THE SEMANTIC DIFFERENTIAL AS A METHOD FOR COLLECTING ESTIMATIONS OF CHORDS

Tuire Kuusi

Department of Composition and Music Theory, Sibelius Academy, Finland

Background

In most studies on nontraditional chords, the subjects have been asked to make similarity estimations. The idea that chords can be rated one by one on bipolar verbal scales comes from the semantic differential. Semantic differential has been applied to musical stimuli, but in only two studies have semantic scales been applied to nontraditional chords.

Aim

The present study aims at examining the use of semantic scales for collecting ratings of pentachords. One aim is to analyze factors guiding subjects' estimations of chords. Another aim is to examine the subjects' consistency with themselves and with other subjects. Yet another aim is to examine the importance of the order of the test items and the semantic scales.

Method

A test was done in which pentachords were rated on semantic scales. From the data thus obtained, distances were calculated between chords, and the data of distances were analysed by multidimensional scaling. The subjects' consistency with themselves was examined in a control-chord test. The importance of the order of the chords was examined by dividing the subjects into three subgroups; each subgroup heard the chords in a different order. Additionally, the scales were tested in three different orders.

Results

The multidimensional scaling analysis revealed a three-dimensional solution. The three dimensions were interpreted as ‚consonance-dissonance‘, ‚the lowest pitch‘, and ‚the placement of the inner pitches‘. The subjects‘ consistency with themselves was found to be high. The order of the test items or the order of the scales was not found to affect the ratings.

Conclusions

A clear connection was found between the factors found in the present study and those found in the similarity estimation studies. Hence, the study confirmed findings made in earlier studies. The clear results and the subjects‘ high consistency also indicates that semantic scales are appropriate for measuring chords.