



## ***XIV Convegno Internazionale di Teoria Musicale***

***28 settembre - 1 ottobre 2017***

***Istituto Superiore di Studi Musicali "G. Lettimi", Rimini***

# ***ABSTRACT BOOK***

**a cura di Catello Gallotti, Marina Mezzina,  
Massimiliano Locanto e Giuseppe Sellari**

*UniversItalia*

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ANALISI E TEORIA MUSICALE  
GATM – Gruppo Analisi e Teoria Musicale

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**CASELLA'S 'MODULATION IN SIMULTANEITY,' BARTÓK'S  
'POLYMODAL CHROMATICISM', AND MY 'SCALAR DISSONANCE'.**

'Polytonality' signifies, to be sure, the interpenetration of diverse scales; but it likewise assumes [...] the survival of the original scales [...] Polytonality, as understood today, is nothing more than modulation in simultaneity [Casella 1924].

As the result of superposing a Lydian and Phrygian pentachord with a common fundamental tone, we get a diatonic pentachord filled out with all the possible flat and sharp degrees [...] In our polymodal chromaticism, however, the flat and sharp tones are not altered degrees at all; they are diatonic ingredients of a diatonic modal scale [Bartók 1943 (1992)].

Early twentieth-century analytical accounts of polytonality and polymodality by Casella, Bartók and others emphasize how scalar and/or chordal integrity is central to our understanding and experience of multi-layered harmonic interactions. Casella's description of polytonality as the 'survival' and 'interpenetration of diverse scales' resulting in 'modulation in simultaneity' has intriguing conceptual and perceptual implications for the analysis of harmony. Similarly, Bartók's notion of polymodal chromaticism suggests that the structure of the resulting harmony depends upon the chromatic relations of combined of layers.

This paper proposes that the dissonant interactions of superimposed layers convey or embody a sense of harmonic distance. Accordingly, I propose a model of *scalar dissonance* [Martins 2013] that measures the tension, mismatch, or friction between polytonal layers, i.e., the counterpoint of distinct scales (or segments). This measurement thus characterizes the resulting multi-layered harmony.

The figure (below) introduces a graphic representation for scalar dissonance, where superimposed scales (or scale-segments) maximally align their (enharmonically equivalent) common-tones. Figure (a) superimposes two diatonic scales of 4 sharps over 4 flats, which correspond to the combination of scales in Bartók's *Bagatelle* op. 6 no. 1. The graph represents scale-steps as solid lines between dots (pitch classes), so that the central position is assigned to aligned common-tones, which are 'consonant' with respect to the overall combined superimposition, and upper

and lower positions are assigned to misaligned non-common tones, which characterize the ‘dissonant’ result of the superimposition.

Figure (b) interprets the resulting superimposed formation by measuring scalar dissonance through two variables: the degree of *porosity* or permeability, which measures the number of common-tones between layers (PORO = 3), and the degree of *mismatch* or friction, which measures the number of notes intersecting conflicting scale steps (thus creating ‘chromatic pressure’ in a different layer), divided by the total number of layers (MISM = 4). In short, this representation privileges scale-step connections within individual layers (the ‘survival of scales’), but also measures their relative degree of dissonant alignment.

The analytical framework of scalar dissonance is probed in Casella’s op. 35 (*11 Pezzi Infantili*) and in selected piece’s of Bartók’s *Mikrokosmos*. In addition, the notions of modulation in simultaneity and polymodal chromaticism are discussed in relation to the theoretical implications of Koechlin’s ‘modulation interior’ [1925] and Milhaud’s ‘polytonality’ [1923].

#### RIFERIMENTI BIBLIOGRAFICI

- BARTÓK B. (1992), *Harvard Lectures*, in B. SUCHOFF (cur. 1976), *Béla Bartók Essays*, Faber & Faber, London, pp. 68-95.
- CASELLA A. (1924), *Tone-Problems of Today*, «Musical Quarterly», 10, pp. 159-171.
- MARTINS J. O. (2013), *Scalar Dissonance: Mismatch, Porosity, and Reorientation in Twentieth-century Polymodality*, paper presented at the Annual meeting of the Society for Music Theory, Charlotte, NC.
- MILHAUD D. (1923), *Politonalité et Atonalité*, «Revue Musicale», 4/4, pp. 29-44.
- KOECHLIN C. (1925), *Évolution de l’harmonie: Période contemporaine, depuis Bizet et César Frank jusqu’à nos jours*, in A. Lavignac – L. de La Laurencie (cur.), *Encyclopédie de la Musique et dictionnaire du Conservatoire*, 2/1, Paris, pp. 591–760.

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#### REBONDS DI IANNIS XENAKIS: METODI DI ANALISI E SEGMENTAZIONE

La nostra ricerca ha come fine l’analisi di *Rebonds* (1987-89) di Iannis Xenakis, insieme a *Psappha* (1975), una delle sue due grandi composizioni per sola percussione. La composizione si compone di due parti, ‘A’ e ‘B’. Facendo riferimento alla proprietà commutativa, già descritta nel suo *Formalized*