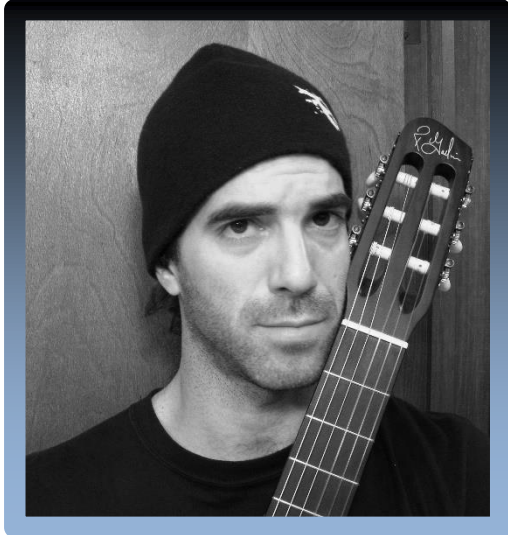


Seminar Series

Topics in the Aesthetics of Music and Sound



**Thursday, February 20, 2014
3:15-5 p.m. in U73**

The Effects of Music upon the Emotional Processing of Visual Information from a Neuroscientific Perspective

Fernando Bravo, PhD Candidate (3rd year) in Music, U. of Cambridge, (Queens' College Walker Studentship) UK; MSc in Integrated Electronic Arts, Iowa State U., USA; MSc in Clinical Psychology/Psychoanalysis, AEAPG-UNLaM, Argentina; BA Honours in Psychology, UCA, Argentina, 1998; "Alumno Extraordinario" Status in Music Composition, Sound Design and Film-scoring, UCA, Argentina. Professional Artistic Plan (Classical Guitar Performance) Conservatory of Music "Manuel de Falla", Argentina.

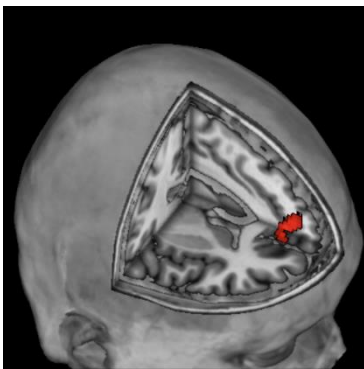
Abstract: The purpose of my research is to investigate the effects of music upon the emotional processing of visual information from a neuroscientific perspective. In particular, my work is focused on analysing how alterations of specific aspects within the musical structure influence the emotional interpretation of visual scenarios.

The analysis of music in audiovisual contexts presents a unique field in which to explore the links between musical structure and emotional response. A better comprehension of music-evoked emotions and a precise delineation of the brain mechanisms involved may serve as a model system which may prove useful for improving our knowledge of brain function in general, but it may also provide a solid framework to explore emotional processing in disease states.

Overall, mapping a systematic relationship between musical-structural features, certain aspects of the audiovisual experience and the underlying neural circuitry, may provide valuable insights for the advancement of affective neuroscience and for potential applications concerned with clinical psychology and music therapy.

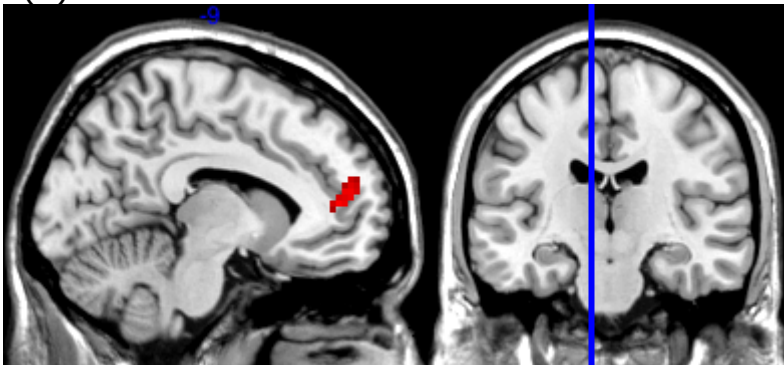
In my presentation during the Seminar Series, I will show results from a series of recent behavioural and neuroscientific (fMRI) studies that I have carried out to investigate the neural mechanisms underlying the emotional processing of musical stimuli of varying levels of dissonance induced by different interval content.

(a)



fMRI results (corrected for multiple comparisons, $p < .05$). 3D rendering (a) and sagittal view (b) showing the statistical parametric maps (SPM) of the direct contrast between dissonant and consonant music. Stronger blood-oxygen-level-dependent (BOLD) signals during dissonance (compared to consonance) were yielded in the left medial prefrontal cortex (mPFC) and in the left anterior cingulate cortex (ACC).

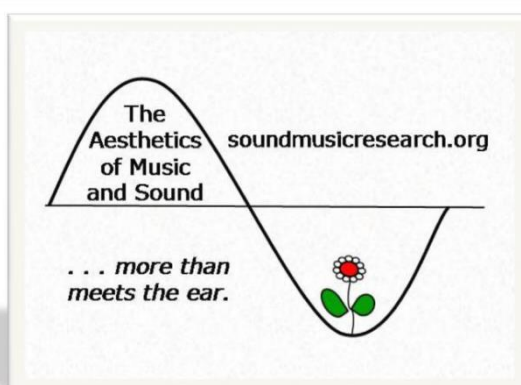
(b)



Website:

<http://www.mus.cam.ac.uk/directory/fernando-bravo>

All are welcome - also via Skype 🌿



- Cross-Disciplinary Interplay between the Humanities, Technology and Musical Practice
- Backdrop for the SDU-IKV Research Program

