

## **Brain Dead Ensemble** An Acoustically Networked Feedback Assemblage of Four

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*Figure 1. The Brain Dead ensemble at the EmuteLab 0 performance (Brighton, UK, January 2018).*

### **Abstract**

The Brain Dead Ensemble are an acoustically networked feedback quartet/assemblage in which the structural, acoustic feedback pathways within and between “open” instruments create a fundamentally distributed musical agency. The current ensemble consists of two feedback cellos, a feedback bass and a Threnoscope, acoustically coupled to form a multi-instrument, multi-channel system - an expanded music interface.

The feedback cellos and bass are electro-acoustic-digital resonator instruments. Each instrument has pickups under each of its strings and one or more transducers built into the acoustic instrument body, inducing electromagnetically-controlled feedback which can be subject to digital processing. The classical model of a bowed instrument is inverted: the player no longer controls and excites the strings to produce sound, but

negotiates with an ongoing, lively, self-resonating instrument. The threnoscope is a software system created by ixi audio for drones, live coding and microtonal, spatialised composition. All the instruments are networked acoustically: the seven channels of the threnoscope are diffused to a quadraphonic PA plus the integral speakers of the string instruments.

The acoustic result of these feedback processes is characterised by a variety of sonic colours including airy microtonal micro-melodies, serene yet colourful drones, complex spectral gestures, and vast explosions surfacing gradually or unpredictably into screams. Performances are improvised; an emergent, negotiated form of performance which involves the steering and shaping of evolving, distributed, sonic energies rather than the instigation and exchange of discrete musical ideas. No one is in control, although everyone is playing.

## Keywords

Hybrid instruments  
Postdigital  
Feedback  
Contemporary chamber music  
Drone  
Noise  
Spectralism  
Assemblage  
Cello  
Double bass

**Acknowledgements.** Thanks to Halldór Úlfarsson for inspiration and ongoing collaboration.

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