

Touch, Strike, Slide, Twist, Shudder

THE BOWERS-HAGAN DUO

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1 VIDEO NOTES

This video catches Bowers and Hagan in the act of sticking their dirty hands into machineries best left alone as they struggle in the midst of unruly sonic behaviours and non-obvious interaction design. Using synthesis algorithms with extreme sensitivity to gesture, they steer rather than control a complex solfège of pulses, noises, crackles and drones, negotiating a link between chaotic dynamics and improvisation. All relationships are tricky, especially the love polyhedron between Bowers, Hagan, their interfaces, their algorithms and their many noises. But we hope for the best.



Fig. 1. The Bowers-Hagan Duo at the New York Electroacoustic Improvisation Symposium 2019.

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2 PROJECT DESCRIPTION

Our video documents a performance of duration c.10 minutes which works with our latest developments of the approach to sound synthesis, improvisation and design research that was first outlined in [1]. Our work takes as its point of departure some sound synthesis algorithms designed by Miller Puckette and implemented in Pure Data. These algorithms are deeply non-linear and manifest the range of behaviours familiar from chaotic dynamics. We have built on this common starting point by incorporating similar algorithms of our own design, by designing compatible live processing techniques, by modifying and extending Puckette's original work, and by working through varied interface design ideas to support a range of gestures suited for steering the chaotic sound that can emerge – gestures hinted at by our title. Our work is a concerted attempt to explore the three cornered relationship between sound synthesis, non-linear dynamics and improvisation. Our work is also sustained. This is not a one-off project but a sustained creative and research practice which has occupied us for over two years. In terms of the research focus of NIME2020 on accessibility, our work shows some strategies for how sound synthesis can be engaged with by means of ecognisable gestures which are performatively intriguing and complex in their consequences.

3 MEDIA LINKS

- <http://www.kerrylhagan.net/bowers-hagan/>

REFERENCES

- [1] John Bowers and Kerry Hagan. 2019. Improvisation at the Edge of Chaos: A Worked-Through Design and Performance Practice for Electronic Improvisation. In *Proceedings of the International Computer Music Conference*. ICMC.