I've long been obsessed with the tenets of Process music & Systems music. These "Generator" pieces all stem from a desire to produce an "automatic" variant, with little in the way of "performance" and/or any sort of mid-stream composer/performer intervention; a sort of "Machine Music" -by, for, and of electronic musical instruments.

While I had been experimenting with "in the box" Computer music patches & algorithms for yielding this sort of selfmodulating, constantly mutating/shifting sound, it wasn't until I applied these ideas & concepts to dedicated hardware control voltage & audio modules that they really began to come to life. The unpredictable entropies & slight signal degradations inherent to Analog instrument design (not to mention the tuning inconsistencies & subtle phasecancellations) lend to much more "musical" results, the minute variations in oscillator topologies & wave-shapes would be near-impossible to emulate in any purely mathematical scenario.

The basic premise for the patches used to generate this music revolves around sending three voltage streams from two LFO's to different modules ; the Pulse out from the first to clock the patch, then the Triangle out of the second to control a master "pan", and the rising Sawtooth out of the second, quantized into a minor arpeggio, to generate the "melody" ... said quantized Sawtooth was sent into a Shift Register, which, when clocked, would push the "note" present at the input down a line of outputs, bucket-brigade style, yielding your classic "Sample & Hold" canon. Changes to the "pitch" of the second LFO affected not only the rate at which the new melody-notes were being generated, but also the panning.

The first two generators (the first and last tracks, respectively) were left untouched, warts & all, as the "imperfections" (audible patching & switching, mismatched levels, etc ...) are ultimately what make them so appealing; in particular the endless fidgeting that makes up the first few minutes of "Generator 2" remind me more of an ad-hoc "Acid" jam session than anything from the Academic/Sound Research sector. It's good to blur those lines every once in a while.

## Keith Fullerton Whitman

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P.S. Please play this music loud, through the air, via two speakers placed far apart from each other.