

VOREI VOLARE COME LE RONDINI: PHONETIC ANALYSIS OF RHOTIC DEGEMINATION IN ELBA ISLAND ITALIAN

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INTRODUCTION

Rhotic degemination is a **marginal and recessive phenomenon** in Tuscan Italian, primarily found in its western varieties. It is geographically scattered and uneven, and its distribution remains largely unexplored. Previous studies [1, 2, 3] have identified localized areas where degemination is more pervasive, notably including **Elba, the largest island in the Tuscan archipelago**. This study builds on [4] and incorporates insights from [5] to examine /r/ realisations in five speakers from two Elban towns, **Portoferraio** and **Capoliveri**, with particular attention to cases of rhotic degemination

CORPUS & ANNOTATION

The speech corpus was elicited using the ALI questionnaire [6], comprising 868 sentences per speaker (3 male, 2 female). Each sentence contained at least one instance of an intervocalic rhotic

Two main types of contexts were targeted:

- Type A:** Intervocalic tap /r/ (140 contexts), present in all speakers
- Type B:** Intervocalic phonological geminate /rr/ (10-12 contexts), which included:
 - Lexical /rr/ (where present)
 - Phonosyntactic long /r/ from /n+r/ assimilation
 - Phonosyntactic /r#r/ sequences across word boundaries

All tokens were manually annotated [7] and classified following the models proposed in [8] and [9]

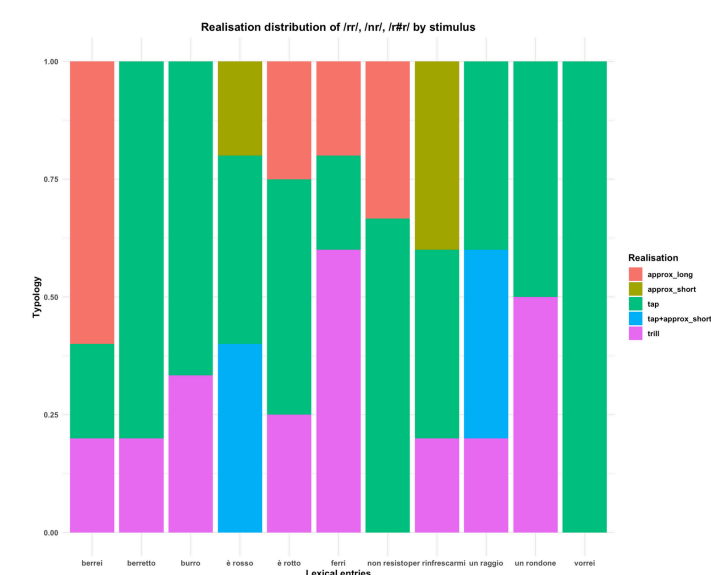
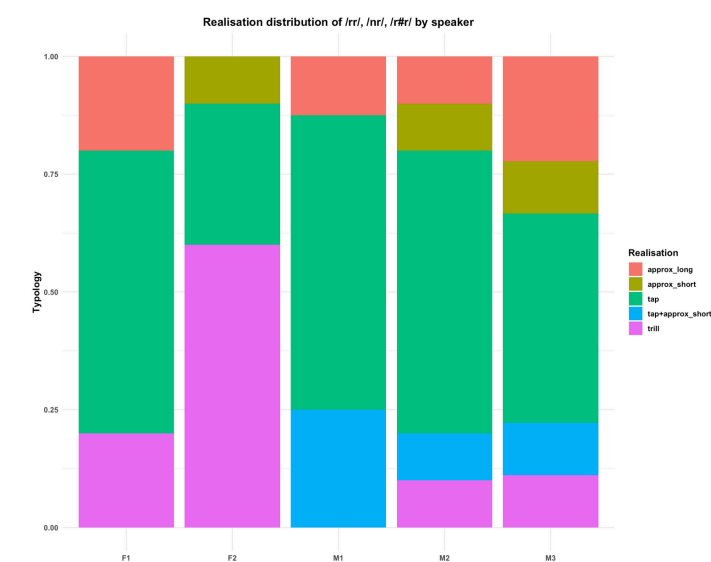
ID	Age	Place of birth	Occupation	Linguistic Background
F1	19	Portoferraio	High school student (3rd year)	Local family from Portoferraio for generations
F2	33	Portoferraio	Employee	Slight influence from father (Siena); mother from Genoa, moved to Elba at age 3
M1	22	Portoferraio	High school student (final year)	Parents from Massa Marittima and Senise; no notable influence on her speech
M2	80	Portoferraio	Retired (former shop owner)	Both parents Elban (Marciana Alta and Marciana Marina)
M3	70	Portoferraio	Retired (former traffic officer)	Local family from Portoferraio for generations

ANALYSIS AND RESULTS

Analysis of the 140 intervocalic /r/ tokens revealed three main realisation patterns:

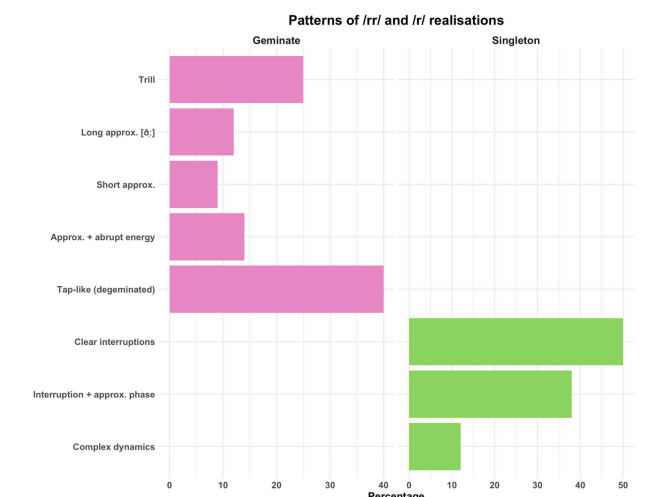
- ~50% were produced as clear, brief interruptions (≤ 50 ms), consistent with canonical taps
- ~35% combined a strong interruption with an approximant-like phase, marked by a gradual transition into the following vowel
- ~10% showed more complex dynamic patterns within a short duration, yet preserved a perceptually abrupt quality

Gradient nature of /r/ realisations even within narrowly defined phonological contexts



DISCUSSION

Rhotic realisations vary notably across speakers. The youngest (F1) shows a pattern closer to standard Italian, with clear alveolar taps and tighter phonatory-articulatory coordination (e.g., tap occlusion briefly increases vocal fold vibration)



M3 frequently produces dental approximants [ʝ] even in geminate contexts (*berrei*; *per rinfrescarmi*; *raddoppiamento fonosintattico*), suggesting sociophonetic effects linked to age. Other speakers display mixed patterns (e.g., M1 alternates taps and approximants; F2 produces both trills and hybrid forms). **Contrasting items like *vorrei* (typically degeminated) and *berrei* (mostly long) highlight speaker-specific strategies.** Findings reflect the gradient nature of /r/ and its sociophonetic conditioning in Elban Italian

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