EXPLAINING THE EMOTIONAL ENGAGEMENT OF LISTENERS WITH THREE PERFORMANCES OF A SCRIABIN ETUDE

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Background

Recent years have shown a growing interest in the emotional response to music and in explaining this response on the basis of musical parameters such as loudness, tempo and musical structure. In continuous measurement of emotional arousal, arousal has been shown to correlate to a considerable extent with the dynamics and the tempo of the performance and with the increase and release of tension within a phrase.

Aims

This study aims to explain listeners' ratings of emotional engagement for three performances of Scriabin's Etude Op. 8 no. 11 by one pianist. This is first done on the basis of a direct correlation between engagement and parameters of the performance. In a second instance, parameters of the musical structure are added and the need for interactions between parameters is investigated.

Method

A master pianist performed the piece at his best and intensely expressive on a Yamaha Disklavier grand piano. Audio and MIDI information were recorded. 24 participants listened to the performances and continuously rated their emotional engagement with the performances.

Results

Preliminary results show that a simple regression model is quite well able to explain the listeners' ratings of emotional engagement on the basis of the measured variables of the piano performance, especially the key velocity of notes. They also, however, show the limitations of this model: 1) the model does well for the entire piece, but not for all individual sections, 2) intercepts are not explained, and 3) there is much more variation in the performance than in the ratings. To overcome these shortcomings, it is necessary to consider the relation between the performance variables and the musical structure and the position of the sections within the piece. It may also be necessary to view the listeners' ratings as an integrated response, rather than a direct mapping or tracking of performance variables.

Conclusions

To explain the emotional engagement of listeners with the performances of the Skriabin piece, it is necessary to not only consider the variations in performance variables, but also their relation to the musical structure. As is known from research on performance, it is the performer's *interpretation of the music* that best explains listeners' responses.