Playing The nUFO

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1 PROGRAM NOTES

"Will new digital instruments become part of the current musico-industrial framework with composers, publishers, producers, sound engineers, performers, concert halls, media, critics, audience? Or do they belong to a new age of musical practice? What is a new digital instrument? How do we play it? Who composes for it? Where does it fit in our culture? And is it a sustainable thing?"

Thor Magnusson poses these questions in "sonic writing" (2019), and they all directly apply to the nUFO I've been developing over the past 3 years. They inform the conceptual background of the piece, with my personal answers to them becoming the initial sound material. Oscillating between clear intelligibility and complex processing blended with layers of abstract synthesis, the piece offers multiple auditory perspectives on these questions.

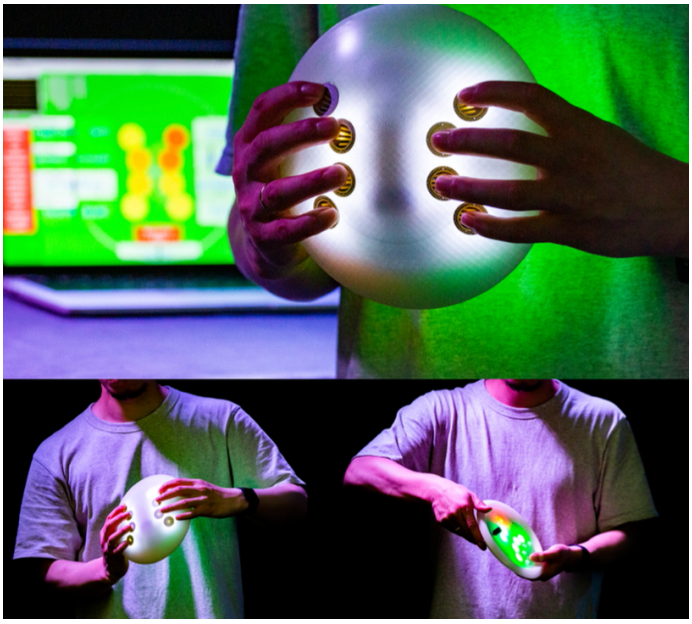

Fig. 1. The NIME Mouse

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2 PROJECT DESCRIPTION

The Airborne Instruments nUFO (nontrivial/new flying object) [2] is a new movement based Digital Music Instrument designed for maximal motional freedom of the performer. A handheld wireless Interactor digitizes large scale movement via a 9-axis IMU together with a set of 8 touch-sensitive pads for fine motor finger action. The corresponding software, nUFO_App, applies elaborate meta-mapping strategies (called Influx) [1] to the movement data to inform up to 4 parallel of sound processes such that even very simple movements create complex changes in the sound. This frees players from distracting technical concerns, and empowers them to focus on playing by listening and intuitive motion.

Developing the nUFO was my main occupation for the last 3 years; first as art academy graduation project, then in the frame of a grant. The work encompassed the design of Hardware & Software, interactions, sound design, development of a series production pipeline, company CI, website and marketing strategies.

This piece's program notes – text excerpts from Thor Magnusson's recent book "sonic writing" – pose pointed questions about societal and cultural implications of NIMEs, which perfectly apply to me as the creator of the nUFO. The composition process started with rendering my private answers to these questions with computer voices as a concrete sound source. Interacting with the nUFO, these sounds can be played back at intelligible rate, or gradually granulated to become purely sonic, at times rhythmical, textures. A choice of complex, internal- feedback-based synthesis algorithms serves as accompaniment to this quasi- human voice, and nUFO's rich interaction affordances leave plenty of space for ad-hoc decisions about the flow of the piece. The juxtaposition of clearly audible speech and dense sound layers constitutes two complementary ways of addressing Magnusson's questions, one semantic/rational and one experiential, which are intended to merge into a self-referential musical contribution to the NIME discourse.

3 MEDIA LINKS

- Video: https://youtu.be/Mvbe5SFA7wA
- Audio: https://soundcloud.com/isak-han/sg-ih-sync/s-RrBaQ

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REFERENCES

[1] Alberto De Campo. 2014. Lose control, gain influence-Concepts for Metacontrol.. In *ICMC*.

[2] Hannes Hoelzl, Isak Han, and Alberto de Campo. 2019. The Airborne Instruments nUFO: a Movement Based Musical Instrument for Possibility Space Exploration. In *Proceedings of the 6th International Conference on Movement and Computing*. 1–4.