

Close Reeding (Neural Reprise)

Musical Composition

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Abstract

My recent album release *Close Reeding* [1] features my live sampling and feedback mixer improvisations with saxophonists (and one bass clarinetist). As a capstone to the album, and as part of my ongoing work in exploring machine learning error as a source of creative content, “Close Reeding (Neural Reprise)” is a neural-net-driven remix of the other tracks on the album. A neural network was trained by playing the previous eight tracks of the album in order, as they appear in the album, giving it a bark-scale spectral analysis of the music as well as the currently playing timepoint within the album. After training, the album was played again for the

neural network, this time with it listening to the album and determining what time point in the album it was hearing. That value was used to drive another sound file player, which played the part of the album the neural net reported to be hearing at any moment. The training and the data provided to the network were such that the network made several close-but-wrong determinations, and so the second audio player was made to jump around within the album. This resulted in a remix of the entire album informed by neural net machine error, linking clips of eight different musical performances by their spectral similarities. Interestingly, a single pitch center emerges in the resulting recording.

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Key words: neural net, machine error

Main References:

[1] Jeff Morris, *Close Reeding: A Digital View from the Inside Out* [Music Album], Ravello Records RR8041, 2020, <https://www.ravellorecords.com/catalog/rr8041/>