EXPERIMENTAL STUDIES IN MUSICAL IMAGERY: IMPLICIT AND EXPLICIT COGNITION

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Background

'Musical imagery' is a term used to refer to the imagined auditory experience of music. A phenomenon of both short- and long-term memory, imagery is experienced as a conscious inner hearing, but one that draws on an implicit knowledge of musical structure. Imagery experiments are described in which both implicit and explicit forms of musical knowledge are tested.

Aims

To adapt implicit priming methods to compare the musical perception and musical imagery of pitch, timing and timbre in familiar music.

To explore the explicit experience of musical imagery

Method

Participants either learned or were tested for prior familiarity with pieces of music pre-selected for their tonal, metrical, or timbral qualities. Each imagery trial consisted of hearing a brief extract of the music, before mentally continuing the piece as if actually hearing it. At a certain moment in the mental continuation (image), either the original or modified music was re-introduced, with the task to determine whether this target seemed to be 'in tune/out of tune', 'in time/out of time', or the 'same/different' (depending on the experimental focus). Accuracy and response times were recorded and compared with data for an equivalent perception task in which the music was actually heard up to the target moment (with no necessity to image through a perceptual 'gap').

Results

The veridicality of imagery for different musical dimensions is suggested by the data. The measurement of response time enabled the sensitive detection of behaviour that was different in kind (and not simply magnitude), when imaging and perceiving music.

Conclusions

It is argued that musical imagery and perception are separable but mutually dependent cognitive phenomena.

ISBN: 3-931852-66-0
ISSN: 1617-6847