

Prosodic transfer in a contact variety: The case of Olivenza Spanish

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1. Goals of this study

The **first goal** is to describe the intonational tunes found in the contact variety *Olivenza* Spanish (OLI-SPA). The **second aim** is to contrast the intonational patterns of OLI-SPA to those of Castilian Spanish (CAST-SPA) and Standard Portuguese (STA-PORT) in order to detect possible transfer from the contact variety Portuguese. The **third objective** consists in comparing the rhythmic properties of OLI-SPA to those of CAST-SPA

Hypothesis:

- OLI-SPA shares tonal characteristics with the contact language Portuguese
- OLI-SPA patterns with CAST-SPA concerning speech rhythm

2. Background

Historical background: Olivenza is located in the border area between Extremadura (Spain) and Alentejo (Portugal). It was under Portuguese rule from 1297 on and became part of Spain in 1802 (Torres Gallego, 2007).

Result → **Spanish-Portuguese bilingualism** (until the middle of the 20th century, Carrasco González, 2006) and **language contact** between Portuguese and Spanish which leads to possible **transfer**

Prosodic differences between CAST-SPA and STA-PORT:

1) Intonation:

- Pitch accent distribution in declaratives: Stressed syllables between the first and last one of the IP tend to be accentless in STA-PORT, in contrast to CAST-SPA (Vigário & Frota, 2004)
- Tonal realization of broad focus statements: L+>H* pitch accents in prenuclear position followed by a nuclear configuration L* L% in CAST-SPA vs. H* prenuclear accents followed by H+L* L% in STA-PORT
- Tonal realization of final contours in neutral yes-no questions: L* HH% in CAST-SPA vs. H+L* LH% in STA-PORT
- Tonal realization of final contours in neutral wh-questions: L* L% or L* HH% in CAST-SPA vs. H+L* L% or H+L* LH% in STA-PORT (see Estebas-Vilaplana, 2010 for CAST-SPA and Frota, 2002; Vigário & Frota, 2004 for STA-PORT)

e. Prosodic phrasing patterns in simple SVO declaratives: (S)(VO) in CAST-SPA vs. (SVO) in STA-PORT (D'Imperio et al., 2005)

2) **Speech rhythm:** STA-PORT has mixed rhythm, i.e. great durational variability of consonantal intervals that places it in the stress-timed class, but variability of vocalic intervals and proportion of vocalic material that locates it in the syllable-timed class (Frota & Vigário, 2001). CAST-SPA is a **syllable-timed language** (see Kireva & Gabriel, 2013; Ramus et al., 1999)

3. Methodology

Subjects

10 monolingual OLI-SPA speakers: 5 male, 5 female, mean age = 25.1 years, range age: 18-35 years; Education: formal or university education

Materials

- Reading of the fable *The North Wind and the Sun* (for the rhythmic analysis)
- Semi-spontaneous speech was collected using the so-called *intonation survey* (see Prieto & Roseano, 2010). **573 sentences** were analyzed in total: 154 declaratives (20 broad focus statements), 131 yes-no questions (40 neutral yes-no questions), 202 wh-questions (78 neutral wh-questions), 36 imperatives, and 50 vocatives (for the intonational analysis). A subset of **300 sentences** were analyzed for the rhythmic analysis: 100 declaratives, 90 yes-no questions, 90 wh-questions, and 20 imperatives
- 60 SVO sentences were recorded using a PowerPoint presentation containing 6 different visual stimuli (for analysis of prosodic phrasing)

Intonational analysis: The inventory of pitch accents and boundary tones was established using the Spanish ToBI labeling system (see Beckman et al., 2002; Prieto & Roseano, 2010)

Rhythmic analysis: Segmentation of materials into C and V intervals. **Six rhythmic metrics** were calculated: %V, VarcoV, VarcoC, VnPVI, CrPVI, and CnPVI (Dellwo & Wagner, 2003; Grabe & Low, 2002; Kinoshita & Sheppard, 2011; Ramus et al., 1999; White & Mattys, 2007). The values for OLI-SPA obtained from the analysis of the read data were compared to the scores for CAST-SPA presented in Kireva and Gabriel (2013) (6 speakers of CAST-SPA: 4 male, 2 female, mean age = 33.5 years, range age: 26-51 years)

Vowel reduction was attested in unstressed syllables in OLI-SPA: Thus, all stressed and unstressed /a/ and /o/ occurring in the read data were auditorily and acoustically analyzed

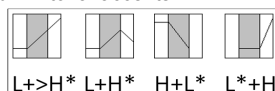
4. Results and Discussion

Inventory of pitch accents in OLI-SPA

a. Monotonal accents

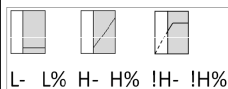


b. Bitonal accents:

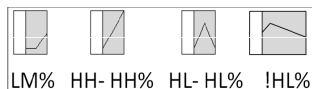


Inventory of boundary tones at BI 3 (-) and BI 4 (%):

a. Monotonal tones



b. Bitonal tones:



Intonation:

- 16% of the IP-internal stressed syllables were deaccented** in the neutral declaratives
 - Tonal realization of broad focus statements:** L+>H* is the most frequent prenuclear accent and L* L% is the most common nuclear configuration in OLI-SPA
 - The most frequent final contours in neutral yes-no questions** in OLI-SPA are: L* HH% (40%) and H+L* !HL% (or H+L* L%) (37.5%)
 - The most common final contours in neutral wh-questions** in OLI-SPA are: H+L* L% (64%) and L* HH% (27%)
 - The predominant prosodic pattern** in OLI-SPA is (SVO) (occurring in 75% of the cases)
- OLI-SPA seems to have generated both prosodic features typical of Spanish and of Portuguese → Convergence between the intonational systems of Spanish and Portuguese

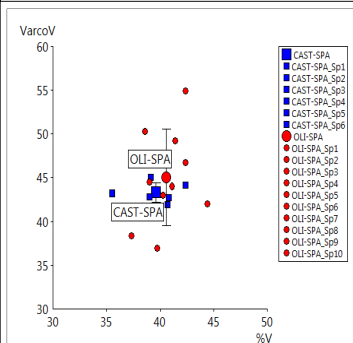


Fig. 1: %V/VarcoV for the fable *The North Wind and the Sun* for Castilian Spanish (CAST-SPA) and Olivenza Spanish (OLI-SPA)

	%V	VarcoV	VarcoC	VnPVI	CrPVI	CnPVI
CAST-SPA	39.57	43.26	40.46	36.19	42.04	46.66
OLI-SPA	40.64	44.97	40.48	38.8	46.92	48.86

Table 1: Mean values for the fable *The North Wind and the Sun* for CAST-SPA (Kireva & Gabriel, 2013) and OLI-SPA

OLI-SPA	%V	VarcoV	VarcoC	VnPVI	CrPVI	CnPVI
declaratives	44.68	47.69	42.9	39.08	37.81	45.51
wh-questions	49.03	62.77	41.12	52.93	34.63	43.84
yes-no questions	46.14	60.48	43.15	50.67	38.99	47.43
imperatives	48.22	56.53	41.47	49.29	38.81	46.15

Table 2: Mean values for the data collected using the intonation survey for OLI-SPA

Speech Rhythm: In Table 1, CAST-SPA and OLI-SPA show almost the same values. Nevertheless, the %V, VarcoV, and VnPVI values, obtained from the analysis of the wh-questions, yes-no questions, and imperatives, are higher. **Explication** → **lengthening of nuclear and final syllables**

➤ Hypothesis is partially confirmed for speech rhythm

Vowel reduction: Unstressed /a/ was produced as [ə] in 66% of the cases and unstressed /o/ was produced as [u] in 18% of the cases

➤ transfer from Portuguese

5. Conclusion

OLI-SPA seems to be influenced by the contact language Portuguese. Its prosodic system can be interpreted as the result of convergence between the prosodic systems of Spanish and Portuguese

Further aims of this study: Prosodic analysis of the contact variety *Olivenza* Portuguese and comparison across *Olivenza* Spanish, *Olivenza* Portuguese, *Evóra* Portuguese (Alentejo), Castilian Spanish, and Standard Portuguese

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