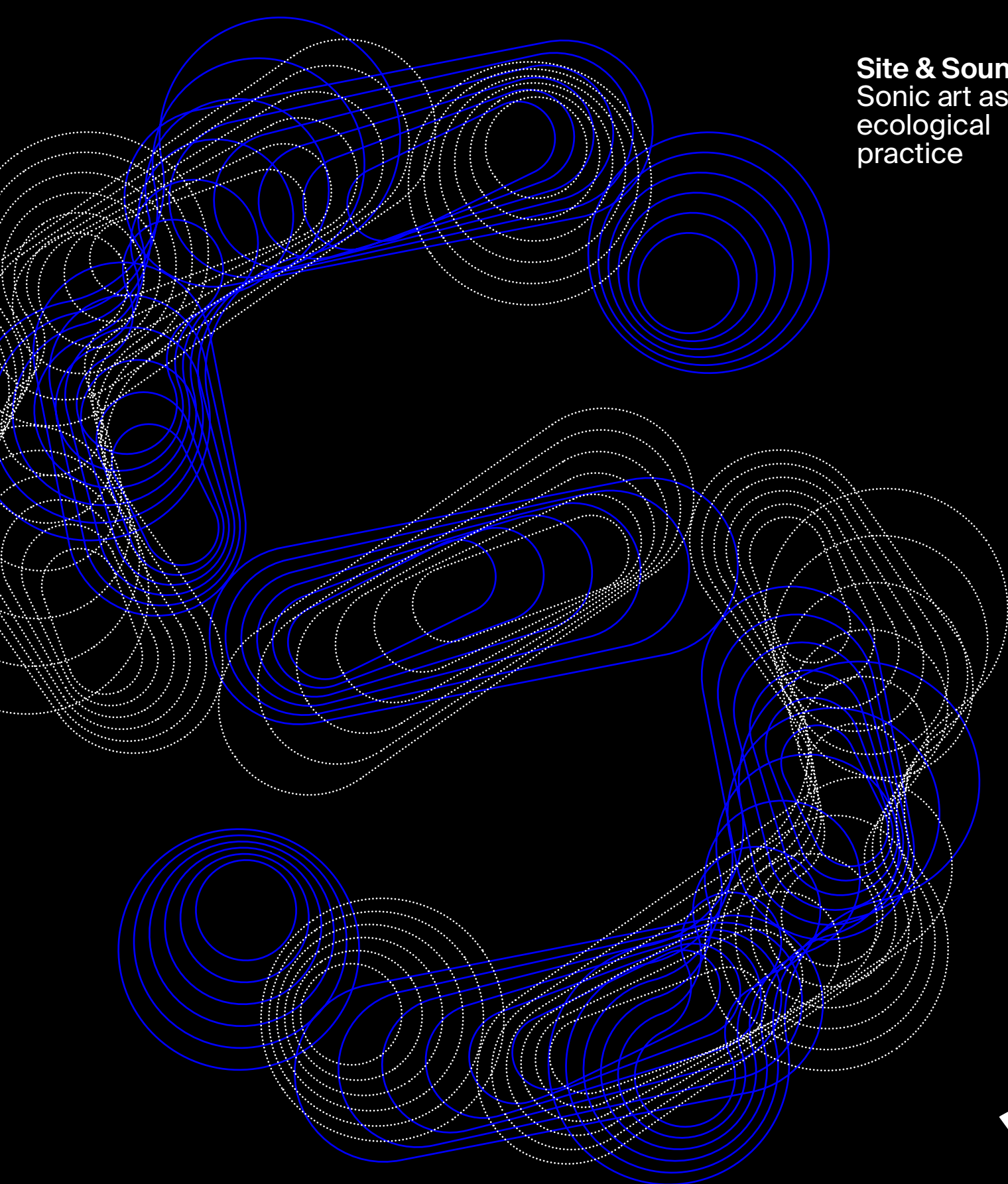
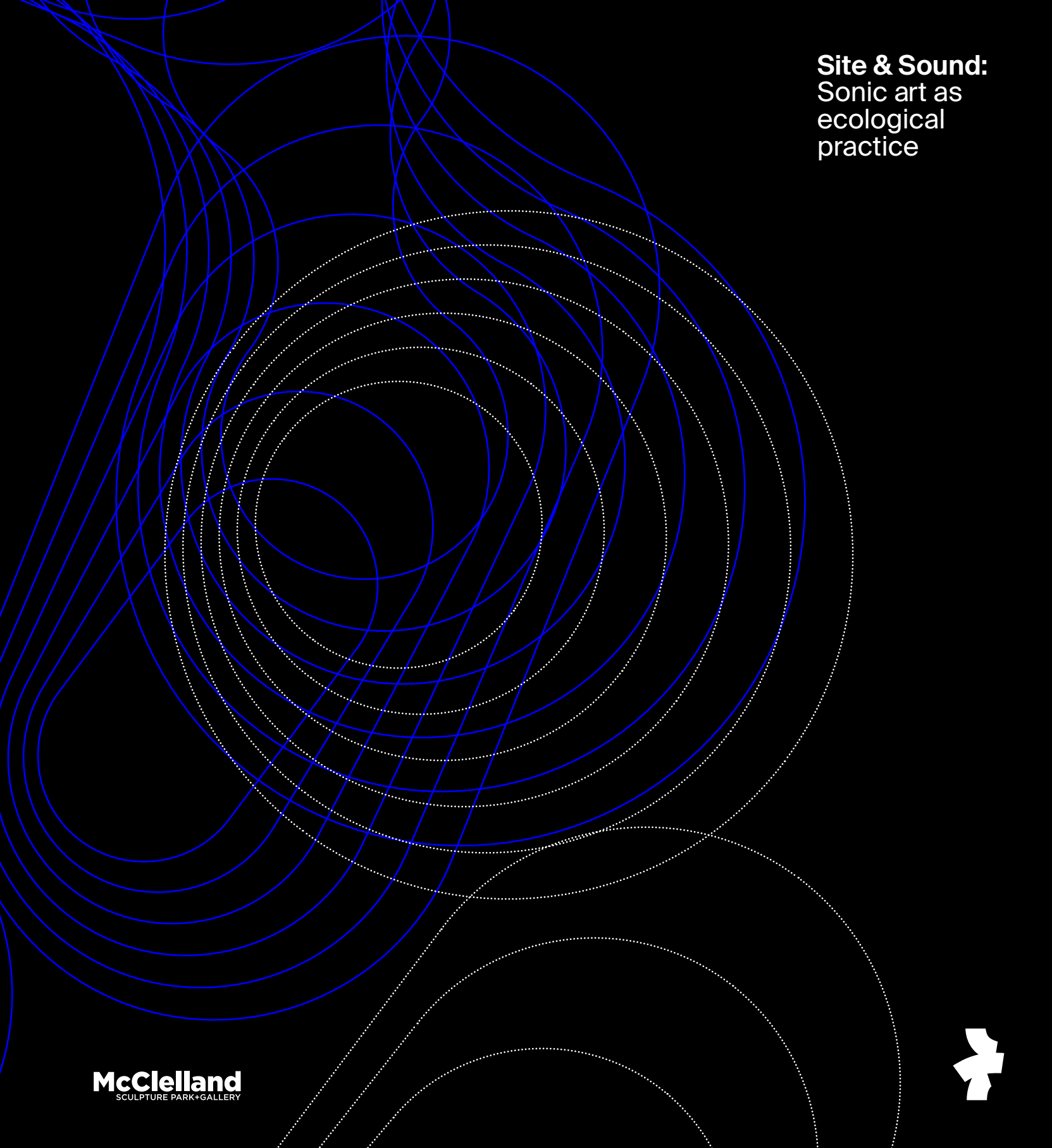


Site & Sound:
Sonic art as
ecological
practice





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Foreword

Lisa Byrne
Director

McClelland
is very pleased to launch
its 50th Anniversary year exhibition
program with *Site and Sound: Sonic art as
ecological practice*. Curated in collaboration with
RMIT University, this exhibition, at the very cutting edge of
what spatial practice can mean in the twenty-first century, is
a fitting and timely commencement for McClelland's anniversary
year program showcasing sculpture in our nationally significant,
open-air exhibition setting.

The exhibition presents a selection of rarely heard works from the RMIT
collection alongside new, site-specific commissions. The RMIT Sonic
Arts Collection launched officially in 2013 and is a unique enterprise: to
date, there are no other comparable collections dedicated to acquiring,
commissioning, presenting, and promoting scholarship around sound
art in Australia. Though initially acquisitions for the collection reflected
the variety of RMIT's inner city location, field recordings and
environmental soundscapes emerged as a major curatorial strain
during the early stages of its inception. Now the collection
continues to expand with new and significant explorations
of sound as an abstract or sculptural medium, works
for performance, and other areas of sound-based
research, and ecological awareness
remains one of its most important
ongoing themes.

As the bushfires,
COVID-19 and increasing urgency
of climate action mounted throughout 2020,
the ecological concerns of the exhibition, which were
largely already implicit in the works selected, took on greater
emphasis. The works presented address a wide range of themes—
for example the melting of the polar icecaps; species extinction and loss
of biodiversity; noise and light pollution; the encroachment of urban on natural
spaces; and global warming. Yet for the heaviness of this subject matter, *Site &
Sound* is not a pessimistic exhibition. Rather it provides an opportunity for audiences
to listen more closely and in doing so, forge a more meaningful connection to their
environment. It encourages us to evaluate our place within the ecology of the world and
the role we can play in understanding and preserving it.

McClelland was pleased to collaborate with a diverse range of academic, artistic and
organisational partners for this exhibition, including RMIT Culture, SIAL Sound Studios, RMIT
Master of Design, Innovation and Technology's *Sensing Nature* studio, and Liquid Architecture.
We were also delighted to host Madelynne Cornish as an artist-in-residence to develop a
new site-responsive project titled *Borderlands*. With the 'new normal' of exhibition visitation
at McClelland upon reopening in December 2020, we have reconfigured the experience of
this exhibition to be a rolling release of projects across the park to begin with, then into
the galleries, and punctuated by commissions, performances, and workshops across the
summer program.

My sincere congratulations and thanks to the project team on the realisation of this
ambitious project: curators Simon Lawrie, Jon Buckingham, and Lawrence Harvey;
and exhibition and technical designers Ross McLeod and Simon Maisch; and all
McClelland staff and volunteers. Thank you also to our exhibition partners
and sponsors RMIT Culture; Besen Family Foundation; Creative
Victoria; Frankston City Council; Elisabeth Murdoch Sculpture
Fund; Yamaha Music Australia; and Selby Acoustics; for
their generosity in supporting this exciting and
timely presentation of ecologically-
based sonic art.





Site and Sound: Sonic art as ecological practice,
Installation view. Exhibition design Ross McLeod.
Photo Christian Capurro.

**Site & Sound:
Sonic art as
ecological practice**

Jon Buckingham,
Lawrence Harvey,
and Simon Lawrie

Not to put too fine a point on it, but we're in trouble. Arctic sea ice has thinned by more than ten percent in the last thirty years. One fifth of all countries are at risk of ecological collapse due to diminishing biodiversity. Global temperatures continue to rise at an alarming rate. In the summer of 2019–20, Australia suffered through some of the worst bushfires in recorded history. Faced with perhaps the greatest crisis of our time, artists have been increasingly using their work as a platform to engage with issues such as climate change and loss of biodiversity; sound has become a critical medium in achieving this.

Site & Sound: Sonic art as ecological practice posits sound as an inherently ecological medium—proposing that our aural comprehension embodies ecological modes of thought that can hopefully fuel an intuitive understanding of today's urgent and complex environmental issues. There is a strong tradition of environmental engagement among soundscape composers: from as early as the 1960s, sound artists have been recording, preserving, and re-interpreting natural soundscapes, often with a particular emphasis on species and habitats considered at risk or endangered. By listening closely, we can learn to recognise and respond to the subtle signs of irreversible ecological change.

Just as visual art is not just what is shown, but the way we take meaning from what we perceive, so sound art is about how as much as what we hear. As opposed to music or speech, which are intentional and constructed, theorist Christoph Cox suggests that sound art utilises raw noise as its source. This 'ceaseless sonic flux', bird calls, the churn of traffic, hissing desert winds, or radio static from the depths of space: anything at all might become objects for the sound artist to compose into a meaningful composition.¹

Among our senses though, we often prioritise the visual, which is not without consequence. As artist David Dunn notes, we, 'tend to privilege our understanding of reality through our sense of sight ... Aural experience is usually pushed further into a background perception, and we pay for this diminishment with a loss of sensitivity towards certain aspects of our environment.'² Understanding sound art therefore requires listening—an active process that David Ingram notes plays a vital role in the formation of ecological awareness: 'the dominance of the visual sense in human beings encourages a sense of separation between... human perceiver and things in the world ... [The] sense of hearing overcomes the limitations of sight by enacting the fundamental ecological principal of holistic connectedness.'³ Which is to say, soundscapes, field recordings and ecological sonic art are capable of establishing a relationship between the listener and the environment they are experiencing. Sound can reveal aspects of our surroundings and interactions between its inhabitants that are either unnoticed or unknowable via other senses. As musician and acoustic ecologist Bernie Krause has noted, 'a picture may be worth a thousand words, but a soundscape is worth a thousand pictures.'⁴

¹ Christoph Cox, 'Sound Art and the Sonic Unconscious', *Organised Sound*, vol.14 (1), Cambridge University Press, 2009, pp. 19–26.

² David Dunn in Andrea Polli, 'Soundscapes, sonification, and sound activism', *AI & Society*, vol.27 (2), 2012, p. 259.

³ David Ingram, *The Jukebox in the Garden: Ecocriticism and Popular Music Since 1960*, Amsterdam, Ropi, 2010, p. 59.

⁴ Bernie Krause, interview with Leah Tonino, 'Call of the wild: Bernie Krause on the disappearing music of the natural world', *The Sun* website, September 2014, <https://www.thesunmagazine.org/issues/465/call-of-the-wild/>; accessed 19 August 2020.

The practice of deep listening is central to First Nations cultures in Australia, where it holds a specific and expansive meaning as a reciprocal form of ethical and ecological connection, care, and respect. Bundjalung and Kullilli artist Daniel Browning describes it as 'an ethical approach, and a deeper state of awareness, as much as a relational way of communicating' that 'extends to our relationship with Country, which has a "voice" although it is often characterised as a music.'⁵ For American composer Pauline Oliveros, the term deep listening refers to a holistic exercise in 'extending receptivity to the entire space/time continuum of sound.'⁶ Considering these diverse connotations in the context of this exhibition, deep listening can broadly refer to a keener awareness and focused attention, both aurally and ethically.

Learning from such an approach has never been more urgent, particularly at a time when the sounds of nature are aestheticised and commoditised for mindfulness applications and meditation soundtracks, as antidotes to the stresses of a neoliberal society that is rapidly destroying those same environments. The contemporary "picture" of our environment is infinitely more complex, and through a more patient and attentive listening we might hear more closely the wider ecological, social, or political networks that define our precarious being in the world.

Many works in the exhibition relate to pressing issues in natural ecology, such as the precious importance of water (Leah Barclay's *Hydrology* 2016); polar regions as harbingers of climate change and global warming (Philip Samartzis and Eugene Ughetti's *Polar Force* 2018/2020, and Jana Winderen's *Spring Bloom in the Marginal Ice Zone* 2017); and natural disasters and their effect on human populations (Frans Ari Pasetyo's *City Noise – Sound (Art) and Disaster* 2006). Other works consider issues relating to urban and social ecologies, such as confronting and reimagining the colonisation of Australia (Susan Frykberg's *A Day of Hours* 2013, and Paul Carter and Christopher Williams' *Cooee Song* 1990/2019); or the calm and chaos of urban environments (Philip Brophy's *Atmosis* 2013, and Nigel Frayne's *What U Might Have Heard* 2016).

Raising a deeper awareness of environmental issues is one of the goals at the heart of *Site & Sound*, though certainly not the only one. It is our hope that this exhibition not only helps build a personal understanding, but that it provides a window onto ordinarily inaccessible facets of our world. It isn't often that one has the chance to experience the bloom of phytoplankton in the Barents Sea near the North Pole, or the singing of insects as the sun sets over the Namib Desert. *Site & Sound* celebrates not only the immersion that such works afford, but also their considered design, the technology that goes into creating them, and the applications of these recordings outside an aesthetic capacity.

⁵ Bundjalung and Kullilli artist and writer Daniel Browning elaborates the significance of this practice in his essay 'The cultural context of listening', on pages 12-13 of this catalogue.

⁶ Pauline Oliveros, *Deep Listening: A Composer's Sound Practice*, iUniverse, Inc., Nebraska, 2005, p. 1.

⁷ Ecoacoustics Research Project website, https://ear.cnrs.fr/?page_id=250; accessed 3 November 2020.

⁸ See Anders Gyllenhaal, 'With bioacoustics, conservationists try to save birds through their songs', *The Washington Post* online, 12 January 2020, https://www.washingtonpost.com/science/with-bioacoustics-conservationists-try-to-save-birds-through-their-songs/2020/01/10/8b800048-0c9a-11ea-bd9d-c628fd48b3a0_story.html; accessed 19 August 2020.

⁹ Kenneth V. Rosenberg et al., 'Decline of the North American avifauna', *Science*, 4 Oct 2019, Vol. 366, Issue 6461, pp. 120-124.

¹⁰ *ibid.*

¹¹ See Michael Quinton, David Benyon, and Dr Iain McGregor, 'To uncover the secrets of exoplanets, try listening to them', *The Conversation*, October 22, 2016, <https://theconversation.com/to-uncover-the-secrets-of-exoplanets-try-listening-to-them-67392>; accessed 19 August 2020.

Passively recording sonic environmental data can be less intrusive than using a camera or video recorder, and can cover vast spatial and temporal parameters. The resulting soundscapes not only reveal more accurately what is and what is not there, but they can also show detailed ecological activity and dynamic changes within ecosystems over time and space.

In this Anthropocene era of increasing habitat loss, urban sprawl and climate change due to human activity, the study of bioacoustics—the production, transmission and reception of animal sounds, including those of humans—has become indispensable to many fields of conservation, including ornithology. With the convergence of artificial intelligence, and remote technological and data networks, the recently established field of ecoacoustics is now used for monitoring everything from the effect of industry, bushfires, and poachers on bird populations.⁷ For example, the distant gunshots of illegal hunters can be recorded and located, and the relative loudness of bird calls in urban environments can be measured in comparison to the same species in its natural habitat and increased levels of human sound.⁸ Importantly, field recordings can show what is absent in a soundscape. Recently it was noted that roughly one third of North American bird populations, around three billion birds, has vanished in the last fifty years.⁹

The development of microphone technology has allowed us to gather information from remote areas, and at frequencies that humans cannot otherwise hear. From aquatic to celestial environments, sound can reveal hidden patterns in our environment—from the nuanced complexity of whale song being equivalent to human language,¹⁰ to astronomical phenomena such as solar winds, coronal mass ejections, gravitational waves and atmospheric conditions.¹¹ In this instance, a process known as sonification is used to convert vast amounts of information into sound, which can then be analysed at once and in great detail as the human ear is more sensitive to minute variation than the eye.

Site & Sound draws on these diverse histories and current practices to reveal the connections between deep listening, field recording, acoustic ecology, natural science, and spatialised sound in contemporary art. The exhibition comes about as an amalgam and distillation of the interests and resources of both RMIT University and McClelland Sculpture Park and Gallery. As one of the country's preeminent centres for sculpture and spatial practice in the natural environment, McClelland offers a perfect venue: sound art simultaneously bridges and blurs the lines between sculpture, music, and design. Meanwhile, the majority of the works in the exhibition have been drawn from RMIT's existing Sonic Arts Collection, which to date remains Australia's only dedicated public collection for sound art.

Site & Sound presents these works alongside newly commissioned projects and works by artists whose concerns mirror those of McClelland and RMIT. It explores the varied ways that sonic art can constitute an ecological practice and allows us to reconsider the nature of our relationship with, and response to, our environment and the other species which share it.

**I hear everything: the
cultural context of
listening**

Daniel Browning

Do we
listen culturally?
Although sound is a wave,
and might be heard objectively, it
is the interpretation—where meaning is
constructed, from stimulus to cognition—that
can alter “what” we hear. Language (or more
properly, speech) is deeply cultural, a formalised
system of communication to create meaning through
sounds articulated by the human voice. But what
about non-linguistic sound—for instance, a bird call or a
thunderclap? Do these sounds, apparently devoid of linguistic
meaning, have *cultural* meaning? Clearly, there are human and
ecological aspects of listening. The First Nations cultural practice
of “deep listening” extends to both human or anthropogenic and
ecological or natural sound. Deep listening is defined by relationality
and extends to our relationship with Country, which has a “voice”
although it is often characterised as a music.

As a sound recordist I have spent my professional life trying to capture the sonic environment, in an attempt to recreate—or at the very least, evoke—a sense of place. As a blackfella, I experience Country as a montage of sounds across a range of frequencies, subjectively. On my first trip to Lake Mungo in far south-western New South Wales however, I experienced something that left me utterly confused; under a domed sky, with nothing to diffract the sound waves I heard vibrations that no microphone could pick up. In the dry terminal lake that once teemed with life I felt something like stillness and the unnerving absence of sound. But perhaps the most dramatic soundscape was a dry, bone-coloured trackway which is generally covered to protect it from the windblown sands and creeping erosion. The fossilised trackway is a text, recording the movement across Country thousands of years ago of several ancestral groups—a hunting party tracking kangaroos, a family with a wandering child and an agile one-legged man, travelling alone. Pintupi trackers who still practised the bush science, itself a form of listening or attunement, were brought to Lake Mungo to interpret the footprints. The story they retold is one of the oldest narratives yet discovered on the continent.

In the urban sonic environment, we are attuned to unwanted, anthropogenic noise—but are we alert or unconscious, and what sounds do we filter out? Listening is political—it is active, responsive, and dialogic. In 2011, I was on a trip recording atmosphere in a clearing high in the Strzelecki Ranges on Gunnai country in west Gippsland. An artist who I was with that day was carrying a set of clapsticks in a pouch and spontaneously began to play.

As the sound echoed an unseen kookaburra perched in a gum began chorusing, as if drawn by the sound. A Noongar elder from the Wheatbelt region told ABC journalist Bill Bunbury that ‘once you get back...

to where your ancestors were there’s this
feeling, it’s as if they’re there with you.

You walk out into the bush—it’s just
beautiful. You can actually hear
the ants breathing, you
know?’¹



¹ Daniel Browning, ‘You can hear the ants breathing’, *Awaye*, ABC Radio National, broadcast 9 October 2010.

² Daniel Browning, ‘Listening to country’, *Awaye*, ABC Radio National, broadcast 20 July 2019.

³ *ibid.*

⁴ R. Murray Schafer, *The soundscape: our sonic environment and the tuning of the world*, Destiny Books, Rochester, 1977, p. 10.

Some
years later I was on
the tranquil Kumano River
towards the Pacific coastline of
the Japanese island of Honshu when
a black kite, or *tobi*, circled the flat-bottom
tourist boat. The tour guide briefly paused her
commentary on a small handheld megaphone,
and the bird began singing a lilting accompaniment.
Another artist I was travelling with in Japan remarked
that in the sacred pine forests of the Kii Peninsula he heard
doors opening and closing, while another told me that in the
silence he “heard” a rainbow cresting over Lake Mungo.

Deep listening is an ethical approach, and a deeper state of
awareness, as much as a relational way of communicating. Vicki
Couzens, a Kirrae Wurrung/Gunditjmara artist and language revivalist
from south-western Victoria, describes the reciprocal nature of listening:
‘Listening is important because everybody has an individual need to
be heard, which comes with being recognised and acknowledged. And
collectively, we need to be heard.’²

According to Dr Lou Bennett, a Yorta Yorta/Dja Dja Wurrung scholar and
musician, the practice is also a balm to counteract noise: ‘Deep listening.
It’s about reaching in, into your soul. Opening that up. It’s about closing your
eyes. Hearing your breath, in and out and being aware of all the sounds that
are around you, man-made or not. It’s like a meditation’, she told me in an
interview near the Malmsbury reserve on Dja Dja Wurrung country in 2011.³

According to acoustic ecologist R. Murray Schafer it was during the
Renaissance that the ear gave way to the eye as the primary source for
gathering information in the Western imagination. He cites the appearance
of visual representations of God (for instance in Michelangelo’s Sistine
Chapel) when previously the entity had been imagined as sound or
vibration.⁴ In a First Nations context Country has both a spiritual dimension
and an identity, for want of a better term, just as rivers or forests might be
said to have personhood and legal rights to protection. This subjectivity
could infer that Country has a “voice”. When we listen attentively to
Country it is possible to hear everything, even at low frequencies, in the
absence of anthropogenic noise. But the urban environment is also
Country, although here its voice or music is often barely audible.

Later in the forest around the village of Nadro in the foothills
of the Italian Alps, our sleep was disturbed by the insistent
rapping of a woodpecker on the window of our cabin.

Whenever I return home to the far north coast of New
South Wales, the piercing almost discordant cry of the
yellow-tailed black cockatoo welcomes me as if to
say ‘brother, where have you been?’. It is oddly
human to attach meaning to such apparently
random nonlexical encounters with the
natural world. We are being moved,
in the emotional sense, and
we must remain alert.



Acoustic ecology in Australia

Dr Leah Barclay

¹ *Voices of Nature*, 12–17 October 2020, Brisbane. See Australian Earth Laws Alliance website, <https://eartharts.org.au/voices-of-nature-2020/>; accessed 8 November 2020.

The
Australian
Forum for
Acoustic
Ecology (AFAE)
was formed in
1998 and represents
members across
Australia who aim to
promote a culture of
listening and raise awareness
of our sonic environment. As
an affiliate of the World Forum
for Acoustic Ecology (WFAE), we
are connected to a global network of
likeminded individuals and organisations
and many of our members are recognised
internationally for their work in acoustic
ecology and climate action.

Over the last twenty years, acoustic ecology has evolved across Australia as a highly interdisciplinary, dynamic field with increased engagement across environmental sciences, architecture, health, digital technology, creative arts and humanities. The last decade has seen a strong emergence of socially engaged practice and sonic activism along with a rapid increase in academic research with large-scale national projects attracting significant support and funding. As an organisation, we support and encourage discussion, debate, education, practical activities, events and research all revolving around developing a better understanding of our sonic environment. We place a strong focus on exploring the value of sound and listening in times of uncertainty. The AFAE exists to support and promote the work of our members and strengthen and enhance the value of acoustic ecology in Australia. This includes increased engagement with environmental activism and active collaborations with artists, scientists, industry and community.

In 2020, our projects have included participating in *Reveil*, a global arts project and international web broadcast that relayed the sounds from live microphones tracking sunrise in multiple locations across the planet for International Dawn Chorus Day. AFAE members hosted live streams across the country from rainforest canopies and aquatic ecosystems in Queensland to remote bushland and rural environments in Victoria and South Australia. The twenty-four-hour live stream revealed compelling acoustic ecologies across the planet with many locations in COVID-19 lockdowns. These distinctive changes in the soundscape acted as a catalyst for many conversations and collaborations around the impact of anthropogenic noise in our communities, the value of listening and sound as a measure for environmental health and the importance of our sonic environment in understanding changing ecosystems.

Most recently, the AFAE partnered with the Australian Earth Laws Alliance (AELA) to host the *Voices of Nature* national exhibition.¹ AELA shares many similarities with the AFAE and recognises the value of ecological sound art in drawing a wider attention and awareness to changing environments. AELA's mission is to increase the understanding and practical implementation of Earth centred governance in Australia, with an interdisciplinary focus across law, economics, education, ethics and the arts. AELA and the AFAE both acknowledge the need for new governance systems, particularly with the dramatic changes experienced in 2020 and the ramifications of climate change we will continue to face in the coming years. We believe our societies need to create new ways of living and working as we transition away from our reliance on fossil

fuels
and
recognise
that humans
are just one
part of our
interconnected
world. The *Voices
of Nature* exhibition
brought together acoustic
ecologists and ecological
sound artists to encourage
the exploration of the concepts of
“voice”, “standing”, “representation”,
and “agency” of the natural world
within human governance systems. The
exhibition also recognised the increasing
value of sound art and acoustic ecology as
key mediums for communicating, exploring
and understanding non-human voices and
hidden ecosystems.

In parallel to these activities, national interest in our soundscape continues to expand through academic research such as Jordan Lacey’s work on urban soundscape design to assist in the management of the built environment, and *The Acoustic Observatory*—a continental-scale acoustic sensor network, recording for a five-year period with 400 continuously operating acoustic recorders collecting approximately 2PB of sound data across multiple Australian ecosystems.² This emerging research builds on long-standing acoustic ecology projects in Australia such as the *Biosphere Soundscapes* initiative,³ Tristan Louth-Robins’ Fleurieu Sound Map,⁴ and Anthony Magen’s sound walks including annual expeditions through the kaleidoscopic soundscapes of the city with Melbourne International Jazz Festival. We have also seen a rapid increase in engagement with communities and schools across the country exploring acoustic ecology from both scientific and artistic perspectives with workshops, sound maps and field recording expeditions.

The AFAE recently celebrated our twentieth anniversary—a milestone that involved various events, projects, collaborations and reflections on acoustic ecology in Australia. During this period, we acknowledged that while activity has increased recently, practices of acoustic ecology and deep listening have been integral to Indigenous knowledge systems and communities who have listened sustainably with the environment for over 60,000 years. We encourage all of our members to directly engage with local Indigenous communities, ask for permission before recording and ensure appropriate acknowledgements of Country are always included as part of projects and events. The AFAE believes listening to First Nations communities and being guided by Indigenous knowledge systems is one of the most important aspects of climate change mitigation and adaptation. We hope organisations such as the AFAE can provide a platform to amplify Indigenous voices and encourage respectful interdisciplinary dialogue and action as the ecological crisis continues to cause incomprehensible damage to our planet.

As part of the twentieth anniversary of the AFAE, we published a special edition of *Soundscape – the Journal of Acoustic Ecology*,⁵ which provides a snapshot of current research and projects across Australia. The journal opens with a listening invocation from Gunggari scholars Vicki Saunders and Gayle Munn—a meditative prelude and an opportunity to listen and acknowledge the Country where you are reading. The three feature articles showcase established Australian practitioners who are all pioneers of their field, pushing the boundaries of sound and interrogating our sonic relationships with place. Ros Bandt writes about ‘The Acoustic Sanctuary’—a remote property in Fryerstown, Victoria that has evolved over two decades as a dedicated

place
for
listening,
a place to
contemplate our
sonic habitat, and
a sound laboratory
for her innovative and
interdisciplinary creative
practice. Bandt calls for a
deeper understanding and
respect for our sonic heritage
and further engagement
with sound culture. Acclaimed
percussionist, composer and sound
artist Vanessa Tomlinson asks why
place is so critical in music making and
proposes that compositions that intentionally
interact with the environment change the way
we listen and leave markers of cultural, social and
environmental conditions at particular junctures in
time. Her article examines various approaches sound
artists use to engage with the environment and suggests
that this work is well placed to reawaken our custodianship
of the land and assist us in shaping our future. Finally, Nigel
Helyer presents four case studies on his projects at Bundanon,
a three-thousand-acre property in the Shoalhaven river valley in
rural NSW, Australia. The artworks were created as part of a three-
year Australian Research Council Linkage Grant project, *When Science
Meets Art: an environmental portrait of the Shoalhaven River Valley*, and
brings together environmental science, new technologies and cultural
history to communicate the diverse environments of Bundanon.

This edition of *Soundscape* also captured the work of emerging scholars in
Australia including Jesse Budel, who has recently completed his PhD adapting
the principles of soundscape ecology to ecological sound art practice, and Vicki
Hallett who reflects on a recent field recording expedition in South Africa where
she had the opportunity to perform at Maboel Rock surrounded by curious wildlife.
Collaborative projects were also profiled including *Listening to Country*, a research initiative
exploring the value of acoustic ecology with Aboriginal and Torres Strait Islander women in
prison.⁶ This project involved an interdisciplinary team of researchers working with women in
Brisbane Women's Correctional Centre (BWCC) to produce an immersive audio work based on
field recordings of natural environments for the purpose of stress relief, relaxation, cultural connection
and well-being.

Acoustic ecology continues to expand across Australia with increased engagement across the arts and
sciences. There is a rapid increase in scientific studies using sound to monitor the health of the environment
and the accessibility of non-invasive recording technologies means community engagement and citizen
science is now more viable nationally. Recent research also demonstrates the interdisciplinary possibilities of
acoustic ecology in contributing to health and wellbeing and the critical importance of sound in our natural and urban
environments. Ecological sound artists across Australia continue to play a significant role in drawing a wider attention
and awareness to our sonic environments through installations, performances and collaborative projects. Sound artists
drawing on environmental field recordings have an unprecedented opportunity to reveal changes in ecosystems that are
often hidden or ignored. The AFAE recognises the value and possibilities of ecological sound art in addressing some of the
most critical issues of our time and will continue to support interdisciplinary collaborations between artists, scientists and
communities to move towards planetary regeneration and environmental engagement through sound.

² The Australian Acoustic Observatory website, https://acousticobservatory.org/home_1/; accessed 8 November 2020.

³ Biosphere Soundscapes website, <http://www.biospheresoundscapes.org/>; accessed 8 November 2020.

⁴ 'Fleurieu Sound Map', Tristan Louth-Robins website, <https://tristanlouthrobins.wordpress.com/category/fleurieu-sound-map/>; accessed 8 November 2020.

⁵ Leah Barclay, ed., *Soundscape - The Journal of Acoustic Ecology*, Vol. 17, 2019, World Forum for Acoustic Ecology.

⁶ Listening to Country website, <http://www.listeningtocountry.com/>; accessed 8 November 2020.

**The development
of environmentally-
focused field recording,
soundscapes and Sound
Art in Australia¹**

Linda Kouvaras

“The blurring of the edges between music and environmental sounds may eventually prove to be the most striking feature of all twentieth-century music.”²

Over the past century, Sound Art—that is, music from the experimentalist tradition based on “noise”—has morphed from a celebration of sound-*qua*-sound to a focus on what sound *means*. From the Italian Futurists’ *Intonarumori* (or some 27 genera of Noise Machines) to John Cage’s “emptying-out” (of authorial intent) / “filling-in” (of the unfettered, ambient sounds in-situ) gesture in his *4’33”*: *Tacit, for Solo Instrument* of 1952, with—along the way—Australia’s own Percy Aldridge Grainger’s pioneering “Free Music” experiments begun in 1938, the focus was on sound displaced from Western, Classical music inheritance, revelling in abrading what *that* tradition held dear, with its conservative precepts of “beauty,” artistic genius and academy-produced “excellence.”

In *4’33”*, it would seem that environmental randomness has triumphantly dictated the form and constitution of a “work.” But in the ensuing era, experimentalists come to evince a postmodern desire ‘to fill Cage’s “silence”, to actually load it.’¹³ And a vital aspect of that “loading” has included a deep concern for the environment in a pointed, focused, *determined* way, in order to *commentate on* the world around the art and the artist—indeed, to make the art *out of* environment. This essay is a select overview of such developments in Australian environmentally-focused Sound Art.⁴

Australia boasts the CSIRAC (Commonwealth Scientific and Industrial Research Organisation Automatic Computer) (1949–64), the first computer programmed to play music⁶ and the Fairlight Synthesizer, the first of the sampling technologies, invented in 1975 Sydney.⁷ One of Australia’s first permanent sound sculptures, Peggy West-Moreland’s *The Singing Ship* (1970),⁸ conceived to coincide with the bicentenary of Captain James Cook’s landing at Emu Point in Queensland, is a concrete structure of Aeolian pipes emitting chordal drones created by wind currents, accompanied by a time capsule containing a directive: ‘to be opened May 2070.’⁹ *Ship* brings to light a number of aspects that came to prove important to environmentally-based artworks: it is outdoors (as opposed to inside a concert hall), “nature” plays the work (favourable weather conditions allowing), it is permanent, and the hidden message is also often key.

Postmodern experimentalist conceptual grounding finds its anarchic, creative groove through Melbourne’s collectivist CHCMC (Clifton Hill Community Music Centre) (1976–1983), launched by Ron Nagorcka, Warren Burt and John Campbell, coinciding with like-minded collectives Sydney’s AZ Music (1970–76) and Brisbane’s One Flat Gallery.¹⁰ CHCMC had a “welcome-all,” no-entry-fee policy, an anti-elitist DIY ethic and iconoclastic humour; their stated mission, ‘to change *culture*,’ was to be achieved through ‘small-scale efforts giving people opportunities to be part of cultural life rather than consumers of “product”’: ‘I witness Nagorcka attaching and swinging small speakers on lengths of strings, and running around the room placing portable cassette recorders in various places to—‘with heavily overlaid metaphorical subtext—“change people’s perspectives”.’¹²

Since these landmark moments, Australian sound art composers both feed off and also innovate new takes on—and departures from—international currents.

Desire to make artworks that preserve in sound the natural world—and critique its destruction—is fostered by the World Soundscape Project (1993–).¹³ Water is a frequent feature in Australian Soundscapes—not surprising, perhaps, in this ‘land of droughts and flooding rains,’ as Mackellar’s iconic poem reminds us. Many of Ros Bandt’s (co-WSP founder) Sound Sculptures fervently draw attention to imperiled Indigenous locales and their enormous significance. One such example is the Murray River, celebrated in her *Voicing the Murray* (1996), which she describes as ‘an acoustic ecology,’¹⁴ and a ‘unique and critical habitat for the whole of Australia,’ degraded by ‘by-products of man’s overuse of the environment, erosion, salination, and cultural dislocation for indigenous peoples.’¹⁵ The immersive soundfield comprises ocean, bush-land and other natural environments, providing a context for voice recordings of ancient and modern languages of Indigenous peoples of the Mildura district’s Yorta Yorta and Barkindji languages, telling of colonial displacement of language and land. Sounds of endangered species add to the recorded tapestry.¹⁶ Her most recent *Barwon Listening* (2020), a collaboration with Vicki Hallet, has a similar agenda and equally rich elements.¹⁷

Sound Sculptures that interact with their environs do not all deal with pressing ecological concerns. Some are outright humorous, some whimsical. Yet all enjoin us to reflect on our own concepts of cultural values, whether from traditions of the past, or the present—or an admixture of both. Sherre DeLys and Joan Grounds’ *Transpoe[sic]* (1994), an interactive installation at the Glasshouses, Royal Botanic Gardens in Melbourne,¹⁸ of semi-disguised, semi-hidden phantasmagoric flora: a 1920s women’s pink, suede shoe, out of which pokes an undeniably phallic stamen of an anthurium, and recordings of human “birdcallers”, offset by Robert Schumann’s nineteenth-century piano work, *The Prophet Bird*. Audiences call out “cooey,” receive a random response; actual birds sing in reaction. Participants are beguiled into exploring connectivity and dissolution of borders between and within species, art history, classical music, the present, quotidian objects, nature in its splendour, the human-made and the natural.¹⁹

A very cheeky installation mounted in a highly charged urban environment, Canberra's City Walk, is the Situationist-inspired²⁰ *The Master's Voice* (2001-), by Sonia Leber and David Chesworth.²¹ These sound artists play in spaces already populated by human foot-traffic, who will unsuspectingly interact with an artwork, and be '[shaken] ... out of their daily reveries for a moment.'²² What these passers-by hear are typical commands, remonstrations and cajolings by everyday pet or working-animal owners—"Good boy!" / "Chook-chook!" / "Trrrrrt!" / "Heel..." / "Come on, are you gonna hide again?" But the postmodern joke lies in the fact that any animal sounds have been excised in the editing, so the voices appear to be addressing the passers-by, who immediately wonder whether the calls are directed at them. The usual environmental setting for both the site of political activity and a human interacting with their animal, is turned upside down here: the enclosed intimate, private space for human/pet interchange is now very public—and completely decontextualised; the seriousness of the parliamentary context is now humorously absurd. Situated in the country's national capital, in a city district called "Civic", the listener is invited to muse on the question of the controlling, "masterful" voice.

Another Sound Artwork to make mischief with the urban environment, upturning a different form of call and response from *Master's Voice*, is *No Answer* (2006), a sound installation by Philip Brophy and Martine Corompt. Mounted in a laneway within the heart of Melbourne's CBD, eight custom-made "payphones" are affixed many feet high up on a building. Passers-by hear intermittent phones ringing, spilling from these near-obsolete forms of technology and communication. But, who would be calling, and why the phones are beyond reach, remain mysterious, all of which prompts the conditioned response to reach for the receiver—thereupon inviting the questioning of such conditioning, when no receiver is there to be picked up. An *alter*-postmodern gentle dig is, however, clear: proudly terming the work "anti-interactive," the creators self-reflexively critique one of the doxas—Sound Art's celebration of ready audience accessibility and actual interactivity that modern technology has been able to bring about in Sound Sculptures—of the very tradition out of which this work emerges.²³

One heart-warming facet of the development of environmentally-based Sound Art over the ten-plus decades of its evolution is the righting of imbalances in gendered representation and access for people who do not happen to be born cis male. Just ten years ago, Tara Rodgers noted that ‘the terms *technology* and *music* are often marked as male domains, and the trenchancy of associated gendered stereotypes seems to gain force when these fields converge in electronic music.’²⁴ Second-wave feminism, however, has given rise to a steady burgeoning of women innovators in Sound Art (as several of my examples herein attest)²⁵—along with the visibility of creatives who do not fall into a binary gender category.

Amy Hanley, for example, makes Sound Art to negotiate relationships of space, bodies, technology and contemporary ecologies of gender, sexuality and queer expression/s.²⁶ The Butlerian-inspired, *Sirmadamsir: Oriented Performativity, or, What Does Judy Want?* (2019) ‘speculates how the indexing of gender and sexuality may be reconfigured through our intimacies with recognition software and speech-based communication technologies’ through a post-Lucier, haunting soundscape of a growingly sinister, repeated phrase: “YOU BEGAN INSIDE A BODY, DIFFERENT TO THE ONE YOU’RE IN NOW.”²⁷ Hanley both revels in *and* critiques technological advancement—and what it signifies for our performative sense of identity.

When one thinks of the environment associated with airports, one might well think of noise pollution, the stress of long-distance travel, the alienation of negotiating the airport. But Lawrence English presents a very different take on the flight travel experience in his field recordings of the enormous rushing runway sounds of take-off and landing at Brisbane Airport, realised in his collaborative Airport Symphony (2007), contemplating the notions of sound in contemporary air travel: ‘Aircraft noise is like pornography for jetrossexuals ... Living under the flight path is like having the best seat in the theatre.’²⁸

English thus presents an unproblematised, unabashed celebration of a particular type of noise, returning us at the end of this essay to Percy Grainger and the Futurists of a century ago, making “music” out of the sonorous environment in which they lived.²⁹

- ¹ Much of the material for this article originally appeared in Linda Ioanna Kouvaras, *Loading the Silence: Australian Sound Art in the Post-Digital Age*, Abington, Oxon: Routledge, 2017 (1st publ. Burlington Vt.: Ashgate, 2013).
- ² R. Murray Schafer, *The Tuning of the World*, 1st edn, New York: Knopf, 1977, p. 111.
- ³ Kouvaras, *Loading*, p. 4.
- ⁴ In Kouvaras, *Loading*, Chapter 2, I explain why I refer to post-1970s experimentalist noise-based art as “Sound Art,” to distinguish it from the earlier, pre-postmodern “Experimentalism.”
- ⁵ For further resources on the pre-mid-1970s history of experimental music in Australia, see, for example, Kouvaras, *Loading*, Chapters 1-3.
- ⁶ See ‘Music Pioneer’, Museums Victoria website, (2002), <http://www.museum.vic.gov.au/CSIRAC/pioneer/index.aspx>; accessed 19 September 2007.
- ⁷ By Kim Rylie and Peter Vogel. See ‘Fairlight’, Synthmuseum website, (2000), <http://www.synthmuseum.com/fair/index.htm>; accessed 18 September 2007.
- ⁸ With Steve Kele, builder; George Cain and David Thomas, acoustic designers.
- ⁹ Ros Bandt, *Sound Sculpture: Intersections in Sound and Sculpture in Australian Artworks* (With CD) (N.p.), Craftsman House Fine Art, 2001, p. 33.
- ¹⁰ See Kouvaras, *Loading*, Chapter 3.
- ¹¹ Nagorcka, quoted in Jon Dale, ‘Once Upon a Time in Melbourne’, *The Wire* 272, October 2006, p. 34. Emphasis in original.
- ¹² Nagorcka, quoted in Dale, ‘Once Upon a Time’, p. 35.
- ¹³ Schafer, *The Tuning of the World*, 1977.
- ¹⁴ Also see Ros Bandt, ‘Hearing Australian Identity: Sites as Acoustic Spaces, an Audible Polyphony’, Australian Sound Design Project (2001), <http://www.sounddesign.unimelb.edu.au/site/NationPaper/NationPaper.htm>; accessed 12 March 2005.
- ¹⁵ Bandt, ‘Voicing the Murray.’ Also see Bandt, ‘Hearing Australian Identity’, and Kouvaras, *Loading*, Chapter 5.
- ¹⁶ Ibid.
- ¹⁷ See Ros Bandt, Hearing Places website, <http://www.hearingplaces.com/barwon-listening>; accessed 28 October 2020.
- ¹⁸ It was exhibited as part of *Earwitness: Excursions in Sound*, curated by Sonia Leber, 17 November–3 December 1994.
- ¹⁹ DeLys and Grounds, *Transpoes*.
- ²⁰ See Guy Debord and Donald Nicholson-Smith, *The Society of the Spectacle*, New York: Zone Books, 1994.
- ²¹ Sonia Leber and David Chesworth, *The Master’s Voice* (2001–), <http://www.waxsm.com.au/mv.htm>; accessed 27 October 2020. See Kouvaras, *Loading*, Chapter 6.
- ²² Sonia Leber, email exchange with the author. See Kouvaras, *Loading*, Chapter 6.
- ²³ See Philip Brophy and Martine Corompt, *No Answer*, Australian Sound Design Project (2006), <http://www.sounddesign.unimelb.edu.au/web/biogs/P000609b.htm>; accessed 25 October 2020. For my explication of the “altermodern,” or post-postmodernism in Sound Artworks, see See Kouvaras, *Loading*, Chapter 8.
- ²⁴ Tara Rodgers, *Pink Noises: Women on Electronic Music and Sound*, Durham, NC: Duke University Press, 2010, p. 2.
- ²⁵ For but one collection of the expanse of such creativity, see Audible Women website, <https://www.audiblewomen.com/>; accessed 20 October 2020.
- ²⁶ ‘Amy Hanley’, Audible Women website, <https://www.audiblewomen.com/?listing=amy-hanley>; accessed 20 October 2020.
- ²⁷ Amy Hanley artist website, *Sirmadamsir: Oriented Performativity or What Does Judy Want?* (2019), <https://www.amyhanley.org/sirmadamsir-oriented-performativity-or-what-does-judy-want-2019.html>; accessed 3 November 2020.
- ²⁸ Queensland Biennial Festival of Music (2007), http://www.queenslandmusicfestival.com.au/01_cms/details.asp?ID=1; accessed September 24, 2009. See ‘Lawrence English talks Airport Symphony (October 17, 2008)’, <https://www.youtube.com/watch?v=Eyxmf6Xucs>; accessed 29 October 2020.
- ²⁹ See Kouvaras, *Loading*, Chapter 8.

Drawing in the sonic environment

Sophie Gleeson

Imagine the sound of a typical urban environment. Maybe you hear the continuous sound of traffic, the repetitive beeping of car horns, or the thin sound of aircrafts you cannot see overhead, slowly appearing and disappearing. Perhaps you hear the ubiquitous drone of building air-conditioner vents, reverberant birdcalls from unseen places, or the emergency sirens that come from behind and in front of you at once.

Each of these sounds have perceptible locations, distances, qualities and meanings. As a listener you absorb these sounds differently to the next person. You like and dislike some sounds and pointedly ignore others; you might remember one sound and completely forget the rest.

When we listen in to the sonic environment we hear not only sound sources, but also those sources' behaviour in the environment and their effect upon us, the listeners. The sonic environment, or the "soundscape," is composed of the multitude of sounds that unfold around us in space and time. It is an 'instrumentarium, a store of sounds, which brings forms to social, perceptual, cultural and spatial configurations.'¹ Sound travels, moving through and around materials and reflecting off surfaces to reveal the spatial dimensions of the environment. Our understanding of the sonic environment is also shaped by its reception—by the ways in which we perceive, process, value and remember sounds, and through how we choose to listen, or not listen. Milena Droumeva writes that there is no one "soundscape" of any given place, but a range of individual aural experiences.² While we each may hear the sound of traffic in the city, our listening experience of it will always be a personal one. So how can we begin to attune to these illusive dimensions of the sonic environment? Sound is dynamic, immaterial and fleeting, difficult to capture and even more so difficult to talk about. One way of capturing it—graphic sound mapping—approaches this challenge.

Graphic sound mapping is a form of thematic cartography that takes sound as its subject matter.³ Graphic sound maps are visual representations of sound typologies, characteristics and spatial relationships that do not include audio.⁴ These maps allow you to capture and express the sonic environment, and in doing so "see" it.

Graphic sound maps may take a number of different, often highly regulated, forms: "noise maps," for example, display objective sound measurement levels across a given area. These maps usually focus on the loudness of unwanted sounds, such as noise from ground and air traffic.⁵ While these maps are useful for expressing quantifiable sound parameters, they do not capture the more complex sonic environment qualities that we experience every day. To express these dimensions we have to map the sonic environment from the listener's perspective.

Listener-focused graphic sound maps capture the sonic environment as it is perceived. At their simplest, they draw upon one or more listener perspectives to visually sketch sounds within an environment. While this approach to mapping is much less common in research and professional practice, practitioners have developed a limited number of listener-focused techniques. In the 1970s, the influential research group the World Soundscape Project produced a range of listener-focused maps, constituting one of the most extensive and influential published collections of sound maps.⁶ These hand-drawn maps represented significant soundscape features as experienced by researchers and local communities in Vancouver, Canada. This approach to graphic sound mapping grew out of musical notation practices, with researchers even using musical symbols to express sound qualities, such as the pitch of different telephone exchanges and ship foghorns.⁷

Moving away from an aesthetic and musicological approach to a cognitive one, French-Swiss researcher Pascal Amphoux of the Centre for Research on Sonic Space and Urban Environment (CRESSON) in Grenoble, France, published a listener-focused graphic sound mapping technique in the 1990s known as 'sonic mind maps.'⁸ Sonic mind maps developed from cognitive mental mapping techniques and research by urban planner Kevin Lynch in the 1960s.⁹ This form of sound mapping seeks to capture its maker's sonic memory of a city or place and their preferences and personal evaluations regarding that sonic memory.¹⁰ But the act of mapping is not limited to using our memory to recall sounds out of context. We can also map listening experiences *in situ*, drawing on our active, in-the-moment perception of the environment we are within. One example of this can be found in David Paquette's study of a neighbourhood's acoustic community in Vancouver, Canada, in 2004.¹¹

The process of creating a graphic sound map can be an incredibly simple one—a listener needs only a piece of paper, a writing tool, and space and time to listen and draw. There is no agreed upon system or technique for visually representing the sonic environment, and nor should there be. If sound is experienced by each person differently, it follows that sound should be captured and expressed differently, too.

The listener may therefore represent sound in any number of ways—through words, shapes, symbols, lines and/or icons. The listener might use arrows and lines to indicate sound movement, and sound contours to denote their thresholds of perception.¹² Variations in line thickness or icon size may express volume, and the sketched position of sounds may express perceived location and distance information. Written commentary may be included to describe sound qualities, listener memories or preferences, or written language may be limited or absent entirely. The maps may choose to highlight what is heard or, alternatively, what *cannot* be heard. Maps may also express key locations, streets, buildings, activities and daily routines.¹³ Graphic sound maps can be produced by an individual or several participants, offering insight into one person's or, potentially, whole communities' experience.

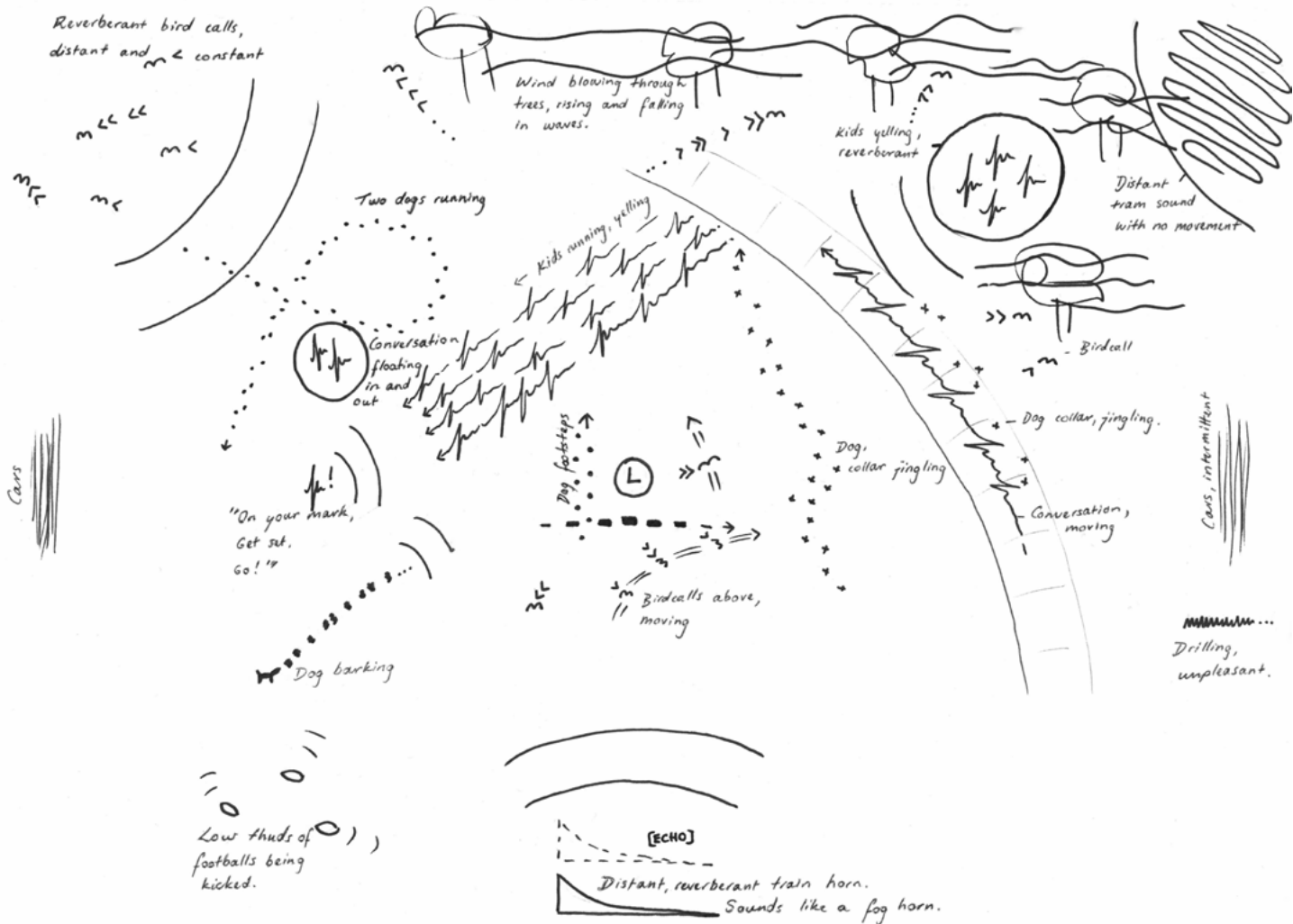


Figure 1:
Example of listener-focused
sound map

A hand-drawn graphic sound map of Fleming Park in Brunswick East, Melbourne/Naarm. I produced this map by listening and drawing what I perceived over a period of fifteen minutes on a sunny Monday afternoon in October. The "L" in the centre of the map represents me, the listener. Sounds are mapped relative to my listening location.

I draw from Amphoux's "sonic mind map" technique and use sound mapping *in situ* in research projects to study everyday urban sonic environments from my own perspective. I find sound mapping to be an indispensable tool for revealing the complexity of the sonic environment around me, highlighting the diversity of sounds I perceive at any given time, and unfolding my perception of and reception towards them. Analysis of sound maps reveals sound types and counts; perceived rhythms and cycles of sounds and activities; combined sonic spatial behaviour such as sound movement, localisation, distance and height information; and subjective sound qualities and values expressed through iconography and written commentary.

I also use graphic sound mapping when teaching soundscape and design courses at RMIT University to interdisciplinary students. I have found graphic sound maps to be especially useful for developing auditory spatial awareness and critical listening skills in visually-oriented students. The practice of sound mapping ties the sonic to the visual and provides a communication tool for students to express their experience.

Graphic sound mapping brings simplicity to a complex subject matter, offering a visual language for sonic experience. It may serve as a useful tool for fields operating at the intersection of sound and the environment, such as urban planning, landscape and architecture design, and sound art. Each listener has their own 'internal soundscape,'¹⁴ whether they are attuned into it or not. Through graphic sound mapping we can begin to unpack it, exploring our listening habits, perceptions and preferences. As sound artist Isobel Anderson writes, sound maps 'have the potential to chart personal and collective, imagined and remembered, and invisible and physical relationships between sound, the world, and ourselves.'¹⁵

¹ Björn Hellström, *Noise Design: Architectural Modelling and the Aesthetics of Urban Acoustic Space*, Göteborg: Bo Ejeby Forlag, 2003, p. 21.

² Milena Droumeva, 'Soundmapping as Critical Cartography: Engaging Publics in Listening to the Environment,' *Communication and the Public*, vol. 2 (4), 2017, p. 338, <https://doi.org/10.1177/2057047317719469>; accessed 20 October 2020.

³ Peter Tschirhart, 'Sound Maps and the Representation of Audible Space,' PhD thesis, University of Virginia, 2013, p. 19.

⁴ Droumeva, 'Soundmapping as Critical Cartography,' p. 341.

⁵ Tschirhart, 'Sound Maps,' pp. 102-103.

⁶ Tschirhart, 'Sound Maps,' p. 97. To view sound maps produced by the World Soundscape Project, see R. Murray Schafer, ed., *The Vancouver Soundscape*, Vancouver: A.R.C. Publications, 1978; R. Murray Schafer, ed., *Five Village Soundscapes*, Vancouver: A.R.C. Publications, 1977.

⁷ R. Murray Schafer, ed., *The Vancouver Soundscape*, Vancouver: A.R.C. Publications, 1978, p. 33, p. 43.

⁸ See Björn Hellström, 'The Sonic Identity of European Cities: a Presentation of the Work Conducted by the Swiss-French Researcher Pascal Amphoux,' in *Soundscape Studies and Methods*, ed. Helmi Järviuoma and Gregg Wagstaff, Helsinki: The Finnish Society for Ethnomusicology, 2002.

⁹ Pascal Amphoux, L'identité Sonore des Villes Européennes, CRESSON; IREC (Institut de Recherche sur l'Environnement Construit), 1993, p. 12 (my translation); Solène Mary, 'Assessment of Urban Soundscapes,' *Organised Sound*, vol. 16 (3), 2011, p. 248, <https://doi.org/10.1017/S1355771811000252>; accessed 20 October 2020. See Kevin Lynch, *The Image of The City*, MIT Press, 1960.

¹⁰ Hellström, 'The Sonic Identity of European Cities,' p. 63.

¹¹ See David Paquette, 'Describing the Contemporary Sound Environment: an Analysis of Three Approaches, Their Synthesis, and a Case Study of Commercial Drive, Vancouver, BC,' Masters thesis, Simon Fraser University, 2004, p. 54, <http://summit.sfu.ca/system/files/iritem1/8672/b51323679.pdf>; accessed 20 October 2020.

¹² Tschirhart, 'Sound Maps,' p. 90.

¹³ Paquette, 'Describing the Contemporary Sound Environment,' p. 54.

¹⁴ Jean-François Augoyard, and Henri Torgue, eds., *Sonic Experience: a Guide to Everyday Sounds*, trans. Andra McCartney and David Paquette, Montreal: McGill-Queen's University Press, 2005, p. 9.

¹⁵ Isobel Anderson, 'Soundmapping Beyond the Grid: Alternative Cartographies of Sound,' *Journal of Sonic Studies*, vol. 11, 2016, <https://www.researchcatalogue.net/view/234645/234646>; accessed 20 October 2020.

Thresholds of listening in McClelland Sculpture Park

David Chesworth

In May 2020, I was invited to visit McClelland Sculpture Park to develop a new artwork for this exhibition. The park was closed due to COVID-19 restrictions and so had not had any visitors for weeks. It felt different to my previous visits, the atmosphere somehow more transparent. Wandering along the empty pathways through the park woodland, I paid more attention to the tiny sonic details coming from the surrounding bushland, which was occasionally buffeted by gusts of autumnal wind rustling the foliage. The normally vibrant artworks, nestled within their individual woodland clearings, were still and withdrawn. It was as though nature and culture had reversed their roles; the trees and grasses were performing as the silent sculptures watched on.

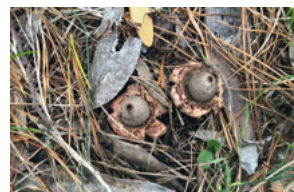
The COVID-19 restrictions had caused a silencing of the usual sonic ambience of the surrounding traffic and suburbs. This lower noise floor had revealed quieter, subtler sounds close by, no longer masked and absorbed by the urban soundscape. The expressivity of these sounds, together with the movements caused by the wind, expanded my frame of interest in the park itself. A tree branch gently hissed in the breeze as its leaves rubbed together en masse; small stones scrunched underfoot; a thornbill flitted across the tree canopy; a lizard scattered leaf litter; wind rustled through a swathe of sedges. These delicate soundings disclosed the woodland's evolving sonic perspective.

Near the low sedges and grasses I noticed many mushrooms of different shapes and sizes. It was the right season for them, and I speculated that their great abundance near the pathways was because there had been no foot traffic to inhibit their growth. Mushrooms are the visible fruits of vast underground fungal colonies. These colonies comprise chthonic vegetative networks of millions of fine threads called mycelium that spread out over great distances, linking together the root systems of different woodland plants, exchanging nutrients and chemicals and sharing information.

It is well known that experimental composer John Cage was a passionate collector and consumer of mushrooms. It was important for him to be able to differentiate between kinds of mushroom so as not to be poisoned, although one foraging trip did indeed land him in hospital. Cage's exacting knowledge of mushroom identification may surprise some, given his reliance on chance processes when composing his music. Cage would have embraced the stochastic sounds of the McClelland woodland, which also would have stirred his interest in mushrooms.



Much has been written about John Cage's composition *4'33"* (1952). The work is usually performed in a concert context. A performer walks on stage and sits at a piano while opening a written score. The performer raises and lowers the keyboard lid between timed musical sections, all the while the keyboard remains unplayed. In its early performances, the ensuing silence from the piano confused audiences but provoked a shift in listening, as their attention moved from the piano towards random experiential components in the surrounding concert hall—creaks, shuffles, murmurs. *4'33"* initiated a shift from the expected expressive frame of the concert performance towards a heterogenous and evolving frame that referenced the surrounding environment.



In a comparable way, COVID-19's urban silencing expanded my framing of expressive content to include the stochastic, sonic and performative components of the surrounding woodland. These various framings were multiple and simultaneous: visual, sonic, tactile and olfactory. Some frames were nested inside others, so that sounds framed durations, and the breezes that cajoled the woodland into performance also pushed against me. Over time, the expressivity of McClelland Sculpture Park hinted at an enveloping woodland sentience, one that was being nourished by invisible fungal networks underfoot. This sentiment felt present within the various framings, coalescing into an ambiance that was increasingly cinematic as my chosen journey through the park contributed to the unfolding montage and dialectic.

Like Cage, I also collected some mushrooms to take home. I wondered whether some of them might offer me a woodland experience of a different kind, one that was hallucinogenic. However, I put the mushrooms aside as they were unnecessary. A soundwalk is already mind-altering in profound ways—a focus on listening can permanently realign our engagement with the surrounding world.

My contribution to this exhibition is presented not as a physical or sonic addition but, rather, as an invitation to engage with the kinds of sounds that are already present in the park. I have prepared a set of listening guidelines—soundwalks—that are available as printed pages or online, to serve as entry points for your own sonic journeys through the park.



Walking While Listening

<https://www.mcclellandgallery.com/walking-while-listening/>

Walking While Listening is a series of four simple, self-guided soundwalks that can be used to discover and enhance our listening skills. During the exhibition, they are available as a written guide. The soundwalks can be downloaded from the above link.



Walking While Listening aims to shift our dependency on spatial and visual experience towards an appreciation of durational and auditory experience. Once we become aware of the rich sound world that surrounds us, we find that there are many ways to listen in to what it has to say.







Mushrooms in McClelland Sculpture Park, 2020.
Courtesy David Chesworth.

Unheard relations
Liquid Architecture

Joel Stern,
Amy Hanley,
Thembi Soddell,
Tina Stefanou,
and Xen Nhà

The following dialogue—between artists Thembi Soddell, Tina Stefanou, Xen Nhà, and Amy Hanley, and curator Joel Stern—took place across WhatsApp, Zoom and Google Docs in November 2020. The purpose was to explore and develop common threads in each artist’s practice, which might inform the preparation for as-yet-unrealised contributions to Liquid Architecture’s program at McClelland Gallery as part of the exhibition, *Site & Sound*. As such, this text has a provisional, speculative quality, serving as an introduction of the artists to one another, and the reader, as well as an articulation of possible directions for the work to come. By the time this text is published and circulated, the commissioned audio pieces will have also been realised. In that sense, we are writing for future readers, including ourselves, with a more complete understanding of what we mean to say.

Act One
Scene One

Outside. A pollen-rich wind blows creating a dynamic force of smell, sound and feeling. Five hearts beat around a bowl of words.

**buzzing sounds omit from the centre of the room—they move in closer*

**someone sneezes*



Act One
Scene Two
I am sitting in a Zoom

**a pigeon coos its contribution*

**chair creaks in a quiet open space*

Xen Nhà: My first big public performance was with my mother. We made a piece inspired by Trinh T. Minh-ha, incorporating poetry and songs. Having her be part of the event was a nice way to start doing more public work, and it felt necessary at that moment.

My work extends from community radio, as presenter of 3CR's Queering the Air and Women on the Line, to making documentaries and zines. In all these things, I'm interested in relationship-building, and connecting with people through sound. I'm especially interested in power dynamics and sound, in relation to race and gender, ideas I have explored through workshops, for instance 'sound bodies', which I facilitated with a friend at a feminist centre in Los Angeles. We used listening exercises and walks to think about place and gentrification, inviting people to explore how their bodies interacted with the soundscape, the sounds of gentrification, sounds that made them feel safe and comfortable. We shared stories of how 'body sounds' reflected our experience of race, gender and body image.

What meaning do we assign to the creak of a chair, and, by implication, the person sitting on it? I'm interested in how we relate to our own bodies and the bodies of others, through sound.

Amy Hanley: I came to working with sound in different ways including music, sonic fictions and radio. I'm interested in space and sound, but also the way that sound intersects with environments and bodies. My practice-based research applies queer ecology and queer theory to thinking about listening environments. Queer ecology, for me, is a way of reading space (substitute the term 'reading' with whatever you like; listening, sensing, seeing, touching, etc), of considering the listening body as always situated, relational. For me, the relationships between listening, sound, queer expression/s and environments also function in less cerebral ways that correspond to my embodied experiences as a queer person.

Joel Stern: My background is connected with experimental music, sound art, and other so-called avant-garde traditions. This work was thrilling and exciting when I first encountered it as a student, but as I got more familiar with the form and content I started to realise that what I was interested in was not so much sound itself (if such a thing can exist), but, rather, signification, what sound meant to me, what it stood for, triggered mentally and conceptually, for instance ideas of freedom, complexity, disruption. This opened me up to a more semiotic way of listening and producing; sound as a text to be read, listener as active reader, an emphasis shift from production of sound, to politics, ethics, aesthetics of listening. At Liquid Architecture I stage investigations into listening modalities and strategies that I hope can be shared and used. At the outset of a project I work with contributors to develop shared questions and references, and to incrementally proceed in exploring these in ways distinctive to each artist.

Thambi Soddell: (feeling uncomfortable) “I’m not good at talking about my work” (eyes shift to the right, reducing visual noise to help them focus) “I started twenty years ago in a Media Arts course, focusing on photography, but soon shifted to sound because of its invisible, ambiguous magic. I work in the realm of *musique concrète*, exploring abstract textures, but from the perspective of its emotional resonance (which is not a very ‘*musique concrète*’ thing to do). My doctoral research explored the idea of the first-person madness narrative, how to translate this into abstract sound. I work with tension and anxiety, but also beauty and relaxation, not as binaries, but as elements that co-exist in the same moment. Abstract sound can reflect the complexity of feeling and affective knowledge that I can’t articulate through words. That’s what draws me to it.”

Tina Stefanou: It all started a million years ago (in a whispered tone)... I don’t consider myself a “sound artist”, I have a background as a singer as a vocalist, playing in bands, throwing myself around the stage, and in experimental music groups. As I’ve pursued art I have been trying to figure out how the spirit and materials of the voice might exist beyond Western conceptions of sound and music, in, for instance, sculpture, stories, images, movement and magic. I often work with my family and with animals, grounded in a multi-species and ecological perspective. I have been collaborating with a herd of elderly horses that live near my house, singing with them for a few years now, making instruments with them, costumes constructed from bells and keys. I work with them to record how their bodies move in sound and space. This is a very slow process of sewing, *l(ear)ning* new skills, workshoping, listening to and with bodies, and making sure the horses are safely introduced to new sonic materials. For me the sonic doesn’t begin with human audibility. Sound is inherent in all things.

Act One
Scene Three
Bird Drama

The humans all stand so they can see, through their screens that they all have legs and buttocks.

Each human has a sounding body that exists in distant spaces, communicating, yet no words can be heard, only birds.

Joel begins with a provocation (not a tweet).

Joel: How might we understand acts of listening and recording in an artistic context as social practice?

Tina: When is something not social? There is something being 'heard'—so a relationship is always already there.

Thembi: Could you define social practice for me?

Joel: Essentially, it is art grounded in the production of social relations and community rather than aesthetic objects.

Thembi: I'm not sure then. I'm reclusive, work alone, and shy away from collaborative or community based practice, I'm not good at understanding sociality in art. So I'm curious, how would you see my work as a form of social practice? Is it even?

Joel: I understand this question as, 'can a reclusive and solitary way of working with sound still be a social practice?' I would say that the moment in which people listen to your work, and connect with you through the medium of sound, is one in which something profoundly social is shared.

Tina: In my work, I think relationally, in terms of a push and pull of materials, meanings and experience, with the intention of sharing this with others. We can expand the idea of the 'social' part and the sense of our work being human centred—for only a human type of sociality.

Thembi: If the sociality of social practice is expanded to include works that are only social in the moment of sharing, how is that different from art that disregards social context? What then is the point of that category? Also, in an exhibition that is responding to the climate crisis, what are the implications of focusing on human-centred practice and sociality?

Joel: As Tina put it, listening itself is ultimately a social act, grounded in anthropocentrism, for example, that which is audible to humans. Thembi, I consider your work 'social' because it communicates ideas of trauma, dread, and emotional intensity which can only be understood within a human framework. Sound therefore becomes a medium for sharing intimate experiences of psychological states.

**The song "I Wanna Know What Love Is" is playing on the radio in the back of the room—it begins to distort*

A round of applause echoes from the local stadium.

Tina: There is an opportunity to explore the phenomenological implications of the 'heard', the relationship of sound to the listener, and the sonic agencies that point to 'something' beyond human perception. For me, 'the self' is a multiplicity (the phrase *ecologies of selves* tickles her right ear), and there is social and artistic value in giving voice to these multiple states.

Thembi: I often think about how people's personalities are known to just be a mix of the five or six people we spend the most time with.

Tina: (laughs) This makes me think how my chooks and doggy are the five 'persons' I have spent the most time with these past months and what that means for my human relations. Moving beyond human exceptionalism there is a subjectivity of relational interdependence with other-than-humans. I think in terms of more-than-human subjectivity, where the isolating weight of humanism is transformed, 'feeling into' those interdependencies—the polyphonic self always being-with-others—regardless of whether you are making, recording, moving alone or with other bodies.

Thembi gardens between messages and becomes enthralled by a 'bird drama' happening in a tree in their backyard. They were drawn to it by the intensity of the sound, the sound of a wattle bird's wings flapping as it bullied a honeyeater to get out of the tree. But the honey eater wasn't having it, jumping from branch to branch standing firm in its right to its place. This went on for hours. Yet when Thembi sat close to the tree, the birds kept to themselves. Thembi wondered "in what way are they experiencing themselves in relation to me? What is our relationship through their own perception? And why does this new relationship change their behaviour and its outcomes?" This helps Thembi understand how their work might be a social practice, a thought they share with the group.

Tina begins moving her head mimicking one of her chooks and growling in a canine-like fashion—Thembi joins her.

Amy, who's been listening whilst eating some dragon fruit, chimes in:

Joel: We might think of this as a dialogue between 'listening subjects' and 'sonic objects'.

Thembi: My sound compositions are a form of communication, a way of sharing feelings or thoughts that can't be put into words (and feelings are also thoughts, in my opinion). I communicate to myself and others through abstract sound. But it is very personal in how each person interprets and understands this communication. It's filtered through their own values, ideas, knowledge, experiences and bias. There is no singular meaning for abstract sound, so the interpretation becomes a reflection of each listening-self, and who they are in relation to me.

Amy: Regarding 'social practice', I feel that while some artists actively align with this term, most practices could be considered 'social' in certain ways. I wonder if this reflects the ways that sociality is valued more broadly by humans, specifically, focusing on human-to-human relationships, rather than human relationships with land, waters, and/or other non-humans, forces and entities. As such, the term 'subjectivity' is not something I use often, because, for me, this leads us towards unproductive binaries like object/subject, mind/body, or 0101. I question how language delivers forms of thinking that separate 'human' from 'environment'. What terms, language and questions might trouble this thinking, and how might we embed them in our practices?

A choir of cockatoos quietly enters the room and surrounds Joel, inviting him into a gentle choral. He opens a book, looking for a half remembered quote.

Thembi: I started using the term 'experiential listening' to describe my compositional process for this reason. As shorthand for listening that accounts for the entirety of what it means to experience sound.

Joel: This sounds quite close to what Pauline Oliveros means by 'deep listening', which she has variously defined as "a practice that is intended to heighten and expand consciousness of sound in as many dimensions of awareness and attentional dynamics as humanly possible", and also "a way of listening in every possible way to everything possible, to hear no matter what you are doing."

Thembi: 'Experiential listening' is a bit different though, in that it's describing my compositional process and the dialogue that forms between myself and the sound while composing. It doesn't include hearing everything, but rather what you want to hear. It's a nod to experiential therapy, in which experiential listening aims to uncover the 'felt sense' of what the speaker (patient/client) is attempting to communicate. The therapist 'listens' to more than the speaker's words, but also to gestures, and the feelings they evoke in the therapist etc. In this analogy, I become the sound's 'therapist', attempting to uncover the felt sense articulated by the sound, using that to further shape the composition. We are in dialogue, relating to and changing one another.

Tina hums to the sound of dispersed words, begins to gurgle water.

Xen: I am still figuring out what terms suit me. I definitely don't like the binary of objective and subjective. I prefer the term 'relationality'. I feel that my work is grounded in the practice of relationships. I take inspiration here from writers Gloria Anzaldúa and Trjnh T. Minh-Hà who speak about sound, documentary and the liminal space. Trjnh T. Minh-Hà has expressed her desire to "speak nearby, rather than about". Beautifully said, complex in practice.

Thembi: Yes! I love how the term relationality switches focus from my experience (as in experiential listening) to the place between my experience and that of others. It's only a slight shift but an important distinction.

Act One
Scene Four
I am thinking of a Zoom

Joel thinks back to a Zoom conversation between the group, and a provocation from Xen about the meaning of the word 'site' and its 'cold' rationality, how it sounds like something imposed upon land. The 'felt sense' of the group's response was one of conceptual expansion. He wants to hear more.

Joel: Could we each say something about what we understand as 'site' in reference to site-specificity or site-responsiveness? Possible sites I have been thinking of; inside one's own head, in a field of social relations, everywhere or nowhere at once, grounded in specific locations, tethered to Country or place...

Thembi: Perhaps the site I work with is the site of perception? The place where perception happens and shapes each of our versions of reality.

Amy: Xen's idea, that 'site' sounds like something 'put upon the land', makes me think of site as event or site as intervention. Rather than the action being 'a placing upon the land' the term 'site' also evokes an inward direction, for me. Though, perhaps the kind of intervention I'm thinking of *is* a placing upon; the placing of meanings and the event of bodies. It makes me wonder, how does a site emerge? At what point does place or perception precede this term? Is there a point where a site is no longer a site?

Act Two
Scene One
Listening (to-from-about) Bodies

Tina trips over an amplifier and spills a glass of cool orange juice on the floor. Outside a seagull quarrels with a sandcastle. Lights out.

Xen: One question I ask is ‘how do we situate ourselves?’ I think this invites dialogue and compels us to reflect on our relationship with ‘site’. I can’t begin to imagine what I’d create ‘onsite’ until I’m there and speaking with Elders or researching the Aboriginal history. I feel the need for a ‘felt sense’ of site.

Thembi: Tina, when we spoke the other day you mentioned that in your work with horses your process is “always about continuous patience, not results driven” and it’s essential to take time building relationships with the people, animals or place to realise your work. If social practice is about creating relations not objects, where does the audience sit within the relationships you build? Is there still an “object” you create for them? If not, what does the audience relate to?

*In the corner of the room a wall whispers
"Can an object be composed of relations?
Is there anything that is void of sociality
and historicity - human or otherwise...?"*

**A deep hum comes from the stool where
Tina sits - she contemplates the audience
and starts to spiral. She is unsure who
the audience is? She responds in a
croaky voice:*

*She is not sure what she means by this.
She clears her throat and further explains:*


*She looks to the left hand corner of the
room when she is nervous. Sounds of
a lawn mower begin in the distance.*

*Joel wonders if 'audience' and 'audio'
are etymologically linked.*

Tina: Is the audience the object?

Tina: I suppose the audience is always implicit regardless of whether a final outcome is present. There are tiny little ears everywhere, inside and out. Perhaps an "audience" is a type of blind faith. There is always "something" witnessing.

Thembi: I'm also wondering, how does "listening" (in the broadest sense of the term) manifest in your work, both in process and result?



Neptune comes to mind; she looks at Amy and says, "I don't mean to sound too cosmic here" Amy moves closer to where Tina is standing. "Go ahead, pull on the strings of the cosmos." A flamenco guitar starts playing in the corner of the room. Tina and Amy start swaying in unison. Tina sings a lullaby to her knee cap, then exits the room for a moment.

Tina throws a bouncy ball on the wall and turns to the reader.

Tina yelps BINGO as she runs back into the space. Peering into a Greek coffee cup Tina sees a thread:

Tina: Listening is an undefinable space-and-time feeling, something that exists within, between and outside of bodies' capacities for receiving and transmitting information. Listen, you're doing it now! It also exists within mechanistic movements and flows in the environment here and beyond. Listening goes beyond the normative functions ascribed to a headphone world. Listening can be like feely fingers, a tongue tasting salt for the first time, an Earth rotation, a caring gesture, or it can be a vision. I have been working with the question—can information sing?

Themb: This makes me think of how Pierre Schaeffer's aim in developing a theory of musique concrète was to find an intersubjective language that removed sound from its sociality and historicity. There is a general feeling that this approach failed, because it is almost impossible for people to dissociate sound from meaning. I see composing as a process of generating relationships between sounds, and that the compositional 'object' is a social relation between sounds. I spend time getting to know the sounds I compose with, and getting to know how they relate to each other. Spending time with sound is a big part of my practice. I have also spent time building a relationship with the equipment and software I use, having worked in the same way for fifteen years. Is anything not a relationship?

Tina: The technologies we use are minerals and flesh bound up in labour and geopolitical webs, woven into our lives, bodies and practice. So many unheard and unseen relationships.

Looking towards the half open door Tina spots Xen planting a tomato in the hallway. The sound of a crow's feet landing on the tin roof enters the house, as does its voice.

Inside the artists think it is raining. Amy smiles as they look up towards the roof.

Thembi regrets mentioning Pierre Schaeffer. We have all heard enough from the "great white men" of sound art. Suddenly five cheerleaders storm the room dancing throwing confetti. All the artists join in.

Crow (translated to English): *Looking out towards the horizon its feathers can sense the shifting hues. As the colours deepen the sounds from the near-by caravan park increase. It can hear a rhythm emerging from a combination of sea breeze on trees and human conversation. The rhythm is infectious and it begins to tap its claws on the tin roof.*

Amy: In a recent work, I explored the affective possibilities of listening through Sara Ahmed's ideas about orientation. Ahmed argues that "to be affected by something is to evaluate that thing. Evaluations are expressed in how bodies turn toward things". So for a while now, in various contexts, I have been wondering how listening is a 'turning toward' and what causes us to turn. Why do we orient ourselves toward certain sounds and how do we evaluate the relationship between those sounds? What are we listening toward? In thinking this way I question how art and artists might facilitate this moment of listening toward... relationships, and how possibilities of listening this way might open an ecological intimacy, a sense of interdependence, with (im)possible worlds, a wandering...

Act Two
Scene Two

Earlier that day Xen was listening to Wurundjeri Woi Wurrung Elder Uncle Bill Nicholson tell stories about Murnong (Yam Daisy) along the Merri Creek. He said there is a difference between 'hearing' and 'listening'. Hearing is mechanical, listening is an act of care, respect and reciprocity. Later, Xen walks along the Maribyrnong River and finds out that it is spelt 'mirring-ngai-birr-nong'... which translates to 'I can hear a ringtail possum'.

Earlier that morning, Amy drove across a bridge, looking out and across the water now known as the Maribyrnong River. Having never encountered this water before, and now having met it for the second time this week, they consider the ways that their body could really meet the water and why this water felt present to them now. They think of the possum and make the shape of the words in their mouth—Mari- byr-nong, they try to recall the connection between the two... A Woi Wurrung word... is the river somehow shaped like a possum's tail? Later Xen's message comes through the chat. Amy thinks, ah ha 'I can hear a ringtail possum'. They wonder, how many other places are named after the experience of a listener?



Xen: I'm listening to the land.

Curtains Open

The artists exit the stage. Pigeons enter and gobble leftover crumbs. The audience listens. Someone coughs and then another then another...

Post-script

Backstage two tawny frogmouths are playing a game of scrabble while "Working Class Hero is Something to Be" by John Lennon is playing from a car outside. One of them begins to spell out s...u...c...c...e...s...s but when they realise they have run out of S's they swap scrabble for twister—they intertwine and become one big mouth. Now they can't stop singing the song they heard earlier.



Artists

Steve Adam
Ros Bandt
Leah Barclay
Philip Brophy
Daniel Browning
Paul Carter & Christopher Williams
Christophe Charles
David Chesworth
Madelynne Cornish
Robert Curgenvén
Reuben Derrick
Sarah Edwards
Lawrence English
Nigel Frayne
Susan Frykberg
Amy Hanley
Liquid Architecture
Rachel Meyers
Xen Nhà
Steaphan Paton
Frans Ari Prasetyo
Douglas Quin
Philip Samartzis & Eugene Ughetti
Thambi Soddell
Tina Stefanou
Barry Truax
Chris Watson
Jana Winderen

Steve Stelios Adam

Passing By...More Quickly 2012-13

sound installation

8 channels, 10 mins 9 secs

Commissioned through the

RMIT Art Fund, 2012

RMIT University Art Collection,

Sonic Arts Collection

Steve Stelios Adam has harboured a long-term fascination with music, sound and its associated technologies. As a composer and sound artist, Steve has created works for a variety of media and performed with instrumentalists, ensembles, choirs and interactive music systems of his own design. His electro-acoustic works have been presented both nationally and abroad and appear in recordings by Move Records, ANU and ABC Classics. Informed by the technical challenges of his own works, he occasionally consults for other artists and organisations to develop software designs for specialised media-based projects.



Sound is not a physical thing: it's a process. It is the wave of pressure caused by vibration passing through air. Sound is, quite literally, motion. In turn, motion can bring new sonic experiences—whether we are moving or objects are moving past us. It's the pace of this movement that affects how much, or indeed how little, we can meaningfully comprehend. This is particularly true of an urban environment. *Passing By... More Quickly* (2013) features recordings made with a hand-held device in and around Melbourne, and chronicles a sonic environment that is substantially the result of people or objects in a constant state of movement and flux. The recognisable sounds of traffic, trams, and bicycles, and the voices of passers-by quickly become ambiguous and potentially bewildering to the listener, speaking to a pace of life that is at once both vibrant and overwhelming.

Ros Bandt

Raptor 2014

sound installation

6 channels, 15 mins 20 secs

RMIT University Art Collection,

Sonic Arts Collection



Ros Bandt is a widely acclaimed, award-winning sound artist and composer who has pioneered acoustic art, site-specific sound installations, electro-acoustic symphonies and sonic archaeologies on four continents. She has a PhD in musicology and has won the Melbourne University Excellence for Research award for her book *Sound Sculpture* and founding *The Australian Sound Design Project*, documenting sound designs in public space in Australia. Her awards include the inaugural Benjamin Cohen Fellowship for Innovation, USA, the Sound Art Australia Prize, the NFSA Award for Sound Heritage and the Don Banks Music Award. Recently Bandt was awarded an Australia Council Fellowship in the Experimental and Emerging art form, and the Richard Gill Award for Distinguished Services to Australian Music. Bandt's soundings of unique places and environments include the world heritage sites of the Yerebatan Cistern, Turkey; Lake Mungo, Australia; Ggantija, Malta; and many ancient sites and amphitheatres in the Aegean.

Raptor (2014) is an investigation of the flight of the Golden Eagle over the Joshua Tree Biosphere in California, using granulated, stretched eagle calls to represent the orientation of the eagle looking down over the land. This is contrasted with the harmonic drones of a bowed tarhu, creating a moving point through which the audience can share the dynamic movement of the bird in flight.

Leah Barclay

Hydrology 2016

sound installation

16 channels, 18 mins

RMIT University Art Collection,

Sonic Arts Collection

Leah Barclay is an Australian sound artist, composer and researcher working at the intersection of art, science and technology. She specialises in electroacoustic music, acoustic ecology and emerging fields of biology exploring environmental patterns and changes through sound. Her work has been commissioned and performed to wide acclaim across Australia, New Zealand, North and South America, Europe and Asia by organisations including UNESCO, Ear to the Earth, Streaming Museum, Al Gore's Climate Reality and the IUCN. She has been the recipient of numerous awards and has directed and curated interdisciplinary projects across the Asia-Pacific and USA. Barclay is the president of the Australian Forum for Acoustic Ecology, the vice-president of the World Forum of Acoustic Ecology, and serves on the board of a range of arts and environmental organisations. She is currently a postdoctoral research fellow at the Queensland Conservatorium Research Centre.

Hydrology (2016) is an immersive sound environment exploring the aquatic ecosystems that cover over seventy percent of Earth's surface. The sounds have been recorded using hydrophones in freshwater and marine ecosystems across the planet, at locations including coastal mangroves in the Sian Ka'an Biosphere Reserve in Mexico, Queensland's Great Barrier Reef and frozen rivers in Norway. The work explores the scientific possibilities of aquatic eco-acoustics with recordings including snapping shrimp, aquatic insects, river dolphins and humpback whales, all of which can be indicators of ecosystem health. The impacts of climate change are often visible in terrestrial environments, yet dramatic changes in aquatic ecosystems can go unnoticed simply due to visibility. Listening to hydrophones provides access to a non-invasive way of understanding changing aquatic ecosystems.



Leah Barclay recording 2017.
Courtesy the artist.



Philip Brophy

***Atmosis* 2013**

sound installation

16 channels, 16 mins 24 secs

Commissioned through the

RMIT Art Fund, 2012

RMIT University Art Collection,

Sonic Arts Collection

Atmosis (2013) is an adaptation of an existing project that Brophy began in 2009, while recording in Tokyo's Kabukicho district at around midnight in summer, on the upper floor of a hotel. Despite its concentration, Tokyo is an amazingly quiet city, and the night air seems strangely capable of carrying sounds in a transformative way, with an uncanny clarity of pitch and timbre. The *Atmosis* project is centred on transcribing a passage of events from a city environment into parts for traditional musical instruments to perform. This piece was recorded in Melbourne, with sounds taken from the city rooftops being used to generate a related type of musical transcription pitch—a sonic investigation of 'atmosphere' and 'osmosis'.

Philip Brophy works in film, video, music and sound design. He was a founding member of the experimental and multidisciplinary group Tsk Tsk Tsk, and performed widely with other musicians and visual artists at venues such as Melbourne's Clifton Hill Community Music Centre and London's Institute of Contemporary Arts. Since the late 1980s, Brophy has explored collaborative films, sound design, and writing. Recent exhibitions of his work have been held at the Ian Potter Museum of Art, Melbourne; Tokyo Opera City Art Gallery, Tokyo; Performance Space, Sydney; National Museum of Art, Osaka; and the Gallery of Modern Art, Brisbane. Brophy's publications include the three volumes of *Cinesonic – International Conference on Film Scores and Sound Design*; *100 Modern Soundtracks* and *100 Anime*, both BFI, London. Apart from numerous chapters in critical anthologies, he writes occasionally for *Frieze*, London; *The Wire*, London; and *Film Comment*, New York.



Philip Brophy performing at Stutter, Horse Bazaar, Melbourne, 2006. Image courtesy the artist. Photo Lara Travis.

Daniel Browning (Bundjalung/Kullilli)

Latitudes: a song cycle 2015

sound installation

Music: Suzanne Cromb

Collection of the artist

Daniel Browning is an artist, curator, journalist and radio presenter based in Sydney. He is a descendant of the Bundjalung people of northern New South Wales, the Kullilli people of south-western Queensland and the traditional owners of the Gold Coast hinterland. Browning has worked in the Radio News and Current Affairs division of the ABC and as News Director at Triple J since 1994, and as producer and presenter of Radio National's Indigenous arts program *Away!* since 2005. He is the curator of *Blak Box*, an innovative architectural sound installation by Urban Theatre Projects used to share the First People's past, present and future through diverse contemporary Aboriginal voices.

Latitudes: a song cycle (2015) presents the rich sonic impressions of three UNESCO World Heritage sites across three continents: Lake Mungo in south-western New South Wales, the Kumano Kodo pilgrimage route in Japan, and the Valcamonica alpine valley in northern Italy. In three movements (*The Crucible*, *The Bridge*, and *The Labyrinth*), the resonant archaeological and cultural histories, stories, and contemporary experience of these long-occupied sites are poetically evoked through deep listening. Comprised of field recordings, the narration of artists, and musical elements, this is a sonic journey where the listener encounters fossilised human footprints in an outback lakebed, the spiritual act of walking on a sacred pilgrimage route, and a network of mysterious Neolithic rock engravings. Approaching these spatial and temporal sites through sound allows evocative poetic relationships to emerge.



Paul Carter & Christopher Williams

Cooee Song 1990/2019

sound installation

43 mins 22 secs

Singers: Jessica Hitchcock and Zoy Frangos

Production: Christopher Williams

Co-direction: Paul Carter and Christopher Williams

RMIT University Art Collection, Sonic Arts Collection

Paul Carter is an internationally renowned writer, artist, and cultural heritage specialist, who trained at Oxford University. He has written extensively about white settler societies, their foundational myths and the ways these inform the places they create and the national narratives that hold them together. Carter has been involved with the design of commemorative landscapes, museum exhibits commemorating Indigenous and non-Indigenous senses of place, and national memorials. He has extensive radiophonic and sound installation experience stretching back to 1987. Carter has been described as 'one of the most respected artist-theorists in the world today, and one of the most arrestingly original and formative thinkers in and about sound of the last three decades.' He has published fifteen books, is Professor of Design (Urbanism) at RMIT, and is on the editorial board of the UK journal *Performance Research*.

Christopher Williams is a sound artist and composer working with text-sound composition, soundscape composition, sound installation, and electro-acoustic music. He was an ABC Audio Arts producer (1994-2013) and completed his PhD in post-radiophonic sound art at the University of Technology Sydney (2019). Christopher has presented works at the Akademie der Künste, Berlin; Zentrum für Kunst und Medientechnologie (ZKM), Karlsruhe; Studio für elektroakustische Musik (SEAM), Weimar; Samstag Museum of Art; Soundstream New Music; National Gallery of Victoria; Praxis Artspace, Greenaway Art Gallery, and the Elder Conservatorium of Music. Many of his works have been featured on ABC Radio National and Classic FM.

Cooee Song (1990/2019) is a work for two performers. Although the script and concept were originally developed in the early 1990s, the work was never realised: the technical challenges proved insuperable, and there were also subtler institutional resistances. The work self-consciously avoided the black and white binaries already apparent in postcolonial revisionism, articulating instead a 'migrant poetics' of emergence, subaltern agency and, above all, a shift from intellectualist discourse to vocalic gesture that tended to push the performance back into public space. According to the original staging instructions, the performers are doubled by pre-recorded echoes of their voices. The motions of the performers trigger the echoes. As conceptual theatre, *Cooee Song* reimagines the colonisation of Australia: the echoic production of the performance space is seen as primary, as a renegotiation of access based on the recognition of Aboriginal sovereignty. As a performance project, *Cooee Song* spatialises classic studio techniques of sound capture and mixing, and repatriates them through the performers, reflecting the dynamics of human encounter.



Video still image of improvisation at Cato Square, Prahran, 12 September 2018, interpreting the electroacoustic layer of *Cooee Song*. Fragments of *Cooee Song* were incorporated into the permanent kinetic lighting and soundscape, *Pipes*, installed across 28 columns at the re-named Prahran Square in December 2019. Performer: Soo Yeun You; video artist: Bruce Ramus; video still: Dirk de Bruyn.





David Chesworth

***Peron Station* 2006**

4 channel audio, 15 mins

Collection of the artist

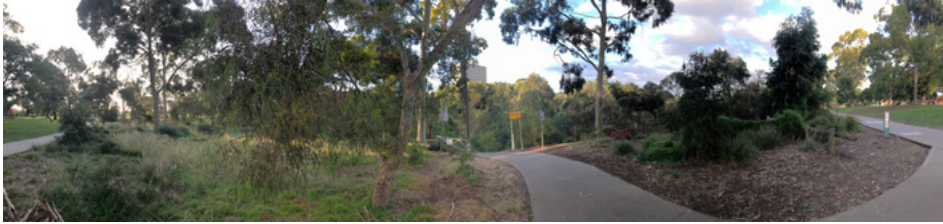
David Chesworth is an artist and musician based in Melbourne. He works across experimental, electronic music, sonic art, installation and video practice, often with a cross-disciplinary, collaborative, and conceptual approach. From 1978 until 1982 Chesworth coordinated the Clifton Hill Community Music Centre in Melbourne, and formed the post-punk bands Essendon Airport and Whadya Want? and later The David Chesworth Ensemble. Since 1996 he has maintained a separate collaborative practice with artist Sonia Leber, undertaking site-specific and research-based projects responding to architectural, social, and technological settings. Chesworth and Leber have an extensive exhibition history, including the 56th Biennale of Venice, 2015; the 19th Biennale of Sydney, 2014; and major solo exhibitions *Architecture Makes Us: Cinematic Visions of Sonia Leber and David Chesworth*, Centre for Contemporary Photography, Melbourne, 2018, UNSW Galleries, Sydney, 2019, and Griffith University Art Museum, Brisbane 2019; *Zaum Tractor*, Fehily Contemporary, Melbourne, 2014, and Gridchinhall, Moscow, 2013; *Space-Shifter*, Detached/ MONA FOMA, Hobart, 2012; and Perth Institute of Contemporary Arts, 2011.

Peron Station (2006) presents field recordings from the remote and scrubby coastal bushland of Western Australia—originally a sheep station, Peron Station is located in Francois Peron National Park near the Indian Ocean. Captured at dawn, the sounds of a diverse ecosystem greeting the day form a richly layered and rhythmic sonic environment, described here by Chesworth: ‘The semi-arid land supports an amazing variety of birdlife. One notable species is the Chiming Wedge-bill whose descending melodic calls overlap and seem to phase in and out of synch with each other. The calls of the White-winged Fairywren is likened to a toy sewing machine. You will hear the Crested-bellbird, also named onomatopoeically by white settlers as the Pan pan panella, and by Aboriginal people as Kanpanparlala or Pakupaku. You will also hear ant and beetle stridulations, which are produced by the insects rubbing their body parts together to make sound and possibly recorded for the first time. Finally, I decided to include recordings of blowholes that occur close by along the WA coast.’



Francois Peron National Park,
Western Australia. Image courtesy
David Chesworth.

David Chesworth
***Walking While Listening* 2020**
self-led participatory artwork



Walking While Listening (2020) is a personal performative artwork that takes the form of a series of instructions for four self-led soundwalks, accessible online or as printed guides at the gallery. The works are realised by the participant through the simple act of walking and listening, loosely guided by Chesworth's poetic or practical prompts. As the title's clever substitution implies, listening is the primary activity in this undertaking and walking secondary. These soundwalks are intended to continue beyond the gallery and this exhibition, through a Facebook group where participants can share their experiences and observations online, and a dedicated website.

Chesworth notes: 'With all the isolation and screen-based communication we've had to deal with this year, *Walking While Listening* presents an opportunity to rediscover the ever-evolving 3D world that surrounds you via a series of self-guided sound walks. Sounds, by their nature, transcend the boundaries of our visual matrix, and allow us to experience a world that is very different from the one that we see. Sound walks can become revelatory experiences when you actively listen. A sound walk can be a sensory, multi-dimensional experience which contrasts with the bounded flatness of the computer screen, where many of us often spend much of our time. And anyone can do it. The *Walking While Listening* site links to simple tasks that can be undertaken that involve walking and quietly listening to the surrounding world in new and unusual ways.'





Madelynne Cormish,
Borderlands 2020, installation view.
Photo Christian Capurro.

Madelynne Cornish

***Borderlands* 2020**

audiovisual installation,
dimensions variable
image 4 channels,
sound 8 channels, 44 mins
Commissioned by McClelland
with the generous support of
the Besen Family Foundation
Collection of the artist

Madelynne Cornish is an audio-visual artist and curator based in Victoria who works with sound, video and installation to question our perceptions of the natural environment. Her practice explores the effects of climate on natural and constructed environments, the dynamics informing remote communities, and the relationships between environment and human activity. Cornish is the co-founder and director of operations for the Bogong Centre for Sound Culture, an independent arts initiative that facilitates cultural projects investigating the history and ecology of the Australian Alps.

Borderlands (2020) is an audio-visual installation investigating the relationships between urban ecology, human engagement and land use. Created during a month-long residency, it draws on the rich landscape of McClelland's sculpture park and surrounding environment, including a wetland conservation area, council nature reserve, concrete works, and residential estates. The project's foci are the temporal and spatial qualities of the geography and the fauna and flora of these sites—microphones were placed in and around the sculpture park and its borderlands to register natural and anthropogenic sound including industry, wildlife and weather. These sounds are juxtaposed with the visual framing of the urban ecology to create an immersive audio-visual installation in the gallery, which details the complexity of the ecological interactions occurring within the sculpture park and its environs.



Madelynne Cornish recording
with Ambisonic microphone in
McClelland Sculpture Park, 2020.
Courtesy the artist.

Robert Curgenvén

framed by a threshold 2019

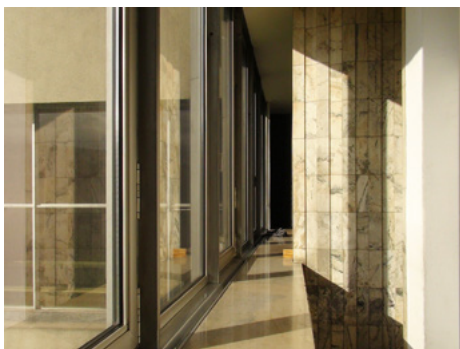
(from SPECTRES,
Recorded Fields Editions, 2021)

sound installation

2 channels, 13 mins 28 secs

Collection of the artist

SPECTRES was commissioned by
UH Fest & MÚTÓ (Budapest, Hungary)
in collaboration with SHAPE platform



Robert Curgenvén is an Australian-born artist based in Ireland, whose work emphasises physicality, our embodied response to sound and its correspondence to location, air, weather and architecture. His work employs complex overtones, deft manipulations of sound pressure amid an unfolding time pressure, using sources ranging from field recordings to pipe organ, custom-made oscillators, feedback and dubplates. His recorded output includes *SIRÈNE*, pipe organ works, for his Recorded Fields Editions; *Oltre* and *Built Through* for LINE imprint; and *Climata*, recorded in fifteen James Turrell Skyspaces across nine countries. Curgenvén has produced works and installations for National Gallery of Australia, Warsaw Centre for Contemporary Art, Palazzo Grassi (Venice), Transmediale (Berlin) and the National Film and Sound Archive (Australia). He has performed at festivals including Sydney Festival, Maerzmusik (Kraftwerk Berlin), Today's Art (The Hague), Sonic Acts (Amsterdam), Ultrahang (Budapest), Gamma (St Petersburg) and was an artist for the EU's SHAPE (Sound, Heterogeneous Art and Performance in Europe) platform in 2019.

Curgenvén describes the genesis of his work *framed by a threshold* (2021): 'What if we were to interrogate contemporary society across the threshold of architecture from a former, but recent, epoch? A statement at that epoch's inception, "*alles Ständische und Stehende verdampft*", is often poetically translated as "*all that is solid melts into air*", but literally is "*all that is Standing and has Stood [will] vapourise/evaporate*". These 'Standing entities' incorporate institutions ('Bodies') and corporations—in physical terms their architectures and the utopian sociocultural visions that these architectures framed. SPECTRES uses the air itself to interrogate ten post-Communist architectural locations across Poland and Hungary via a simple intervention/modulation: drawing the surrounding air and current manifestation of contemporary political and geographical economies into these buildings, these volumes—the very monuments of those that Stood and are Standing, the dwellings and inhabitations of the corporatised Bodies.

Recorded over ten days in 2019, traversing cultural centres to social housing projects through to northern and southern centres of Solidarność (Polish Solidarity movement) at its thirty-year anniversary, these architectures present a threshold, framing each location and its context. The rapid growth leading to our present moment is audibly juxtaposed across this recent architectural and institutional past, positioning our listening, physical bodies upon a threshold as a political act—where interiorities and exteriorities are challenged, reframed via a pressure upon ourselves and surrounding volumes, filtered by our perception and an architectural gestalt to hear and reframe our contemporary surroundings.'

Reuben Derrick

Poranui 2012

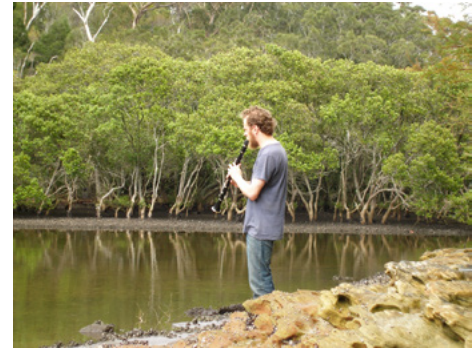
sound installation

8 channels, 10 mins 45 secs

RMIT University Art Collection,
Sonic Arts Collection

Reuben Derrick is an artist based in Christchurch, New Zealand. His doctoral dissertation of 2014, *Acoustic illuminations: recorded space as soundscape composition*, draws upon field recordings from New Zealand, Australia and Sri Lanka.

His ongoing projects include punk-jazz collective Poltroon, sound design and music for Free Theatre (recently for *The Black Rider* and *Frankenstein*), as well as multidisciplinary collaborations with dance (Movement Art Practice and Kyungmi Kim), sculpture, poetry and film. In 2015 he was awarded a fellowship to the Music Orni residency in New York. Derrick embraces an exploratory approach in his work, performing collaboratively and solo at music festivals and concert series such as Now Now in Australia, and Bomb the Space, Party of Special Things To Do and Fredstock in New Zealand.



Poranui (2012) refers to an area located on New Zealand's South Island near Christchurch. Its main feature is the particularly hostile beach with a heavy swell and undercurrents that have claimed the lives of people attempting to swim or to wander too far down the steep bank. The presence of the sea is relentless; even during calm weather its ominous power is felt through infra-sonic vibrations. The landscape is harsh, bleak and exposed and human activity is limited to grazing stock and a small settlement. The beach stretches from the settlement to the East where it reaches high cliffs. Banks Peninsula can be seen to the North and East, Kaitorete Spit stretches twenty-five kilometres to the West and to the South is the Pacific Ocean. Recordings made within the location are combined in ways that choreograph these voices in order to convey their visceral power. The piece focuses on three fundamental natural elements: water, stone and air.

Derrick writes: 'The process of auditioning and combining these recordings strongly evoked sensations I had experienced while exploring Poranui, such as the briny smell of the sea, the feeling of cold wet feet and the heightened state of alertness provoked by this unsettling environment. The compositional narrative closely follows these explorations. The editing techniques serve to enhance and expand my experience, by focusing on specific soundscape elements and making them shift around and into one another, drawing listeners into an astonishing yet inhospitable environment in ways they could not otherwise have chosen.'

Image courtesy Reuben Derrick.
Photo Joseph Derrick.

Sarah Edwards

Echo Chamber 2012

sound installation

6 channels, 4 mins 37 secs

Purchased through the RMIT Art Fund, 2013

RMIT University Art Collection,

Sonic Arts Collection

Echo Chamber (2012) is a sonic response to the archaeology of RMIT University, echoing the university's historic landscape in order to immerse listeners in what lay beneath their feet; contemplating ideas related to the past, and imagining potential futures. The six channel audio amplifies the university's physical and conceptual features, utilising recordings taken from around the buildings' internal and external structures; samples of radio crackle and Morse code representing the role RMIT played in training 2,500 men and women in radio communications during World War II; and a recording of *Litoria raniformis**, a frog that was once prevalent in the former marshland of the site and is now locally extinct.

* With special thanks to Emeritus Professor Murray Littlejohn whose pioneering recordings of the bio-acoustic calls of Southern Australian frogs have significantly contributed to international research on evolutionary biology.

Sarah Edwards is a Melbourne-based artist whose practice examines the work of the natural history museum and its critical role as a repository for life on earth. Using light and sound, Edwards creates immersive installations that respond to the physical environment. In 2016, Edwards was awarded a PhD from the School of Fine Art at RMIT. She completed a Master of Fine Art in 2010, winning a Vice Chancellor's Award for outstanding achievement. She holds a Bachelor of Education in Visual Arts and a Post Graduate Diploma in Art Curatorship from The University of Melbourne. Since 1990 she has worked in the cultural heritage sector, including fifteen years at Museums Victoria. Edwards is currently Heritage Curator at Parliament of Victoria.







Lawrence English recording in the Amazon rainforest.
Courtesy the artist. Photo Marc Behrens.

Lawrence English

A Mirror Holds The Sky 2019

field recordings presented in stereo

sound, 36 mins 29 secs

Collection of the artist

Lawrence English is an Australian composer, artist and curator based in Brisbane. He completed a Masters of Music at Queensland University of Technology in 2002 and a PhD in 2017, has presented and performed extensively both in Australia and internationally, and has written on listening, field recording and sonic art. He is director of the experimental record label Room40, and has produced numerous albums of his own. Working with field recording, experimental music, live performance and sound installation, English's work explores the politics of perception and the subjective experience of listening as a means of revealing the unseen complexity of our environment.

A Mirror Holds the Sky (2019) was recorded in the remote Amazon rainforest of South America, and presents a dense fabric of unique sonic textures and rhythms. In the thick vegetation of this environment, aural sense has primacy over the visual. English describes the unique atmosphere in this work: 'In the tropical jungles of the Amazon, sound is like humidity; it is everywhere, it hangs in the air and it never ceases, its presence is ephemeral yet endless. Each square foot of the rainforest plays host to countless insects, frogs, birds and mammals, all manifesting sound in an effort to be heard. Each individual voice is a claim to territory, a cry for a mate or another semantic notation beyond human understanding. Together though, these voices create a density of frequency and timbre that is unlike any other location on earth.'

'In this thick and constantly evolving sound field an ear accustomed to the restrained sound palette of a city or town is quickly overwhelmed, confused and finally, fatigued. This is no place for the apathetic or the cursory. The Amazon requires a very keen type of audition. The casual ear begets its owner nothing but causality. To listen is to live, and to learn. Audition allows us to thrive and to be granted a special sensing beyond the limited confines of the eyes. In the jungle our eyes fail us, they permit the smallest of perspectives. It is our ears that open the horizon of sense, permitting us to know the inhabitants of the forest, and perhaps even their business, long before we might lay eyes upon them.'



Lawrence English recording in the Amazon rainforest.
Courtesy the artist. Photo Marc Behrens.

Nigel Frayne

***What U Might Have Heard* 2016**

sound installation

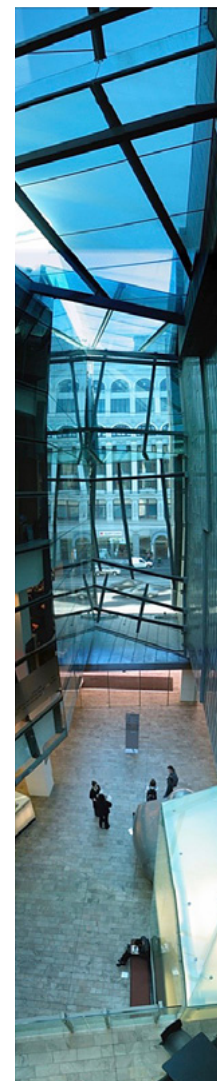
8 channels, 23 mins 49 secs

RMIT University Art Collection,

Sonic Arts Collection

Nigel Frayne (1952-2018) was an acoustic designer and soundscape composer with a background as a rock musician, sound engineer, theatre sound designer and a graduate in composition and music technology from Latrobe University. His expertise in acoustic design and electroacoustic soundscaping encompasses a unique blend of design and technical skills developed through broad experience. Widely travelled throughout the USA, Europe and Asia as a senior designer for sound and electroacoustic soundscaping, his commissioned projects include Taronga Zoo; Federation Square; the Australian War Memorial, Canberra; ACMI; and Museum of Sydney. Frayne's company, Resonant Designs, was selected by RMIT University to join its exhibition *Hot Spots* at the 2004 Architecture Biennale in Beijing. He was the longest serving chair of the World Forum for Acoustic Ecology and was a founding member of the Australian Forum for Acoustic Ecology, serving on the committee until his death in 2018.

What U Might Have Heard (2016) is a re-envisioned version of an ambient electroacoustic soundscape installation that was commissioned for the public areas of the Australian Centre for the Moving Image (ACMI) in 2000. This original project was a site specific work carefully designed into this unique precinct and public space. Frayne presented a project report *Electroacoustic soundscape design at the Australian Centre for the Moving Image (ACMI), Melbourne, Australia* at the Sound Design Symposium, Paris, in 2004, which included extracts from his article 'Acoustic Design in the built environment', in *Soundscape: The journal of acoustic ecology*, vol. 5, no.1, 2004. *What U Might Have Heard* is conceived as a virtual representation of the original soundscape, now taking the form of a sonic exhibition. Rather than the physical experience of walking through ACMI and thereby composing one's own version of the soundscape, the exhibition would have the audience remaining in one position with the piece spatialised around them. The structure of the soundscape is based on the four points of the compass, with a central void featuring vertical displacement and movement through a defined space. The soundscape extends notionally beyond the walls of the building by responding to the urban environment and public transport to the North; the natural environment of the Dandenong Ranges to the East; the public plaza of Federation Square to the South; and the seaside or bay areas at the mouth of the Yarra River to the West. However, the roles played by the physical structure of the building and the transparent illusive quality of sound are now reversed—the architecture itself becomes a virtual artefact or ghost. Now freed of its functional role within ACMI, the dynamic soundscape becomes the subject of attention and the ears of the listener become attuned to the unique sonic materials that comprise the composition.



Nigel Frayne, installation view, ACMI, Melbourne, 2000.
Image courtesy Helen Dilkes.

Susan Frykberg

***A Day of Hours* 2013**

sound installation

16 channels, 14 mins 58 secs

Commissioned through the

RMIT Art Fund, 2012

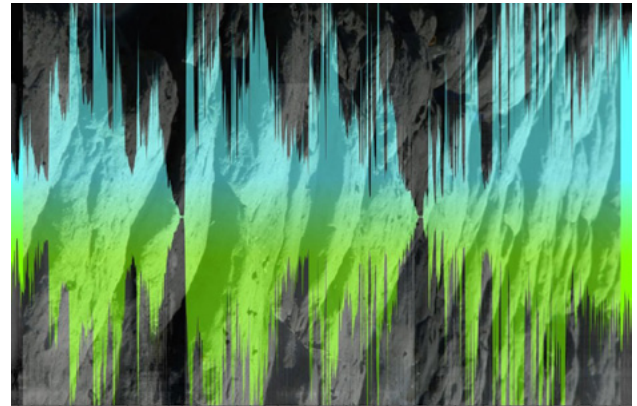
RMIT University Art Collection,

Sonic Arts Collection

Susan Frykberg is a sound artist, composer and poet who strives to balance Chi-Rho spirituality, creativity and social justice.

In addition to her sound works, she composes for a variety of combinations of electroacoustics, instruments, and chant. Notable performances include for the International Alliance of Women Musicians, 2008; *Salve Regina Electronica*, New Zealand Electroacoustic Symposium, 2009; *Ubi Caritas Electronica*, 9th International Festival of Women Composers, 2010; and *Suffering*, Australasian Computer Music Conference, 2011. In 2010–11, she worked with improvisational musicians in an ensemble called *Let the Art Sing*. She is a member of the Canadian Music Centre, SOUNZ, and SOCAN, and was a founding member of The World Forum for Acoustic Ecology and the Canadian Electroacoustic Community.

In *A Day of Hours* (2013), Frykberg analyses the ways in which we create a sense of place through sound. Based on the concept of 'sonic archaeology'; she 'digs' through the past to construct an imagined progression through time in Melbourne, from the pre-colonial era to the present day. This is achieved through combining such sound sources as local fauna, the voices of First Nations people, and recordings of historical events. As sonic reference material is limited to the history of recording, however, Frykberg uses symbolism and allegory to invoke the distant past. The arrival of European settlers and Christianity to the area is invoked through fragments of the Gospel of John in semi-intoned Greek and Latin, for example. Over all this, live radio is layered to capture a snapshot of the immediate present.



Susan Frykberg, limestone soundwave
visualising sound art. Courtesy the artist.

Liquid Architecture
Unheard relations

Amy Hanley

Xen Nhà
Thambi Soddell
Tina Stefanou

Amy Hanley is an artist and writer based on Wurundjeri Country, in Narm/Melbourne. Their practice-based research considers relations of space, bodies, technology and contemporary ecologies. Engaging forms of performance, installation, and collaboration, their work often explores gender, sexuality and queer expression/s. Hanley's practice is interested in listening as an affective practice and the possibilities of sound as a communicator for matter-cultural gestures between human and non-human bodies.

Hanley was an artist in residence at Bogong Centre for Sound Culture in 2020 and was the recipient of the Hearsay International Audio Arts Festival, Best Sound Art Award 2019. They have featured work at Screen & Sound Cultures Eco Media Symposium, 2019; Falls Festival, 2019; A Night at the Nicholas, 2019; Hearsay International Audio Arts Festival, 2019; Mapping Melbourne, 2018; The Black Box Theatre, 2018; The RMIT Design Hub, 2017; Crack Theatre Festival, 2016; Melbourne Meat Markets, 2016; 107 Projects, 2016; and have been broadcast on Soundproof, ABC Radio National, 3RRR and FBi Radio. Hanley will develop a commissioned project for *Site & Sound* through curatorial associates Liquid Architecture.



Rachel Meyers

Southern Ecophony:

***Wind and Water* 2020**

for two violins and tape,

20 mins 21 secs

Performed by Emily Sheppard
and Rachel Meyers

Sound design by Rachel Meyers with
recording contributions from Luke Plumb

This project was assisted through Arts

Tasmania by the Minister for the Arts

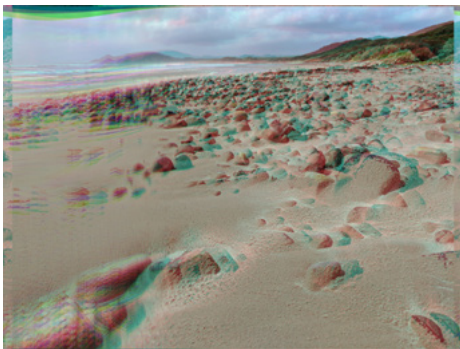
Commissioned by Next Wave X and

Liquid Architecture

Rachel Meyers is a Tasmanian musician, composer, musicologist, and sonic artist whose career spans world, folk, experimental, and early music spheres. She works within the fields of performance, academia, community cultural development and music education. Meyers completed a Bachelor of Music at the University of Melbourne, studied violin under the tutelage of Leonid Zeyde, and music composition with Dr Stuart Greenbaum. More recently she has focused on creating sonic artworks that incorporate both field recording and musical practices.

Meyers recorded *Southern Ecophony: Wind and Water* (2020) on the remote North Western Tasmanian coastline with an underwater microphone, at a location known as The Edge of the World, where the Arthur River meets the Southern Ocean. She has woven into this soundscape her own responses played on violin, to create a conversation between natural and musical elements. For Meyers the listener completes the work as they introduce their own sensory impressions to create their own journey, whether experiencing the work through headphones while walking, or in the activated and immersive gallery space.

In her listening notes to *Southern Ecophony*, Meyers explains: 'The practice of listening to more-than-human matter is like a porthole into a nuanced ecological awareness. What does intimacy look like across species? How could the sounding of a single stone (or a wave, a swarm of krill, a discarded can of deodorant) manifest traces of independence and vitality? By appropriating environmental sounds and contexts, can we invoke certain thoughts, memories or understandings? I have been pondering such questions as I try to learn to "listen carefully." By listening carefully, I mean not in the traditional ways that I was taught in my musical training, but in listening for threads of the world that I've not yet heard or understood. What happens if we decide to listen to the sounds around us not as background noise, but as musical voices? Suddenly, our sound world changes into a constantly developing musical work full of strange and tiny voices in conversation, evolving from movement to stillness and back again in an instant. Instead of maintaining the divide between human and nature, we can consider the interdependence of matter. This soundscape composition is an invitation to listen more deeply to the music of worlds seen and unseeable.'



Liquid Architecture
Unheard relations

Amy Hanley
Xen Nhà
Thambi Soddell
Tina Stefanou

Xen Nhà is a documentary maker and artist based on unceded Kulin Lands, Melbourne Australia. Their work explores intimacy and power dynamics across body, race and gender. Using narrative and sound poetry, they invite people to play, imagine and practice vulnerability with the stories they want to tell. They have produced radio documentaries *27*, *Remotely Intimate* and *We Weren't Born Yesterday*; and have run creative sound workshops locally and internationally. Recently, they were a Collaborative Studio Fellow at UnionDocs in New York City, where they produced the short film *flutters through skin*. Nhà will develop a commissioned project for *Site & Sound* through curatorial associates Liquid Architecture.



Steaphan Paton

***My Jindabyne II* 2018**

single channel digital video, colour,
silent, 30 secs
edition 1 of 3 + 2AP
Collection of McClelland

Steaphan Paton is a Victorian-based artist and member of the Gunai and Monero Nations from Gippsland. Through varied media including painting, sculpture, video and sound, his practice probes the complex networks which bind landscape, culture, and history while highlighting forms of governmental and cultural imperialism that continue to perpetuate the impacts of colonialism.

Paton completed a Master of Contemporary Art at the Victorian College of the Arts in 2016, and his work has been exhibited at major Australian art institutions including: *Colony: Frontier Wars*, National Gallery of Victoria, 2018; *Sovereignty*, Australian Centre for Contemporary Art, 2016; *Murruwaygu*, Art Gallery of New South Wales, 2015; and *Melbourne NOW*, National Gallery of Victoria, 2013. Recent solo exhibitions include *The Australian Inquisition*, Gertrude Glasshouse, 2019; and *Gunailand*, Gippsland Art Gallery, 2018. His work is also held in private collections in both Australia and internationally. Paton undertook a studio residency at Gertrude Contemporary in 2018–2019, and is represented in major collections including National Gallery of Australia; National Gallery of Victoria; and Museums Victoria.

My Jindabyne II (2018) presents a silent landscape, yet one that is dynamic and multifaceted—the artist has stitched together multiple videos, taken from a car with a phone camera, to show the undulating mountains, hills, and valleys of south-east New South Wales aligned along a living horizon. While being a visual work without a sound element, *My Jindabyne II* offers a counterpoint to the other sonic works in this exhibition, while reinforcing the complex ecological, historical and cultural dynamic of site. The necessarily subjective experience of place is central here, always in flux, and while perspectives shift there is an immutable character and significance to this location as the artist's Country. Despite the enduring First Nations connection to this Country, it is a location rich in colonialism and exploitation, from songs of settlement to the Snowy Mountains Hydro-electric Scheme. The landscape becomes a fluid mass consisting of coexistent but contrasting Indigenous, colonial, and re-colonial perspectives.





Stephan Paton, *My Jindabyne II* 2018,
video still.

Frans Ari Prasetyo

City Noise – Sound (Art) and Disaster

2006

sound installation

11 mins 1 sec

Collection of the artist

Frans Ari Prasetyo, born in Bandung, Indonesia, is an independent scholar and photographer who is currently Research Fellow at the Ethnography Lab of University of Toronto and York University. His work uses visual ethnography on urban-ecology politics with various grassroots communities, underground collectives and representatives of the marginalised urban population. Beyond the visual, Prasetyo considers sound as an inherently spatial phenomenon that can shape public life while amplifying issues of affect, sense and materiality. His field recordings posit environmental and social factors as having a reciprocal influence on soundscapes, while blurring the distinction between local and global contexts. He has written numerous journal articles, book chapters, and produced photo publications and exhibitions. Most recently Prasetyo has authored *River in A Visual Shot*, BRICK and ITB, 2017; *Music In Stereo (City): Cultural Politics, Social Movement and Network of Friends*, Koalisi Seni Indonesia, 2016; 'Straight Edge City: Bandung, Indonesia', in Gabriel Kuhn, X: *Straight Edge and Radical Sobriety*, PM Press, 2019; 'The Car-Free (Day) Movement: Transformation of Space and Place in Bandung, Indonesia', in Rahma M. Doheim et al., *The Car-Free (Day) Movement, Humanizing Cities Through Car-Free City Development and Transformation*, IGI-Publishing, 2020; and has a forthcoming book chapter with Jim Donaghey for *Punk Space in Bandung, Indonesia: Evasion and Confrontation*, Intellect Books and The University of Chicago Press, 2021.

City Noise – Sound (Art) and Disaster 2006 consists of field recordings which represent the atmosphere of the tsunami disaster in Aceh in 2004 and the 2006 earthquake in Yogyakarta, concurrently offering a sonic impression of the 1998 street demonstrations of the Indonesian Reformasi. The compilation was an attempt to sonically demonstrate how an (urban) environment undergoes physical disasters and how this translates into psychological disasters for its inhabitants. The structure of the city resonates in the distant reverberations of passing trains, transmitted through the ground, woven with other sources of environmental and ambient sounds and including voices in a chaotic and disrupted urban environment. It presents not only the natural sounds of disasters in general (earthquakes, tsunamis, floods, and volcanic eruptions) but also the sounds of those affected (especially humans), responding directly and indirectly to and immersed within the atmosphere of a disaster.



Prasetyo explains the structure and content of the work: 'first of all the morphological and narrative properties of a background sound derived from a natural disaster is (re) presented. Second, sound is considered as a texture and proposed to pinpoint, specify, and prototype urban sounds often heard in the cities of Indonesia. One example is the Muslim call to prayer, adzan, emanating as many as five times per day from all mosques in almost every city in Indonesia. The adzan sonically represents the Indonesian Muslim majority and the Islamic character of the city of Aceh. Finally, the sound of shouting and distortion noise from wind, thunder, and rain convey the atmosphere of chaos and human fear. Through this disaster one hears the tentative hope that has been crushed in the fading echoes of the victims' songs. This composed memory is dedicated to friends and relatives—and their communities—whose lives have been irrevocably altered through the above-mentioned disasters. It is a sonic message filled with spirit, inspiration, and hope to persevere and to realise a better future.'

Frans Ari Prasetyo recording.
Courtesy the artist.

Douglas Quin

Madeira Soundscape 2013

sound installation

16 channels, 28 mins

Commissioned through the

RMIT Art Fund, 2012

RMIT University Art Collection,

Sonic Arts Collection

Douglas Quin is a sound designer, naturalist, educator and composer. His recordings of endangered and disappearing habitats represent one of the most extensive collections of this kind anywhere. Among other projects, Quin has created and mixed sound design for director Werner Herzog, and has worked on exhibits for the Smithsonian, American Museum of Natural History and the Polish Academy of Sciences. He is currently involved with the Kagu Recovery Plan and World Wildlife Fund as a bioacoustics researcher. His work has been performed at festivals and venues including Merkin Hall, Kennedy Center for the Performing Arts, and Spoleto Festival USA, and he has received numerous awards including the Ars Acustica International prize. Quin is an Associate Professor at Syracuse University.

Madeira Soundscape (2013) consists of field recordings Quin made over a month on the island of Madeira. It is a cultural soundscape, weaving sounds from both the urban and natural environment to create a rich sonic tapestry of places and events from the city of Funchal, the *levadas* (aqueducts), villages and mountains of the island. The soundscapes include Sunday mass before Christmas; church bells; the community music tradition of the Singing of the Kings in early January; the bustling Mercado dos Lavradores in the Old Town of Funchal; and holiday fireworks. These are tied together by the motif of water, to which the piece constantly returns. Beginning with dripping deep inside a mountain levada, cascading through the aqueducts down to seaside caves, water is the quintessential sound of Madeira.







Recording at Watts Hut, Eastern Antarctica, 2010.
Courtesy Philip Samartzis.

Philip Samartzis and Eugene Ughetti

Polar Force 2020

sound composition

8 channel, 36 mins

Australia Council for the Arts; Australian

Antarctic Division; Creative Victoria

RMIT University Art Collection,

Sonic Arts Collection

Philip Samartzis is a sound artist with a specific interest in the social and environmental conditions informing remote wilderness regions and their communities. He is particularly concerned with concepts of perception, immersion and embodiment in order to provide audiences with sophisticated encounters of space and place. Samartzis is the co-founder and artistic director of the Bogong Centre for Sound Culture, which affords artists and musicians the opportunity to create site-responsive works in the Victorian Alps. He has performed and exhibited widely in an international context, and has undertaken a number of prestigious residencies and commissions, including presentations at San Francisco Museum of Modern Art, 2002; Mori Arts Centre, Tokyo, 2003; Sydney Opera House, 2004; National Gallery of Victoria, 2013; Gallery of South Australia, 2020. Samartzis is the recipient of three Australian Antarctic Division Fellowships which he is using to construct a sound map of the Australian Antarctic Territory spanning 12-years. France Culture and ABC Radio National commissioned a one-hour composition titled *Antarctica, An Absent Presence* (2014) based on the publication he produced for Thames & Hudson Australia in 2016. In 2017 France Culture commissioned a piece focusing on the geophysical effects of wind on wilderness areas including Antarctica and sub Antarctica. Recent Antarctic related exhibitions include *Super Field* (2018) produced in collaboration with architects Baracco and Wright for the RMIT Design Hub Gallery; and *Floe* produced in collaboration with architect Roland Snooks for the National Gallery of Victoria's *Triennial Extra* (2018).

Eugene Ughetti is known for tackling complex and ambitious art music projects whether as director, composer, performer or conductor, and is the founding artistic director of Speak Percussion. His artistic output is primarily an exploration of the materiality of percussion, but his work could also engage with ideas like drum aged rum, supersonic performance, or the percussive military. He has worked with some of the world's guiding lights in new music including Pierre Boulez, Liza Lim, Steve Reich and John Zorn. Ughetti's works have been presented at Darmstadt, Germany; Roulette, New York; Sonica, United Kingdom; Lucerne Festival, Switzerland; SIPFest, Jakarta; Mona Foma, Hobart; and Arts Centre Melbourne, among other venues. He has worked with most of Australia's leading new music ensembles including conducting *Elision* in the world premiere of Richard Barrett's *Construction* in the 2011 Huddersfield Contemporary Music Festival; and with some of the world's finest conductors, including Valery Gergiev, James Levine, Pierre Boulez and Charles Dutoit. Ughetti has composed works for The Australian Ballet, Melbourne Symphony Orchestra, Australian Broadcasting Corporation, and Bionics Institute. He was awarded the inaugural Sidney Myer Creative Fellowship 2012, MCA Freedman Fellowship for Classical Music 2011, the Australia Council Creative Music Fellowship, and various national Art Music Awards for his work with Speak Percussion.

Samartzis and Ughetti's *Polar Force* (2020) is a collaborative sound art and music performance interrogating the nature of life on a remote Antarctic research station. The project emerges from an Australian Antarctic Division Arts Fellowship awarded to Samartzis in 2015, which he used to document the effects of katabatic wind on Casey Station. The work features sound recordings of extreme weather events mixed with daily operations informing station life. The sound recordings form the basis of a suite of multichannel environments that provide audiences with vivid and tactile experiences of the natural, anthropogenic and geophysical forces shaping the continent. The work was a finalist for a Green Room Award for Best Contemporary Sound Performance and received an honorary mention for Digital Music and Sound at the Prix Ars Electronica and has since toured Europe.

The original configuration of the work included purpose-built instruments that used pressurised air and corrugated tubing in combination with carbonated ice and water to build a rich range of musical responses. This iteration comprises a new installation component for *Polar Force* including original material drawn from Antarctic sound recordings mixed with newly composed material performed on the special ice and air instruments designed for the project. The installation is mixed for 8-channel surround sound playback to create immersive encounters and localised events.



Liquid Architecture
Unheard relations

Amy Hanley
Xen Nhà
Thembi Soddell
Tina Stefanou

Thembi Soddell is a non-binary, Polish-Australian (second generation) sound artist living on Dja Dja Wurrung Country in the rural Victorian town of Clunes. Working on the nexus of musique concrète, raw emotion, and sound design they create dense, affective and abyss-like sound worlds. They are best known for their powerful acousmatic performances and installations in darkness, of 'startling, even hallucinatory intensity' (*New Zealand Listener*, 2012). These reflect their longstanding interests in psychology, perception and emotion in relation to intense encounters with sound. Soddell was awarded a PhD from RMIT University in 2019 for their practice-based research investigating the potentials of acousmatic sound for representing and understanding lived experiences of so-called mental illness and trauma, and previously a Bachelor of Art in Media Arts (2002) with Honours in Sound Art (2005). Soddell will develop a commissioned project for *Site & Sound* through curatorial associates Liquid Architecture.



Soddell's recent sound installation, *Held Down, Expanding* (2018), premiered at MONA FOMA and was a finalist in the APRA-AMCOS 2019 Art Music Awards for Excellence in Experimental Music. Their work has also shown in esteemed galleries, including the Australian Centre for Contemporary Art, 2016; Institute of Modern Art, Brisbane, 2016; National Gallery of Victoria, 2014; and Museo Reina Sofia, Spain, 2020. They have performed at experimental music festivals Australia-wide, released five albums, and twice toured Europe, performing at venues and festivals such as Instants Chavirés, Paris; Cave 12, Switzerland; and Hoerkunst Festival, Germany. Soddell has also worked as sound designer and dramaturg for choreographer Tim Darbyshire.

Thembi Soddell, *Held Down, Expanding* 2018, installation view, Abbotsford Convent, Melbourne. Courtesy the artist.

Liquid Architecture
Unheard relations

Amy Hanley
Xen Nhà
Thambi Soddell
Tina Stefanou



Tina Stefanou is an Australian-Greek Melbourne-based artist who works across performance, movement, experimental voice, sculpture, moving image and sound. As a vocalist, Stefanou explores how voice can exist within objects, spaces, ideas, relationships and situations. As a means to seek more inclusive ways and to frame tangled relationships, her artistic practice and research engages in multispecies performance with a family of local others, friends not-yet-made, and poetic meetings of matter. Her collaborators include sites, practices, communities, family members, non-singers, children, musicians and animals to explore the limits and imaginative potential of artistic practice in *more-than-art environments*. Informed by diasporic experiences and the exploration of non-Anglo cultural expression, the artist is engaged in sound as social practice. Stefanou is the recipient of the 2020 Schenberg Art Fellowship and is currently a Master of Fine Art candidate at The Victorian College of the Arts, University of Melbourne. Stefanou will develop a commissioned project for *Site & Sound* through curatorial associates Liquid Architecture.

Barry Truax

Ocean Deep 2017

sound installation

8 channels, 12 mins 50 secs

RMIT University Art Collection,

Sonic Arts Collection

Barry Truax is a Canadian composer and Professor Emeritus in the School of Communication at Simon Fraser University where he has taught courses in acoustic communication and electroacoustic music. He worked with the World Soundscape Project, editing its *Handbook for Acoustic Ecology* (1978), and has also authored *Acoustic Communication* (1984) and numerous articles on sound and technology. As a composer, Truax is best known for his work with the PODX computer music system which he has used for solo tape works, music theatre pieces and those with live performers or computer graphics. In 1991 his work *Riverrun* was awarded the Magisterium at the International Competition of Electroacoustic Music in Bourges, France. Truax's multi-channel soundscape compositions are frequently featured in concerts and festivals around the world. Since his retirement in 2015, he has been the Edgard Varèse Guest Professor at the Technical University in Berlin, and Guest Composer at the 2016 Beast Feast Festival in Birmingham.

Truax's soundscape composition *Ocean Deep* (2017) takes the listener on an imaginary descent into the depths of the ocean in a submersible capable of withstanding the tremendous pressure of the undersea environment. The audience hears the creaking of its frame and encounters swarms of strange sea creatures. A strong vortical undercurrent propels the return ascent and the work ends with a re-emergence on the shore of a subtropical island in the evening. *Ocean Deep* is an extension of the first movement of Truax's 1990 quadraphonic work *Pacific*, the first to use granular time-stretching of environmental sound using the composer's PODX software, with spatialisation created by Harmonic Functions' TiMax2 matrix mixer. This technique, known as granular synthesis, breaks down sound into "grains"—sonic fragments that are fractions of a millisecond—which are then manipulated to build up complex dynamic flows of sound, much like individual droplets of rain might together create a powerful flood.



Barry Truax at the Institute of Sonology,
Utrecht, ca.1973. Courtesy the artist.
Photo Theo Coolisma.

Chris Watson

Namib 2013

sound installation

16 channels, 14 mins 15 secs

Commissioned through the

RMIT Art Fund, 2012

RMIT University Art Collection,

Sonic Arts Collection

Chris Watson is an English musician and sound recordist specialising in natural history. He was a founding member of the musical group Cabaret Voltaire, and has worked as a wildlife sound recordist on television documentaries and experimental musical collaborations. Watson has developed a particular and passionate interest in recording the sounds of animals, habitats and atmospheres from around the world. As a freelance recordist and composer for film, television and radio, Watson specialises in natural history and documentary location sound together with sound design in post-production. Most recently Watson has been exploring aspects of spatial sound and Ambisonic installations in collaboration with galleries around the world.

The Namib Desert is an ancient and unique landscape: a vast, mobile sea of sand that extends over 2,000 kilometres down from the Atlantic coast of south and west Africa. *Namib* is composed from recordings made over eight years in different regions of the desert, from the Skeleton Coast to the interior dune mountains. It traces the shifting sounds created by the dense Atlantic fog bank rolling inland at dawn to transform the acoustics along the dry banks of the Kuiseb River. It uncovers the deep rhythms of an evolving sand dune, from the movement of individual grains to the slow westwards creep of an entire mountain of sand. And it reveals the sounds of the dunes, hills and valleys being patrolled after sunset by an emerging alien empire—insects vibrating and singing into the night air. *Namib* reflects a timescale beyond our reckoning, compressing an environment that has slowly evolved over fifty million years into a fourteen-minute soundscape.



Jana Winderen

Spring Bloom in the Marginal Ice Zone

2017

sound installation

16 channels, 20 mins

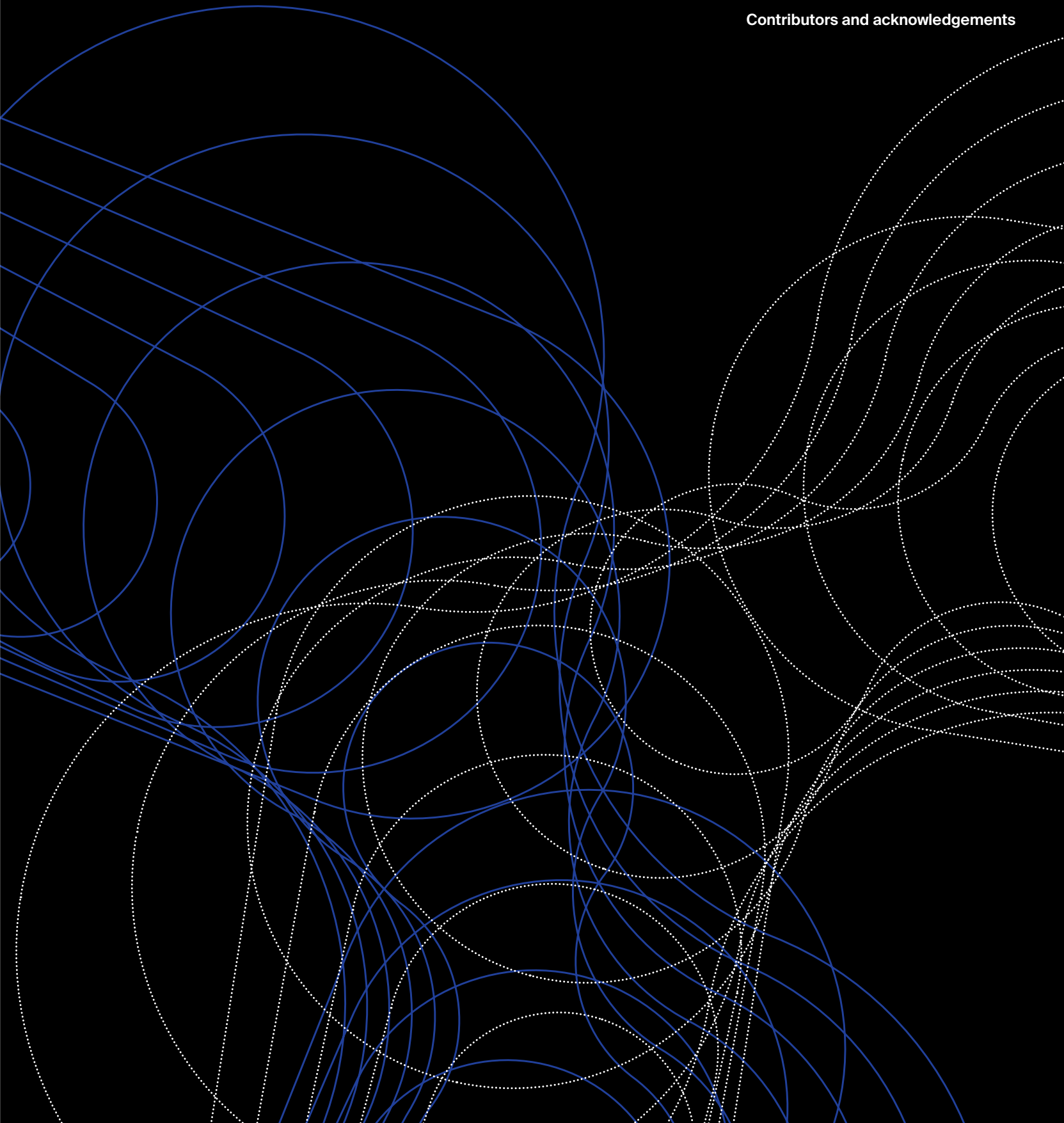
RMIT University Art Collection,

Sonic Arts Collection



In *Spring Bloom in the Marginal Ice Zone* (2017), the listener experiences the bloom of plankton, the shifting and cracking sea ice in the Barents Sea around Spitsbergen towards the North Pole, and the underwater sounds made by bearded seals and migrating species such as humpbacks, orcas, and spawning cod. The marginal ice zone is the dynamic border between open sea and sea ice, an ecology that is extremely vulnerable. The phytoplankton present in the sea produce half of the oxygen on the planet. During spring, this zone is the most important carbon dioxide sink in our biosphere. In *Spring Bloom in the Marginal Ice Zone* the sounds of living creatures become voices in the current political debate concerning the official definition of the location of the ice edge. This work is Winderen's latest instalment in a series that reveals the sounds of underwater life, from the warm waters in the Caribbean to the cold and nourishing waters around Greenland, Norway and Iceland.

Jana Winderen studied Fine Art at Goldsmiths College in London, and has a background in mathematics, chemistry and fish ecology from the University of Oslo. She was commissioned for an installation in the Park Avenue Tunnel, New York City in the summer of 2014, and exhibited at MoMA in 2013. She was recently an artist-in-residence at the TBA21 Academy. In 2011 Winderen won the Golden Nica, Ars Electronica, for Digital Music and Sound Art. Winderen researches the hidden depths of the ocean with the latest technology; her work reveals the complexity and strangeness of the unseen world beneath, using audio topography of the oceans and ice crevasses. She is concerned with finding sounds from hidden sources, both inaudible to humans and from places and creatures that are difficult to access.



Leah Barclay is an Australian sound artist, composer and researcher working at the intersection of art, science and technology. She specialises in electroacoustic music, acoustic ecology and emerging fields of biology exploring environmental patterns and changes through sound. Barclay is the president of the Australian Forum for Acoustic Ecology, the vice-president of the World Forum of Acoustic Ecology, and serves on the board of a range of arts and environmental organisations. She is currently a postdoctoral research fellow at the Queensland Conservatorium Research Centre and has written extensively on acoustics, ecology and listening.

Daniel Browning is an artist, curator, writer, journalist and radio presenter based in Sydney. He is a descendant of the Bundjalung people of northern New South Wales, the Kullilli people of south-western Queensland and the traditional owners of the Gold Coast hinterland. Browning has worked in the Radio News and Current Affairs division of the ABC and as News Director at Triple J since 1994, and as producer and presenter of Radio National's Indigenous arts program *Away!* since 2005. He is the curator of *Blak Box*, an innovative architectural sound installation by Urban Theatre Projects used to share the First People's past, present and future through diverse contemporary Aboriginal voices. Daniel has worked as an editor for *Artlink Indigenous* and *Artlink Blak on blak*, and is a widely published freelance writer on arts and culture.

David Chesworth is an artist and musician based in Melbourne. He works across experimental and electronic music, sonic art, installation and video practice, with a diverse cross-disciplinary, collaborative, and often conceptual practice. From 1978 until 1982 Chesworth coordinated the Clifton Hill Community Music Centre in Melbourne, and has long been central to Australian experimental music activity.

Sophie Gleeson is a sound artist, audio producer and academic. She teaches soundscape studies and spatial sound production at the SIAL Sound Studios at RMIT's School of Design. Her evolving research and creative practice concerns listener experience, place and attuning to the sounds of the everyday.

Liquid Architecture (LA) is Australia's leading organisation for artists working with sound and listening. LA investigates the sounds themselves, but also the ideas communicated about, and the meaning of, sound and listening. As curatorial associate of the *Site & Sound* exhibition, LA Artistic Director Joel Stern has worked with artists Amy Hanley, Thembi Soddell, Tina Stefanou, and Xen Nhà to produce new sonic works that reflect, respond, extend, depart or otherwise connect to sonic environments in and around McClelland Sculpture Park and Gallery. These works will be presented as part of a listening event during the exhibition.

SIAL Sound Studios was officially opened in 2004 and is now part of the School of Design at RMIT University. The studios are devoted to sound-based research, teaching, performance and exhibitions. Students, staff, guests and partners include practitioners in acoustic design, sound performance, soundscape research and design. Projects in the studios encompass design, composition, acoustics, technology, performance and exhibitions. The studios also house Australia's only speaker orchestra, which is regularly used for spatial sound performances and workshops.

Starlings Spatial Sound Collective is a group of sound artists dedicated to the investigation, demystification and celebration of spatialised sound, including Lisa Rae Bartolomei, Gillian Lever and Josh Peters. Working in collaboration with SIAL Sound Studios at RMIT University, Starlings explore the artistic applications and historical examinations of multi-channel audio in its many forms, using multiple sound sources to build immersive and innovative sonic spaces. As part of *Site & Sound*, Starlings will present a dynamic performance event incorporating a number of works by emerging sonic artists who explore field recording, sonic investigations of the acoustic environment and spatialised sound.

Jon Buckingham was curator of the RMIT University Art Collection 2011-2020, where he worked to develop, exhibit and interpret the university's more than 120-year-old collection, including its ground-breaking Sonic Arts Collection. As a curator his practice continues to explore the role played by collections in contemporary institutions and curatorial models. He has curated a number of exhibitions, including *Sound Bites City* 2013, with Suzanne Davies & Lawrence Harvey; *Revelations* 2014; *Against the Grain* 2015; *Quiddity* 2016; and *Chaos & Order* 2018. In 2021 he commenced as Program Manager, Curation and Innovation working at the University of Melbourne's Archives and Special Collections.

Lawrence Harvey is a composer, sound designer and director of SIAL Sound Studios, School of Design, RMIT University. He is Artistic Advisor to the RMIT Sonic Arts Collection and directs public concerts and exhibitions on SIAL Sound Studios' speaker orchestra. Harvey has collaborated in performances and exhibitions, teaching and research with musicians and artists, interior, digital and industrial designers, and architects. In addition to electroacoustic compositions, he has produced gallery and urban sound installations, spatial sound designs for VR and theatre, and performed widely. His writing, teaching and post-graduate supervisions explore spatial sound composition and performance, soundscape studies and sound as a model for other cultural practices.

Simon Lawrie is curator at McClelland Sculpture Park+Gallery in Langwarrin, Victoria, where he manages a collection of over 2600 works including 120 large-scale outdoor sculptures, a diverse exhibition program, and a number of ongoing and project-based artist commissions and public art projects. He has curated exhibitions including *Inside Out: Space and Process – Erwin Fabian and Anne-Marie May* 2020; *Solid Light: Josef Stanislaw Ostoja-Kotkowski* 2019; and *SERIAL* 2019.

McClelland acknowledges the generous support of our exhibition partner RMIT Culture and funding sponsor the Besen Family Foundation. We are grateful for the ongoing assistance and contributions of all our sponsors, partners, donors and patrons: Creative Victoria; Frankston City Council; Crown Resorts Foundation; Packer Family Foundation; the Elisabeth Murdoch Sculpture Fund; Aidan Graham Trust; International Art Services; Corrs Chambers Westgarth; Plenary Group; Elgee Park; Cub Cadet; Haymes Paint; Yamaha Music Australia; and Selby Acoustics. Particular thanks are due to the indispensable contributions of co-curators Jon Buckingham and Lawrence Harvey, as well as SIAL Sound Studios. Thank you also to McClelland's dedicated team of staff and volunteers.

The curators would like to thank the artists involved in *Site & Sound* and contributors to the exhibition catalogue, as well as the following individuals and organisations: Ross McLeod, Simon Maisch, Erik North, David Beesly, David Stanley, Tim McLeod, RMIT Media & Communications, Prof. David Forrest, RMIT MA Arts Management, Janine Fritschi, Que-Phuong Lam, Xin Liu, Ziqi Shao, Ella Sweeny, Aakash Verma, Sukanya Deshmukh, Timofey Kojevnikov, Yahan Wang, Wanlin Zhao, Jiechen Zhao, Kevin O'Connor, Brad Marmion, Matty Fuller, Tristan Janle, Ron Ellazam, Alexander Einoder, Hatairat Jampanant, Xinmin Jia, Hung Nguyen, Jin Qian, Jonathan Tan, Yahan Wang, Brendan West, Xuansheng Wu, Haoyu Yin, Li Yin, Jiechen Zhao, Australian Wildlife Sound Recording Group, National Film and Sound Archive, Simon Tait, Dan Turnbull, Bunurong Land Council, Joel Stern, Georgia Hutchison, Caroline Colbran, and Gabrielle Fanning.

