

Songs in Isolation: Social Commentary and Contagion, COVID-19, and Creative Practice in Electronic Music

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Abstract: *Songs in Isolation* is a series of nine mini-works for online multimedia distribution. The works are a time capsule of the first 18 months of the COVID-19 pandemic. Each piece was informed by Melbourne, Australia's global and locational socio-political contexts. Composition themes include frustration (at public messaging, government incompetence, panic buying, lobbying by large businesses at the detriment of the rest of society, and spreading of disinformation), socially contagious behaviours (home hairdressing, meditation, dieting), and personal reactions to stress (brain fog, dissociation, pressure to generate creative content). This research is practice-based performative autoethnography [1], [2]. The pieces and social context move together, buffeted by the movements of a virus and the success or failure of each country concerning travel movements and location-specific behaviours of the public. Various composition tools and techniques were used to suit each work, including gestural interfaces (Wave [3], MiMu [4], self-built datagloves – GLVD [5]), consumer EEG interface – Muse 2 [6]), various DAWs and field recording devices, and voice.

1 Introduction

Songs in Isolation is a series of works composed during the 2020-2021 COVID-19 lockdowns in Melbourne, Australia. The pieces were a response and documentation process for current events, public waves of consciousness (anxiety, apathy, bread-making, et cetera), and the importance of maintaining one's practice during isolation. The works use various tools, such as human interface devices (HID) – consumer EEG (Electro-encephalogram) device *Muse 2* [6], self-built dataglove gestural controllers (GLVD); and digital workstation tools such as *Max* [7], *Ableton Live 11* [8], *Logic Pro X* [9]. Audio sources included field recordings, sampling, and human voice using *Extended Vocal Techniques* (EVT). EVT are singing techniques drawn from contemporary, experimental, and non-Western styles. These techniques are part of my practice and exploration as a singer-composer-performer and are my primary choice for artistic expression. Each piece is a work of performative autoethnography and was informed by embodiment studies and body-centric practices.

COVID-19 created a dividing barrier between the world before and the world after. Social contagion was a benign manifestation alongside the viral contagion concerns. Behavioural contagion gave individuals a sense of connection during a period of isolation in addition to fear-based and emotional contagions as social phenomena (panic buying and hoarding of toilet paper and other grocery goods, for example). These positive and negative aspects spread through the internet [10]. Through our physical separation, many attempted to remain connected via social media. This facsimile of social connection was a potential super spreader for behavioural trends, magnifying the normal engagement through a heightened sense of fear and anxiety driven by the global pandemic.

In this paper, I discuss social contagion during viral contagion through COVID-19 artworks and the echoes of actions throughout society. I was affected by behavioural contagion and discussed my works in the context of each work's current events and as compared to songs that became viral memes

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during the early stages of the pandemic. This work is limited to my experiences and reactions to global phenomena. Perspective is often granted through distance to the initial catalyst, particularly in traumatic situations, as the COVID-19 pandemic has been for many people. How do COVID-centric artworks bear witness to time, place, and space? This research addresses these questions by looking at works through an outward lens on social contagions [11], [12].

2 Methodology

This research is practice-based [1] autoethnography [2]. The pieces and the writing are told through a personal lens, commenting on the broader societal landscape and responding to COVID-19, political events, and social issues. Understanding and interpreting the world through making is central to my practice. Sullivan [13] describes knowing in the arts as a braid-like structure, where the strands must be continuously unwoven, sorted, and re-constructed through various existing practices and enquiries. The pieces and social context move together, buffeted by the movements of a virus and the success or failure of each country with travel movements and location-specific behaviours of the public.

My pieces serve as vehicles to explore social contagion, personal experiences, and global phenomena. I experiment and innovate with techniques, audio effects, and technologies, externalising personal experiences. Furthermore, I employ body movements and brainwave data to control sound generation, turning my body into an artistic interface. Drawing heavily from personal experiences and reactions to events, I acknowledge my perspectives and biases, reflecting on how these experiences inform artistic choices and the embedded meaning in my work.

I use various wearable technologies and computer-based composition tools to create the pieces. These devices are pivotal, as my approach is significantly influenced by the tools used. Due to the importance of the body and perceptions as integral components in the research, I have drawn from embodiment [14], [15] due to its body-centric approach. Embodiment, in straightforward terms, is the study of the interplay between the body, brain, and objects in action. The composition experiments were accompanied by a reflective journal containing work-session reflections (intuitions, perceptions, techniques, analysis, methods used, and health state). Each work was completed with a video clip, uploaded to YouTube, and debuted at a SeenSound event (a monthly sound and audio event run by Brigid Burke and Mark Pedersen in Melbourne, Australia). Compositions were inspired by current events, principally location-driven by Melbourne, Australia. However, the heavily online nature of general life currently means a significant cross-pollination from other countries.

Location Context

Living through Melbourne's COVID-19 lockdowns significantly influenced my experience and that of my social circles during the early pandemic stages. Initially, the Victorian government adopted a more relaxed approach but later shifted towards stricter measures, which some viewed as draconian. Personally, I hesitate to label them as such, as I witnessed rule-breaking in my neighbourhood and through news articles that painted a different picture. Instead, these restrictions seemed to reflect a pessimism about society's commitment to collective well-being, questioning Australia's deeply ingrained "mateship" values.

While Melbourne was relatively safe from high infection and death rates compared to other global regions, the consequences of political and societal failures were still challenging to endure. Families in Australia were spared much COVID-related grief, but mental health issues, particularly among women in Victoria, escalated [16], [17]. Additionally, traditional gender roles were reinforced during the pandemic, with women taking on most of the added responsibilities in housework and childcare [18].

3 Behavioural Contagion

Behavioural contagion is a form of social contagion. These can be malignant or benign; for example, behavioural and social contagion is thought to be a factor in mass murders, suicide clusters, fads, and viral internet memes¹ [19]. Some examples of viral musical audiovisual memes were the *Coronavirus Etude* [20] and *Get on the Beers* [21]. Examples of behavioural contagion through social media transmitted fads include the home salon (cutting and dying hair at home), baking bread (especially sourdough bread), and panic buying.

It is thought that an explanation for social contagion may be the “memetic stance because culture has an independent evolutionary dynamic that is derived from the genetically evolved human capacity and predisposition to replicate culture” [19, p. 50]. Marsden discusses the success of social contagions being determined by stimulus and response in evoking imitation. The internet provides easy access to both stimulus and response-giving for individuals and groups.

The internet is considered a weak tie in social contagion. However, it has further reach due to the length of the tie and network possibilities. Centola discusses how “networks with long, narrow bridges are useful for spreading information” but cautions that “too much randomness can be inefficient for spreading the social reinforcement necessary to act on that information” as risk and/or connectedness decline [10, p. 731].

Since some works are responses to, and adoptions of, social and behavioural contagion, I have sought to critique (at the time) current events as a pseudo-pandemic diary. Some works are more lighthearted and whimsical to cope with ever-pressing global concerns. The pieces become thematically darker as time and circumstances wore on. This climaxes in the ninth piece (or the last muse), where this work diverges into my doctoral thesis and presentations of trauma as a composition tool to externalise psychological states.

4 The Nine Muses

Here, I discuss the compositions relevant to this paper and how they represent the global or local context at the time of composition. The series is collectively called *Songs in Isolation*. The works are discussed in the order composed and released. Links to YouTube videos are provided for each piece.

I: Always Read the Instructions, April-May 2020

This responds to the early 2020 trend of dying one’s hair and chaotic government communications about the pandemic. It uses speech, video, and audio effects created in Logic Pro X [9]. The audio was recorded during hair dyeing while delivering a perky, YouTube tutorial-style address, paralleling the process of dying one’s hair to creating art in lockdown and upholding traditional productivity.

A theme of the pandemic has been globally mixed messaging concerning health recommendations. In early 2020, the news was flooded with opinions expressed as facts and insane medical advice was being spread by prominent political figures and conspiracy theorists alike. Uncertainty prevailed, and DIY haircare surged.

The layered and glitchy audio elements symbolise information-disinformation cycles, medical recommendations filtered through social media, and lockdown-induced hysteria. Text lines like “In isolation, you really have to focus on solo projects” and “Always read the instructions first” satirise the pressures imposed by workplaces, governments, corporations, and universities for continued productivity and consumption. These statements are juxtaposed with facial expressions conveying grimaces, uncertain twitches, and sighs, further accentuated through audio manipulation techniques within a Digital Audio Workstation (DAW), resulting in glitching sounds.

Link to work: <https://youtu.be/NDrUtRkOdnw>

¹Pictures shared peer-to-peer on social media, generally with a text caption over the top, sometimes involving sound or moving images and normally amusing.

II: Easing Restrictions, June 2020

This piece draws on the use of language, voice, and layering from Mark Applebaum's *Three Unlikely Corporate Sponsorships* [22] series. It responds to the untimely easing of COVID-19 restrictions in Australia in June 2020, contrasting with New Zealand's cautious approach. I saw mixed reactions on social media, with some enthusiastic about returning to "normal" and others more cautious and sceptical.

I formed a score by stacking text layers in a word processor and recording each layer using a low-quality headset microphone to emulate early computer conferencing call quality. The text's position on the page in the text score informed the pitch centre of each line's delivery. The audio was processed with audio effects to separate the layers sonically.

Text sources included social media themes like lockdown weight loss, supermarket shortages, opinions on easing restrictions, and snippets from news conferences on platforms such as the Australian Broadcasting Company (ABC). Like Applebaum, employed speech rhythms and pitches to shape the music deliberately in a playful manner.

Link to work: <https://youtu.be/ewcDSfh51uk>

III: Umm... Omm?, July 2020

This piece extends my EVT and throat-singing practice from my master's degree, investigating how physical and virtual locations affect voice use. I composed it in response to social media's renewed emphasis on meditation and creating peaceful environments during Melbourne's second significant lockdown in July. I made layers of voice, using overtone (filtering vocal formants by control of the tongue, oropharynx, and nasopharynx) and undertone (period doubling the fundamental pitch with the false vocal folds) singing. The initial layer draws inspiration from the syllable "Om", commonly associated with meditation and yoga in Indian religions. The piece features minimal harmonic movement but shifting overtones and fundamentals, creating an unresolved space with subtle tension that builds throughout and eventually fades without musical resolution.

The goal was to craft a pseudo-meditation piece that offers a tranquil yet somewhat edgy sonic environment, stepping beyond genre-specific boundaries. That is, the lack of traditional harmony and an increased dissonance in note selection. The intentionally short duration prematurely disrupts established meditation music parameters.

Link to work: https://youtu.be/8puSjA6O6_Q

IV: FuzzyLogic, September 2020

This piece responds to the heightening of my brain fog, amplified by my doctoral project and the challenge of maintaining a positive educator role amidst recurring anti-lockdown protests [23]. This étude was also used for my doctoral thesis to test *Muse 2* (a consumer EEG device) as an embodied sound controller and alternative to glove-based gesture control. The title blends logic theory, its commonplace association with washing machine ads, mundane existence, cognitive fuzziness (brain fog), and the distortion control symbolism in translating my brain waves into real numbers between 0 and 1.

Using voice and *Muse 2*, (Figure 1), I yoked delta, theta, alpha, beta, and gamma brain waves via OSC (Open Sound Control) from an iPad and a secondary application, routing them into *Max* [7]. Each brain wave type controlled a distinct sound source. One vocal layer encompassed "ah" sounds with and without vocal fry (isolated vocal fold air pops) and an undertone. The accompanying video was generated by recording the device's output while listening to the final composition.

Link to work: <https://youtu.be/PkVjeE0VcNQ>

V: Being Inside, October 2020

This piece was inspired by the relentless dripping of the bathroom sink and shower taps, neglected by our landlords for years. Melbourne was on the cusp of reopening, with each day aching for reconnection with friends and family amidst the monotonous daily grind. To counter this sameness, I resorted to



Figure 1: *Muse 2* EEG headset device being worn while routing data to control sound.

haircuts for a change. Dripping taps are universally irksome and have been employed as a torture method, notably known as Chinese water torture [24].

I used *Max*, *Ableton Live*, *GLVD* (version three, with gestures: fist, palm, peace sign, and pinky out, see *Figure 2*) and one hand manually controlled volumes on a second MIDI controller. Due to CPU intensity issues stemming from an unoptimised *GLVD* version three *Max*-patch device interface, I employed a single glove to mitigate the computing load. Unlike my other works, this piece does not feature voice; I used the vibrating drone of hair clippers and reverb to enhance overtones, mimicking the effect achieved with vocals.

Link to work: <https://youtu.be/Wutfkbiq930>

VI: First, There Was Nothing, Then It Exploded, October 2021

This work uses voice and *GLVD*, version three; see *Figure 2*. It combines serendipity, flow, and a sonic explosion. As Melbourne inched towards easing most COVID-19 restrictions, transitioning into “COVID-normal” rules [25]. The hayfever season coincided with this prolonged lockdown, causing a sense of temporal and future disorientation. This composition briefly provided solace.

A sudden data glitch unexpectedly intensified the self-made filter effect in *Max* and reverb, resulting in a sonic explosion akin to a missile detonation. I controlled this audio through the roll position of my right wrist. The intermittent synth line emerged from my moments of distraction (while keeping the other hand still) while grappling with the substantial, distorted noise. The noise initially erupted chaotically but gradually evolved into a structured sound that I could control. This revelation brought the sound almost to silence, a choice I briefly regretted before reigniting the noise. I became consumed by the interaction but became self-conscious and halted the noise, believing I had spent over 10 minutes engrossed in the activity. This unexpected shift in time perception and the sound’s engulfing quality resulted in a temporal disconnection, aligning with ‘*flow*’ and embodiment concepts [26], [27]. The engagement was captivating due to its element of surprise and initial unpredictability.

I opted to preserve the glitch unaltered to capture the depth of my immersion in the activity, while the synth and speech segments leading up to and following the glitch were edited to frame and docu-



Figure 2: *GLVD* version three.

ment the glitch. These segments were layered and panned in the final mix.

Link to work: <https://youtu.be/3ls4tD3G8W0>

VII: Mood:2020, October 2020 – January 2021

This piece, a collaborative effort with Little Songs of the Mutilated under the coordination of Justin Ashworth, involved around 42 participants from a collective of over 120 individuals. Each participant contributed a sample of five seconds or less, and the guidelines were simple: create a piece with a duration ranging from three to fifteen minutes, using at least 90% of the sounds from the shared sample database. I integrated 17 of these samples, including my contribution.

I organised these samples into blocks by editing and combining multiple samples. Then, employing *GLVD* version four (Figure 3), I generated layers of sound by controlling the speed, pitch, and audio effects on each sample block. Takes were performed, curated, and stacked to construct the final composition².

Its inspiration stemmed from one sample's name, "*MOOD20*". At the time, I found humour in the track name, reflecting my crankiness, confinement, and weariness of lockdown and winter. Much like a disgruntled parent would put it, I was in a "mood". This emotion seemed to resonate with the prevailing sentiment in Melbourne when I began crafting the piece.

Link to work: <https://youtu.be/u3hisGPoK4E>

VIII: Flame, February 2021

This piece uses breath, field recordings, and a lighter. It was written in response to being told of the terminal illness of a friend that was left to fester during COVID-19, renewed urges to ease restric-

²A timelapse video of one layer's recording can be viewed at <https://youtu.be/OCBy0Q2RT7k>, where I manage sample starts and stops and control audio effects like speed, distortion, and filtering.



Figure 3: *GLVD* version four

tions unwisely, anti-vaccination protests, vaccination rollout bungles, wimpy climate change action by the Australian government, poor handling of sexual assault in Australian workplaces, and confused aid requirements amid smaller scale lockdowns in Victoria, Australia. This composition marks a shift away from the intense emotional and behavioural connections experienced during the initial COVID-19 lockdown periods, representing mounting frustrations arising from inaction, complacency, and the repetitiveness of these experiences.

Breath and lighter flicking samples accompany each other and interact with field recordings and natural bush sounds captured at Organ Pipes National Park, VIC, in January 2021. The breath sounds reinforce the bird songs and fire crackles, acting as the gas flows through the lighter with soft whistles, inhales, exhales, and other mouth noises. Rhythmic inhales and exhales, occasionally intertwined with subtle inward phonation, create a subdued climax in the composition, symbolising Australia's governmental conservation apathy.

Link to work: <https://youtu.be/jTRzBAY99VA>

IX: Your Subconscious is Knocking, Pt. 1, September 2021

This piece encapsulates the lingering impact of COVID lockdowns, the traumatic experiences facilitated by the altered communication dynamics of the COVID era, and the escalating prevalence of gender-based online abuse [28]–[30]. During traumatic events described in the concealed text (layer 1), my brain underwent transient amnesia (dissociation), erasing the trauma details and leaving only the lingering symptoms. Dissociation arises when the brain becomes overwhelmed and temporarily disconnects from a situation, leading to brief or extended periods of detachment.

This composition comprises two layers and was crafted using *Max* and voice. The first layer features text-driven noise that recounts an abusive situation I endured from 2020 to 2021, primarily unfolding through an online platform. The noise gate allows sound to pass through when the text is spoken. The second layer becomes audible during instances of “Shh” and breath or mouth sounds (this second noise gate operates similarly to the first). The second layer interacts with the first, causing a reduction in the first layer's sound.

The recurring “Shh” symbolises moments of disconnection within my brain, while the initial, quieter tonal noise represents my experience – my subconscious and body attempting to communicate. When the shushing takes precedence over the first layer, it imitates the momentary dissociation of a besieged mind. The various “Shh” iterations reflect the brain's capacity for effective self-censorship with varying degrees of intensity.

Link to work: https://youtu.be/Q4rF_uZkXNc

5 Discussion

During the first two years of the COVID-19 pandemic, especially in Melbourne, we craved human connections despite physical distancing. We sought virtual unity through trends, collective emotions, social media, and digital conferences. We spent much time plodding through life and on video-conferencing calls. I intended to document these shared experiences sonically – down to the home hairdressing trends, pets wandering in front of the camera during meetings, and toilet paper shortages creating a pandemic diary. The resulting works reveal a theme of online contagion and offer social commentary on issues amplified through viral transmission, which I explore through proximity, contagion, play, and humour.

Proximity and Contagion

Songs in Isolation acts as a time capsule and commentary on early pandemic experiences, reflecting our collective sense of anxiety and responses. These were our collective angst. Many individuals maintain social connections through social media and platforms such as Zoom. Each work demonstrates a facet of the COVID-19 experience. Surprisingly, earlier works demonstrate a greater unification with the

cultural zeitgeist than later works. This could be due to the easing of restrictions providing a social outlet. By piece eight, more pressing matters became evident from COVID-19 for my social circle and me, so our experiences diverged.

These initial emotional shifts and engagements in trending activities illustrate examples of convergence or emotional contagion, likely influenced by empathy and the mirror neuron system³ [31] [32]. Research shows that emotional contagion is driven by empathy, a quality generally found to be higher among artists [33]. When I was filled with grief for the death of my previous life, other people were in a similar space, and then when I moved through it, they would have done too. Even in physical isolation, emotions appeared to travel through digital communications.

Different reactions to upheaval fuelled trends, driven by factors such as boredom, minor acts of rebellion, the so-called Lipstick Effect⁴ [34], a desire for community through shared activities, and heightened anxiety. For instance, panic buying, a socially undesirable herd behaviour, emerged due to perceived threats and product scarcity, influenced by an individual's social network and the need for control in a situation where one felt helpless [35], [36]. Another noteworthy thread was the compulsion to change one's appearance [32], [34], particularly evident in the surge of DIY haircare facilitated by the sudden unavailability of salon appointments. Beyond my normal predilection for DIY, I could control my public-facing response through creative works documenting my experience. These compositions aimed to inject humour and light-heartedness into the pandemic narrative, using emotional contagion to relieve the general stress of living through a pandemic.

Each work in *Songs in Isolation* deals with a different emotional wave. Earlier works exhibit a tongue-in-cheek approach to social and mental health phenomena. The sonic textures remain aesthetically consistent between pieces. I generally used low-budget technology and rapid composition turnarounds to authentically capture evolving events. A downside is the lack of predictable structure in intervals between compositions. More reliable trends might have been captured in one piece every two to four weeks. Regularly generating and sharing works online increases the likelihood of algorithmic recognition. However, this added pressure might result in stilted work, burnout, and a lack of relevance as trends fluctuate.

Notably, some prominent pandemic trends, like bread baking and toilet paper shortages, are not featured in these compositions. Conversely, albeit subtly incorporated, panic buying reflects toilet paper's unpredictable availability in my local supermarket, for example, in *Easing Restrictions*. Toilet paper remains an item that is inconsistently available in my local supermarket. However, these were trends that I and my household avoided during the main lockdowns for various reasons. The home salon trend paralleled my usual, non-COVID life. This allowed easy integration into the creative process as the regularity of haircuts and hair dye meant that I could engage during my normal routine. This contributed positively to the internet's weak tie effect in social contagion, lowering the entry barrier.

Some of the inspiration for these compositions stems from darker experiences, such as the connection between *Your Subconscious is Knocking* and the theme of abuse, all linked by the profound sense of isolation and trauma. These thematically darker works are handled more seriously, collectively revealing a downward trend in mental health and emotional resources. They serve as snapshots of moments when I experienced increasing social isolation, in stark contrast to others becoming less restricted, thus documenting the detrimental effects of prolonged government-mandated isolation.

Play and Humour

Humour, particularly dark humour, is often used as a crutch when we deal with difficult circumstances⁵ [37]. In not using overt sonic aggression cues (except for distortion in *Fuzzy Logic*), the emotional tone of the pieces is kept light. Even *Always Read the Instructions, Your Subconscious is Knocking, pt.1*,

³The mirror neuron system is a specialised group of neurons in the brain that mirror the behaviours and actions of other people. This system is implicated in language, empathy, and social cognition, among others.

⁴Where (mostly) women make small discretionary purchases to provide an emotional uplift in times of economic downturn.

⁵In this case, individual and collective trauma.

and *First There Was Nothing, Then It Exploded* with their glitchy, shaped noise, emphasise tonality and timbre. They achieve this by juxtaposing absurd elements like an overly cheerful speaking voice, librarian shushing, and unconventional synthesizer lines.

Other absurd elements the mundanity of everyday lives, featuring elements like a cat sample in *Mood:2020*, recurring home hairdressing themes, and text content in *Easing Restrictions*. They also document the waves of larger social consciousness, albeit through the lens of an individual's biases⁶. By framing my work through nonsensical and surreal depictions of news, emotions, and trends, I aim to offer a humorous perspective. This approach cloaks potentially distressing emotions, presenting them as subjects for light-hearted amusement rather than expressing them with excessive distortion or anger.

The confinement of endless Zoom calls and restricted outdoor activities triggered a sense of entrapment. To counter this, I embraced novel instruments for musical expression, such as the *GLVD*, and repurposed devices like *Muse 2* in a playful manner. These novel instruments facilitated embodied interactions with sound, a subject I continue exploring in my doctoral thesis. Embodiment and one's connection to the body can be disrupted through traumatic situations by the individual's conscious or unconscious distancing from emotions and anxiety as somatic consequences. This research is beyond the scope of a single article.

As a summary of ongoing research, novel physical interaction with sound manipulation and sound creation changes my sonic output to explorations of timbre and physically generated manipulations. This functionally means often using continuous controls rather than stepped controls. This shift and incorporation of the whole body in the creative process disrupted my conventional practice as a singer and multi-instrumentalist. It gave a positive reason to engage with computer music after long workdays and provided release through the creative process. Moreover, it prompted adjustments in my performance goals, emphasising grace and the delicate balance of being a singer, dancer, and accompanist, reigniting my involvement in dance as an art form with its distinct bodily demands. This experience informs my future research, particularly exploring the development of proprioceptive skills and aesthetics in gestural performance, building upon Mainsbridge's work [38].

Technologies' Impacts

Quick turnarounds for most pieces led me to use whatever was readily available in addition to my doctoral research on wearable and embodied interfaces. This sometimes resulted in a low-budget approach, reflecting the shift to home devices compared to professional setups. Musicians, including professionals, students, and amateurs, often faced a reduction in the quality of their tools during the pandemic. As mentioned in *Easing Restrictions*, these lower-quality devices were used intentionally to colour and code the recordings towards this purpose.

I used Zoom H1 and H5 devices in field recordings. I preferred the H1 for its portability, minimal mental effort, and convenience (powered by a single AA battery). This cost-effective choice streamlined decision-making, mirroring the reduction in choices imposed by Melbourne's strict curfews. I prioritised devices with low cognitive demands, reflecting and paralleling the pandemic's emotional toll, financial strain, and Zoom fatigue, characterised by eye strain, constant self-monitoring, reduced mobility, frozen positions, and heightened cognitive load compensating for diminished non-verbal communication [39], [40].

6 Conclusions

COVID-19 continues to shape our lives, as are online platforms and contagious behaviours. *Songs in Isolation* addresses the enduring impact of COVID-19 on our lives, particularly interrogating these contagions. These compositions serve as a sonic diary, encapsulating collective trauma and my personal

⁶A capsule of my biases: feminist, left-leaning, pro-vaccination, and pro-science, but from a very small-town farming upbringing.

experience during the first 18 months of the pandemic. Comprising nine distinct works, each captures specific moments shaped by global and local socio-political contexts, primarily Melbourne, Australia. The topics encompass frustrations with public messaging, government competence, panic buying, corporate lobbying, and the spread of disinformation. Though I used quick turnarounds to capture moods, irregular intervals between pieces limit their ability to comprehensively capture specific trends.

The compositions provide a sonic commentary on our evolving social landscape, exploring proximity, contagion, and humour. They mirror emotional shifts and engagement in trending activities during the pandemic's early stages, emphasising emotional contagion through empathy and digital communication. The pieces explore various trends and behaviours influenced by social media, such as panic buying and DIY haircare, shedding light on the role of online contagion. The series balances light-hearted tones and darker themes related to isolation and trauma, portraying the emotional toll of prolonged social separation, and changing circumstances.

Playfulness and humour feature prominently, offering solace amidst challenging emotions and experiences. Absurd elements and surreal depictions engage the audience and provide relief from pandemic-induced stress.

Integrating novel interfaces like the *GLVD* and *Muse 2* adds a playful dimension, facilitating embodied sound interactions and enhancing the compositions' distinctiveness.

Where possible, pieces were crafted with low-budget technology, leveraging available resources and other research strands. The cost-effective approach reflects the pandemic's shift from professional setups to home environments. Intentional use of lower-quality devices mirrors pandemic themes in compositions. Field recording devices highlighted the value of simplicity and reduced cognitive load, underscoring artists' adaptability in adversity and offering lessons for future creative endeavours during crises.

7 References

- [1] L. Candy, "Practice Based Research: A Guide," University of Technology, Sydney, AU, CCS 2006-V1.0 November, 2006.
- [2] T. Spry, *Body, Paper, Stage: Writing and Performing Autoethnography*. Walnut Creek, UNITED STATES: Routledge, 2011. Accessed: Apr. 07, 2020. [Online]. Available: <http://ebookcentral.proquest.com/lib/unimelb/detail.action?docID=843865>
- [3] Genki Instruments, *Wave*. 2019. Accessed: Mar. 14, 2022. [Datarig]. Available: <http://genkiinstruments.com/products/wave>
- [4] MiMu Gloves LTD, *MiMu*. 2010. Accessed: Oct. 18, 2021. [Datagloves]. Available: <https://mimugloves.com/>
- [5] S. Rose, *GLVD (Gently Leveraging Variable Decisions)*. 2020. Accessed: Apr. 26, 2023. [Datagloves]. Available: <https://www.youtube.com/watch?v=Rphplar3RUo>
- [6] InteraXon Inc., *Muse 2: Brain Sensing Headband - Technology Enhanced Meditation*. 2020. Accessed: Jun. 27, 2022. [Consumer EEG Headband]. Available: <https://choosemuse.com/muse-2/>
- [7] Cycling '74, "Max MSP." Cycling '74, USA, 2018.
- [8] Ableton, "Ableton Live 11." Ableton, Germany, 2021.
- [9] Apple Inc., "Logic Pro X." Apple Inc., USA, 2022.
- [10] D. Centola, "Complex Contagions and the Weakness of Long Ties," *Am. J. Sociol.*, vol. 113, no. 3, pp. 702–734, Nov. 2007, doi: 10.1086/521848.
- [11] R. E. Riggio and C. R. Riggio, "Social contagion," in *Encyclopedia of Mental Health (Third Edition)*, H. S. Friedman and C. H. Markey, Eds., Oxford: Academic Press, 2023, pp. 270–273. doi: 10.1016/B978-0-323-91497-0.00192-2.
- [12] T. Cochrane, B. Fantini, and K. R. Scherer, Eds., "Music to Listener Emotional Contagion," in *The emotional power of music: Multidisciplinary perspectives on musical arousal, expression, and social control*, in Series in affective science. Oxford: Oxford University Press, 2013.

- [13] G. L. Sullivan, "Making space: The purpose and place of practice-led research," *Pract.-Led Res. Res.-Led Pract. Creat. Arts*, pp. 41–65, Jun. 2009.
- [14] R. Shusterman, "Somaesthetics: A Disciplinary Proposal," *J. Aesthet. Art Crit.*, vol. 57, no. 3, pp. 299–313, 1999, doi: 10.2307/432196.
- [15] G. Sullivan, *Art Practice as Research: Inquiry in Visual Arts*, 2nd ed. USA: SAGE Publications, Inc., 2010. Accessed: Aug. 26, 2019. [Online]. Available: <https://au.sagepub.com/en-gb/oce/art-practice-as-research/book233902>
- [16] P. Butterworth, S. Schurer, T.-A. Trinh, E. Vera-Toscano, and M. Wooden, "Effect of lockdown on mental health in Australia: evidence from a natural experiment analysing a longitudinal probability sample survey," *Lancet Public Health*, vol. 7, no. 5, pp. e427–e436, May 2022, doi: 10.1016/S2468-2667(22)00082-2.
- [17] P. Hosseinzadeh, M. Zareipour, E. Baljani, and M. R. Moradali, "Social Consequences of the COVID-19 Pandemic. A Systematic Review," *Investig. Educ. En Enfermeria*, vol. 40, no. 1, Apr. 2022, doi: 10.17533/udea.iee.v40n1e10.
- [18] A. Sevilla and S. Smith, "Baby steps: the gender division of childcare during the COVID-19 pandemic," *Oxf. Rev. Econ. Policy*, vol. 36, no. Supplement_1, pp. S169–S186, Sep. 2020, doi: 10.1093/oxrep/graa027.
- [19] P. Marsden, "Memetics and Social Contagion: Two Sides of the Same Coin?," *J. Memet.*, vol. 2, pp. 171–185, Jan. 1998.
- [20] J. DePaoli, *Coronavirus Etude (For Piano and Disinfecting Wipe)*. 2020. [Music]. Available: https://www.youtube.com/watch?v=XP5dPn_eP7Q
- [21] Mashd N Kutcher, *Get on the Beers (feat. Dan Andrews)*. 2020. Accessed: Oct. 03, 2022. [Meme, Audiovisual Music Video]. Available: <https://www.youtube.com/watch?v=7hOK5JF5XGA>
- [22] M. Applebaum, *Three Unlikely Corporate Sponsorships*. 2016.
- [23] M. McGowan, "Melbourne anti-lockdown protests: at least 15 arrested in violent clashes with police," *The Guardian*, Sep. 05, 2020. Accessed: Jun. 26, 2023. [Online]. Available: <https://www.theguardian.com/australia-news/2020/sep/05/melbourne-anti-lockdown-protests-dozens-arrested-in-violent-clashes->
- [24] M. de Young, *Encyclopedia of Asylum Therapeutics, 1750-1950s*. McFarland, 2015.
- [25] J. Taylor, "Melbourne to reopen after more than four months of Covid lockdown," *The Guardian*, Oct. 26, 2020. Accessed: Jun. 26, 2023. [Online]. Available: <https://www.theguardian.com/australia-news/2020/oct/26/melbourne-to-reopen-after-more-than-four-months-of-covid-lockdown>
- [26] D. A. Schön, *The Reflective Practitioner: How Professionals Think in Action*. Routledge, 1983. doi: 10.4324/9781315237473.
- [27] M. Csikszentmihalyi, *Flow: The Psychology of Optimal Experience*. HarperCollins e-books, 2009.
- [28] D. M. H. Kee, M. A. L. Al-Anesi, and S. A. L. Al-Anesi, "Cyberbullying on social media under the influence of COVID-19," *Glob. Bus. Organ. Excell.*, vol. 41, no. 6, pp. 11–22, 2022, doi: 10.1002/joe.22175.
- [29] C. Wahlquist, "'Distressing and confronting': online sexual harassment rises for Australian university students during Covid," *The Guardian*, Mar. 23, 2022. Accessed: Jun. 27, 2023. [Online]. Available: <https://www.theguardian.com/australia-news/2022/mar/23/distressing-and-confronting-online-sexual-harassment-ris>
- [30] M. Berger, "Gender-based online abuse surged during the pandemic. Laws haven't kept up, activists say," *Washington Post*, Nov. 25, 2021. Accessed: Jun. 27, 2023. [Online]. Available: <https://www.washingtonpost.com/world/2021/11/24/online-abuse-surged-during-pandemic-laws-havent-kept-up-activists-say/>
- [31] T. Eerola, J. K. Vuoskoski, and H. Kautiainen, "Being Moved by Unfamiliar Sad Music Is Associated with High Empathy," *Front. Psychol.*, vol. 7, 2016, Accessed: Jun. 27, 2022. [Online]. Available: <https://www.frontiersin.org/article/10.3389/fpsyg.2016.01176>
- [32] J. A. C. J. Bastiaansen, M. Thioux, and C. Keysers, "Evidence for mirror systems in emotions," *Philos. Trans. R. Soc. B Biol. Sci.*, vol. 364, no. 1528, pp. 2391–2404, Aug. 2009, doi: 10.1098/rstb.2009.0058.
- [33] E. Hatfield, R. L. Rapson, and Y.-C. L. Le, "Emotional contagion and empathy," in *The social neuroscience of empathy*, in Social neuroscience. Cambridge, MA, US: Boston Review, 2009, pp. 19–30. doi: 10.7551/mitpress/9780262012973.003.0003.
- [34] P. N. Danziger, "With Recession Threatening, The Lipstick Effect Kicks In And Lipstick Sales Rise,"

- Forbes, Online, Jun. 01, 2022. Accessed: Jun. 27, 2022. [Online]. Available: <https://www.forbes.com/sites/pamdanziger/2022/06/01/with-inflation-rising-the-lipstick-effect-kicks-in-and-lipstick-sales-rise/>
- [35] U. Dholakia, "How Anxiety Affects Our Buying Behaviors | Psychology Today Australia," *Psychology Today*, vol. Online, Mar. 30, 2020. Accessed: Dec. 13, 2021. [Online]. Available: <https://www.psychologytoday.com/au/blog/the-science-behind-behavior/202003/how-anxiety-affects-our-buying-behaviors>
- [36] K. F. Yuen, X. Wang, F. Ma, and K. X. Li, "The Psychological Causes of Panic Buying Following a Health Crisis," *Int. J. Environ. Res. Public. Health*, vol. 17, no. 10, p. 3513, May 2020, doi: 10.3390/ijerph17103513.
- [37] L. Martens, "Dark Humor and Childhood Trauma," "Are you okay?," Jun. 26, 2019. <https://medium.com/are-you-okay/dark-humor-and-childhood-trauma-988dc3c64396> (accessed Mar. 07, 2022).
- [38] M. Mainsbridge, *Body as Instrument: Performing with Gestural Systems in Live Electronic Music*. Bloomsbury Academic, 2022. doi: 10.5040/9781501368578.
- [39] L. (Elizabeth) Sander and O. Baumann, "5 reasons why Zoom meetings are so exhausting," *The Conversation*, Australia, May 05, 2020. Accessed: Sep. 12, 2023. [Online]. Available: <http://theconversation.com/5-reasons-why-zoom-meetings-are-so-exhausting-137404>
- [40] A. Vergallito *et al.*, "Explicit and Implicit Responses of Seeing Own vs. Others' Emotions: An Electromyographic Study on the Neurophysiological and Cognitive Basis of the Self-Mirroring Technique," *Front. Psychol.*, vol. 11, 2020, Accessed: Sep. 12, 2023. [Online]. Available: <https://www.frontiersin.org/articles/10.3389/fpsyg.2020.00433>