

University of Melbourne

*Interactive Composition
Bachelor of Music (Honours)
Major Project 2021*

Cloud Unknowing

Artist Statement

These video recordings document a hardware and software installation comprised of a 26 channel Ambisonic dome of my design and immersive software experiences created for this project.

The COVID-19 pandemic prevented public installation of this work. Although these videos have been rendered with binaural interpretations of the Ambisonic audio, they cannot recreate the same experiences. They serve as a demonstration of the installation and how the pieces created for this installation function.

The following pieces leverage qualities unique to the intersection of immersive audio and virtual reality to give participants new perspectives through the ability of immersive technology to manipulate scale, give form to the unseen and create new modes of perception through agency and embodiment.

Living Room

Max/MSP, HTC VIVE, synthesizer, IMU sensor

Climate change is a looming global disaster. Our human minds cannot comprehend the scale of the changes we face in the coming decades. This piece turns climate change into a personal experience by allowing the participant to wander through a lounge-room-sized sonic map of Australia. Factual map data of increased bushfire risk, rising sea level and changes in rainfall distribution are introduced to the mini-Australia over a contracted timescale. The audience can explore disaster areas or remain in safe spaces. However, as time moves inexorably forward the situation worsens. Sonic chaos encroaches, leaving no space untouched.

Coil

Max/MSP, VIVE Tracker, synthesizer

We are surrounded by information and forces that we cannot directly experience. Our modern appliances bathe us in electromagnetic radiation. How would our experience of our homes change if we could synesthetically sense it? Virtual reality creates a new channel of information to experience our surroundings. A modern living area with appliances is represented as sound only and is experienced through participant exploration, internalising the boundaries, intensities, and textures of the radiation we allow in our homes every day. The mains hum drones as appliances are added one at a time for the user to interact with until they are enveloped by electromagnetic radiation.

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Drown

Max/MSP, HTC Vive, Reaktor

Virtual reality and Ambisonic audio create a visceral experience of climate change. The helpless participant experiences the claustrophobia of a slowly rising sea. Sounds reminiscent of human civilisation are emitted by spheres that float on the surface of the rising water, then succumb and finally sink into the abyss. The remote threat of global climate change is made imminent and personal through the compression of time and virtual immersion.

Workspace

Max/MSP, HTC Vive

In this immersive reconstruction of a factory floor, the participant can interact with rhythmic factory machinery and workplace sounds to shape a static and/or moving jigsaw of sound. This reflexive internalisation asks the audience to interact with the rhythms of our post-industrial daily life with exceedingly industrial sounds. They can shape their sonic environment to their tastes in a playful interaction where one can throw a metal stamping press. Sounds are represented as four orbs, which the participant sees in virtual reality, and interacts with to position and animate movement patterns.