

How predictable is word stress in Italian?

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Introduction: In Italian, any of the last three syllables can be stressed (1a; in verbs any of the last four syllables, 1b). Even though the lexical stress considerably obscures the task of determining the default stress there is a general consensus in the literature that the last syllable is extrametrical (when not lexically stressed, as in the first form in 1a) and that the foot type is trochaic. Scholars disagree on two issues, first on whether Italian is quantity-sensitive (Sluyters 1990, D'Imperio & Rosenthal 1999, Morén 2001) or not (den Os & Kager 1986, Nespor 1993) and secondly, in words with only light syllables, whether the default stress falls on the penultima (D'Imperio & Rosenthal 1999) or the antepenultima (Morén 2001). As a consequence, it is not clear if Italian prefers a bimoraic trochee on the second-last syllable or a bisyllabic trochee built to the left of the extrametrical final syllable.

In this paper, I report the results of a nonsense word experiment (or wug test) designed to shed light on these two aspects of Italian stress, quantity-sensitivity and foot form (as either bi-syllabic or bi-moraic), and give an optimality-theoretic (OT) account of the facts revealed based on the OT analyses proposed by D'Imperio & Rosenthal (1999) and Morén (2001).

Method: A written list of 28 phonotactically well-formed nonsense words was created, containing three- and four-syllable words with light syllables only, or combinations of light (L) and heavy syllables (H; excluding final heavy syllables for phonotactic reasons). Heavy syllables were all closed by a consonant. Nine native speakers from four different areas in Italy read each test word in two contexts. **Results:** The data show intra-speaker variation in the placement of the main stress in three-syllable words with light syllables (LLL), varying between second- and third-last position (2a), while LLLL words are almost invariably realised with penultimate stress (2b). HLL, LHL and HHL words show that syllable weight only has an effect in the penult (2c-e) (as in Latin; see Roca 1999). These findings correlate with lexical distribution: Italian has many LLL and HLL words with stress on the antepenultima as well as words with the same syllable types with stress on the penultima. Among HHL and LHL words all realisations of all test words have penultimate stress and there are extremely few real words of the LHL-type with antepenultimate stress in the Italian lexicon (as 1c).

Analysis: Intra-speaker variation emerges from crucial non-ranking of the constraints determining the position of stress. Such a nondeterministic grammar is expected given the massive occurrence of lexically pre-specified stress. I assume that constraints not strictly ranked relative to each other assume a random ranking in each candidate evaluation. Percentages in usage of competing forms are determined by the number of unranked decisive constraints and their factorial ranking potential (cf. Anttila 2003). The even distribution of pre-final and antepenultimate stress among LLL words is a side effect of the interplay of a PARSE constraint ('syllables are parsed into feet') and the most important constraint on stress placement (EDGEMOST-Right; see 3, 4). Italian displays only a small number of words that actually show variable stress (1d; Jacobs 1994). High ranking of faithfulness and a high degree of pre-specification across the lexicon are responsible for this.

Conclusion: The paper shows that the contrasting views on quantity-sensitivity and foot form sketched above all fail to capture the Italian default stress. Taken together, they give a more adequate picture: The penultima is definitely weight-sensitive and in LLL words stress vacillates between the 2nd- and the 3rd-last syllable. Due to the nature of the system (with prevailing lexical stress), such generalisations can only be found via experimentation (e.g., with nonce word tests) rather than by looking at existing data. The variation attested finds a straightforward analysis in OT as the effect of ad hoc rankings of unranked constraints.

- (1) Stress in Italian
- a. verità 'truth'
 - paróla 'word'
 - stúpido 'stupid'
 - b. teléfono 'they phone'
 - telefoneró 'I will phone'
 - c. pólizza 'policy'
 - d. féstival /festivál 'festival'

(2) Wug test results

	Word type	Antepenult	Penult
a.	LLL	53.33%	46.66%
b.	LLLL	11.12%	88.88%
c.	HLL	34.5%	65.5%
d.	LHL	0%	100%
e.	HHL	0%	100%

(3) LLL 50/50 variation

	NONFINAL	PARSE- σ	EDGEMOSTRIGHT
☞ a. (frúda)lo		*	**
b. (frú:)dalo		**	**
c. fru(dálo)	*!	*	*
☞ d. fru(dá:)lo		**	*
e. (frùda)(ló)	*!		

(4) Temporary rankings for (3):

- i. PARSE- σ » EDGEMOSTRIGHT ☞ candidate (a)
- ii. EDGEMOSTRIGHT » PARSE- σ ☞ candidate (d)

(5) LLLL near 100% penultima

	NONFINAL	PARSE- σ	EDGEMOST-R
☞ a. (ròka)(pá:)do		*	
b. ro(kápa)do		**	*!
c. (róka)pado		**	***!

(6) HHL 100% penultima

	FOOT= $\mu\mu$	PARSE- σ	EDGEMOST-R	WSP
a. (dʒón)sikko		**	**!	*
☞ b. dʒon(sík)ko		**	*	*
c. (dʒónsik)ko	*!	*	**	*

Candidate (b)'s violations are a proper subset of (a)'s violations. No ad hoc ranking can favour (a).

References

- Anttila, A. 2003. Variation and phonological theory. In J. K. Chambers, P. Trudgill, N. Schilling-Estes (eds.) *The Handbook of Language Variation and Change*. Oxford: Blackwell. 206-243.
- D'Imperio, M. & S. Rosenthal 1999. Phonetics and Phonology of Main Stress in Italian. *Phonology* 16: 1-28.
- Jacobs, H. 1994. How Optimal is Italian Stress? In R. Bok-Bennema and C. Cremers (eds.) *Linguistics in the Netherlands 1994*. Amsterdam and New York: Benjamins. 61-70.
- Morén, B. 2001. *Distinctiveness, Coercion and Sonority. A Unified Theory of Weight*. New York and London: Routledge.
- Os, E. den & R. Kager 1986. Extrametricality and Stress in Spanish and Italian. *Lingua* 69: 23-48.
- Rocca, I. 1999. Stress in the Romance Languages. In H. van der Hulst (ed.) *Word Prosodic Systems in the Languages of Europe*. Berlin, New York: Mouton de Gruyter. 659-811.
- Saltarelli, M. 1983. The Mora Unit in Italian Phonology. *Folia Linguistica* 17: 7-24.
- Sluyters, W. 1990. Length and stress revisited: A metrical account of diphthongization, vowel lengthening, consonant gemination and word-final vowel epenthesis in Modern Italian. *Probus* 2: 65-101.