REFEREED CREATIVE WORKS

Jesse Austin-Stewart - 8x5 Speaker Array [2018]

for 8-channel speaker wall made up of 40 speakers

Daniel Blinkhorn - Kibuyu [2017]

acousmatic work

Off the coast of Tanzania, on the small island of Zanzibar I happened upon a bazaar in Stonetown with all manner of beautiful African instruments. I found myself drawn to a small, hand made mbira. This humble instrument buzzed and creaked and was far from perfect, yet striking a tine was immediately captivating. Kibuyu in Swahili translates to 'Calabash' and is the box resonator used in the construction of the instrument. Throughout the work I have used the term as a metaphor similar to the phenomenon of seashell resonance, except in this instance, as one holds the instrument against their ear they don't hear sound redolent of the ocean, but rather a more dynamic abstraction of sonified biomimicry resounding well beyond the instrument itself and deep into the island of Zanzibar and the many mimetic evocations found therein. All the material within the composition comes from the striking of three tines of the mbira, with no additional sonic material employed within the piece. Zanzibar is a UNESCO World Heritage Site.

KW: Biomimicry, Electroacoustic, Eco-acoustic Composition, Multichannel, Fixed Media

Ryan Burge - I am Sitting in a Simulacra [2017]

acousmatic work

I am Sitting in a Simulacra explores how we might understand authenticity. It is a tip of the hat to Alvin Lucier's well documented iterative processes in I am Sitting in a Room (1969), and Jean Baudrillard's notion of hyperreality in Simulations and Simulacra (1981). The work incorporates several modes of compositional practice, with mimesis as a foundation. A field recording from Beeliar Wetlands of birds, cicadas, cars and noise was analysed, and reconstructed in a DAW using only FM synthesis and filters. This digital composition was played back at its source location to introduce indeterminism in an antiphonal performance with nature. A recording of this process was immediately played back, and recorded again. This process was repeated several times. Finally, all recordings were then arranged and mixed in a DAW. The work challenges our assumptions of authenticity by exploiting the capabilities of technology within a 'natural' setting, asking the listener to decide what is real and what is constructed.

KW: Mimesis, Hyperrealist Music, Field Recording and Electronics, Post-digital Aesthetics, Authenticity and Simulation

Simon Charles - Murrindindi [2016]

for electric guitar and electronics

The field recordings that comprise much of this piece were taken from 'Murrinidindi Scenic Reserve' on Taungurung country of the Kulin Nation in Central Victoria. The inherent rupture that occurs through the transition from place to captured audio is an important idea in the teasing out of this composition. In this piece, the linearity of sound events in these recordings are interfered with and this inference becomes a way of navigating meaning. Murrindindi explores ideas the around the performer's physical relationship to the sounds around them and the sounds that they produce. Rather than a relationship of shaping-constructing-manipulating, the piece invites it's performers to consider this relationship in more subtle ways. For instance, it enables ways to consider physical stasis and modes of embodiment in listening. Rather than dealing with compositional language that is grounded in modes of sonic ideation, the language of this work explores ways that sound may linger around it's performers. In doing so, it seeks to re-imagine embodied relationships to sound that are the usual praxis of instrumental performance.

Roger Dean - Digging Deep [2018]

for acoustic piano, generative algorithms, and electroacoustic processing
austraLYSIS and Western Sydney University

This will be a solo piece for acoustic piano, generative algorithms, and electroacoustic processing. Deep Improviser, a quite simple deep learning model developed by the performer will be used as a generative partner, together with live dsp.
KW: Improvisation, Deep Learning, Generativity, 4-channel DSP, Piano

Donna Hewitt and Mary Mainsbridge - #Me Two [2018]

for voice, eMic, wearable controller, Kinect, Ableton Live and Video projection
University of New England and Macquarie University

This is a new collaborative work inspired by the 2018 '#Me Too' campaign and the events that unfolded around the Harvey Weinstein scandal.
The work of both artists explores gestural movement and voice, with each performer using a different system and approach to their exploration of gesture. Donna Hewitt works with the eMic and a wearable controller that primarily utilises arm and hand movements, while Mary Mainsbridge uses a system that detects whole body motion via the Kinect. With such obvious connections and aligned interests, these artists decided to embark on a collaboration looking for ways to bring their systems, gestures and voices together.
Both artists are interested in performance gesture, the relationships between sound and gesture, and the role gesture plays in communication more broadly. Preliminary discussion around the work centred on the personal experience and psychological impact of gesture for women, the way gesture defines, depicts and influences power and the impact that physical gesture can have on personal power. Furthermore, how can these relationships be conveyed through sound and electronic music performance? The work draws upon and is inspired by texts that emerged during the #me too campaign and on a practical level is about two women exploring collaboration via two unique music technology systems.
A big part of this project is the exploration and observation of the collaborative process itself and finding ways to merge different systems and identify collaborative approaches where there are few established formulas or clear models to be guided by.
Both artists tend to perform solo with their systems and where collaborations do occur they are typically with other male artists. This collaboration is therefore a unique opportunity for two female artists to come together to compose and perform a new work, building on the theme of empowerment that anchors the piece.
KW: Gesture, Interfaces, Voice, Collaboration, Electronics

David Hirst - Imaginação de vise [2016]

acousmatic work

This work progresses from purely "mimetic" to purely "abstract". Contrasting natural with human made sounds, earth with water sounds, and short with sustained sounds, this work aims to provide a flavor of the Portugese region of Viseu, with a move from natural soundscape to a more abstract sound world. Imaginação de Viseu (Imaginations of Viseu) is an electroacoustic music work composed for the project: SONIC EXPLORATIONS OF A RURAL ARCHIVE - Electroacoustic Music and Sound Art International Competition, coordinated by Binaural/Nodar (Portugal). The work uses sound sources recorded in the rural region of Viseu Dão Lafões in Portugal. Beginning with the natural sounds of frogs from Mosteirinho, human steps enter from Azival in Cepões. Then we hear community washing water flow in Calde de Varzim, granite blocks by the Santo Amaro road in Nelas-Cepões, the processed sound of a Chapel Gate in Freixo Lady Street in Sanguinhedo of Côta, the sound of experimentation on tinplate found near the Aerodrome Street in Nelas-Cepões, and clapping in the Chapel of Our Lady of Health in Farminhão. All of these sounds are bound together with subtle electronic processing, and the work culminates in a chorus of sustained bell sounds sourced from Ribafeita, Mosteirinho, and Couto de Baixo. The work makes extensive use of space using the Ambisonic Toolkit software developed by Joseph Anderson's team at the University of Washington.
KW: Creative Work, Computer Music, Electroacoustic Music, Mimetic, Portugal

Cat Hope and Stuart James - Their Lives are Stripped of Meaning [2018]

for trumpet, voice and electronics
Monash University, Edith Cowan University

In 2016, Australian author Richard Flanagan made a statement in a response to the Australian Government's policy on the treatment of refugees arriving in Australia by boat, which involves detention. "Their lives are stripped of meaning." In this piece, the vocalist sings these words, but they become incomprehensible as they are separated out over the 8 minutes of the piece; a direct reference to the indeterminate length of detention that Australia enforces upon refugees. Time passes, we forget and our ability to understand becomes difficult. In addition, the electronic part is created by sampling the instruments at certain moments in the piece, and strips away the timbral characteristics of the work, another metaphor for the consequences of this treatment of our fellow human beings.

KW: Animated Notation, Acoustic and Electronic, MaxMSP, Decibel Score Player, Australian Music

Marcus Jackson - Wet Dream II [2018]

for electric guitar and electronics
Victoria University of Wellington

WET DREAM II is a continuation of a series of works exploring alternative methods of score presentation, for live performers and electronics. The first work, w3t dr33m, was premiered in March, 2018 by Simon Eastwood and SMP Ensemble. WET DREAM II takes as its genesis the superlative-laden, YouTube-based rock pedagogy community, and the way this community parallels the rock aesthetic of the 1970s. The work results from spectral feature extraction of a set of online guitar/drum solos, and derives a meta-guitar/drum solo. A MaxMSP patch uses this data to generate the "scores" in real-time. The patch sends data via OSC to Processing, which live-generates the guitar score, displayed on a monitor. Data is also sent via serial to the Arduino, to control a series of LED strips attached to the outer heads of the drums, and underneath the cymbals. These provide the score for the drumkit performer, who follows the lights. This Arduino also controls the strobes. Conceptually and aesthetically, the work is a tongue-in-cheek mimicry of the audacious stage shows, virtuosic displays, and hyper-masculine energy of the cock rock era. However, with the audience's ability to see the light score, and the strobe lights' interference with the LED system, a subversive interchange of anticipation, expectation, and disjunction is articulated.

KW: Database Aesthetic, Live-generated Scoring, Screen-based Notation, YouTube, Multimedia

Stuart James - Noise in The Clouds [2017]

for laptop (running customised chaos oscillator software) with viola, cello, bass flute, clarinet, 2 percussionists and electronics
Edith Cowan University

Noise in the Clouds is a laptop concerto written for laptop soloist, visual projection, sextet ensemble, and live electronics. Whilst the concerto form has been understood for hundreds of years as a work for soloist and ensemble, the writing of concertos specifically for laptop soloists has only emerged within the last few years, and therefore this combination is free of the constraints of other established instrumentations. The work explores chaotic phenomena of varying types: chaotic audio oscillators, chaotic phenomena as found in nature, and the process of iteration as a visual narrative. These expressions became a mechanism or structure for generating the sound universe, musical structure, the compositional process, the visualisation, and the notated score. The laptop soloist performs an instrument developed by the composer which derives all of its sounds from chaotic 'strange attractors' that are expressively controlled by the soloist by the 3D movements of the hands. This instrument expands on a 2D multi-node timbre morphology interface developed by the composer, applying this instead to modulating the generative parameters of chaotic audio oscillators.

Rodrigo Kendrick - Production // Re-Production [2018]

Edith Cowan University

In 1922, the constructivist artist Laszlo Moholy-Nagy wrote passionately of the creative opportunities afforded by what he called "reproductive technologies": the film, the photograph, and the phonograph: "Since it is primarily production (productive creation) that serves human construction, we must strive to turn the apparatuses (instruments) used so far only for reproductive purposes into ones that can be used for productive purposes as well."

Today the capacities of these technologies are all served by integrated digital devices carried on our persons every day, but rarely used for what Moholy-Nagy would have considered a 'productive creation'. Despite the

near-ubiquity of sensors for everything from sound through to light and radio waves, and the computational power for rapid translation and reproduction of these stimuli, our devices perform mostly organisational and social roles. An increasing tendency exists for these devices and their capacities to be utilized by governments and private interests against our best interests, but the end user it seems, cannot see the forest for the trees. This installation is driven by a re-differentiation of these reproductive capacities, and is composed of several simpler, more clearly-delineated systems presented as an annotated installation. Mechanical, integrated, and software systems react to the movement and presence of light --Moholy-Nagy's Primary medium-- within the space. Information sheets demystify these operations, with the intention of encouraging more "productive" engagements with these technologies.

The installation, which is in development as part of an upcoming residency at the Perth Artifactory, uses both visible and invisible light to explore objects and audience members within the space and provides a sonic accompaniment to their positions and journeys therein.

KW: Laszo Moholy-Nagy, Bauhaus, Installation, Experimental Theatre, Musical Reconstruction

Jean-Michel Maujean - Aguardente [2018]

for Hydrowoofer

An audiovisual exploration into Cymatics.
Aguardente translates to "fire-water" in Portuguese, and this is the name given to wine that has been distilled into a spirit. Similar derivatives from other countries include Grappa and Moonshine. This audiovisual composition incorporates audio recordings of fire and water, along with music in a 16-tone harmonic tuning system. Sound is played through a speaker filled with water. A camera captures coloured light reflected off the water surface and projects it onto a screen. As the sound vibrates the water, a variety of shapes and patterns are generated, that can provide visceral analogies to the frequency and amplitude of the sound. A programmable LED ring produces the coloured light. Each of the 24 LEDs can be independently controlled for colour and brightness and as such, lighting sequences resemble the sounds played. For example, a fire sound is visualised through an open-source LED sketch called Fire2012 [1]. Audiovisual synergies are developed and explored for an immersive experience.

This compositional demonstration is best observed in conjunction with the paper presentation: The Integration of Cymatics with Audio/Visual Composition, using the Hydrowoofer (held on Thursday, 6th December, room 3.101 at 2pm).
[1] https://github.com/FastLED/FastLED/blob/master/examples/Fire2012/Fire2012.ino

Peter McNamara - Amplitude [2013]

for solo percussion & pre-recorded electronics
University of Sydney

Amplitude for vibraphone, tam-tam and pre-recorded electronics is entirely based on the physical-acoustic properties of various pre-recorded tam-tam sounds. Each is subjected to acoustic analysis with the partials present used to create synthetic sounds in the electronic component that closely imitate the original sounds. These partials also form the basis of the pitch material used in the vibraphone, which metaphorically re-enforces and amplifies the electronic component, synthesising entirely new tone colours.

Barry Moon - Hex [2016]

for six guitars with electronics
Arizona State University

Hex for Six Guitars & Electronics: Hex is a piece for six guitars with electronics. Each guitarist has their own contact microphone, Raspberry Pi running Pure Data for processing, and speaker. The computers are synced on a LAN. This allows for the players to create spatial arrangements in the performance space. It also creates a sense of "chamber music" that is generally lacking in works for instrumental performance with computer processing.

KW: Pd, Pi Guitars, Computers, United States

Jos Mulder - Stolen Goods (Stocketus) [2017]

for acoustic ensemble and loudspeakers

Stolen Goods explores the immediate relation between acoustic instruments and loudspeakers projecting the sound of those instruments. A time delay is introduced between the two; at the start of the piece the loudspeakers wait 5 seconds before playing back the sound picked up ("stolen") by the microphones on the instruments. This waiting time is brought down to nothing over the duration of the performance. Consequentially, different functions of the loudspeakers in relation to the instruments are activated, starting with an estranging echo effect becoming rhythmical musical elements, to ultimately becoming every-day sound projection (or amplification) when the delay time is reduced to zero. The metaphor of the pile of loudspeakers has its own character expressed by a soundscape of modulated and transformed recordings of earlier versions of the work.

Josten Myburgh - The silver morning shifts their birds from tree to tree [2017]

for three performers and electronics
Edith Cowan University

The Silver Morning
In this piece, software programmed in Max/MSP organises three distinct types of sound, each generated through composites of just intoned sine tones, by randomly generating their start and end time within five two-minute long sections. The duration of each sound is proportionally much smaller than the duration of silence in the section. The three performers are then offered a very open set of conditions which express the ways they may respond to the electronic sounds, encouraging 'pairing' with the sounds in a relationship of quasi-imitation or complementation as they understand it in their own musical language. The resultant expressionless surface of the piece, with its low density of events, amplifies the significance of the appearance or disappearance of musical layers. It also forms an investigation into how a high degree of comprehensibility of the relationship between an interactive electronic situation and the performers working with it still produces complex results, and makes room for interesting nuances to become the musical surface of the work, rather than relegating the performers to the status of inputs into the software.

KW: Generative Electronics, Just Intonation, Indeterminacy, Chamber Music, Spatial Music

Ryan Smith - Study No. 55 [2016]

for 5 to 15 Perfomers

Study no. 55 explores the concept of malleable phase relationships for an ensemble of 5 to 15 performers. The term 'Malleable Phase Relationships' describes a rhythmic approach in which performers are not simply phasing with one another, but also moving in and out of phase with an imaginary time basis. The Animated Score features a series of generative no-theme variations, and may last for any duration.

KW: Animated Notation, Malleable Phase, Percussion, No-Theme Variation, Generative

Michael Terren - Silicious [2017]

acousmatic work

Siliceous is a speculation on the interior lives of rocks and mountains. Realised during an artist residency in Ólafsfjörður, Iceland, it reflects on the supernatural constructions that many cultures assign to the subterranean. Rather than invoking a single enormous entity as is commonly depicted, the impression is one of conversation, multiplicity, and communality. Siliceous also explores the limitations of mimetic sound design, in which the textures are derived from sources typically used in the context of electronic dance music.

Cissi Tsang - Water Study [2018]

for field recording, electronics and video
Edith Cowan University

Water is an element that is constantly shaping landscapes, and this power is particularly prevalent in The Burren, Ireland – a karst landscape primarily located in northwestern County Clare, Ireland. Glaciers first exposed the limestone pavement through erosion as they moved across the landscape during the Ice Age, and water still – now through rainfall – weathers away at the rock. This piece was created from a field recording of water running off part of The Burren being collected into a water tank. This field recording was then layered multiple times, with each layer manipulated by different effects, and the resultant composition was then used to create a music visualisation.

Water Study is an exploration into how a field recording can be used to create a composition, through combining the organic with digital processes. It also invites listeners to meditate on the nature of water and their relationship to this important resource. The work was created during an artist residency hosted by Burren College of Art.

KW: Field Recording, Acoustic Ecology, Audio-visual, Eco-structuralism, Music Visualisation

Lindsay Vickery - takadanobaba [2018]

for voice, violin, trumpet, alto saxophone, bass clarinet, electric guitar, prepared piano and percussion.
Edith Cowan University

Like most Tokyo metro stations, Takadanobaba is filled with the very noisy and chaotic sounds of humanity. Sometimes such places seem paradoxically empty and almost still. In this work a field recording of the station underwent an analogous stripping of sound - removing all but the most prominent frequencies and then stretched to nearly ten times its original length. The resulting "empty" recording was annotated and orchestrated for an ensemble of 8 performers. The synchronised networked scrolling score composing a range of extended instrumental techniques is presented to the performers in conjunction with a remixed recording of the source audio. The work extends my exploration of an "Ecostructural" approach into an entirely anthropogenic environment. The sonic structure of the work is derived from the sounds of the station albeit more slowly. It was written for and is dedicated to performers from the Tone List group.

Lindsay Vickery - Thalweg [2018]

for electric guitar and electronics
Edith Cowan University

A Thalweg is a line connecting the lowest points of successive cross-sections, most commonly the lowest points in a body of water. As such it is often transformed into a symbolic and transient boundary between human-defined territories. In this work a scrolling extended notation score is presented to the performer in indeterminately selected sections. A real-time spectral analysis of the electric guitarist's performance is used to determine parameters of audio processing including temporal and pitch shifting, spectral manipulation and threshing and down-sampling. The analysis data obtained in successive cross-sections is used to create a shifting remapping of the guitar's output that is dependent upon the nonlinear progression of the work.

KW: Electric Guitar, Scrolling Notation, Extended Notation, Non-linear Structure, Interactive

Martin Wesley-Smith - X [1999]

for clarinet and computer

X was composed from April to July 1999, as East Timorese militia-puppets of the Indonesian forces occupying East Timor-were freely massacring the defenceless population of East Timor. Popular resistance leader Xanana Gusmao meanwhile languished in prison. After the UN-supervised ballot on August 30, in which nearly 80% of the people chose independence, all hell broke loose, with thousands killed and most towns and villages trashed. Xanana, however, was released from jail to begin the long painful process of healing the wounds and building a new free East Timor from the ruins of what had been a colony of firstly Portugal and then, from 1975, of Indonesia. X is dedicated to this remarkable man. The images were culled from many sources. While I have permission from copyright owners to use many of them, some photographers are either unknown or uncontactable. If anyone recognises one of his/her images here, please contact me to discuss the copyright situation. The CD-ROM was made in the Electronic Music Studio of the Sydney Conservatorium of Music.

Martin Wesley-Smith - Weapons of Mass Distortion [2003]

for clarinet and computer

These days we are seeing more and more of what in 1946 George Orwell exposed (in Politics and Language) as the deceits and devices of 'doublespeak'. For example, 'collateral damage' really means the maiming and killing of innocent civilians; 'removal with extreme prejudice' means assassination; 'incontinent ordnance' are bombs which hit schools and hospitals by mistake; 'active defence' is invasion; and an 'energetic disassembly' is a nuclear explosion. During the Vietnam War, 'limited duration protective reaction air strikes' meant bombing Vietnamese villages. In Australia, asylum-seekers, who have committed no offence, are dismissed as 'illegals'. As Melbourne, barrister Julian Burnside points out: '[Language] can hide shocking truth, it can deceive a nation, it can hand electoral victory to the morally bankrupt.' Rumsfeld's word 'deconfliction' meant invading Iraq—at the cost of thousands of lives, massive damage, and billions of dollars—to stop it using non-existent weapons of mass destruction and giving them to terrorists with whom it had no links. This piece looks at the abuse of language, particularly the use of doublespeak in undermining the democracy in whose name we invaded Iraq.
'When I use a word', Humpty Dumpty said, in rather a scornful tone, 'it means just what I choose it to mean—neither more nor less'. 'The question is', said Alice, 'whether you can make words mean so many different things'. 'The question is', said Humpty Dumpty, 'which is to be master—that's all'.
Photography in the videos is by George Gittoes and others; cartoons by Steve Bell, Alan Moir, Peter Nicholson, and others; some lyrics by Peter Wesley-Smith; recorded choir: Canberra Choral Society; recorded tenor soloist: David Hamilton; concept, music, programming, script etc: Martin Wesley-Smith. Weapons of Mass Distortion was commissioned by Ros Dunlop with funding assistance from the Music Board of the Australia Council, the Australian Government's arts funding and advisory body.

Martin Wesley-Smith - Papua Merdeka [2005]

bass clarinet and computer

In 1969 Indonesia gave the people of West Papua, or Irian Jaya as the Indonesians called it, a so-called 'Act of Free Choice' to determine whether they wanted their country to become part of Indonesia or achieve independence. One thousand and twenty two people were chosen and told that if they didn't vote for Indonesia, they would be shot. The vote was unanimous. The UN shamefully ratified it, preferring not to see the real situation: the brutal theft of a people's land, resources, and lives.
This piece is about the West Papuan people and their thirst for freedom. Almost all the sources I've used in creating it were begged, borrowed or stolen from others. They include Penny Beaumont, Sheila Draper, Ros Dunlop, Don Bennetts, Gerry Errante, Steven Feld, Lynne Hamilton, of Prowling Tiger Press in Melbourne (who published West Papua—Follow the Morning Star by Ben Bohane, Jim Elmslie and Liz Thompson, an inspiring book of superb texts and photographs), David Kirkland, Jonny Lewis, Jonathon Mustard, Edward Smith and Alice Wesley-Smith. My thanks go to all of these people. Thanks too to David Bridie, Louise Byrne, Andrew Kilvert, and Rob Wesley-Smith. Apologies to those whose names have been inadvertently omitted. Two other books provided valuable information: Jim Elmslie's Irian Jaya Under the Gun (Crawford House Publishing (Australia) Pty Ltd) and Peter King's West Papua Since Suharto (University of New South Wales Press). I used the beautiful West Papuan anthem Hai Tanah Ku Papua. Flags, used with permission, came from http://www.theodora.com/flags and Robert Lowry's Shall We Gather at the River? Most of the bird of paradise paintings were by Rowan Ellis (1848-1922). Finally, thanks to Ros Dunlop for commissioning the piece; and, for funding assistance, to the Music Board of the Australia Council, the Australian Government's arts funding and advisory body.