Interaktiv musikkomposition

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Abstract

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This dissertation, titled Interactive Music Composition, is a practice based Ph.D. thesis in the field of Musicology. The purpose is to explore if and how one can compose computer based interactive music, that is musically satisfying for an interacting audience, consisting of both laymen and skilled musicians. The text describes the design and reflection in two interactive music installations: The open-air installation *Do-Be-DJ* in a public park, and, *Mufi*, with modular and moveable interface. Based on methods and perspectives in Musicology and Interaction Design, a composition model for interactive music is developed. The model investigates the experience dimensions *listen*, *explore*, *compose* and *collaborate*. It also investigates the design dimensions of *interaction*, *narrative structure*, *composition rule* and *sound node*. The conceptual approach is to apply improvisation and composition methods from jazz, pop and groove based music on interactive music. It also uses the concepts of *openness* in musical structures and interpretation, *musical mediation* of actions and meaning, and *everyday use of music*, when composing interactive music. The dissertation contributes to an understanding of how to create composition techniques for interactive music, such as: *Direct, varied* and *shifting response*. It reflects on the change in meaning of the musicological terms composition, improvisation, musical work, listener, musician and audience. And on the interaction design terms interaction, gameplay, system and user. The term *co-creator* is used to describe an actively, interacting and collaborating person, to complement traditional terms like audience, performer and user.

Keywords: Interactive Music, Music Composition, Improvisation, Sound Design, Interaction Design, Musicology, Narrative, Gameplay, Collaboration, Musicking Co-creator, Open, Computer Music, Practice based, Artistic Research, Research by Design, Music analysis, Musical Mediation, Shifting response, Genre, Funk, Jazz, Techno, SuperCollider, Max/MSP