Program Notes

Sonoporation is a method of modifying cell membranes. Creating rapid changes in pressure with sound waves, microbubbles form and allow for the introduction of foreign genes or other materials. This method carries an inherent risk of rupture, so most applications employ limited exposure to ultrasonic frequencies.

This piece centers around F#. As the pitch wavers around 92 hertz, activity increases and more space opens. The more frenzied the texture becomes, the more foreign musical material gets introduced. Though it completes without a complete rupture, the evidence of the process remains as streaks in the musical space.

Sonoporation is written for and dedicated to Steven Banks.

Electronics

The piece requires Max 7, 2 mic inputs, and stereo out. The sax should be amplified at the bell and at the 6 pad (written D#). Back the mics away from these spots if the bell mic produces too many audio drops and/or if the pad mic picks up too much pad clicking.

Each system of the staff is recorded in its own audio file for recall throughout the piece. The person running the electronics must close the current recording and start the next by hitting "r" twice. Subsequent events are triggered by the succession of systems recorded.

Though each space will react differently, it is suggested that Live and Recorded Output be set highest, followed by Processed and Slaps. Noises and Delay should be about 1/3 of Live, and Static should be just below. The person running the electronics should monitor the effect faders throughout, though most classifications have dynamic progressions built into their logic. At no point should the sax be overtaken by the electronics.

Sonoporation

Brian Penkrot

for Steven Banks

♩ = 60 Evenly and calm, but not weak
Circular breathing when possible
Tonguing on articulations only - everything else connected