

FOR IMMEDIATE RELEASE — A Chessboard that Makes Music

Click here for video of the Chessboard Drum Machine <https://youtu.be/wNEp6VEgl0E>

Have you ever wondered what a game of chess would sound like, if it were music? Rob Flax has, and now he has the technology to find out.

Before he found music, there was chess. Flax is a multi-instrumentalist, composer, educator, and huge chess nerd. He can play the violin while playing multiple games of chess simultaneously, blindfolded even. While there are plenty of musicians who enjoy chess, and plenty of chessmasters who have studied music, very few people combine the two.

Now, for the first time, Flax has created a chessboard that makes music. He calls it the Chessboard Drum Machine, and it's an astonishing synthesis of strategy, improvisation, generative music composition, and technology.

At first glance the Chessboard Drum Machine appears to be an ordinary chessboard, with wooden pieces and a pleasing aesthetic. A closer look reveals a USB cable connected to the side: this is a DGT electronic chessboard, the same kind used in the highest levels of tournament play (like the World Chess Championships, among many others). The "smart board" has internal components that communicate with a computer, relaying the position on the board.

Flax has partnered with software engineer Shaun "Merthsoft" McFall, who has written computer code to turn the board's readout into MIDI, the universal language of electronic synthesizers and drum machines. Every time a piece moves on the board, the software sends different MIDI notes to several simultaneous drum samplers, synths, and grooveboxes. In this way the board is more of a controller than a sound generator itself, but that means the possibilities are infinite.

A keen observer of history will note that in 1968 John Cage performed an experimental concert with a chessboard, featuring the great artist and chess player Marcel Duchamp—but in that performance the electronics were simple, capable only of detecting whether or not a piece occupied a square. Fifty years later the technology has advanced considerably, making far more complex musical ideas possible. The DGT board can distinguish among the pieces, so a knight can make a different sound than a bishop, and so on. Plus there are now analysis engines that can evaluate the position, suggesting the best move or calculating the odds of a player winning.

Flax has several goals for the project: first, a novel way to create drum grooves and rhythmic ideas for his songwriting and composing. Second: to make music that sounds like chess, and more closely captures the inner beauty of the game. Third: to inspire others to learn about the component parts, as both chess and music are rich enough to inspire multiple lifetimes of study. Sharing this process with the world may help the next generation of learners to seek out "bi-literacy," and inspire creativity for generations.