

Ways of Making People Move: mapping and interpretation in the live generation of augmented musical scores

Abstract

Recent technological developments have enabled experiments in cross-domain mapping and transcription - processes we often do intuitively - where data from many sources: video, biomechanical or physical movement, for instance, can be used to generate musical notations in real-time. These representations ('ways of making people move') might consist of common practice notation, graphics, text or any combination of these. Live transcription creates a particular relationship between composer, score, performer and performance, where details are unknown, but generalities are controllable. These performances can themselves be augmented by electronically generated sound or other composed, notated material, while the musicians' live performance retains quality and spontaneity.

This paper, which will include practical demonstrations, presents work involving the above processes. The resulting performances are analysed and the performers encouraged to provide their own insights into their experience with the process.

Technologies used include the SuperCollider audio programming environment and the INScore augmented score project. Hardware used in the creation of bespoke interfaces includes ultrasonics, the Kinect and the Leap Motion. As well as providing a fascinating and creative musical experience of preparation and performance, the process highlights a number of issues concerning performance practice, instrumental technique, rehearsal and the balance between notation, now no longer fixed in time, improvisation and sight-reading. Examples of non-specialist improvisation through physical computing and the impact of machine listening are also introduced.