

Yarn

Performative installation

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Introduction

This work is considered as an improvisational ritual performance, contextualized in the 21 century European art music. The performers decide how they should play and how long the process should last. The composer provides the objects and the SuperCollider patch for the performance.

Setting Up

Four threads, made of nylon (graph 1) or cotton (graph 2), are respectively fastened with tension between a metal plate and a sturdy knot inside a room. (graph 5) One geophone (I used the Geofón by Lom, see graph 3) should be adhered to the metal plate. On each fastened threads, a thread should be connected via a wood ring. (graph 4, graph 5)



Graph 1



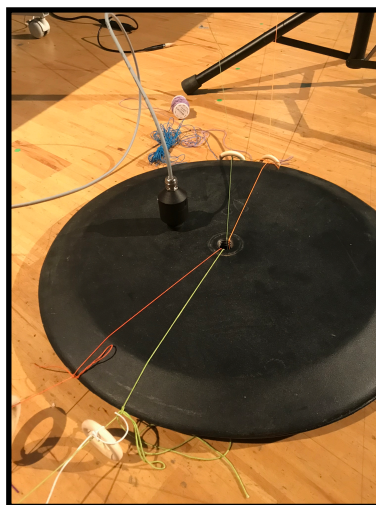
Graph 2



Graph 3



Graph 4



Graph 5

Performance Note

Each performer holds two threads which connected to the fastened threads in the space. During the performance, one should explore how to create sound using the objects in hand. They should be aware of the interaction among their body, the objects, as well as the sound which is being created. They should also decide how they start how they end the process and make agreements/disagreements as a duo.

```
////////////////////////////////////Yarn SuperCollider Patch////////////////////////////////////
```

```
(////Set up:
```

```
s.freqscope;
```

```
Server.default.options.device_("UMC202HD 192k");
```

```
)
```

```
///Soundcheck:
```

```
{PinkNoise.ar(0.2)}.play;
```

```
{SoundIn.ar(0)}.play;
```

```
///The main patch:
```

```
(///fft, spectrom stretch, add high freq:
```

```
~fft = {
```

```
    var in, out, chain, scramble, hop = 1/16, amp;
```

```
    in = SoundIn.ar(0);
```

```
    in = HPF.ar(in, 50);
```

```
    in = Limiter.ar(in, 0.9);
```

```
    amp = Amplitude.ar(in);
```

```
    chain = FFT(LocalBuf(2048), in, hop: hop);
```

```
    chain = PV_MagShift(chain, stretch: SinOsc.kr(amp).range(0.5,5));
```

```
    amp.poll;
```

```
    out = IFFT(chain)!2 * hop;
```

```
};
```

```
///Reverb
```

```
SynthDef(\rev, {
```

```
    arg out = 0, in = 0, mix = 0.33, room = 0.8, damp = 0.6, amp = 0.8;
```

```
    var inSig = In.ar(in, 2), sig;
```

```
    sig = FreeVerb2.ar(inSig[0], inSig[1], mix, room, damp, amp);
```

```
    sig = BHiShelf.ar(sig, 1200, 1, 0.8);
```

```

        ReplaceOut.ar(out, sig);
    }, metadata: (
        specs: (
            mix: [0, 1, \lin, 0, 0.33],
            room: [0, 1, \lin, 0, 0.33],
            damp: [0, 1, \lin, 0, 0.33],
            amp: [0, 1, \lin, 0, 0.33]
        )
    )).add;

///Geophone
SynthDef(\geo, {
    arg amp = 0.8, gate = 1;
    var mic, sig, filter;
    mic = SoundIn.ar(0);
    sig = Limiter.ar(mic);
    sig = HPF.ar(sig, 440);
    filter = BAHPass.ar(sig, SampleRate.ir / 4);
    Out.ar(0, sig + FreqShift.ar(filter, 0, LFNoise2.kr(0.01).range(0, 2pi)) ! 2) * amp;
}).add;

)

///reverb gui:
//SynthDescLib.global[\rev].makeGui;
(
~rev = Synth(\rev);
x = ~fft.play;
~g = Synth(\geo);
)

(
~rev.free;
x.free;
~g.free;
)

~g.set(\amp, 0.9)
~rev.set(\mix, 0.6)

```