

ENGAGING COLLABORATIONS

RESEARCHING INTERFACES FOR MUSICAL INTERACTION

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Mutual Engagement

This research is conducted on the basis that creative collaborations depend on points of mutual engagement:

... highly focussed points where participants push at the boundaries of shared understandings of experience and expectation - they engage with the product at hand, and with each other

Collaborative Musical Improvisations

As a pragmatic start point this project will use the domain of collaborative music improvisation as a good example of collaboration involving high levels of mutual engagement between participants.

In common with face-to-face conversation, collaborative music improvisation is typically co-present and multimodal, combining musical signals with verbal and visual cues. In contrast, it is more strongly oriented towards mutual engagement and aesthetic satisfaction rather than information exchange, it tends to have concurrent rather than sequential contributions, and it is a form of instantaneous production in which the act of composition is also the act of performance

Whilst collaboration can be undertaken without high levels of mutual engagement, it is key to enjoyable, efficient, creative, and high quality collaborative activities Current approaches to understanding group work do not adequately model features of engagement in group activities

Observation

An initial set of features of human communication in group music improvisation will be identified through filming collaborations involving high levels of mutual engagement

Analysis

Each performance will be reviewed collaboratively in order to identify sections in which participants felt:

- a. the performance was particularly mutually engaging
 - b. problems occurred with communication and co-ordination
 - c. significant changes in musical interaction occurred in the performance
 - d. group improvisation occurred
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Modelling

Results of the tests and studies will be used to design a framework for understanding mutual engagement and patterns of communication in collaboration

Prototype development

Tools to support group improvisation will be explored beyond developments such as [Daisyphone](#), [MetaTone](#), and [WebDrum](#) by providing support for richer forms of human-human and human-computer interaction.
