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## Harmonic Expectancy and Musical Emotionality

What is Music? Music is the organized progression of audible tones, rhythm, and quality of the sound. Have you ever listened to someone playing a classical piece of music on the piano and suddenly heard a jarring note or chord, which seems out of place followed by a slight pause by the musician? When you hear a beautiful piece of music it is usually easy to recognize your emotional pleasure in listening to it. It is also easy, therefore, to recognize your displeasure in a particular type of music or part of a song.

Even when listening to someone play a piece on the piano, which you have never heard before, it is usually evident when they have played the wrong note or chord. Most of the time, you can detect their mistake a little before they pause and continue playing or stop playing altogether. How do you feel when an unexpected chord is played in an otherwise harmonious melody or piece? Some might say that it is emotionally evident to them that an unexpected note is played. Most music, especially classical music, comes with an expected progression of chords and/or melodies. Have you, yourself, ever played a musical instrument such as a piano and been able to tell that you played the wrong chord? A musician, of course, usually knows when he or she plays the wrong chord because they have probably been practicing the piece for a while or have heard it in the past. How do you explain a member of the audience who has never heard the song before knowing when a wrong chord is played? How does it affect us, as humans, to detect this violation of harmonic expectancy? What role do our musical emotions play in identifying harmonic expectancy violations? Does our detection of the violation of harmonic expectancy vary with the experience and/or training we have had in the field of music?

Emotions seem to play a main role in how human beings think and act in every day life. In fact, every different emotion we have can be thought to change the entire course of actions we are to take in that day. For example, if someone wakes up and is pleased with the weather, in general, they will probably be more enthusiastic in their daily routine. Similarly, if a person is feeling sad sometimes playing the right piece of music can make them more content, emotionally. The source of the change of emotions is a combination of many different things. Cognitive development and progression is directly involved in the actions of our emotions. Anticipation is one cognitive process, which usually leads to a dramatic change in our emotions. It can lead to pleasure, displeasure, and fulfillment among other things. It has been suggested before, that musical emotions are affected prominently by the completion or deficiency of musical anticipations. If a listener is hearing a piece of music and a note or chord is played which is irregular to the listener's expectation then his/her emotions in relation to the progression of music will be much different than they would be if the music had followed their expected sequence of notes. Also it is said that there is an inherent tendency for humans to be able to

detect harmonic inconsistencies in music based on exposure to the type of music.

\*I would like to study the position of musical expectations in the outcome of musical emotions and responses. More specifically, I would like to study the role of harmonic musical expectations and how they affect musical emotions.\* It is beneficial to use harmony in this process, because it is simple to validate expectancy with harmony using music theory and literature. \*The experience of the listener is also analyzed. That is, the ability to detect harmonic expectancy violations is compared in musically trained individuals and those with minimal musical education. \*I would like to explore the possibility of adding an experimental aspect to my study. A possible experiment could be as simple as having subjects listen to a couple of different excerpts of music and then gauging the change in musical emotionality and tension rates.

It is interesting that something as removed from the sciences as music may have a significant impact on the way human beings think and actions they portray. In addition, it is interesting to analyze this topic from the perspective of how different human beings may be preset to have certain reactions or abilities in relation to musicality and musicianship.