## INTERNATIONAL CONFERENCE ON LIVE INTERFACES

# Distributed Agency in Performance

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**Abstract.** Building on the recent *Interagency in Technologically-Mediated Performance* symposium at Bournemouth University, this workshop will aim to practically explore intersubjective relationships between networks of human and non-human actors in the context of artistic performance.

**Keywords:** performance ecosystem, agency, irreducibility, resistance, adaptability, embodiment, co-tuning, emergence, mediation, feedthrough

### **Description**

Our workshop is targeted at performers, designers and researchers who have an interest in practically exploring complex emergent behaviors and dynamic relationships in 'performance ecosystems' (Waters 2007). We aim to arrive at a better collective understanding of the following questions:

- How is agency distributed across people and things in performance environments?
- Can we move the thematic of performance away from demonstrating control to developing empathy and skilful adaptability?
- How can we move past the design motivation of interface transparency towards a recognition and celebration of resistance, instability and co-tuning?
- What happens when we transduce between different domains, e.g. sound -> electricity? Can we develop a more shaded account than simply talking of losses, noise or imperfections?
- How can we better understand sounding assemblages that are irreducible? If something doesn't lend itself to being understood in terms of its component parts, then can we develop workable tactics for designing and playing with such things?

We will begin the workshop by contextualising these questions through discussion of existing artistic works and ideas, before moving swiftly on to collaborative practical exercises. Our aim here is to deepen our knowledge of music making through 'doing' and 'showing' rather than merely 'telling'. Following this introductory stage, while working in small groups with the facilitators, you will design and physically sketch a human-scale (partially functioning) prototype of a performance ecosystem. This network will include a range of interrelating agents, possibly including: people, elastic bands, cardboard boxes, computer code, sensors, actuators, step ladders, masks, books, tacit rules, and explicit methods for resisting equilibrium and/or provoking crises. Following this stage, each group will deliver improvised performances while acting out the necessary elements of the physical sketches. These improvisations will provide the basis for critical discussion and subsequent performative iterations. Our team of artist-researchers will facilitate the workshop and provide expertise in designing musical interactions, physical sketching, rapid prototyping, improvising, and critical reflection.

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#### References

Bowers, J., & Archer, P. 2005. Not Hyper, Not Meta, Not Cyber but Infra-Instruments. In *Proceedings of the 2005 International Conference on New Interfaces for Musical Expression (NIME05)* 

Dix, A. 1995. Cooperation without (reliable) communication: Interfaces for mobile applications. *Distributed Systems Engineering*, 2(3), 171.

Gallagher, S. (2013). The socially extended mind. Cognitive Systems Research, 25-26, 4-12.

Hogg, B. & Norman, S.J. (eds.) 2013. Contemporary Music Review - Resistant Materials in Musical Creativity 32(2-3)

Magnusson, T. 2009. Of Epistemic Tools: musical instruments as cognitive extensions. Organised Sound, 14(2), 168–176.

Norman, S.J., Waisvisz, M. & Ryan, J. 1998. Touchstone. STEIM. http://www.crackle.org/touch.htm

Ryan, J. 1991. Some remarks on musical instrument design at STEIM. Contemporary Music Review, 6(1), 3-17.

Waters, S. 2007. Performance Ecosystems: Ecological Approaches to Musical Interaction. In *Proceedings of the Electroacoustic Music Studies Network Conference*. Retrieved from http://www.ems-network.org/spip.php?article278

Waters, S (ed.) 2011. Organised Sound - Performance Ecosystems 16(2)

#### **Artistic Works**

Nicolas Collins Pea Soup (1974; 2001-2014)

Tom Davis & Paul Stapleton Ambiguous Devices (2012-)

Agostino Di Scipio Audible Ecosystemic Interface (2003-)

Bennett Hogg Ghost Orchestra (2008)

Stanley Lunetta A Piece for Bandoneon and Strings (1966)

Tom Mudd Control (2015)

John Richards et al Dirty Electronics (2003-)