Sound and Space

23 July
7.30 pm
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SOUND AND SPACE

Driftwood / Peruvian Kalimba by Matt Hitchcock

This work is a collage of two ambient works from a collection tentatively titled "The quieter moments". Both these works draw on psychoacoustic illusions to explore the depth achievable in sonic spaces, from the proximate (closest) to the distal (most distant), as well as height, and the circumspace achievable by surround sound composition. The works are both introspective in nature, experimenting with the impact distance and sonic "mass" can impart to energy (performative and experiential), and consequently our musical connection to sound.

The introduction exclusively uses white noise as a sound-source. The white noise source is processed using resonant filters and granular synthesis techniques to play with timbre - the textures, spectral content, spatial contexts and envelopes of sounds - and the way these changes to the sonic "surface" impact our connection to both the individual fragments of sound and the gestalt, the sum of all parts. At the heart of this minimalistic piece is the concept that no whole sound is heard to move, rather the many sub-elements or grains of each sound are caused to move through a process of breaking each linear fragment into spectral layers and juxtaposing these in time, linear space and aural space. Space here includes height, distance, width and circumspatial location. This opening is a very brief extract of an hour-long work.

The second part of tonight's work extends on these themes whilst adding a contrast in focus. Here, three recorded mono sounds (Kalimba, male vocalisations and female vocalisations) are split into spectral layers and dislocated in space. The focus of this work is to explore the sense of depth achievable by using psychoacoustic principles to bring parts of a sound close to us, while other parts of the same sound exist in the distance. Each mono sound is therefore heard to exist in multiple planes and locations at once, relying on our brains to reconnect the constituent elements into related wholes. Here, distance rather than volume is used to change our relationship to each element and sub-element, impacting our sense of intimacy and immersion in the work, and thereby hopefully enhancing the listener's engagement in "the moment" created by the tensions and releases in harmony, distance, size and movement.

Kalimba played by Matt Hitchcock, with vocalisations by Gerard Chávez and Nanina Ghelfi.

Sonic Interiors by Andrew Brown and John Ferguson

Sonic Interiors explores relatively uncharted territories of timbral and rhythmic space. Sounds and textures uncommonly found in conventional music are navigated, but still the work contains traditional elements and musical gestures. The sonic landscape is at times unfamiliar yet strangely reminiscent. Both John and Andrew have developed new bespoke instruments for this

work. Andrew's features ring modulation synthesis controlled by multi-dimensional touch gestures. This process provides a rich diversity of sonic potential whilst always maintaining remnants of the physical gestures used in performance. Effects and quadraphonic sound distribution enhance and relocate what is otherwise a simple monophonic sound source. John's instrument (Purple Pd Machine) features an array of button and knobs wired to an iPhone, resulting in a surprisingly well-ordered assemblage that may nevertheless be liable to melt at any moment. Euclidean rhythms and sound-file granulation are at the foreground of the sound world but the audio samples chosen very much speak for themselves, beyond the performers attempt to manipulate them. Quadraphonic sound diffusion is automated and responsive to both tactile input and computational parameters. The work involves performance with live algorithms where performer agency is augmented by agency in the machines, as they exert their influence in somewhat unpredictable ways. Always, the work emerges from the interactions amongst performance and machines, following a tight compositional structure that still allows for moment-to-moment improvisation and surprise.

LAKA: River in the Sky (Preview) by Leah Barclay

LAKA is 360 degree exhibition of video, sound and virtual reality that immerses audiences in Yolngu and Hindu ways of understanding the world. The exhibition showcases how both cultures prioritise the relationship between our ancestors, future generations and our natural environment. If we as a species are to survive climate change, we will need to undergo significant cultural change alongside the necessary political and socio-economic changes. We will have to remember our innate connection to nature; to remember that we are just one small part of a vast, interconnected, ecological system. There are cultures that have already built sophisticated ways of living based around this very philosophy. Laka provides audiences with an opportunity to immerse themselves in these ways of thinking.

The sound world of Laka is composed by Leah Barclay drawing almost entirely from processed field recordings of the environment, in Yolngu country in the Northern Territory and various parts of South India. The work weaves in voices and location recordings to explore commonalities in the traditional cultural systems of Yolngu and Hindu communities. Both world-views enmesh the human and natural worlds in sophisticated ways. Both work with cyclical rather than linear notions of time. There is also a rich but largely unexplored geographical connection. Scientists mapping the human genome have discovered that certain First Nations Australians and South Asians have DNA matches from 4,000 years ago.

Both Hindu and Yolngu cultures have ancient stories of rivers in the sky. For Hindus, one story is that we live in the belly of a dolphin, swimming in the Ganges of the sky. For Yolngu, one story is that we exist as fish swimming in the Milky Way, and that we only come down to Earth temporarily to live our lives, before returning to that river in the sky. Laka has been developed over the last five years in collaboration with Australian artists Rosealee Pearson (Yolngu) and S.

Shakthidharan (Hindu) and their families. The 360 exhibition and feature film premieres July 28 in Sydney and this performance is a preview of the Laka sound world.

In the Liminal Space **By Nicole Carroll**

This work is a curation of several long-duration performances on a GRP A8 and Serge Paperface (1975) synthesiser, which are both housed at MESS (Melbourne Electronic Sound Studio). The GRP A8 is a contemporary but rare single-unit Italian synthesiser, while the Paperface is a vintage modular synthesiser formerly owned by LaTrobe University. The primary sound source for this curation was the GRP A8. The moving clicks and noisey textures that comprise the majority of the sonic content are complemented by low, steady oscillations performed on the Paperface. In the initial performances, sounds evolved over time through slow, subtle changes in frequencies, and envelope, filter, and sequencer parameters.

The source content was minimally processed, relying on traditional tape editing techniques, such as cutting and splicing. A random selection of short samples are processed via granular synthesis during performance to produce textural washes through speed and pitch shifting. The process of performing on hardware, which presents limitations for both human and machine, allows one to focus on precise, intentional developments of sound. Without the aid of digital technology, where an infinite number of parameters may be accessed and controlled through automation, only a limited number of parameters can be manually altered at a given time. This restriction encourages a durational performance method. I approach the analog hardware medium as a meditative practice and performance.

Sound spatialisation is performed live via Max/MSP in conjunction with fixed surround tracks with composed 8.1 spatialisation. The performance system allows for both point-to-point and circular movement. The point-to-point functions allow multiple stereo stems to be mapped in unconventional arrays, and allows for random motion and flexible timing. The circular panning system moves fixed stereo images around the space, allowing for changes in amplitude intensity and timing. These systems are controlled both manually and through algorithmic processes.

LIMINAL SPACE is a performance of a performance. It is a hybrid of digital and analog technologies. It is the noise in between the signals. Emit. Transmit. Receive.