M1.6 Scott Barton

Machine Rhythm Study No. 2

Machine rhythms are temporal organizations that are realized by the precise timing capabilities of computers and electromechanical musical instruments. They deviate from configurations whose intervals consist of low-integer ratios (the kind found in traditional notation and commercial DAWs) in ways that escape the domain of expressive timing. This work explores the temporal dimension within which these machine rhythms are both distinguished from and blended with their low-integer-ratio counterparts. The result is a variety of different kinds of grooves: some are straight, some are lopsided. An experimental aspect of the work asks to what extent symmetry and displacement contribute to our sense of groove. The software tool Cycletron, an interface for generating rhythms based on circular representation of time, was used to create the patterns. The improvisatory nature of the work is meant to illuminate how a novel interface can influence compositional choices and inspire creativity.

Duration: 6' 35"

Scott Barton composes, performs, and produces (electro)(acoustic) music; conducts psychological research; and develops musical robots. His interests include rhythmic complexity in beat-based contexts, stylistic heterogeneity, perceptual organization, instrument design, machine expression, human-robot interaction, improvisation, and audio production. He founded and directs the Music, Perception and Robotics lab at WPI and co-founded Expressive Machines Musical Instruments (EMMI), a collective that designs and builds robotic musical instruments. As a researcher, programmer, and author, his work in rhythm perception and production has been published in journals such as Music Perception and Acta Psychologica . He is active in the world of audio production as a recordist, mixer and producer. His most recent album Stylistic Alchemies (Ravello Records) features electroacoustic works that illuminate the creative potential of the studio in the synthesis and juxtaposition of musical genres. His compositions have been performed throughout the world including at SMC; ICMC; SEAMUS; CMMR and NIME. He is an Associate Professor of Music at Worcester Polytechnic Institute. scottbarton.info