Cort Lippe
Program Notes

Duo for Tenor Saxophone and Computer (2023) was written for the saxophonist Kyle Hutchins and premiered at the University of Buffalo in 2023. The piece is an interactive work, the computer part having been created using the software Max/MSP, in which the performer has an active role in shaping the computer output. Various parameters of the performer's interpretation of the score, from larger scale rhythmic and phrase tracking of pitches, durations, and intensities down to micro-level spectral information, is used to continuously influence and manipulate the computer sound output by directly affecting digital synthesis and compositional algorithms in real- time. Chaotic algorithms, which are often used to describe various kinds of motion, were used in the creation of the instrumental score and the computer part.

The computer makes use of analysis/resynthesis, various kinds of filtering, frequency domain processing, spatialization, delays, atypical synthesis techniques, and other digital signal processing algorithms.

The instrument/computer relationship moves on a continuum between the poles of an extended solo and a duo. Musically, the computer part is at times not separate from the saxophone part, and serves to amplify the saxophone in multiple directions; while at the other extreme of the continuum, the computer part has its own independent musical voice, while this solo/duet relationship exist simultaneously. Much like chamber music playing, in which individual expressivity sometimes is meant to serve the whole and at other times has an integral influence on the entire ensemble, the varied musical relationships between the performer and computer are fundamental to the musical results.