71.3 Principles for expressing emotional content in turntable scratching

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Background

Scratching is a novel musical style that introduces the turntable as a musical instrument. Sounds are generated by moving vinyl records with one or two hands on the turntable and controlling amplitude with the crossfader with one hand. With this instrument mapping, complex gestural combinations that produce unique “tones” can be achieved. These combinations have established a repertoire of playing techniques, and musicians (or DJs) know how to perform most of them. Scratching is normally not a melodically based style of music. It is very hard to produce tones with discrete and constant pitch. The sound is always strongly dependent on the source material on the record, and its timbre is not controllable in any ordinary way. However, tones can be made to sound different by varying the speed of the gesture and thereby creating pitch modulations.

Consequently timing and rhythm remain as important candidates for expressive playing when compared to conventional musical instruments, and with the additional possibility to modulate the pitch.

Aims

The experiment presented aims to identify acoustical features that carry emotional content in turntable scratching performances, and to find relationships with how music is expressed with other instruments. An overall aim is to investigate why scratching is growing in popularity even if it is a priori seems ineffective as an expressive interface.

Method

A number of performances by experienced DJs were recorded. Speed of the record, mixer amplitude and the generated sounds were measured. The analysis focuses on finding the underlying principles for expressive playing by examining musician’s gestures and the musical performance. The found principles are compared to corresponding methods for expressing emotional intentions used for other instruments.

Results

The data analysis is not completed yet. The results will give an indication of which acoustical features DJs use to play expressively on their instrument with musically limited possibilities. Preliminary results show that the principles for expressive playing are in accordance with current research on expression.

Conclusions

The results present some important features in turntable scratching that may help explain why it remains a popular instrument despite its rather unsatisfactory playability both melodically and rhythmically.

Key words: Music performance, New musical interfaces, Scratching

71.4 How do musicians deal with their medical problems?

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Background

Musical careers are becoming more competitive and stressful. The incidence of music-medical problems such as carpal tunnel syndrome and focal dystonia is increasing. Musicians fear professional consequences if they seek support.

Aims

We explored the relevant music-medical knowledge and preventive strategies of typical classical musicians. We plan to develop and promote post-secondary courses in music medicine for musicians.

Method

Participants were 27 professional classical musicians living in and near Frankfurt/Main, Germany. They had been playing for between 15 and 55 years. Our questionnaire addressed issues surrounding music-related medical problems (e.g., amount of practice time, nutrition, stage fright, chronic