

Some more applications of the tonal grid annotation

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Introduction

This paper aims at providing a theoretical setting for the tonal grid annotation system (De Dominicis 2010a, 2010b).

The tonal grid is a graphic device which allows the representation of that special kind of linguistic phenomena: when they are (grammatically) unexpected and recurrent. We could mention tonal and segmental perturbations, syntactic and lexical discontinuities, and pragmatic functions (e.g. the focalizations). Moreover, the tonal grid allows to reconstruct the relations among these ones: i.e. the possible tonal 'rhyme(s)' between two (or more) tonal perturbations at close/remote range, or the phoric relationship between constituents within the clause.

The tonal grid is an upgraded version of the syntactic grid. This annotation system was firstly designed by Claire Blanche-Benveniste and the GARS (Groupe Aixois de Recherches en Syntaxe) in order to account for the oral production in a conversation, where the linearity is often broken and a given sequence can be realized in "wave series" (see: Blanche-Benveniste 1990, 1997; Blanche-Benveniste, Borel, Deulofeu, Durand, Giacomi, Loufrani, Meziane, Pazery 1979; Blanche-Benveniste, Bilger, Rouget, van den Eynde 1990; Bilger 1982; Bilger, Blasco, Cappeau, Pallaud, Sabio, Savelli 1997). In particular, the syntactic grid is specially suited to highlight the disfluencies and the fragmentary nature of speech (false starts, hesitations, repetitions), and how they contribute to build the meaning and the grammatical functions.

A syntactic grid consists of two main dimensions: the horizontal axis represents the sequence of the syntagmatic positions (or constituents); the vertical one shows the possible different paradigmatic occurrences lying on the same position. By adding a syntagmatic construction to its paradigmatic fragments one gets a discursive configuration. It may recur at regular intervals, like a rhyme, and so give the discourse a peculiar architecture.

The tonal grid supplements the syntactic one by adding tonal (or intonational) features: it highlights the recurrence of the same tonal pattern on different syntagmatic positions, or on the whole paradigmatic set of constituents belonging to the same syntactic position. In both cases, if a given tonal perturbation recurs, then each instance is an occurrence of a tonal pattern rhyme. Moreover, the tonal grid brings up the recurrence of some special segmental perturbations: so these ones settle another kind of rhyme (or phoric relation). Summing up, inside a tonal grid some locations are provided, where several kinds of rhyme interface. These relations – specially if they link F0 prominent positions (due to a focalization or to the metrical hierarchy) – identify what we name an intonational Nucleus: a new (relational) definition of the Nucleus in a macro-Intonational Phrase (macroIP).

Interfaces

The theoretical starting point of our approach relies on a multidimensional conceit of the intonation theory (and of the Nucleus). Firstly, the reference units should be defined at the interface among F0 contour, metrical hierarchy, syntactic and pragmatic functions. Some special syntactic functions of the oral production (short, and juxtaposed clauses; often without nominal constituents) should also be added to those interfacing functors.

Secondly, as for the intonation analysis, strictly speaking, we will consider tonal rhymes (i.e. non automatic, intentional tonal perturbations), and some segmental perturbations (likewise

intentional).

On the whole, the intonation is considered as the main mean for achieving the textual cohesion (Couper-Kuhlen, Selting 1996; Ladd 1996; Selkirk 2000; Truckenbrodt 2007; De Dominicis 2009, 2010a, 2010b).

Data and conclusions

In this paper we will give some more detailed pieces of evidence concerning the operating mechanism of the tonal grid annotation. Starting from some chunks of speech, in different types of language, we will then show how a grid works, in order to find the unexpected perturbations, their tonal shape, and the relations the grid allows to establish among the macroIP constituents that are their functors or bearing units.

Then we will argue that the tonal grid is not only a mere annotation technique, but also (and above all) a new theoretical approach to figure out the constituency of the Intonational Phrase (IP). Particularly, the architecture of the grid helps to find the relation between the F0 prominences (material prominences) and the prominences that result from the metrical or syntactic hierarchies (metalinguistic prominences) within the same IP or across IPs (that is, within what we name a macroIP). The relation between two or more material and metalinguistic prominences identifies what we name Nucleus.

The theory claims that the Nucleus must be one (per IP) and obligatory. So, in order to verify this outcome, we simply predict that by removing a single prominence (no matter what kind, material or metalinguistic) there should not be a change of the phonological type of the IP (or macroIP), whereas by erasing all the prominences that enter into a relation to form a Nucleus, a categorical shift of the IP or macroIP (e.g. a change in sentence modality, or syntactic interpretation) would be triggered. In the paper we will account for these cases.

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