

(The Presence of) Pressure, for WooSIE flute and Max/MSP

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1 Program Notes

Like life, dissonance in music is an event or time period that makes us look forward to when that imbalance is resolved. In this work the opening dissonances gradually accumulate and thicken, shifting into sustained layers, before bursting into rapid, energetic gestures. These gestures dissipate, shifting to layered gestures combining looped melodic fragments and short noise attacks. As noise components are introduced, melodic material bursts out of the dissonance, rising through the flute's register to finally arrive at a punctuated resolution.

2 Project Description

This work, for flute and Max/MSP, use a simple hyper-flute fitted with a WooSIE (Woodwind Sensors for Interactive Environments) system, an outcome of the Tracking And Smart Textiles Environments (TaSTE) project [4, 5] and influenced by the work of [1, 2, 3]. One aim of WooSIE is to inexpensively provide for the generation of digital data without having a performer give up refined technique and performance skills developed on their preferred instrument, or making serious modifications to that instrument. With WooSIE five FSR sensors are mounted on 3D-printed removable plugs in the open-hole flute keys, and a clip-on wireless system sends the keyed pressure data to the software. The performer is able to use combinations of keys and key pressure thresholds to trigger samples, increment through sections of a piece, control audio processing, and start and stop loop recording/playback.

3 Technical Notes

This submission is now a video submission, as it is now not possible for the composer and performer to travel to NIME. Thus, no concert tech is required.

4 Media Link(s)

- Video: <https://vimeo.com/1187766090>

Acknowledgments

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Ethical Standards

No elements of this work involved research with people or animals, and all work adhered to the ethical standards of the University of British Columbia.

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References

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- [2] E. R. Miranda and M. M. Wanderley, *New Digital Musical Instruments: Control And Interaction Beyond the Keyboard*. Madison, WI, USA: A-R Editions, Inc., 2006.
- [3] J. Malloch and M. M. Wanderley. The T-Stick : From Musical Interface to Musical Instrument. In *Proceedings of the International Conference on New Interfaces for Musical Expression*, pages 66 – 69, New York City, NY, United States, 2007
- [4] R. Pritchard, “Tracking And Smart Textiles Environment (TASTE)”. In *Proceedings of the International Computer Music Conference 2019*, pp. 494 – 499, June 16 – 23, New York, New York, New York University.
- [5] R. Pritchard, *Doshite?* for piano, Sleeve Hand Responsive User Garment (SHRUG), audio/video clips, and Max/MSP/Jitter processing. M. Masaki, piano and SHRUG; Pritchard, R., music/SHRUG sensors/software/ video. Premiere: Calgary, AB, Mar. 3, 2022