Force-Feedback Interactions with Generative Music

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Very little research has explored the use of force feedback with generative music systems, where the musician does not perform individual 'notes' but controls computer algorithms that assist in the generation of the musical material. This paper will discuss findings of a pilot project investigating potentials in this area. This included exploration of "multi-state" systems, where pushing or pulling the interface past certain thresholds could cause the system to fundamentally reconfigure itself. Results suggest that this approach, in particular, can help inspire spontaneous creative approaches to musical macrostructure. The paper will also propose a set of high-level models for linking generative systems with force-feedback interfaces and identify key issues that must be addressed to move this research forward.