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Grains without Territory: Voicing Alexander Garsden's [ja] Maser and the de-centralized Vocal Subject

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Abstract
The singing subject is both site-of and author-of her practice. This practice-based, artistic research unpacks the entangled process of making new music, conscious that the performer-author is the site where embodied problem solving takes place. The principal focus of the paper is the author's realization of Alexander Garsden's *[ja] Maser*, for voice and electronics, created by recording and reconstituting vocal elements using traditional compositional and performative methods as well as studio recording and granular synthesis. The author approaches the realization of this new work as an experimental practice in dialogue with theoretical frames that inform and situate the research. *"The grain of the voice"* (Barthes) is a central theoretical touch-point for this case-study which also engages with ideas derived from texts by Connor, Deleuze and Guattari, Dolar, Chion, Auslander, Cavarero and Harraway. The author contends that theoretical grounding can be utilized to support and parse vocal practice, mediated by technology and the collaborative process, to more effectively negotiate performer subjectivity in the realization of new music. The results of these investigations through artistic research provide insight into the approaches a performer might devise to solve practical and philosophical problems in new electro-acoustic music while negotiating the granular, unstable nature of subjectivity.

Cover Page Footnote
Acknowledgements: I wish to thank the composer Alexander Garsden and electronics performer/producer Samuel Dunscombe, for their creative and technical input as well as their generosity in reviewing this research at various stages of its development. My thanks also to my doctoral supervisors Vanessa Tomlinson and Scott Harrison under whose guidance most of this research took place. Finally thank you to those who made the commissioning, recording and live realizations of this work possible: Arts Victoria, Vivid Sydney, Hospital Hill Records and Cameron Hipwell.

Grains without territory: voicing Alexander Garsden's [ja] Maser and the de-centralized vocal subject

Jessica Aszodi

Introduction

We inhabit a world saturated by voices. The "… *human voice structures the sonic space that contains it*" (Chion, 1999, p. 5) and establishes humans as subjects "*capable of recognizing and being recognized*" by other subjects (Connor, 2007, p.6). Those voices are made of the material of ourselves, ripples in space affected by the joint work of our intentions and our physiology. The timbre of each voice tells the story of our inner acoustical properties, our flesh and their fluctuations, which Barthes famously designated the "*grain of the voice*" (Barthes, 1977). We are accustomed to a steady flow of living voices from our co-workers, family, passersby, and also to a host of mediatized ones – bodiless, projected out of speakers (Katz, 2010).

This paper discusses the author's realization of Alexander Garsden's work for solo voice with electronic playback, *[ja] Maser*[1], through the lens of artistic research (Borgdorff, 2006; Cook, 2015) and autoethnography (Adams, Ellis and Holman-Jones, 2013). The singing subject of this text is both site-of and author-of her (my) practice. In this practice-based, artistic research the performer-researcher is the site where musical and extra-musical problem solving takes place. The following text conveys the subjective experience of one "narrative self" (Cavarero, 2000), alongside a discourse that situates and theorizes decision-making in music; this duality will be reflected in some intentional oscillation of the timbre of the authorial voice between a first-person narrative style and discussion of the relevant theoretical materials.

In the past two decades a vivid scholarly picture of the vocalizing subject has emerged (Bulut, 2011; Eidsheim, 2015; Järviö, 2006; Kreiman & Sidtis 2013; LaBelle, 2014; Macpherson & Thomaidis, 2015; Neumark, Gibson & Van Leeuwen, 2010; Pierson 2015, et al) revealing the voice as a conduit for the kernel of human subjectivity (Dolar 2006), and re-asserting the integral role of phone (Cavarero, 2005) to understanding logos and language in the discourse around knowledge production. This paper is a case study in how the perceivable effects of subjectivity influence realizations of new musical works and how that subjectivity is in turn mediated through a musical text. I hope that by describing the mechanics of decision-making from the vantage point of the subject who produces sounds that I will convincingly argue for the integration of theory and practice which I actively pursue and evidence my claim that an interrogation of performer subjectivity can enrich interpretive practice in the realization of new music.

[ja] Maser is built from many layers of voice, entangled with space, presence and subject. As is common in experimental music practice (de Assis,

1 A video of a live realization of this work (at Griffith University in 2015) can be found here: https://youtu.be/U4D7deYZocU

2015), the score itself is a product of and is nourished by experiments that were a necessary element for moving this piece into the real. The work's effective realization demands that both composer and performer are willing to shift their thoughts and practices to fit the specific purpose of the moment, querying their ingrained assumptions and conventions, knowing that the experiment's outcome cannot be assured.

The title of this paper refers to the way in which the objectively human grit of voice (or *grain*) is not the uniform product of a unified body distributed in an orderly field (or *territory*) but something more slippery, which affects both research and performance at many levels. Colloquially, "grain" evokes the small, naturally occurring parts that make up a larger object (rice, wood, sand). The grain with which I am principally concerned is Barthes', which is particular to the voice, and represents not music, or text, or body but a nexus between them all.

Barthes exhorts the singing voice's capacity beyond the adjectival, borrowing Kristeva's *phenotext* and *genotext* as models for theorizing two oppositional aspects of vocal music. The former, Barthes calls 'phenosong', which encompasses expression through breath, in phrasing, compositional intention and conventions of genre. The latter, Barthes calls 'genosong', which encompasses vocal materiality, embodiment, or as he calls it "diction". The signifier *grain* makes an ally of the genosong. Barthes wishes for listeners to recognize the significance of "*the tongue, the glottis, the teeth, the mucus membranes"* (Barthes, 1977, p. 184) in addition to the fineries of breath, technique and expressivity that traditional pedagogy would encourage us to value in vocal performance.

The electronic playback part for *[ja] maser* was composed by Garsden utilizing recordings of my voice filtered and modulated via granular synthesis[2]. During this process he too made an ally of "*the tongue, the glottis, the teeth, the mucus membranes*," intentionally focusing on sounds which foreground those fleshy elements. *[ja] Maser* could be said to utilize the 'genosong' as raw material. To my knowledge, 'granular synthesis' is not a term directly related to Barthes "grain", but there is something of a neatly convergent, semantic evolution in their coming together at this juncture of flesh, media and performance. One of the principal difficulties of realizing electro-acoustic music like *[ja] Maser,* is in forming adequate frames that enable the researcher/performer to decide how to mediate and parse their presence or absence within the electro-acoustic milieu. In order to make decisions about practical elements like proximity, movement, position in space and sound-projection, theoretical frameworks should be in place to justify decisions in relation to the meanings inherent in the piece (Emmerson, 2007).

Throughout this project, the contribution of computer-musician (and performer/composer) Samuel Dunscombe was key to realizing these decisions from a technical perspective and to discursively fleshing out the aforementioned frames. Let me state that my relationship with electronics is not that of a *maker*.

2 *"…granular synthesis as a unique method of achieving complex sounds by the generation of high densities of small grains on the order of magnitude of 10-20 milliseconds duration."* (Truax, 1988, p. 14) This process contemporarily applies to "*a number of different audio systems that work by using tiny snippets of sound*" called grains "*that can be manipulated individually and are recombined to generate the final output*." (Price, 2005)

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My role in this project and this research is situated in my vocal practice. I made decisions which shaped how the electronics stretched and framed the ontology of vocal performance, but Dunscombe and Garsden were the ones who carried out the practical engineering, mixing and editing.

Much of this paper is concerned with the 'nuts and bolts' of realizing a new piece. The explanations provided serve to illustrate my contention that a conscious negotiation of performer subjectivity in music improves research and performance practices. I posit that the subject-performer is not a neutral space through which a musical text must pass but an active, complex body of knowledge and material.

The practice

With these words I seek to convey a narrative of my subjective experience of realizing Garsden's piece to the reader. I wish to communicate something of the phenomenal as well as the methodological and analytical elements of my practice. After giving an overview of the practical unfolding of the project (*The practice*), I will situate my approach to the mediatized elements of the piece (*Media*) and then discuss my decision-making process across two phases: *Recording* and *Preparation/Performance*. I will not discuss the phenomenal experience of performance itself, but the decisions I made as I prepared-for and reflected-upon those performances will be examined in the final section of this paper: *Negotiating the decentralized subject*.

The following figure shows the principal activities, demarcated by research stage (preparation, performance and studio-editing/recording) for the first year of working on Garsden's *[ja] Maser.*

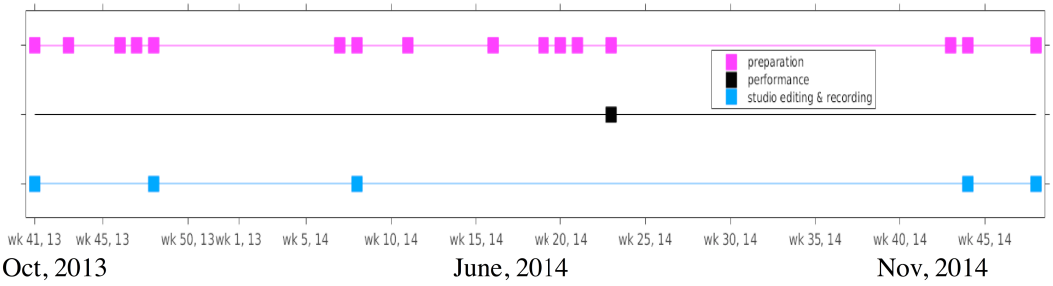

Fig. 1 – Overview of research for the 1st year of *ja [Maser]*

The first step in which I personally was involved was a studio recording session in October 2013 (with a brief preparation for that session undertaken in the same week). That day, following a "pre-score" Garsden had composed, we recorded me singing ascribed pitches and sounds throughout my range. Garsden describes the piece thus:

> "[ja] maser limits itself to ascending glissandi, the start and end points of which are taken from a composite spectrum based on a fundamental C#0 at 70 Hz, where overtones of this fundamental are offset against overtones of its 3rd, 7th and 11th overtones. In this way, both the soloists' and

> electronics parts etch out a permutation of very similar whole number ratio intervals within confined frequency territories, changing in register over the unfolding form. Additional pitch material has been distilled from unusual vocal utterances (dental multiphonics, fry multiphonics, etc.) which have been filtered and modulated via granular synthesis." (Garsden, 2015)

Utilizing the frequency relationships Garsden gives above, *[ja] Maser* was composed from these original recordings, using my voice as raw-material. The unusual, noisy vocalizations he mentions *"dental multiphonics, fry multiphonics"* are perhaps even more of a focal point for both the live-vocal and electronics parts than the traditional pitched singing. In this piece sounds we regard as ordered or order-creating (for example, conventionally sung pitches, recognizable rhythmic and harmonic structures), are interwoven with sounds that are often written-off as sonic detritus, but which might be more usefully viewed in light of Barthes' genosong. *[ja] Maser* is built from the unintentional, noisy, sounds that do not fit within the bounds of traditional Western vocal music or spoken language.

The kernel of the vocalizing subject's materiality subsists at every level of this piece but that materiality is never offered up as stable or safe. The extremity of the sounds Garsden calls for from the solo vocal part, bring with them an ever-present possibility that I could lose control of a gesture or sound, leaving me vulnerable to public errors, and uncontrolled physiological malfunctions. The most pointed of these moments is possibly at the very end of the piece where I am instructed to sing a 16 second long glissando from D6 to F#6, in one breath. It is the last of an exhausting series of similar gestures that occur one after another. That final phrase is a long way off being possible for me to execute faithfully; the genuine attempt to produce it on my part creates a tight, crumbling, kind of sound that often ruptures unintentionally into multiphonics, glottal stops, creaks and chokes that I have little ability to control.

I contend that the unstable, fluctuating form of subjectivity represented by the voice in this work, has a deterritorializing (Deleuze & Gauttari, 1987; Deleuze & Gauttari, 1977; Nesbitt & Hulse 2010) function, in line with the way Aaron Cassidy describes vocal noise:

> "Language has a territorializing function. It establishes boundaries and relationships, hierarchies, and connections through short- and long-term memory. Noise on the other hand is a fundamentally deterritorializing phenomenon, what Deleuze and Guattari might call a "local space of pure connection.[3]" Indeed its noisiness lies principally in its destabilizing, its upending of communicative norms and hierarchies." (Cassidy, 2013, p. 43)

The voice of *[ja] Maser* is not a stable, unified subject. She is noisy, errorful and fluctuating – yet she is also a physical material produced by a disciplined body, whose flesh is formed of training and experience, who is influenced by genre-based, linguistic and musical languages ingrained onto her person over decades of education. This combination of practiced intentionality,

3 Gilles Deleuze and Felix Guattari, (1987) *A Thousand Plateaus*. University of Minnesota Press, Minneapolis.

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habitually regulated flesh and uncontrollable, unstable sounds is a complex and tangled terrain for the performing subject to negotiate.

Media

From the invention of the microphone, to the advent of tape music and *musique concrète* (Schaeffer, 1966), voices have been transformed by technology. The expectations and associations we have of voice are inextricably technologized. In many parts of our lives, technology is a mediating factor in how we communicate, whether it be through intentional interaction with music on our stereo or ipods, or phone conversations, Skype calls and the omnipresent voices of muzak[4] that form the sonic backgrounds of public spaces: "*for many listeners, perhaps most, listening to music is now primarily a technologically mediated experience"* (Leman & Maes, 2014, p. 31).

Disembodied voices are so ubiquitous in contemporary society we barely notice them. As we listen our brains are absorbing or discarding information gleaned from those voices. We do not skim the words from recorded communiqué and forget the rest. We listen, consciously or unconsciously, for meaningful cues from the speakers' "*vocalic body"*[5] (Connor, 2007) and the "*grain of the[ir] voice*".

To listen to voice is to listen for the person who vocalizes, "*the voice, in this way, promises a subject; it excites or haunts a listener to recognize in the voice a "someone"* (LaBelle, 2014, p. 6). The voices we hear in our day to day lives are not announced to us, clearly labeled for the media through which they are conveyed; live and mediatized are entangled in historical, cultural and experiential terms. As Auslander states "*theorizations which privilege liveness as a pristine state uncontaminated by mediatization misconstrue the relationship between the two terms*" (Auslander, 2008, p. 56). Most of us move easily and habitually within that indistinct reality. We are well on the way towards the everyday experience of Harraway's irreverently modeled cyborgs (Harraway, 1991) and as the aforementioned author suggests, we can find *"pleasure in the confusion of boundaries and responsibilities in their construction"* (ibid p. 292).

This research takes pleasure in the complex 'confusion of boundaries', and takes 'responsibility' for unpacking the parts of liveness and mediation necessary for effective performance. *[ja] Maser* is a work in which the absence of "clear-cut ontological distinctions" (Auslander, 2008) between the live and the mediatized, means that decisions around what is "live", directionality of sound, and embodiment in space must be carefully negotiated to frame presence and absence, fleshyness and computation, continuity and fragmentation. I make my choices

4 I use the term 'muzak' here in the colloquial sense, rather than to refer to the music produced by the *Muzak* company in the early to mid 20th century – whose productions intentionally never featured vocals.

5 Though listeners are usually unaware of the physics and mechanics of singing, they do perceive the relationship between voice and body, and consciously or not, respond to the body's relationship to voice. The "vocalic body" is a term coined by Steven Connor to describe "a surrogate or secondary body, a projection of a new way of having or being a body, formed and sustained out of the autonomous operations of the voice." (Connor, 2007 p. 35)

with an awareness of the listener's sensitivity to the meanings inherent in voice and how voice can be mediated to create bridges towards signifiers other than human – cyborgs, muzak, computers – and back to flesh again.

Recording

I want to begin discussion of the 'nuts and bolts' work at the recording phase because this is the phase where the vocalist's subjectivity is least stable. My voice is produced by a body which is wrapped in a skin that is relativity inflexible. It has limits in its amplitude, directionality, frequency range, acoustical properties and reproducibility. With technology comes choice; seemingly infinite choice. A recorded voice is malleable and pregnant with flexible possibilities in a way that cannot be matched in the live domain. For this reason the considerations of how to decisively control and convey my voice in this part of the research were not easily solved.

Creating this piece involved recording at many different junctures and we had to be conscious that our final 'product' needed to be appropriate for commercial release (in digital and vinyl formats). In a live performance, the performer has physical space to maneuver. In electro-acoustic performance the possibilities are myriad (though those possibilities are counterweighted by many technical considerations). In a studio recording the listener's perception of space must be crafted in-studio, the balance of sonic elements allowing the listener to clearly perceive space, proximity and movement through the limited directional capacities of a stereo speaker set up. Throughout, we recorded the vocal performance at close proximity, with several microphones and in a reasonably dry way, so that we would have maximum flexibility over how we reconstructed the small parts into a new whole, with the eventual goal of creating an audible architecture of place fit to the purpose of the piece. Within that architecture a vocal protagonist was to be constituted, structuring the terrain we made for her.

The general outline of how the project unfolded is shown below:

1. Capture of raw vocal materials.
2. Composition of the live-vocal and playback parts.
3. Studio recording of the live-vocal part.
4. Editing of the recordings from Step 3 to create a rendering of the live-vocal part.
5. Composition of the playback part (utilizing the recording from the previous step as raw-material) and an amended vocal score.
6. Various attempts to perform the work live (with playback).
7. Various attempts to re-record the live-vocal line.
8. Performances and recordings where the live-vocal line – as represented by the recording made in step 3 – is accompanied by the playback part.

After the raw vocal material had been captured (Step 1), Garsden used the samples acquired to work on the computer-mediated process of composing the playback and live-vocal lines, which he notated and sent to me to learn.

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The opening of *Draft 1* of the score:

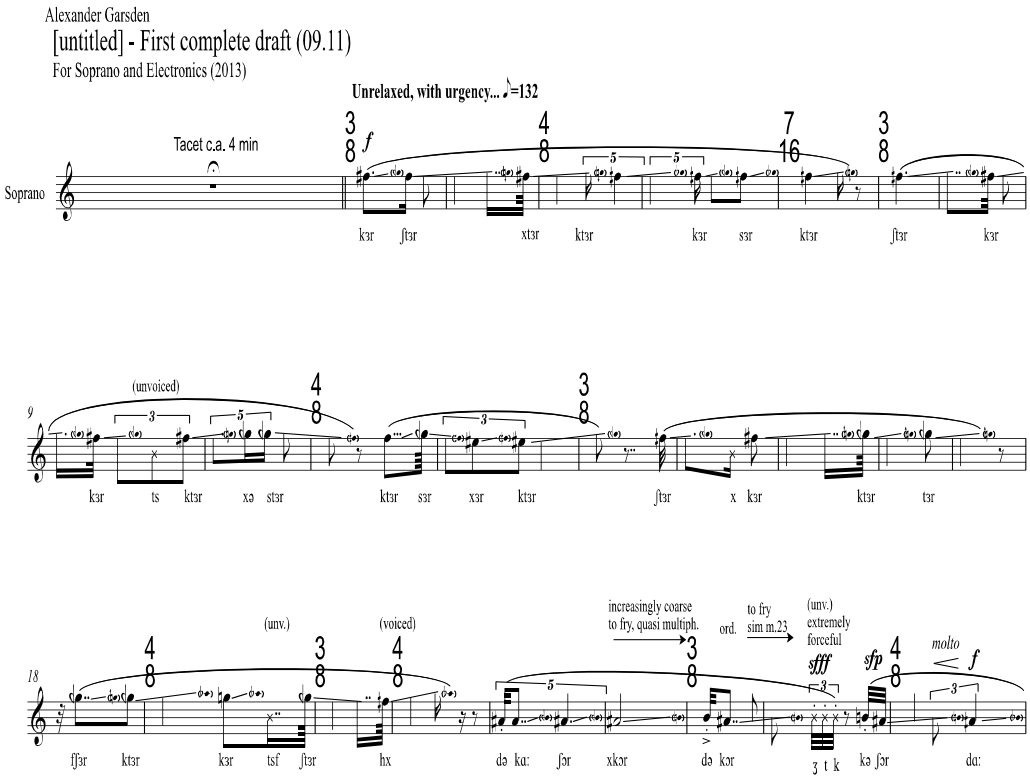

Fig. 2 *[ja] Maser* 2013 draft

This first version had to be learned very quickly for practical, deadline-related reasons. With the time we had (3 weeks from score delivery to recording) I was not able to master the materials well enough to create a semblance of a live, through-performed version of the vocal part. We had to record in tiny chunks, stopping all the time to check pitch or rhythm or articulation. Additionally, I needed a restart before many of the transitions between extended techniques because I had not yet ingrained the laryngeal acrobatics that would be required for a through-performance of those technically challenging portions.

The feeling in the studio those first days was pretty intense. I tried with all my will to make my body produce the sounds notated on the page but, through a combination of not having had the time to do the necessary embodied problem-solving and the near-impossible difficulty of some of the requested sounds, I was not able to effectively produce them. At this stage I had not yet figured out which sounds were never going to be possible, and which just needed more 'singing in'. After the second session of the week, my flesh contorted into shapes they were not strong enough to take, I lost my voice entirely. Submitting to the composer's will, as performers are conditioned to do, I allowed myself to be pushed over what I intuitively knew was a dangerous precipice. I was left voiceless and, unable to

speak, temporarily lost my ability to work, sing, teach, or go about my life as usual. The experience felt like a musical micro-trauma.

Garsden and Dunscombe digitally stitched together the rag-doll parts of my performance in those sessions to form an aural-image of a cyborg protagonist with her stuffing hanging out through the rough edits and cuts. After the panic had subsided, and my voice returned, I reflected upon the recording we had made. I listened to this Frankenstein of myself, and was disappointed. I thought that the recording had brilliantly captured how strenuous, gritty and *grainy* the part was, but not an expressive or embodied reading of the work. The gathered recordings became grist which Garsden used as he composed the playback part and an amended version of the score.

The final score was very similar to the first draft, though the opening electronic introduction was greatly shortened. The major difference stems from changes in the notation made to reflect errors on my part that had occurred in the earlier recording session (Step 3). In some parts, Garsden amended the score to copy the errors rather than rectifying the errors to follow the score, as one conventionally might expect. The solo vocal part in the final score imitates the imperfect realization I had made in that first under-rehearsed attempt to record it.

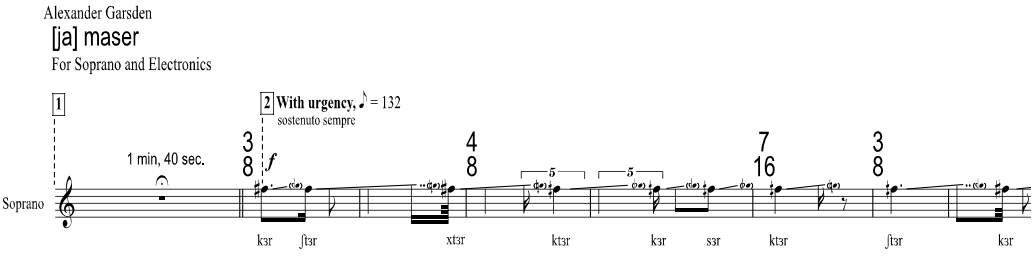

Fig. 3 Opening of *[ja] maser (*Garsden, final draft, 2014)

Despite the discomfort of making it, Garsden was "quite happy"[6] with how this first recorded version sounded. In the months after it was created, I believed that this rough and ready realization would surely be supplanted by one I would make later on once I'd had time to 'sing it in'. I wanted to give the piece time to settle into my body so I could make a realization where I felt consciously present, rather than scrambling desperately and painfully to articulate what Garsden had notated. I also thought it would be better to make a new recording after I had performed the work live – which we (Dunscombe and I) did for the first time at the *Vivid Sydney* Festival in June, 2014. Afterwards, upon hearing the live recording of this performance[7], I got feedback from Garsden that he was not satisfied with our live realization as it had occurred.

Several months later we made another studio recording, which failed to meet everyone's bar for success. We tried to address the issues Garsden had raised, and to address our own desire to make a recording that felt representative of a live performance. We tried again. One more failure. At this point we were not

6 Garsden expressed this feeling in the course of our personal correspondence

7 Garsden could not be present at the premiere but heard a live recording of the performance.

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sure what path to take. We had not yet found a solution through theory or practice, and the physical separation of this collaboration across continents created difficulties in our communication. As Garsden put it: "*our transcontinental workshopping approach was too innately problematic to facilitate a more rounded dialogue. If we had been in the same room, requests to try a different approach, tone, phrase structure, text technique, would have been given and received in a very different light.*" (Garsden, 2016)

Collaborating on a geographically spread experiment placed extra strain on the meaning of each action. When every new idea had to be put into written form, videoed or communicated via Skype, words took on greater significance than perhaps they should have. Most of our sonic experiments had to be recorded in order to seek feedback, creating the strange scenario where each experimental step became a minor end in itself. This process left us open to too much conjecture. Instead of collaborators being able to voice their responses in real time *"…every step of the process took so much time and effort (and physical expense on your part) that an idea emerged whereby each stage of the workshopping and recording was, in itself, a finished product of sorts"* (Garsden, 2016). Several times, strenuous undertakings took place in response to relatively unimportant requests that were ultimately discarded because of a lack of mutual understanding. Additionally, as I tried to construct research out of our collaboration, the need to document and analyze sometimes compromised the natural rhythms of making. I regret we were not more aware of these dangers as we attempted this difficult kind of collaboration. The labor of making the piece was more physically demanding than it should have been, and we did not have methods in place to ameliorate the danger. After various unsuccessful attempts to re-record the live-vocal line (Step 6) an exchange of emails ensued between the collaborators, seeking to solve our problems by clarifying the theoretical and phenomenological goals of the work. It was Dunscombe who first hit upon the idea that the question we really should have been asking was: *"…is the recording the document of a live performance – of the live agency of a human performer – or is it a post-constructed 'idealised' version of something that potentially could not happen in real life*?" (Dunscombe, personal correspondence, 2014)

This conversation was a game-changer. The rough version (from Step 3) now existed alongside two other complete attempts to record the live-vocal part. I thought that a solution could be found by changing how I was framing the experience, rather than by repeatedly attempting to record and re-record the work, attempting to fix tiny, potentially unresolvable details in the vocal performance. I decided that the affect I was producing in the latter two attempts at the studio recording were too embodied sounding, too real and consequently, imperfect. Once I had 'sung in' the piece, it lacked the urgency and specificity of the original recording. As it had fused to my body, the work became fleshy and soft. That first recording captured the intensity and difficulty of the sounds and, as I was only attempting to perform tiny fragments at a time, I was capable of voicing the intention of each micro-gesture as a complete thing in itself, rather than as parts of wider phrase arcs reliant on the breathing mechanism. This breathing mechanism is a (the?) key feature of the maligned 'phenosong' Barthes theorized. In the moments where one kind of sound becomes another, the nature of breath necessitates micro-sacrifices of accuracy in timbre and rhythm, smoothing the

vocalic body into a sleek, expressive middle ground that is unpalatable to Barthes and useless for this piece.

I realized that *[ja] Maser* is not a reflection of a polished and unified subject who has sanded down the sharp edges of her inner materials. She does not need to breathe – her voice is an explosion of grains, an emission, or as the title of the piece suggests, stimulated microwave radiation[8]. The first recorded version (Step 3) radiates abstracted sounds that represent my carved up flesh as if waves of *musique concrète*. That early recording revealed a performance that is simultaneously more direct, and more imaginary than would have been possible with a 'live' performance. Through the tools of the studio the listener is able to get closer to more intense and extreme expressions of the vocal subject than would be possible in a live recording. They hear the vocalic body of a singing subject who cannot exist, but somehow reflects an experience in touch with the visceral real. Thus, we abandoned our attempt to make a studio recording reflective of live through-performance and instead Garsden worked with the version of the vocal line we captured initially (in Step 3) to create the recording for the album. Whether or not the solo vocal part will ever be faithfully realized live is still an open question; I have not yet settled upon the best method to perform myself as a deterritorialized, imaginary, vocalist.

Preparation/Performance

Now the problem of realizing this piece as a live performance will be addressed. After the premiere, Garsden and I agreed that the shortcomings of the live performed version are most problematic in the first half of the piece. For example, in the figure below, the singer is repeatedly asked to *crescendo* to triple *forte* from *'sffp'*, moving between voiced *ordinario* tone, an unvoiced fricative and quasi-multiphonic fry-tones. The resultant *'ordinario'* sound (given the other parameters) is that of a very harsh and weighty chest voice which, in the 3rd gesture you see here, is artificially pushed up to an unnaturally high pitch[9]. This is immediately followed by three very fast, staccato, unvoiced consonants that are supposed to sound even louder than the preceding note. At the notated speed (quaver = 132 bpm) these sounds: [ʃ] [t] [k], each take up less than one tenth of a second.

8 A maser is an early cousin of the laser which, instead of stimulating emissions of photons in the frequency range of visible light, utilizes the microwave frequency range. The word 'Maser' is an acronym for "Microwave Amplification by Stimulation Emission of Radiation" (*What is a Maser?* Stanford University, retrieved 2016 https://einstein.stanford.edu/content/faqs/maser.html)

9 The end point of this phrase is C5. In a classically trained cis-female voice the chest to head break would usually occur around Eb or E4; carrying chest voice up so high produces a very pressurized, intense tone.

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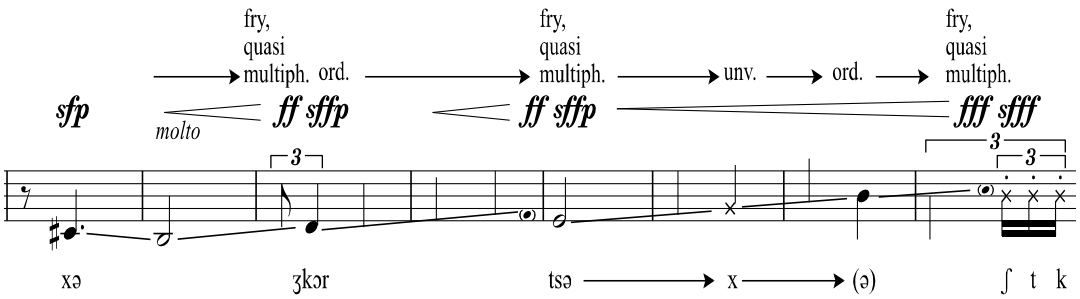

Fig. 4 [ja] Maser. Bars 73-81

What is notated is, to my thinking, a very exciting thing to listen to. However, performing precisely what is written, live and exact, is something I believe to be impossible. At least I'm pretty sure it is for me. The notation sets up something of a catch-22. In my voice, a sung pitch is naturally quite loud. In any singer, voiced pitches carry better than unvoiced consonants. If I sing the beginning of the phrase as asked, there is no hope of the sounds [ʃ] [t] and [k] being louder than a belted middle register pitch, exploding out of a multiphonic, triple *forte*. I could make these unvoiced sounds louder, relative to how loud they would usually sound, but in sheer decibels they would never overshadow a full capacity belted tone. I could soften the sung portion of the phrase dramatically to contrast against the plosive/fricative consonants at the end of the phrase, but that would prevent me from accessing the best choice of timbre to convey *'ff'* tone with multiphonics. I am only capable of rendering a poor reflection of what's asked of me in this instance. This section is a microcosm of the kinds of problems encountered throughout the piece as I worked towards its live performance. An accurate live rendering of the work seemed so out of reach, at one point we began to discuss the possibility that *[ja] Maser* may best exist in recorded form only.

In 2015, rather than abandoning the idea of performing the piece live, I tried an experiment. For the second live performance (at Griffith University in April, 2015) I decided to try a realization where the studio-recorded version of the 'live' vocal line would be played through speakers, alongside the corresponding playback, for the first half of the piece only. Then the playback part would continue but I would sing the vocal part *live* (though still amplified) for the second half of the piece. This reading was something of a hybrid between an acousmatic[10] and a live electro-acoustic realization. It was attractive because it afforded an opportunity to solve the practical problems of the first half of the work while simultaneously drawing the limits of my presence and absence, and my technologized mediation, into the foreground.

[ja] Maser was the first piece on the program. I hid myself on a catwalk in the lighting rig, towards the back of the hall, in a corner where the audience would not easily see me. The lights went down, signaling the beginning of the performance. The studio-recorded version of the piece (comprised of both the

10 Acousmatic sound is sound one hears without seeing their originating cause – an invisible sound source. Chion, M. (1994). In this case it refers to a piece that is entirely pre-recorded, projected out of speakers.

playback and the live-vocal parts) played through the PA above the audience's heads as they sat in the dark. Halfway through the piece a light began to fade up on my face. I was gradually made visible to the audience, should they chance to look upwards towards the lighting rig. From figure 13 onwards I began to sing the vocal part live alongside the playback, amplified by a lavalier microphone I was wearing.

I intended to draw attention towards the interplay between the embodied and the mediated. I wanted to see if I could use proximity and position to stir up the instability of meaning in the situation. By 'perching' myself in a space not designed for performance I required the audience to seek me out in the visual field, rather than 'staging' myself where the audience could more passively assume what my role was according to the conventions we all know. The raw sonic materials of this piece are derived from my voice but they are so heavily mediated it is difficult for a listener to discern their source, what is live, or what is a manipulation. I hoped the audience would decide for themselves what they believed to be 'real', 'who' was singing, and what was mere electronic reproduction, without making the physical reality explicit.

Afterwards it was drawn to my attention by percussionist and researcher, Vanessa Tomlinson, that because the stereo PA (positioned high above the stage) was the only source of amplification, she felt as if the whole performance had been acousmatic. My real body was too far away from most of the audience for the acoustic vocal sound to have been heard and no speakers were situated close enough to my physical body to create a sense of directionality. Even when I was singing, my presence suggested more of a specter in the visual periphery than a living voice. This tension between the live and the mediated that I was so hoping to highlight, did not manifest for her. I realized that, in failing to take into account the proximity of the speakers as well as the live bodies in relation to the audience, I had shot my own idea in the foot. This moment has resulted in a big change in approach for me when making decisions about directionality, proximity and amplification – not just for this piece, but for every electro-acoustic piece I've worked on since.

Negotiating the decentralized subject

The above-described realization is not the 'final and best' way of solving the problem of the fractured presence of the living singer in this piece, but I am glad I did not abandon the possibility of a live realization of the work. The experiment, though far from entirely successful, did provide evidence that a viable live version is worth pursuing. Its results offer insights into possible approaches for constructing electro-acoustic vocal presence that have applications for pieces beyond *[ja] Maser*. In this kind of work the best results are often not the ones where everything turns out the way one had hoped, but where the experiment points the researcher towards new knowledge that could not have been attained without having undertaken the embodied research.

Despite being constructed of the dust of my self, *[ja] Maser* proved difficult ground for live habitation. My habits, my physical limitations and the embodied conventions of music-making overshadowed the raw, "grainy" sounds

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necessary for this piece to function at its best. The flow and breath-based continuity of a live performance pulled focus away from the individual, abstract sounds and onto the phrases produced by my fleshy body. Throughout the many phases of realizing this piece it became clear that the genosong needed a special method of articulation if it was to be lifted above the phenosong in the ears of listeners and the practice of this trained singer.

The playback part in this piece captures all that *grit* very effectively. The swarming grains of vocal sound, specifically affected in their tiniest parts, create a terrain composed of computationally deconstructed and reconstituted vocality. In that space we can take pleasure in the complexity of the "confusing boundaries" (Harraway) between the live and the mediatized. The playback part resists organization under normative hierarchies of Western music, and through its *noisiness*, pivots urgently from sign to sign in a fashion that resists stabilization. The environment Garsden has created is a placeless place within which occurs a *deterritorialization of the grain* (Barthes, 1977; Deleuze & Guattari, 1977). In that milieu I had the awkward task of being both a flesh and blood protagonist, and a researcher determined to voice a version of myself that would serve the purpose of the work. Parsing the live work through my physical body in the traditional fashion, as I had initially tried, was a misguided goal.

Realizing this piece required that I carefully consider the habits and expectations of listeners as well as the artists involved. The voice has such a special relationship to meaning, providing a signifying reference point that structures the space that contains it (Chion, 1999). In this piece the voice is a decentralized, unstable projection of a subject; to lead the listener to recognize something of their own instability and fragmentation in such a voice, we must decisively address what kind of 'someone' (LaBelle, 2014) it is that we wish to be recognized.

Though theoretically, I am completely comfortable with the idea that I am a decentralized, post-structural subject, 'the doing' of this piece revealed that in practice, my behavior betrays that present-tense motivations are usually less subtle. There is a tension between the 'moment to moment' need to feel my flesh function for purpose and the more abstract theoretical frames that tell me I am spread, entangled and de-centered. Refining my lens of attention, so that it might zoom in and out more deftly, is an ongoing occupation.

It took all this experiment and all this reconsideration of method, for me to rethink my voice-as-material, so it could be successfully fashioned to the needs of the work, filtered in bits through the lasers' eye of Garsden's notation. This way of thinking about voice is, of course, but one of many. It may not be useful to apply directly to other works – indeed the particular integration of theory and practice in this scenario are the result of a bespoke research process, designed to best realize one piece. In this way, we see that a conscious negotiation of subjectivity can strengthen and deepen artistic practice in the realization of new musical works.

References

Auslander, P. (2008). *Liveness: Performance in a mediatized culture*. London: Routledge.

Adams, E., Ellis, C. and Holman-Jones, S. eds. (2013). *The handbook of autoethnography*. Walnut Creek, CA: Left Coast Press.

Barthes, R. (1977). *Image, music, text*. (S. Heath, Trans.) New York: Hill and Wang.

Bartleet, B. & Ellis, C. (2009). *Making autoethnography sing/making music personal*. Australia: Australian Academic Press.

Borgdorff, H. (2006). *The debate on research in the arts*. University of Gothenburg, Department of Political Science (Accessed 2016) http://www.pol.gu.se/digitalAssets/1322/1322713_the_debate_on_research_in_the_arts.pdf

Cassidy, A. (2013). 'Noise and the Voice' in Cassidy, A. & Einbond, A. *Noise in and as music* (pp. 33-54). Huddersfield: University of Hudderfield Press.

Cavarero, A. (2000). *Relating narratives : Storytelling and Selfhood* . London & New York: Routledge.

Cavarero, A. (2005). *For More than One Voice: Toward a Philosophy of Vocal Expression*. Stanford: Stanford.

Chion, M. (1994). *Audio-Vision: Sound on Screen*. New York: Columbia University Press.

Chion, M. (1999). *The voice in cinema*. (C. Gorbman, Trans.) New York: Columbia University Press.

Connor, S. (2007). *Dumbstruck: a Cultural History of Ventriloquism*. Oxford: Oxford University Press.

Connor, S. (2014). *Beyond Words: sobs, hums, stutters and other vocalisations*. London: Reaktion Books.

Cook, N. (2015). *Beyond the Score: Music As Performance*. Oxford: Oxford University Press.

De Assis, P., Coesse, K. & Brooks, W. (2009). *Sound & Score: Essays on Sound, Score and Notation*. Ghent: Leuven University Press.

D e Assis, P. (Ed.). (2015). *Experimental Affinities in Music* . Ghent: Leuven University Press.

Deleuze, G. & Guattari, F. (1987). *A thousand Plateaus*. Minneapolis: University of Minnesota Press.

Deleuze, G. & Guattari, F. (1977). *Anti Oedipus*. London: Continuum.

Dolar, M. (2006). *A voice and nothing more*. Cambridge, Massachusetts: MIT Press.

Dunscombe, S. (2016). *Samuel Dunscombe - about*. (Accessed 2016) http://www.samueldunscombe.com

Eidsheim, N. S. (2015). *Sensing Sound: singing and listening as vibrational practice*. Duke University Press Books.

Emmerson, S. (2007). *Living Electronic Music*. Burlington, VT: Ashgate.

Gannon, S. (2013). Sketching subjectivities. In *Handbook of Autoethnography*. Walnut Creek, CA: Left Coast Press.

Garsden, A. (2014). *[ja] Maser.* Melbourne, Australia.

DOI: 10.14221/dnm.i1/2

Garsden, A. (2016). *About*. Alexander Garsden. (Accessed 2016) http://www.alexandergarsden.com/about/

Harraway, D. (1991) *Simians, Cyborgs and Women*. New York: Routledge.

Järviö, P. (2006). The Life and World of a Singer: Finding My Way. *Philosophy of Music Education Review , 14* (1), 65-77.

Karantonis, P., Placanica, F., Sivuoja-Kauppala, A. & Verstraete, P. (Eds.). (2014). *Cathy Berberian: Pioneer of contemporary vocality*. England: Ashgate.

Katz, M. (2010). *Capturing Sound: How Technology Has Changed Music*. Berkely, CA: University of California Press.

Kreiman, J. & Sidtis, D. (2013). *Foundations of Voice Studies: An Interdisciplinary Approach to Voice Production and Perception*. Hokoken, NJ: Wiley-Blackwell.

LaBelle, B. (2014). *Lexicon of the mouth: Poetics and Politics of Voice and the Oral Imaginary*. Bloomsbury Academic.

Macpherson, B. & Thomaidis, K. (Eds.). (2015). *Voice Studies: Critical Approaches to Process, Performance and Experience*. London: Routledge.

Nesbitt, N. & Hulse, B. (Eds.). (2010). *Sounding the virtual : Gilles Deleuze and the theory and philosophy of music*. Farnham, England: Routledge.

Neumark, N., Gibson, R. & Van Leeuwen, T. (2010). *Voice: Vocal aesthetics in digital arts and media*. Cambridge, MA: MIT Press.

Pierson, M. (2015, December). *The voice under erasure: Singing, melody and expression in late modernist music*. (Accessed 2016) https://www.academia.edu/9322541/The_Voice_under_Erasure_Singing_Melody_and_Expression_in_Late_Modernist_Music

Schaeffer, P. (1966). *Traité des objets musicaux*. Paris: Le Seuil.

Price, S. (2005) *Granular Synthesis*. Sound on Sound. (Accessed 2016) http://www.soundonsound.com/techniques/granular-synthesis

Truax, B. (1988) *Real-Time Granular Synthesis with a digital signal processor.* Computer Music Journal. 12 (2), MIT Press, 14 – 26