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Synopsis and Response Report of The Contribution of Immanent and Performed Accents to Emotional Expression in Short Tone Sequences by Erik Lindström

In this paper, Lindström explores the relationship between emotion and music by observing subjects' emotional responses to various music factors, such as harmony, mode, rhythm, and the interactions between them. The research is based on the hypotheses that certain pitches relative to tonality are important for specific emotional expressions. The pitch importance is usually highlighted either by immanent or performed accents.

The paper can be divided into four parts: introduction, Experiment 1, Experiment 2, and general discussion. A comprehensive review of previous research on music expression and perception is presented in the introduction. Several studies have demonstrated how musical factors, such as harmony, tonality, mode, intervals, melodic properties, pitch contour, pitch level, and rhythm patterns, may affect the expression and perception of emotional expressions in music. Various studies also indicate that interactions between those factors are often used to emphasize music structure.

There are several interesting observations from previous research. For example, accents by pitch, intensity, and duration are used similarly in speech to direct attention to important words (Patel & Peretz, 1997). The presence of a continuous melodic line is fairly important to achieve tonal clarity (Holleran, Jones, and Butler, 1995). Less stable tones tends to resolve to more stable ones and the major triad contains the most stable tones, followed by other diatonic tones, and finally the chromatic tones (Povel & Egmond 1993). Each note can be assigned a value indicating different levels of perceived stability in major or minor keys (Krumhansl 1990). And at last, dissonant notes on emphasized beats (appoggiatura) occur significantly more often in musical passages that can evoke tears in listeners (Sloboda, 1991).

Based on the above evidences, Lindström formulated six hypotheses for this paper: (a) the tones of a melody are not of equal importance for expression of emotion; (b) implicit harmonic function of certain tones may be important; (c) tense or unstable notes may be more apt for negative emotion; (d) relaxed or stable notes more apt for positive emotion; (e) happiness will be expressed better in major mode; (f) and sadness can be expressed better in minor mode.

In Experiment 1, Lindström explores the unequal importance of notes according to immanent accents. Four types of progressions are created as testing tone sequences, including I-IV, I-V7 in C major and i-iv, i-V7 in C minor. Each progression first plays the triad twice and then plays three notes individually. Each of the three note progression was also manipulated by different melodic and metric accents. Listeners were asked to rate all sequences on two bipolar

scales, happy – sad and tender – anger. Among all results, Lindström found that progression 1 (I-IV in C major) receives the largest contrast effects in happiness, and the note A is the most interesting note for happiness. Progression 3 (i-iv in C minor) corresponds to sadness, and the note A^b in the progression is the focus of sadness. Progression 4 (i-V7 in C minor) presents anger, where the note B creates the tension. The rhythm short-short-long was perceived as the most angry rhythm pattern. However, the results did not show a consistent effect when metrical and melodic accents are added on the target note.

The purpose of Experiment 2 is to reveal the contribution of different performed accents on the target notes found in Experiment 1. Some examples of performed accents are: increasing loudness, lengthening the tone, delaying the onset, and playing the accented note more legato. Based on the results, Lindström draws several conclusions. The leading tone B expresses more anger with performed accents; High pitch is favorable for expression of anger while low pitch is for sadness; Legato increases perception of sadness; Loudness plus legato and delay contribute most to perception of sadness.

This paper achieves the author's goal, revealing the emotional effects of immanent and performed accents in music perception. The short tone sequences do not reflect normal progressions of musical pieces. For example, some sequences contain unresolved leading tone, unsmoothed voice leading, and all sequences only consist of tonic, subdominant, and dominant chords. However, they still result in certain different types of emotional responses. The choice of the chord for the progression is reasonable but lacking in representation. The incompleteness implies the internal complexity of music structure, where one note may perform several different roles and having more than one accents at the same time. The situation becomes even more complicated when trying to relate emotional responses to individual audience and/or the interaction of those music factors. It is commonly accepted that emotional perception is one of the most important responses of music accents. However, it is very difficult to clearly explain and identify any one-to-one mapping relationship between them.