Preliminary Knowledge Extraction from Beethoven's Sonatas: from Musical Referential Patterns to Emotional Normative Ratings

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Abstract: The piano sonatas of Beethoven represent part of the Intangible Cultural Heritage. The aims of this research were to further explore this intangibility by placing emphasis on defining emotional normative ratings for the " Waldstein" (Op. 53) and " Tempest" (Op. 31) Sonatas of Beethoven. To this end, a musicological analysis was conducted on these particular sonatas and referential patterns in these works of Beethoven were defined. Appropriate interactive questionnaires were designed in order to create a statistical normative rating that describes the emotional status when an individual listens to these musical excerpts. Based on these ratings, it is possible for emotional annotations for these same referential patterns to be created and integrated into the music score.

Keywords: emotional annotations, intangible cultural heritage, musicological analysis, normative ratings **Conference Title:** ICACII 2018: International Conference on Affective Computing and Intelligent Interaction

Conference Location : Paris, France **Conference Dates :** May 17-18, 2018