

MUSIC WITH MOVING PARTS *Installation / Live Performance*

Topic: Music

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Abstract

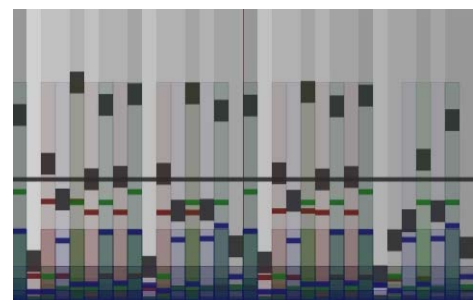
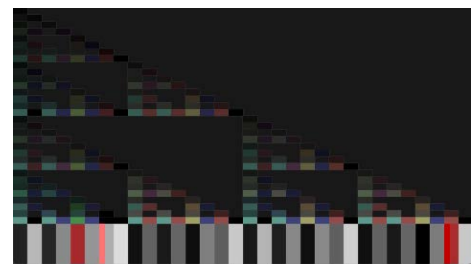
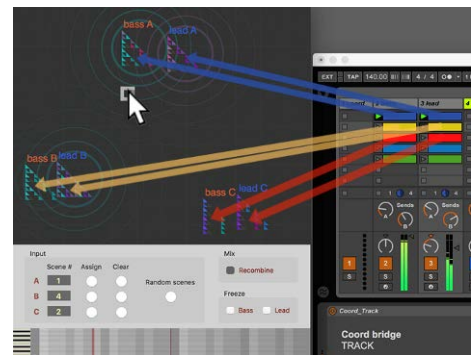
Harun Gezici has been producing deep minimal house and atmospheric Techno for more than 10 years as Ultratech. In this piece he weaves algorithmic, real-time musical variation and hybridization into the context of a larger musical production/performance, incorporating algorithmic music software designed by Jay Hardesty and outboard analog gear. Here, music algorithms are not intended to create material that sounds generative or experimental; instead the aim is to harness, splice and steer generative structure that already exists in a familiar genre (EDM).

Here the composer's skills, intuition and judgment are leveraged by algorithms that act as a sort of improvisational coprocessor, interactively refactoring local, low-level rhythmic and melodic structure. There is no attempt to model or replace compositional strategies or to algorithmically evaluate the results. The software complements the composer/performer in a manner similar to the relationship between a driver and a car's dashboard and navigation system. (That is, a self-driving car would be exactly the wrong metaphor.)

Particular melodic elements are morphed to generate a spectrum of variations, which are explored by traversing an interactive landscape where selected melodic inputs serve as musical landmarks.

Certain other parts are algorithmically recombined in a coarse-grained manner, governed by patterns that have unpredictable sequences, governed also by simple relations that derive from a tiny set of rules.

But the main shape and content of the piece remain in the hands of the composer/performer. The overall form and many elements within the piece are completely outside the reach of the software. The aim is a piece of music that sounds like music without any algorithmic component, but which has organic "moving parts".



Music with Moving Parts

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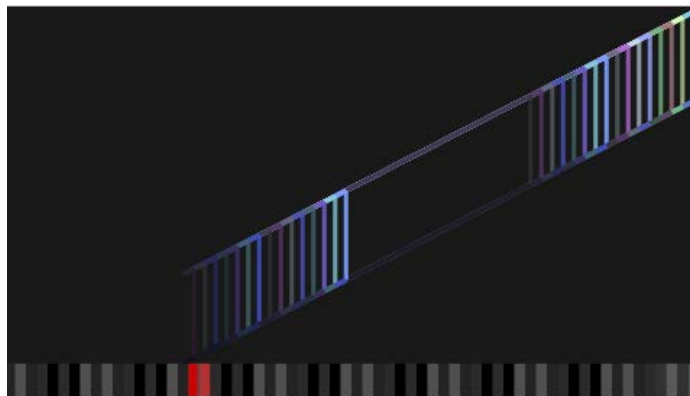
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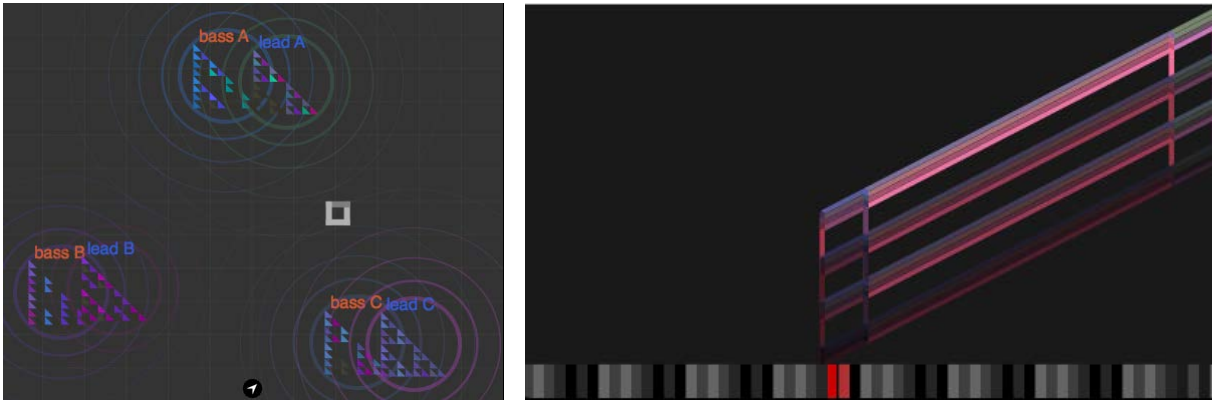
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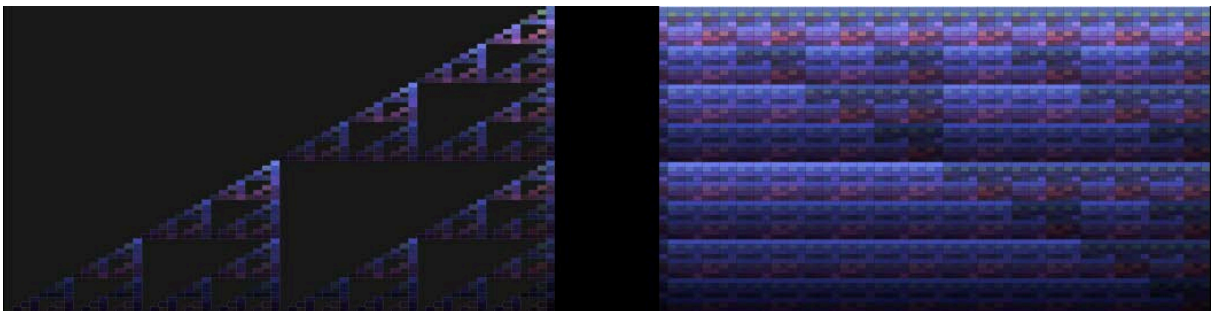
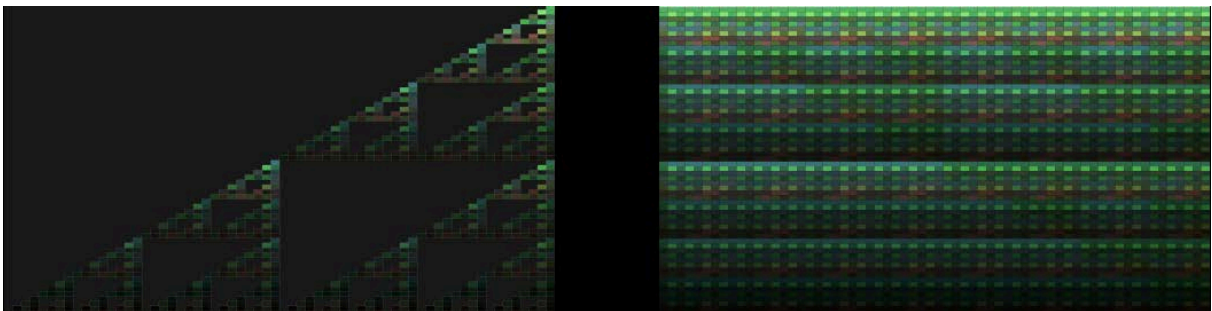
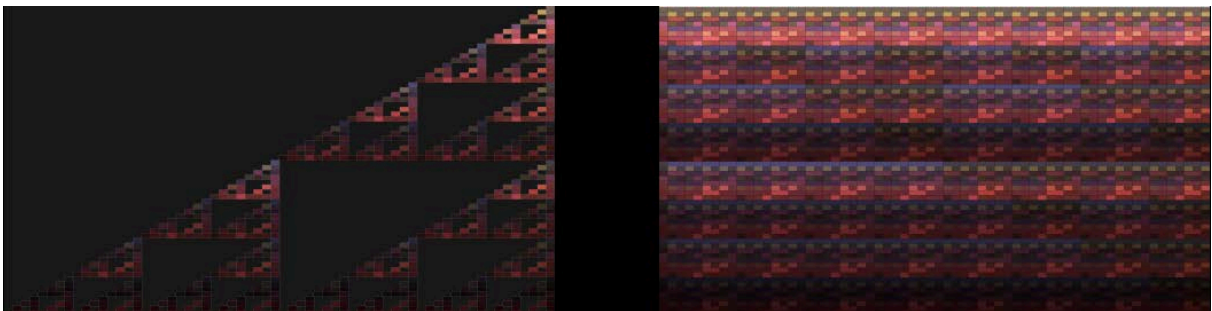
Overview

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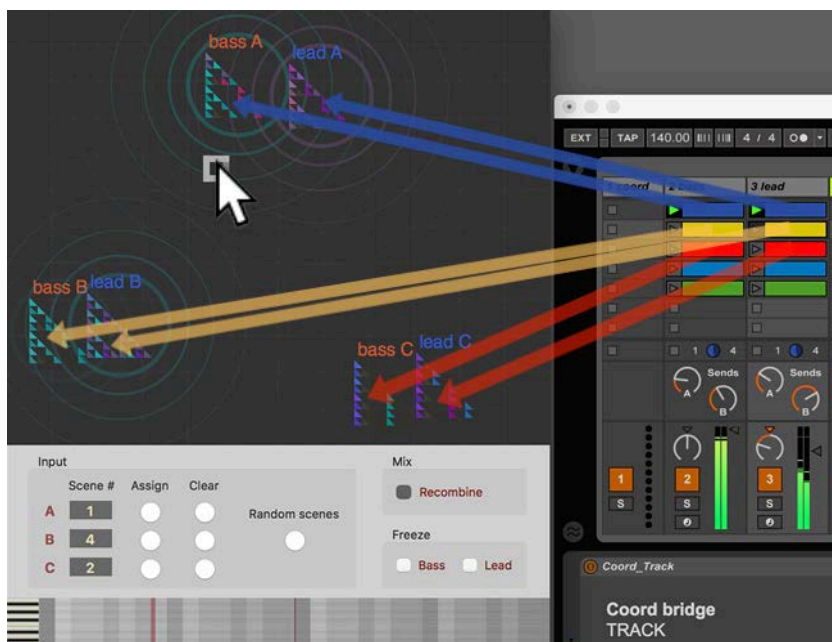
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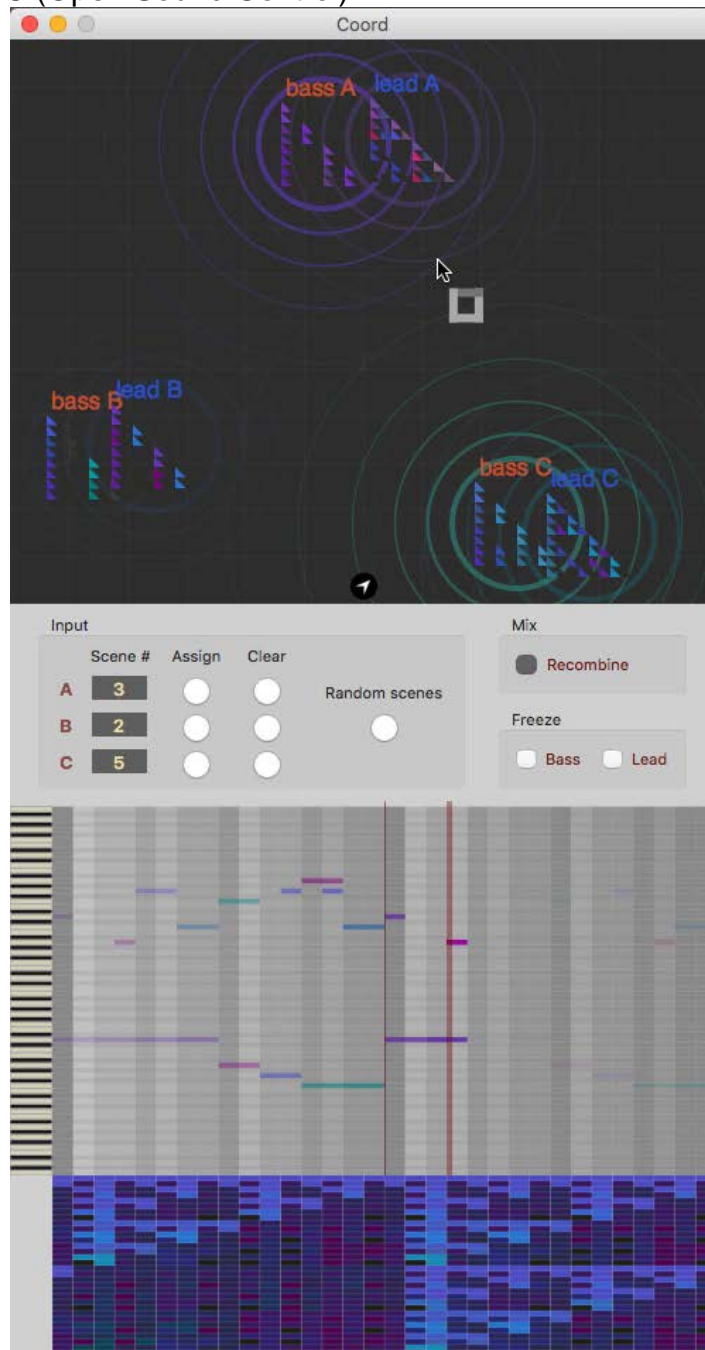
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Performance Setup

Ableton Live is the production environment containing the musical elements, consisting of both audio and MIDI parts. Audio rendering is carried out by a combination of software synths and outboard devices.



A separate Mac-based application named Coord, written in the Swift programming language, receives note data from, and transmits streaming note data to, selected tracks in Live. Custom plugins on those tracks, written using Max/MSP, extract note data from those tracks. The plugins forward the note data, commands and clock information between the two apps via OSC (Open Sound Control).



This approach morphs between music clips on a particular track, exploring variations “between” those clips rather than simply switching between one clip and another via Live’s interface. The relative influence of the input clips is controlled in real time. Other elements of the piece remain purely in the hands of the composer/performer. The result is a piece of music with “moving parts” that leverage human-composed material and

relies on human actions and musical judgement.

References

Hardesty, J “*Variations on a Rhythmic Landscape*”, XIX Generative Art Conference, Florence, 2016