

The Parametrization of the CP: a comparison of Italo-Romance dialects through the PCM

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Background: The Parametric Comparison Method (PCM) is a tool for language comparison which takes sets of syntactic parameters from different languages as input to computations and outputs phylogenies of those languages (Longobardi, 2003, 2012, 2018; Longobardi & Guardiano, 2009, 2017; Longobardi et al., 2013, 2015; Guardiano & Longobardi, 2017; Ceolin et al., 2020 ...). One of the main benefits of this tool is that it can be easily expanded in terms of the parameters involved, of the languages under analysis and also of the structural domain selected. Hence, while Longobardi et al. focused on the nominal domain and Baker and Roberts (to appear) on the inflectional/verbal domain testing standard varieties, this paper will show a further expansion of the PCM both in terms of the structural domain investigated and in terms of the languages under analysis. This paper aims to present some preliminary results retrieved from the application of the PCM to the complementizer phrase (CP) on a sample of Italo-Romance dialects and aims to show how the PCM can be expanded and refined to capture microvariations between languages that are undeniably related. Indeed, the shift from standard to non-standard variety resulted in the necessity to define some more fine-grained parameters capable of fully capturing the detailed microvariations between these varieties, but on the other hand it also led to find a balance between generality and specificity in parameters description in order to maintain the reliability of the comparison.

The Parameters: Adopting the cartographic framework, for each head of the split CP (Rizzi, 1997), a sub-list of parameters was generated, for a total of 101 parameters. Several parameters were formulated in terms of formal features on functional heads. Following Gianollo et al. (2008), the grammaticalisation, checking, spreading, and strength of functional features were verified to account for numerous phenomena characterizing the CP. Other parameters, instead, account for further salient patterns of variations in CP. Once the value of each parameter was assigned, languages were compared in pairs and the syntactic distance was calculated. For either language in the pair, each parameter value was assigned and afterwards the number of differences in parameter values was divided by the sum of differences and identities. The syntactic distance falls in a range between 0 and 1 and the lower these values, the more related the two languages in the pairs are.

Results: In the previous applications of the PCM to other structural domains (Guardiani & Longobardi, 2017; Baker & Roberts (forthcoming)), the results given by

the computation of the respective syntactic distances, tended to match the traditional comparative methods. In other words, it was observed that the syntactic distances can reproduce the specific language families which the languages under analysis belong to. Therefore, two languages drawn from the same language family are expected to have a lower syntactic distance with respect to two languages belonging to two different families. Looking more closely at the parametrization of the CP tested on Italo-Romance varieties, it is possible to define the same trend, namely the findings overall reproduce the traditional subdivision of dialects/regional varieties (Ledgeway & Maiden, 2016). Nonetheless, some surprising results emerged:

- Veneto dialects: Bellunese, Trevigiano and a variety of Polesano were tested and despite their apparently similar functional properties, the first two turn syntactically closer than Polesano. This is primarily due to a different use of subject clitic inversion in combination with *wh*-movement. Moreover, whether Bellunese and Trevigiano do not allow focus fronting and left-dislocations, Polesano is keener to accept these syntactic operations.
- Piedmonte dialects: Biellese and Cuneese were tested and they report a syntactic distance which is higher than expected because of a phenomenon which solely characterizes the former. Indeed, only in Bellunese interrogative *wh*-items can be followed by a declarative complementizer *che* (that) in both main and embedded interrogatives.
- Fiorentino: Even though it is generally labelled as a dialect of central Italy, its geographical proximity to the areas where NIDs are spoken created the expectation of linguistic proximity as well. This is not actually the case, indeed Fiorentino is significantly distant from most NIDs. This is the result of a wider acceptance of complementizer deletion in Fiorentino with respect to NIDs where it is systematically ruled out and to a peculiar realization of non-standard interrogatives through discourse particles, a phenomenon that is attested only in this variety so far.

Conclusion: The application of the PCM to a set of Italo-Romance varieties provided syntactic distances whose values range between 0.1 and 0.4, which from the PCM's viewpoint indicates an undeniable relatedness between these varieties. However, some distance values were not expected, demonstrating that a method which aims to diagnose the most detailed properties of a language is able to reveal more subtle differences or unexpected similarities between languages that are traditionally associated with the same language family.

References:

- Baker, J. & Roberts, I. (to appear). Extending Parametric Comparison: Some Preliminary Results. In P. Crisma & G. Longobardi (eds.), *Handbook of historical and diachronic linguistics*. Oxford: Oxford University Press.
- Benincà, P., Parry, M., & Pescarini, D. (2016). The dialects of northern Italy. In A. Ledgeway & M. Maiden (eds), *The Oxford guide to Romance languages* (pp. 185-205), Oxford Guides To The World's Languages.
- Ceolin, A., Guardiano, C., Irimia, M.-A., Longobardi G. (2020) Formal Syntax and

Deep History. *Frontiers in Psychology* 11.

Gianollo, C., Guardiano, C., & Longobardi, G. (2008). Three fundamental issues in parametric linguistics. In T. Biberauer, *The Limits of Syntactic Variation* (pp. 109–142). John Benjamins Publishing Company.

Guardiano, C., & Longobardi, G. (2017). Parameter theory and parametric comparison. In I. Roberts (ed.), *The Oxford Handbook of Universal Grammar* (pp. 377–400). Oxford: Oxford University Press.

Ledgeway, A., & Maiden, M. (2016). *The Oxford Guide to the Romance Languages* (Oxford Guides to the World's Languages) (1st ed.). Oxford University Press.

Longobardi, G. (2018). Principles, Parameters, and Schemata: A radically underspecified UG. *Language and Linguistic Science*, 41 (3-4), 517-558.

Longobardi, G., & Guardiano, C. (2009). Evidence for syntax as a signal of historical relatedness. *Lingua*, 119(11), 1679-1706.

Longobardi, G., Guardiano, C., Silvestri, G., Boattini, A. & Ceolin, A. (2013). Toward a Syntactic Phylogeny of Modern Indo-European Languages. *Journal of Historical Linguistics* 3, 122-152.

Longobardi, G., Ghirotto, S., Guardiano, C., Tassi, F., Benazzo, A., Ceolin, A. & Barbujani, G. (2015). Across language families: Genome diversity mirrors linguistic variation within Europe. *American Journal of Physical Anthropology* 157, 630- 640.

Rizzi, L. (1997). The Fine Structure of the Left Periphery. In L. Haegeman, *Elements of Grammar* (pp. 281–337). Dordrecht: Springer.

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