

AVPhD2

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John Eacott, University of Westminster

eacottj@wmin.ac.uk

Contents may vary: the behaviour and play of generative music artefacts

With the proliferation of digital arts and technologies various models for experiencing music have emerged that exploit technical and creative advances. These advances offer an opportunity and challenge to musicians and technologists to extend existing music artefacts like recordings and instruments in the direction of novel forms that offer adaptable and personalised music experiences to a wide range of users. One way of responding to this challenge is to create designs for music artefacts that offer new experiences through the use of computer generative processes that produce rich and coherent musical statements while moving towards an understanding of what these statements may mean.

This research has arisen in response to this challenge and focuses on the design of music artefacts that exploit generative processes. The research is practice based and has led to the design and implementation of three generative music artefacts disseminated between 2000 and 2003. This work involves many creative and technical challenges, none more vital than the writing of software that is able to construct musical material and develop it into satisfying musical forms. Each artefact also has its own means of user interaction that affects its purpose and musical output. Various forms for interaction are considered from pure generative mechanisms that allow little interaction to ones that permit several users to create and influence the music simultaneously.

As well as the practical design and generative composition components of this research a range of theoretical issues are considered. Some of these are technical and include the design of algorithms that generate coherent musical output. Others are creative and address the peculiarities of attributing meaning to unique and personalised music arising from the use of generative music artefacts. This challenge led to the identification of themes of play, content and behaviour that run through the work.