Some notes on 'Binary Count'

This piece invites the players to explore a different counting system to the decimal system that so many human cultures have adopted. The piece draws attention to our normalised and normative ways in which we organise and process information. Baseten, likely used by many human cultures because we have ten fingers (Dantzig, 2007, p. 12) did not have a monopoly on counting systems but have become almost hegemonic. But this does not make it the best. Some favour base-twelve as it divides easily into half, third, quarter and sixth unlike decimal which has a messy 2.5 as its quarter division. While the binary system feels quite alien to most people (and some friends who have seen this piece did not have an understanding of it) we have surrounded ourselves with devices that use binary. The piece asks the players to perform the difficulty that people have with the binary system-keeping track of long strings of numbers-contrasting with the ease with which computers can make calculations-binary logic circuits constituting the vast majority of computing. In doing so, it highlights the hegemony of our decimal system and foregrounds the hidden (occult) counting system that controls so much of the technology so pervasive in our lives. It also refers back to the origin of the binary system in both Egyptian 'Eye of Horus' mathematics (Burton, 2010, pp. 33-82) and the I-Ching (which led Leibniz to explore the binary system) (Burton, 2010; Leibniz, 2007).

The binary system also references self and other or ego and zeroness, and other forms of binary logic; the title plays off the usual "one, two; one two" that vocalists sound check with.

Bibliography

Burton, D. (2010). *The History of Mathematics: An Introduction*. New York NY: University of New Hampshire.

Dantzig, T. (2007). Number: The Language of Science. New York, NY: Plume.

Leibniz, G. W. (2007). Explanation of binary arithmetic, which uses only the chacters 0 and 1, with some remarks on its usefulness, and on the light it throws on the ancient Chinese figures of Fuxi (L. Strickland, Trans.). Retrieved from <u>http://www.leibniz-translations.com/binary.htm</u>