

Locality Effects in Italian Verbal Morphology*

ANDREA CALABRESE

University of Connecticut
andrea.calabrese@uconn.edu



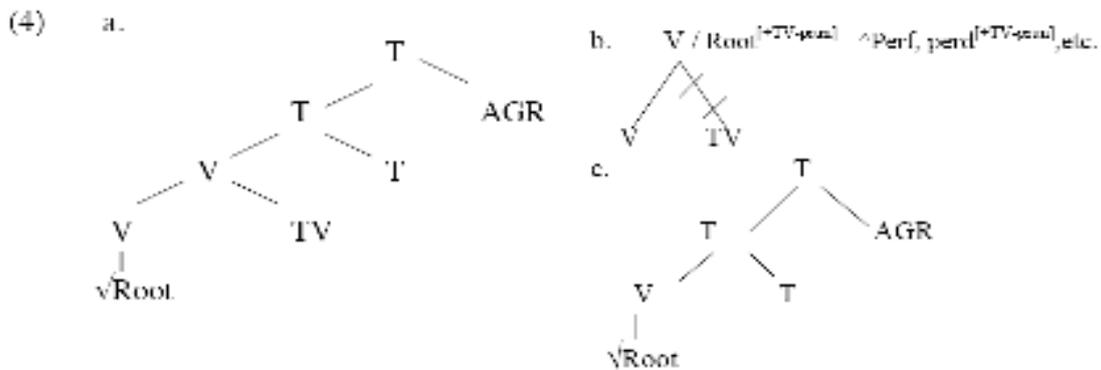
*“Ad Adriana, una grande linguista e per me una grande amica,
con affetto e profonda gratitudine”*

This paper argues that some of the basic properties of Italian verbal morphology can be understood only if the hierarchical and linear position of morphemes within the verbal forms is taken into consideration. In particular, it shows that morpheme-to-morpheme interactions in Italian verbal morphology can occur only when the morphemes are in positions that are (hierarchically and linearly) local to each other, as proposed by Embick (2010, 2013).

The paper deals with the irregular morphology in Italian perfect and past participle forms. In these forms one observes a correlation between presence vs. absence of regular morphology and presence vs. absence of thematic vowels. Specifically, irregular morphology, which crucially requires access to specific root information, occurs only when the thematic vowel is absent.

- (1) a. **Irregular:** vs. b. **Regular:**
[[[[*pérd*]_{root} __]_V -s-]_I]_i]_{AGR}
pérsi ‘lose-Perf-1sg’
[[[[*pérd*]_{root} __]_V -s-]_I]_o]_{AGR}
pérso ‘lose-PastPart-MscSg’
Athematic
- [[[[*part*]_{root} -**i**_{TV}-]_V -Ø-]_I -sti]_{AGR}
partisti ‘leave-Past-1sg’
[[[[*batt*]_{root} -**i**_{TV}-]_V -t-]_I -o]_{AGR}
partito ‘leave-PastPart-MscSg’
Thematic

* The related article will be part of Di Domenico, E., C. Hamann and S. Matteini (eds.) (to appear) *Structures, Strategies and Beyond. Studies in Honour of Adriana Belletti*, Amsterdam/Philadelphia, Benjamins Publishing Company.



Traditional analyses of verbal irregular morphology postulate that stress plays a crucial role in the selection of the irregular stem allomorph (irregular stems/roots are inherently stressed). The same postulation, or a variation of it, is found in the most recent accounts of Italian verbal morphology (cf. Burzio (1998), Maiden (2010), Pirelli and Battista (2000), Vogel (1994). However, as discussed by Oltra-Massuet and Arregi (2005), Calabrese (2012), the position of main stress in verbal forms is always predictable from the morpho-syntactic composition of the string. Specifically in the cases relevant here, if the thematic vowel is present, then it is stressed. If it is absent, stress falls on the root. The predictability of verbal stress crucially undermines analyses such as those mentioned above, which require idiosyncratic assignment of stress to stems/roots—other arguments will be provided in the paper against them.

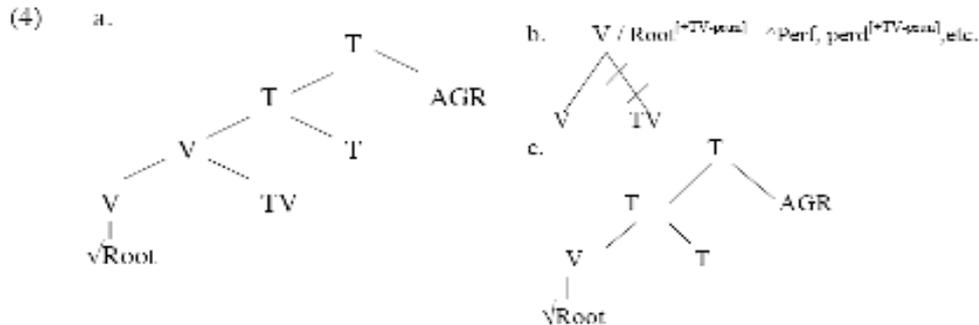
The analysis proposed in this paper is set in the Distributed Morphology framework. Distributed Morphology (DM; Halle & Marantz 1993) crucially incorporates hierarchical structure into the morphology; essentially, it assumes the input to morphology to be syntactic structure. Features (or feature bundles) are distributed over nodes forming morphemes, which in turn are subject to Vocabulary Insertion rules that add phonological material (exponents) to these morphemes. Contextual allomorphy is accounted for by vocabulary insertion on one hand and through the application of readjustment rules, morpho-syntactically conditioned phonological rules, on the other.

Allomorphic interactions are constrained by the manner in which Vocabulary Insertion operates, and by the interaction of *linear* and *cyclic* locality conditions. Two different conditions are relevant in this paper. The first of these conditions (2) enforces “inside out” cyclicity (e.g. Halle and Marantz 1993, Bobaljik 2000); the second one (3)(see Embick (2010)) specifies a linear condition on contextual allomorphy:

- (2) VI proceeds cyclically from the lowest element in the structure outwards
- (3) Contextual allomorphy (involving access to morpho-lexical features) requires concatenation (linear adjacency).

The paper proposes the following analysis. After verb raising (Belletti (1990)) and other morphological operations discussed in the paper, Italian verbal forms have the morpho-syntactic structure in 4a) where the TV is the thematic vowel. In athematic forms the thematic vowel is pruned by the operation in 4b)—a readjustment rule triggered

by root information—thus resulting in 4c) (where T also includes aspectual features insofar as T and ASP undergo fusion):



The reason for the correlation between absence of thematic vowels and irregular morphology is the following. Irregular VIs crucially require access to root information, cf. the VI for the exponent /-s-/ in (4)a). However, given the two conditions in (2) and (3), the presence of the thematic vowel prevents application of such VI. In fact, when the cyclic application of vocabulary insertion reaches T, root information cannot be accessed because the root is not linearly adjacent to T due to the presence of the thematic vowel. Hence, (3) blocks application of (4)a). If the TV is present, only regular VIs such as those in (4)b) or c) can be inserted.

The Vocabulary Items relevant for the verbal forms in (1) are as follows:

- (4) a. s <--> [+Perf, (+Part)]_T / Root^S ^ __ {Root^S = perd, etc.}
 b. /-Ø-/ <--> [+Perf]_T
 c. t <--> [+Part]
 d. /-i/ <--> [+Auth, -Pl]_{AGR}
 e. /-o/ <--> [+Masc, -Pl]_{AGR}

Notice that if /-s-/ is inserted, as in athematic verbal forms, Readjustment Rules may apply, for example, (5) which triggers deletion of the coronal stops [d] before /-s-/.

- (5) [-continuant, +coronal] --> Ø / __ ^ [s]_T

In this way, both the Passato Remoto and the Past Participle of irregular verbs can be readily derived from their underlying roots, which appear in other—thematic— forms of these verbs such as the imperfect or the infinitive. The notion of morphological locality is fundamental to achieve this result.

References

Bobaljik, J. D. (2000) The ins and outs of contextual allomorphy. In Kleanthes K. Grohmann and C. Struijke, eds., *Proceedings of the Maryland Mayfest on Morphology 1999*, 35–71. University of Maryland Working Papers in Linguistics 10.
 Belletti, A. (1990) Generalized Verb Movement . Torino: Rosenberg & Sellier
 Burzio, L. (1998) Multiple Correspondence, *Lingua* 103, 79-109
 Calabrese, A. (2012) Allomorphy in the Italian Passato Remoto: A Distributed Morphology Analysis. *Language and Information Society*. Sogang University, Korea. 1-75
 Embick, D. (2010) *Localism versus Globalism in Morphology and Phonology*. Cambridge, MA: MIT Press.

- Embick, D. (2013) Morphemes and Morphophonological Loci in O. Matushansky and A. Marantz (eds.) *Distributed Morphology Today. Morphemes for Morris Halle*. Cambridge, MA: MIT Press.
- Halle, M. and A. Marantz (1993) Distributed Morphology and the pieces of inflection. In K. Hale and S. J. Keyser (eds), *The view from Building 20: Essays in linguistics in honor of Sylvain Bromberger*, 111–176. Cambridge, MA: MIT Press.
- Maiden, M. (2010) Morphological Persistence. In M. Maiden, et al.(eds), *The Cambridge History of the Romance Languages* [Vol. I], 155-216. Cambridge: Cambridge University Press.
- Oltra-Massuet, I. and K. Arregi (2005) Stress by Structure in Spanish. *Linguistic Inquiry* 36 (1):43–84.
- Pirrelli, Vito and M. Battista (2000) The Paradigmatic Dimension of Stem Allomorphy in Italian Verb Inflection. *Rivista di Linguistica*, 12 (2): 307-380.
- Vogel, I. (1994) Verbs in Italian morphology. In G. Booij and J. van Marle, eds., *Yearbook of Morphology* 1993, 219-254. Dordrecht: Kluwer.