation: partial (Nules) and total (Borriana).

➤ In contrast, in the other prototypical harmonic context, /é/+a/, there are only changes in the F1 values of the last vowel, which do not significantly differ from /é/ in any variety.

□ Open issues:

- ✓ Are the two assimilatory patterns found in the context /ó/+a/ gradual or of a different nature?
- ✓ What factors could justify this different behavior?
- ✓ Why doesn't /é/ trigger the same processes?

➤ Considering all the contexts together, there seems to be a gradation in the interaction between the stressed and the final vowel:

1. No remarkable changes in the final vowel: context /á/+a/ (Nules)
2. Leveling/rising of F1 without significant changes in F2: context /é/+a/, among others (Nules & Borriana)
3. Leveling of F1 with a partial leveling of F2: context /ó/+a/ (Nules)
4. Leveling of F1 and F2: context /ó/+a/ (Borriana)

□ Open issue: Do these four stages constitute a diachronic chain or are they completely independent from each other?

6. REFERENCES

- HERRERO, Ricard (2008): *Les vocals tòniques de l'harmonia vocàlica del valencià: paràmetres des de la fonètica acústica*. Master's Degree Dissertation. València: Universitat de València.
- HERRERO, Ricard & Jesús JIMÉNEZ (2011): «Coarticulació i harmonia vocàlica en valencià septentrional». In: LLORET, Maria-Rosa & Clàudia PONS (eds), *Noves aproximacions a la fonologia i la morfologia del català*. Col·lecció Symposia Philologica. Alacant: IIFV.
- JIMÉNEZ, Jesús (1998): «Valencian Vowel Harmony». *Rivista di Linguistica*, 10: 137-161.