

## **Erica Bisesi o svojom projektu:**

Music historians and music theorists trace compositional influences and historical trajectories by studying structural similarities and differences in musical scores. In this study, I developed a new approach for analyzing the evolution of musical language in the historical trajectory connecting Schubert, Wagner, late Liszt and early Schoenberg. That trajectory is characterized by the stepwise emergence of extended or chromatic tonality, free chromaticism, and atonality. I am interested in the details of this trajectory and possible psychological explanations. I focused on the gradual dissolution of the classical harmonic scheme I – IV – V – I, the gradual introduction of equal subdivisions of the octave in harmonic and tonal progressions (tritone relationships instead of fifths and fourths; progressions by minor and major thirds), the gradual intensification of melodic chromaticism, and the substitution of familiar harmonies with unfamiliar or more distant harmonies, leading to Schoenberg's 'emancipation of dissonance' and abandonment of the major-minor system.

Are these changes in musical structure – i.e. the progressive decreasing of tonal stability and increasing of chords' unfamiliarity, dissonance and harmonic tension – accompanied by consistent changes in the emotion and associations that are typically evoked in communicating the musical experience?

I began my study with traditional analyses of a representative selection of pieces by Schubert, Wagner, late Liszt and early Schoenberg, placing them in their historical contexts. I then considered structural continuities, transitions and breaks, both within and between the works of each composer. Given this background, I performed computational analyses that are based on ideas and methods borrowed from four disciplines: music history (Baroni, 2003; Bent, 1996; Burnham, 1992; Cook & Pople, 2004), music theory (pitch-class set analysis: Forte, 1973; Rahn, 1980; neo-Riemannian models: Cohn, 1998; 2012; Gollin & Rehding, 2011; Kopp, 2006; transformational theories: Lewin, 1987; Rings, 2011), psychoacoustics (a model of musical chord-roots: Parncutt, 1988; 1993), and cognitive psychology (key profiles and correlations between them according to Krumhansl & Kessler, 1982 and Temperley, 2006; 2012).

The question of the historical transition from tonality to atonality was then addressed by a complementary approach that focused on emotion. In the

empirical research, I asked 20 musicians and non-musicians to rate each of the pieces in terms of the 1<sup>st</sup> and 2<sup>nd</sup> order emotion labels predicted by the GEMS multidimensional model of music emotions (Zentner et al. 2008), and found that progressive variation of the combined effects of vertical (simultaneous) and horizontal (successive) tension along the proposed trajectory is related with the progressive increasing of emotional aspects like tension and surprise. Third, participants further described the repertoire in a free, native language interview – by indicating associations with emotions, imagery and gesture, as well as with other metaphors that came to their mind when listening to the music. The effect of new descriptors was explored, including living/non-living things, gesture (body, movement), personal involvement (positivity/negativity, motion/commotion, memories), space, time, the external world (social interactions, nature), senses different from hearing (bright/dark, soft/hard). To analyse empirical data, I mixed qualitative and quantitative research methods (grounded theory, correspondence analysis, analysis of variance, correlation and regression analysis).

In order to involve the audience, I will introduce the experimental stage of my research with a recital of a selection from the musical examples analysed in this study.