Desertsoundlore: Deep Listening to Aura in the Mojave Desert

Lorrie Edmonds

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By:	Lorrie Edmonds		
Entitled:	Desertsoundlore: Deep Listening to Aura in the Mojave Desert		
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Signed by the fir	nal Examining Committee:		
	Dr. Elizabeth Miller Chair's name	_ Chair	
	Dr. Matt Soar	Examiner	
	Examiner's name		
	Dr. Owen Chapman	Examiner	
	Examiner's name	Companyisan	
	Dr. Owen Chapman Supervisor's name	Supervisor	
Approved by _	Dr. Owen Chapman		
	Chair of Department or	Graduate Program Director	
<u>July 9,</u> 2021	Dr. Monika Kin-Gagnon Dean of Faculty		
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Abstract:

Desertsoundlore: Deep Listening to Aura in the Mojave Desert By Lorrie Edmonds

This thesis engages with the notion of Walter Benjamin's 'aura' through impressions of sonic aura as discovered within the soundscapes of a kilometre of rural desert situated in North Joshua Tree, California. By employing a methodology of immersive listening techniques and a Harawayan lens of 'making-kin', explorations involved focused aural attention to ephemeral soundscape moments, soundwalking into wild protected land and prioritization of respect-laden empathy in the reception of sound events onsite. This paper discusses overbearing constraints imposed by desert climates, the ubiquity of technological reproductions of subjective auratic experience in our contemporary world and the potential for the withering of sonic aura once its recorded atmospheric sounds have been decontextualized from their original site. This paper also discusses the struggle to represent the authenticity of an immersive listening experience at a site of aura through electroacoustic sound works when the recordist's memory of perceived auratic moments become unstable through cracks in post-site information, understanding and reflection over time.

Keywords: research-creation, aura, sonic aura, immersive listening, authenticity, Mojave Desert.

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This thesis is dedicated to my beloved father, the late J. Duncan Edmonds, who transcended suddenly in late August 2019. We shared one of our last meaningful phone conversations during my 2018 research-creation journey. We bonded over a love for the desert as he told me of his trips to Palm Springs, CA, with his own father. I said to him that I wished he could have joined me in North Joshua Tree, as he thrived in hot summer weather and he loved going for walks.

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Chapter 1: Introduction

1.1. Introduction and Conceptual Inspirations

Desertsoundlore is an interpretative creation-from-research sound project that aims to navigate and negotiate the enigmatic "Aura" that surrounds the area of North Joshua Tree, California, in the Mojave Desert. By turning to praxes of embodied listening as both meditative methodologies of enquiry and theoretical groundworks in stride with Walter Benjamin's notion of "Aura" and its rays of "authenticity", this project embraces feministminded situated listening practices that prioritize empathy, perception, authenticity, intuitive understanding, environmental and acoustic awareness, as well as a sense of experiential synthesis over time made real through experiential memory and resonance.

After a short tourist visit to Nevada's Red Rock Canyon National Conservation Area in 2016, I felt compelled to go back to investigate my sudden fascination with the Mojave Desert and its desolate soundscapes. I created a short residency opportunity in the desert region of Joshua Tree, CA, as the basis for this research-creation thesis project for the purpose of 'initiation by immersion' during its hottest season. My original intent was to stage a pirate radio event, but this plan became unfeasible while I was located onsite. My subsequent work with the research site is through the engagement with what I qualify as its "aura" as sensed through the sound events and other media I was able to collect while there.

By focusing on immersive listening practices and low-tech field recordings created while situated in a rural environment of ancient natural landforms and its eccentric inhabitants. Desertsoundlore attempts to understand and unearth layers of a patch of desert's potent "aura" through audio enquiry in a path toward sound composition sensed and sourced as reactivations of place, reverberations from field recordings and multisensorial memory.

Throughout this project, I have worked through the following cluster of research questions:

- 1. What does the desert require of a human listener? Can a kilometre of living desert be probed using immersive listening methods for its sonorous details in hope they reveal character of an enigmatic environment?
- 2. How do we represent a unique environment in sound-work that begins with recordings of 'reconstructed memory' which are informed by place?
- 3. Can technical reproduction of localized sounds and creative audio composition suggest and transport aura in the hopes of communicating the essence of the desert?

In this discussion, I propose that a combination of immersive listening methods can serve as both salient theoretical groundings and methodologically playful exploration in creating compositions that privilege listening and sound in search of authenticity and "the desert vibe". Author Pauline Oliveros' practice of Deep Listening, including exercises from her texts "Deep Listening" and "The Sonic Meditations", were drawn from daily as methods to discover, explore and imbibe resonances within a kilometre of untouched desert land. Oliveros' methods prioritize perception, presence in the moment, bodily movement, reflection and empathy as intuitive forms of enquiry, with intent to spark 'auralization' and sensually creative ways of listening (Oliveros "Auralizing in the Sonosphere" 162, 166). Author Hildegard Westerkamp's praxis of soundwalking and her thoughts toward soundscape analysis became a near-daily ritual of embodied enquiry, a multi-use locative device as navigational tool for nature observation, exploration and self-situatedness in expansive considerations for nurturing

a place-making relationship with my situated acoustic environment. Author Andra McCartney's insights on soundwalking within the soundscape, as well as her considerations on the ethics of soundscape analyses prove beneficial in unpacking, remediating and composing with field recordings.

Summoned in combination with these methodological praxes, author Donna Haraway's compost theory lens of "making-kin" came into clear focus to encourage a position of compassionate stewardship and "response-able" engagement with my temporary human and non-human neighbours. Deep Listening with Haraway's notion of "making kin" in mind proved that wild desert beings are those who hold partial knowledges of wisdoms and truths in ways of adapting and surviving in a tangle of place, time, heat, resource scarcity and meaning on a merciless landscape.

These groundings then inform my original audio creations which grew from natural sound recordings originally made in the remote desert of North Joshua Tree, California throughout the month of August 2018 for a low-watt pirate radio programming and transmission experiment gone awry. Desertsoundlore expands on these site-specific audio 'memories' by offering interpretative compositions that build upon and transform desert soundscape recordings and primitive musical experimentation into contemplative sound works.

As a creative project, Desertsoundlore is a proof-of-concept project of two audio compositions made from recordings of a soundwalk and a modest night-walk using Garageband as DAW and its effects, several found sounds and two extremely amateur musical compositions. Each is sourced from specific soundwalks that were informed by the otherworldly stillness of wild desert land. They are intended to communicate the wonder and authenticity of profound quietude and wisdom gained from exploratory observation on a spot of raw desert which continues to resonate from a situated month of time spent absorbing its calming atmospherics.

Situating myself: I am a solitary Caucasian, middle-aged, educated, working-class Canadian city-dweller living in very close proximity to unmasked sounds of city life and urban noise. Warm destinations and rural places are rarely choices for exploration and adventure, as I tend toward comfortable climates with access to cultural stimulation and urban transport systems as a non-driver. However, I felt drawn to the Mojave Desert in August 2016 when visiting Nevada's Red Rock Canyon National Conservation Area in a profound encounter of Deep Time versus human time when standing in the presence of breathtaking living landforms that have shifted in place over millions of years through forces of time, physics, geology and earth sciences. I sensed a strange summoning beyond language or logic from that landscape, compelling me to return to the Mojave Desert with purpose of creating a sounding-enquiryevent to take place in an environment that is typically perceived as a fascinating if forlorn 'nowhere'.

I remain concerned that the deserts of America are considered to be contested Native American land while denied, colonized, militarized, commodified, and politically controlled by American governments. Joshua Tree and its surrounding communities rest on ancestral lands of the Chemehuevi, Serrano, Cahuilla, and Mojave peoples (https://www.29palmstribe.org/copyof-our-mission-statement-1). These Native American tribes historically inhabited an area surrounding the Oasis of Mara near Joshua Tree National Park until the late nineteenth century when white settlers encroached upon the region (Ibid npag). This project makes no intent to claim or speak for foreign landscapes nor to tell stories of any location that are not my own experiential perceptions to represent.

CHAPTER 2: ENTERING THE MOJAVE DESERT

Desertsoundlore reflects on author Walter Benjamin's notion of 'aura' surrounding one kilometre of rural Mojave Desert by exploring the embodied listening praxis and theoretical groundings of Pauline Oliveros' concept of Deep Listening in combination with solo soundwalks and in-situ field recordings. The soundscapes discovered on a spot of desert within its atmospheric presence as situated in a remote corner of North Joshua Tree. California, are the subjects of investigation. Informed by principles of soundwalking, soundscape composition and acoustic ecology, low-tech audio field recordings created onsite are remediated as main sources for post-research sound composition.

At its core, my research centres on 'listening to the desert' in attempts to understand its potent atmosphere of aura by exploring sonic layers of the 'desert vibe' within its powerful presence. This project's groundings in listening praxes-as-theory and thoughts toward research-creation soundworks were conscious onsite, although the recordings involved were created for the low-watt pirate radio project that did not happen as planned. As this project has evolved, theoretical frameworks and post-research sound production inspiration have grown from reflections on the chosen methodology onsite through readings, research notes, listening and working through field recording edits, listening journals, reflections, photographs taken onsite and post-site paintings as material means of keeping the desert 'vibe' aglow. All serve as mnemonic devices and material fragments of persistent acoustic memories and perceived auratic experience used as creative sources. As sound work, this project hopes to transport a listener into joining my roamings amidst untamed desert wilderness through mixtures of recorded soundwalks, stationary late-night recordings, spoken word and original musical compositions.

2.1 Enter the High Desert

The Mojave Desert, named for the Mojave Native American tribe, covers approximately 70,000 square km of southern California as well as areas of Nevada, Utah and Arizona. It constitutes the smallest and driest of American deserts that meets with the Sonoran Desert at its southeastern edge and the Great Basin Desert at its north (https://www.britannica.com/place/Mojave-Desert). Expectations of 'desert' as shifting sand dunes dissolve in this parched landscape where sand covers only unpaved roads. My research site is located in a mountaintop valley in North Joshua Tree in southwestern California, sixteen kilometres north of the census-designated place of Joshua Tree village. Akin to landing on another planet, the high-desert floor consists of a living-soil crust that acts as a thickened skin that holds all dry desert plant life together. Rings of creosote bushes grow as dense brush, yucca and cacti species thrive, and a wide ring of endangered-candidate Western Joshua trees twist skyward (Cummings, February 22, 2021 www.biologicaldiversity.org). Summer temperatures in this region average 45 degrees Celsius, meaning its numerous critters have evolved over time to hunt and play by night when temperatures cool and its human inhabitants turn quiet. Silences and sounds of human, non-human and hybridized desert lifeforms commingle in vibrations through ground and air, their resonating details expanding into a layered paradox of rural soundscapes rich in sonic presence.

Yet this isolated corner of wilderness is not as serene as it seems. The southwestern boundary of active Marine Corps Air Ground Combat Centre Twentynine Palms stands two kilometres away, which was established as a base for international war zone combat training by American governments in 1952 (Goolsby www.desertsun.com). Fake bombs detonate over populated scale models of Middle Eastern villages behind mountains ranges during daytime; invisible Dark-Ops aircraft drop flares below commercial jet paths at night.

Natural aguifer basins lay deep between soil and encroaching rock layers to nurture plant and animal life amidst harsh conditions, yet the regional water supply has become an over-tapped natural resource due to ongoing state drought conditions and growing appetites of human consumption. This corner of the Mojave Desert also sits atop hundreds of fractures in the earth's surface stemming from the San Andreas Faultline nearby (www.nps.gov/jotr/learn/nature/faults.htm). Visible from Keys Views vantage point in Joshua Tree National Park as a large black crack ripping across the Coachella Valley's low-desert floor, the San Andreas Faultline acts as plate boundary point where Pacific and North American continental tectonic plates slip, slide, shift and collide as energetic forces in constant motion and tension.

Inhabitants of Joshua Tree and neighbouring communities take pride that their corner of Mojave Desert bears remarkable atmospherics which offer healing energies in its sense of tranquility. This region has served as inspiration for generations of creative thinkers marked by the steep presence of mountaintops, prehistoric rock and land formations, natural dark skies protected from urban light pollution, and the picturesque Joshua Tree National Park with access to open wilderness. Yet the aura surrounding Joshua Tree as place emanates as an intangible feeling or 'vibe' that connotes an atmospheric quality understood by those who reside there or visit. Glimpses of locals at several cultural events impart a sense of community in place where liberties in freedom of speech and autonomous thought in simple ways of living on rural landscapes are welcome relief or release from physical and psychological pressures of urban society.

2.2 Into the Aura

Spirituality circles speak of 'aura' as fields of energies that radiate around a living body, while Wiktionary.org defines 'aura' as "[d]istinctive atmosphere or quality associated with something" and "(parapsychology) An invisible force surrounding a living creature" (https://en.wiktionary.org/wiki/aura). Some have been fortunate to behold an original work of art or landscape that inspires awe while radiating an 'aura' of its singularity as it sits in its contextually historical place. Some will be enraptured by a work's unparalleled beauty of concept and affect, while others might perceive that same work as a forgettable object or just another road-stop and leave unchanged. To absorb the auratic presence of a unique work of a place, an object or a sound, and to be moved by strong personal aesthetic response to that work is a sublime feeling of enjoying art and of being alive.

In his 1936 essay "The Work of Art in the Age of Mechanical Reproduction", cultural theorist Walter Benjamin posits that an original work of art or a site of natural wonder emanates an "aura" of "authenticity" that holds a "unique existence at the place where it happens to be", bound by its creation to a specific time and place in history (Benjamin 220). Based on early historical tradition of the use of singular artworks in cult rituals, such as painting, landscapes, architecture and music, groups of beholders would cross distances to experience the presence of a unique work, whether it be to witness a temple, a painting, a statue, mosaics, or even a live chorus (Ibid 221, 224).

Benjamin posits that aura is understood as a quality that emanates from a singular work as reverential atmosphere where the work sits in its place as contextualized by history and tradition (Ibid 221). The aura of an original artwork is a quality of its authenticity, which is also fixed into place within that singular work. Whether sensed as radiance or perceived as aesthetic response of feeling awe or emotion by its audiences, Benjamin states that aura is inseparable from a unique work as an element of its unique presence in the world (Ibid 220). A work whose "presence of authenticity" and "authority" as situated in its original setting is the "prerequisite" condition of aura (Ibid 220). In Benjamin's understanding, once departed from the site where that singular work sits in its original place, its audience members are no longer in the presence of aura. Benjamin states that mechanical reproduction technologies available in 1936, such as photography and film, carry no ability to replicate the aura that surrounds an original work or a natural landscape (Ibid 220). He writes that "[e]ven the most perfect reproduction is lacking in one element: its presence in time and space, its unique existence at the place where it happens to be" (Ibid 220).

When we "detach" a work from its aura and its site through reproductions, Benjamin says that "[o]ne might subsume the eliminated element in the term 'aura' and go on to say: that which withers in the age of mechanical reproduction is the aura of the work of art... One might generalize by saying: the technique of reproduction detaches the reproduced object from the domain of tradition" (Ibid 221). While Benjamin posits that aura of an original work cannot be duplicated or taken from its specific site, he does not address that aura is a feeling sensed (or not) in bodies and minds of individually subjective beholders (Ibid 221). He states that reproduction "withers" the aura of an object due to "detaching from the domain of tradition", in that copies of an original work imprinted and remediated by mechanical reproduction do not capture any perceived auratic effect (Ibid 221). Once a work is mass copied then circulates to arrive in multiple viewers' hands, the work and its reproductions are stripped of aura because copies no longer hold the original work's singular mystique or its contextual specificity (Ibid 221). By "shattering of tradition" through multiple copies of a work, any sense of its originality is lost along with its ritualistic bonds to aura (Ibid 221). Yet this break with tradition through reproductions of a work is liberty.

Benjamin posits the implication of a work's freedom from ritual and context in reproductions at the loss of its original location-based atmosphere of aura as "technical reproduction can put the copy of the original into situations which would be out of reach for the original itself... it enables the original to meet the beholder halfway, be it in the form of a photograph or a phonograph record. The cathedral leaves its locale to be received in the studio of a lover of art; the choral production... resounds in the drawing room" (Ibid 220-21). In the previous passage, Benjamin makes one of his few mentions in this essay regarding reproduced sound. Are we to assume that Benjamin took no issue with early sound recording in 1936 as it was already a known means of mechanical reproduction, vet film and photography were considered threats to early 20th century perceptions of art?

Recorded sound was established in 1857 with the invention of the phonautograph by Édouard-Léon Scott de Martinville, followed by development of the record-and-playback phonograph by Thomas Edison in 1877 (www.emiarchivetrust.org/about/history-ofrecording). Benjamin notes that "[t]he technical reproduction of sound was tackled at the end of the last century. Technical reproduction had reached a standard that not only permitted it to reproduce all transmitted works of art and thus to cause the most profound change in their impact upon the public; it also had captured a place of its own among the artistic processes" (219-220). He also states that "[i]n permitting the reproduction to meet the beholder or listener in his own particular situation, it reactivates the object produced" (Ibid 221). Once we have left a site of a unique work or place where time was spent attentively listening and recording the passage of sound within a perceived auratic landscape, those recordings cannot duplicate or transport the whole of its sonic atmosphere. Aura is ephemeral, temporal, intangible, immoveable, and affects individually subjective aesthetic response. Benjamin's point speaks of reactivation of a work through possession of its likeness at a far distance from its original site, suggesting a type of power held by a reproduction, but one that is ultimately partial. This has been noted in sound recordings, which capture frequencies, but not listening contexts. Sounds can also be transported as 'copies' back to a studio setting for listening, relistening, remembering, reflection, analysis and 'dissection' as material fragments for composition.

The nature of sound itself is far more ephemeral than aura: we hear a sound, perceive that sound, listen to it with attention, then it passes. We bear witness by listening and absorbing impressions of that sound, as attentive listening to one moment of a particular sound may change us forever. Sound recordings are imprinted soundwaves that linger as moments of resonance floating homeless in placeless space on tape or memory card. Reproductions of sound from an auratic site have no fixed place in reality until we as soundcrafters create a new world for them that are inspired by an original place. In doing so, we can creatively construct a 'new place' in time and space to "reactivate" our copies of site-specific audio recordings, which hold and represent those captured moments spent immersing in atmospheric aura (Ibid 221).

Many are now in possession of personal recording devices on their bodies at all times (i.e., cell phones) which are fit for reproducing likenesses of objects or places which we experience. While these devices are not strictly mechanical, many of Benjamin's notes regarding aura and its withering in his era can be updated and applied to our currently digitally-mediated society. Much has happened since Benjamin penned his text in 1936 in terms of technological developments, and much has been said regarding his theory of aura and its links to authenticity in hyper-mediated age. A detailed account of this discourse, however, is beyond the scope of this thesis.

We are socialized to be aware that remediated copies of frozen moments can never replace a sensory-inscribed raw experience in the presence of the real 'thing'. Global consumer culture has groomed the desire to make mediated reproductions of lived experience as means to capture ephemeral moments, which instantaneously become immediate past. We are also now conditioned to 'share' visually-privileged ephemeral memories with family, friends and social media connections. Yet mediated "fragments" of fading memory on fallible technologic 'memory' devices and accessible digital platforms have become intimately personal archives that can "reactivate" experiential emotions, thoughts, sensations and wonder in the beholding recordist (Ibid 234, 221). We re-listen to sound recordings and look at photos or videos to remember and reactivate multi-sensorial feelings drawn from a specific lived experience, or to learn from them as audience. Recorded artifacts of impressions and perceptive affect frozen in the presence of a unique site over time as a series of singular spatio-temporal experiences can linger further for the recordist as resonances of connection to time and place, perhaps serving as creative trajectories within an appreciative beholder.

Once reactivated in the studio, audio materials preserved as 'sonic fossils' of subjective experience of sound can reconstruct pathways of situated circumstances in aesthetic response to that remembered recorded moment by inducing a powerful sense of returning to specific moments of place. These fragments of lived experience can move us back in time to the precise moments those sounds were recorded, while also moving us forward to regenerate intentions for artistic drive informed by place. It is in what we make and do with our detached residual materials which are inscribed as memories, somatic resonances, emotional and aesthetic affect and personal knowledge gained from experiencing the presence of a revered place as a work of art. A uniquely auratic experience can serve as inspirational catalyst for newly-created artworks to claim their own space and place of authentic originality.

2.3 Deep Listening: Ears as Traveling Companions

"What is heard is changed by listening and it, in turn, changes the listener. I call how we process what we hear the 'listening effect'." - Pauline Oliveros (Sounding the Margins 74)

Hearing is a mechanical function of the ear that absorbs soundwaves and vibrations of information into the body; hearing is the physical system that enables perception. Hearing is automatic in those privileged with healthy ears, just as listening may be a passive act dependent on attention to engagement with sounds we hear. Listening involves acts of perception, learning and sense-making of the soundwaves that enter the body by processing incoming information in the brain. Attentive listening is a skill which focuses on the perception of sounds around us as they arrive into our bodies by immediately deriving any meaning or necessary response upon their reception. Among its modalities, the practice of Deep Listening can lead us to ask new creative questions of our perceptions as we receive and experience sound.

Author-composer Pauline Oliveros describes her practice-based theory of Deep Listening as "listening in every possible way to everything possible to hear what you're doing. Such intense listening includes the sounds of daily life, of nature, or one's own thoughts as well as musical sounds. Deep Listening represents a heightened state of awareness and connects to all that there is" (Oliveros Sounding the Margins 73). Deep Listening (DL) is an attention-based concept-as-praxis of "exploring the difference between hearing and listening" by engaging with the sounds that surround us (Oliveros TEDXIndianapolis 2015). DL is a form of active listening using "conscious attention" to the worlds of sounds we move through by focusing awareness on discernment of sonic details and dimensions of sound that together compose the 'score' of our every day (Oliveros Deep Listening 27). DL centres on "listening and expanding" beyond the body's boundaries to always listen for more within what Oliveros perceives as "the continuum of perceptible sound" (Ibid xix). DL calls for "awareness of stimuli and reactions in the moment" while also consciously "acting with awareness, presence and memory" (Ibid xxi). DL can be achieved through Oliveros' composed exercises for engaging "patterns of attention" which ask us to train our ears and minds for "active engagement with attention" as we learn to focus on acoustic and intellectual perceptions, interpretations and associations of sounds coming into and surrounding the body (Ibid xxi, xxiii).

Oliveros' theory of Deep Listening developed by arranging a series of bodily exercises, sounding and vocalizing exchanges, as well as written reflections integrated with elements of meditational methods to enrich her lengthy praxes of musical composition and improvisation (Oliveros Deep Listening xxiv). DL's concepts, ideas and movements evolved from Oliveros' earlier innovative work The Sonic Meditations (1974), which were composed of improvisation-informed listening exercises that she felt brought her higher

musical creativity and therapeutic healing to her well-being. Oliveros' practice of DL for groups and individuals who may be musicians and non-musicians are designed to "investigate patterns of attention, ways of listening and responding" due to what she noted was an urban-based human "disconnection with the environment" (Ibid xviii, 9).

Oliveros asserts that DL's two forms of listening are attainable by giving what she terms "focal and global attention" (*DL* 24). Focal attention concentrates "targeted" listening on an object to render clarity in its sonic detail, whether it is a singular or series of sounds or one pronounced within fuller sound dimensions (Oliveros *Sounding the Margins* 74, *DL* xxiv, 25). Global attention engages in these overlapping dimensions of close and distanced space created by sounds; it is "diffuse" and is intended to extend empathetic and non-judgmental compassion in its perception (Oliveros *DL* 25-27). When focusing attention on the larger flow of sounds, there is less perceptive discernment but more flow of contextualization by "concentration on the entire field of sound" in what she terms "the space/ time continuum" (Oliveros *Sounding the Margins* 74, DL xxiv).

DL exercises these two forms of attention to listen for sounds and silences within "the sound/silence continuum" as ways to "feel the sharp contrast between clear detail of a sound or sequence of sounds using focal attention" and "expansion to multiple sources sounding simultaneously" enmeshed as layers of the soundscape by using global attention (Oliveros *DL* 24). When both modes of listening redirect aural attention by instantaneously flipping between 'targeted' sonic detail and our wider immediate soundscape, the goal is to consciously balance the two fields of sound with each other and feel the switch of dimensionalities within the body as it receives sound (Ibid 25). Oliveros believes that by switching between this duality of perceiving between focused sound and its wider aural dimensions, DL transforms into a mode of meditation focused on "the interplay of sounds and silences" by expanding conscious listening to include "all sounds and perceptible vibrations" (Ibid xxiv). Training our ears to practice DL's perceptual shifts and balancing the two attention modes is intended to enable the listener to become "in connection with all existence" (Oliveros *Sounding the Margins* 74).

Breathwork improvisations encourage bodily well-being; toning and sounding by adding vowel sounds to each breath then working up to extended vocalizations and mouth movement during longer exhalations can calm swirling minds. Bodily rhythm-making exercises are intended to open reception and raise energy (Oliveros *DL* 26). As each body part is tuned, energy, awareness and grounding become more available, giving texture and timbre to what we perceive within the larger flow of sound (Ibid 25). Slowed vocalizations of words or soundings and spoken descriptions of imagined sounds outside of human corporeality are intended to break boundaries between listening dimensions (Ibid 44). By responding to a number of perception-based questions, such as "Sit by the trees – what kind of tree makes what kind of sound?", we can develop empathy and compassion for respondent humans and other lifeforms who add depth, space and dimensionalities to our temporal soundscapes (Ibid 44). DL's questions lend 'sounding' extensions of scope and breadth when encountering strange desert lifeforms, as well as new ways of animative thinking applied to methods of attentive listening activated onsite and curiously creative directives for ideas in soundwork composition.

DL is "active" because consciously engaging with sound gives choice to focus our attention, absorb meaning and decide whether any action as information is contained in any sound received and perceived that may require action or reaction (Oliveros *Sounding*... 74,

DL 29). In this understanding, Oliveros reminds us that animals are natural Deep Listeners who readily sense threats to their existence (DL xxv). When humans enter into wildlife habitats, the animals are aware, listening, and ready to react; they have learned that acoustic and vibrational presence of humans can mean "the difference between life and death for the creatures" (Ibid xxv). Listening for disturbances within a moment's soundscape and responding with attention, retreat or defence are conditions of many species' survival (Ibid xxv).

DL guides us to listen to the world around us with presence, open ears, and open minds. DL requires commitment to reach beyond individually-biased boundaries of awareness for deeper understanding of our place within multi-dimensional fields of sound (Oliveros *Deep Listening* 28). DL as a practice asks us to listen with empathy stretching beyond our human containers by welcoming any feeling, sensation or memory stirred by sounds we process, including those which bypass the brain. Oliveros intones that cultivating "compassion (spiritual development) and understanding comes from listening impartially to the whole space/time continuum of sound, not just what one is presently concerned about" (Ibid xxv). Within this nexus of evolving awareness is where she claims that "discovery and exploration can take place... practice enhances openness" (Ibid xxvi). By consciously focusing on listening to forefront empathy, non-judgment and openness toward the many sounds and lifeforms present onsite, the continued practice of DL may help the listener to gain new levels of awareness of detail within the world of sound beyond oneself that can in turn enable both creative approaches for sound work with an added benefit of inner healings.

The beauty of DL is in its practice: new awareness raised by DL's global and focal forms of attention can permanently alter the listener's habits of listening. DL promotes awareness of details within present soundscapes and environments that can culminate in experiential synthesis. By preparing our bodies to engage with sound on a cellular level through its exercises, DL can guide us into attentive listening to happen upon auratic moments of sound in our environment that could pass unnoticed by untrained ears. Learning to balance our perception between focal and global attentions can change a moment of conscious awareness while absorbing and perceiving sound into a sonically auratic experience that may immediately become embedded and treasured within the listener. While perception and affect of sonic aura are considered to be subjective responses as discussed, DL can ready our bodily conditions to heighten our reception of sound by offering new perceptual experiences of sonic events within the atmospheric realm of an auratic site. As well, a sense of inner calm resulting from DL exercises can function as a space for sense-making within Oliveros' aural vocabulary terms "sounding" and "resounding", while also serving as a site of research-creation. DL builds on the production of unfolding knowledge through learned attention and experience to the parts and whole of a present soundscape, while also launching creative surges for sound remediation and production (Oliveros "Auralizing in the Sonosphere" 162, 166).

Deep Listening is employed in this project as both a theoretical grounding and as method of research, as it shares foundational principles and ethics with the creative and research practices of soundwalking. Both DL and soundwalking prioritize the listener's awareness of environment, conscious presence in the moment, empathy for the ecology of a place and its expressions of sound, open-mindedness toward the randomness of sounds we encounter, as well as our roles within the space-time continuum and its present soundscape.

2.4 Soundwalking Within the Soundscape: Navigating Aura

The term 'soundwalk' was developed by R. Murray Schafer and the World Soundscape Project at Simon Fraser University in Vancouver in early 1970s, which included Hildegard Westerkamp as a member (McCartney 2014, 212). A soundwalk is considered as "any excursion whose main purpose is listening to the environment", according to author-composer Westerkamp (Westerkamp "Soundwalking" npag). Soundwalking is intended to focus aural attention as a means to "rediscover and reactivate our sense of hearing" while moving through our surroundings (Ibid npag). A soundwalk aims to make the listener aware of the uniqueness of their immediate environment as means to contemplate "our listening, the experience of space, its meanings, our understanding and knowledge of a place, our curiosity", and can foster a deepening relationship with place (Westerkamp "Soundwalking" npag, "Soundwalk Practice: An Agent For Change?" npag). The practice of soundwalking gives agency to participants and encourages active listening among a wide audience to coax "inner space for noticing" of the detailed sonic characteristics within the cacophony of our everyday while raising consciousness toward our acoustic environment (Westerkamp "Soundwalking as Ecological Practice" npag).

Soundwalking can be done as a solitary outing or in a group (McCartney "Creating Moving Environmental Sound Narratives" 2014, 212). A formal or public soundwalk is traditionally designed as a group activity that is composed, scored and guided by a leader, prerouted in locations and mapped with planned listening cues while remaining open to sonic randomness with opportunity for discussion and dialogue with other participants at its conclusion (Paquette & McCartney 4). Some forms of "listening walks" insist on participants' total silence (Wagstaff 2002 in McCartney "Creating Moving.." 221). Contemporary artists have established their own forms of soundwalks which vary the role of listener participation, including audio walks by Janet Cardiff & George Bures-Miller, electrical walks by Christina Kubisch, shadow walks by Viv Corringham, blindfolded walks by Francisco Lopez, audio guides (such as at the 9/11 site in New York City), museum guides, sound mapping walks, and recreations of soundwalks as radio works or multimedia installation gallery works amongst more recent mediations (McCartney "Creating Moving ..." 219, 222, 226-229, 232).

Westerkamp states that regardless of its style, its form or its mediated location, a soundwalk gives the participant an opportunity to explore "what the 'naked ear' hears and how we relate and react to environmental sounds", unencumbered of microphones and recording equipment (Westerkamp "Soundwalking as Ecological Practice" 2006). Its primary functions include "orientation, dialogue and composition" by offering "a first acoustic impression of studied places" (Westerkamp 2000 p. 4 in Paquette & McCartney 138). Through repeated practice, soundwalking's tenets of open-minded conscious listening and conscious awareness can serve not only purposes of navigation and self-location, but also by revealing information and subsequent understandings of socio-cultural, political, historical and environmental information of a chosen site within its ephemeral soundscape (McCartney "Creating Moving ..." 212).

Perceptional biases and personal histories are called upon subconsciously in framing how we listen and approach the act of attenuated listening when exploring an unfamiliar environment on foot (McCartney "Ethical Questions About Working with Soundscapes" 164). As recordists and composers capturing our experience and interactions in a situated location, ethical implications in the representation of authenticity of place and the expression of our relationship with that place must be well considered (McCartney "Ethical Questions" 161).

When entering a remote rural location and its daily soundscapes, urban-dwelling visitors are often taken by an overall quality of stillness. Yet desert sounds also carry information. As we focus our conscious listening attention, we can discover the overlapping of close sounds in nature, but questions may emerge in the context of the location: who controls the rural silence? Is a quiet sonic landscape one that offers comfort and escape or does a lack of noise signify oppression for those whose only experiences with place are within the present desolate location, and what are those experiences of silence (McCartney "Ethical Questions" 162)? How does such a serene soundscape "affect its perception and value" for locals or for visitors, and what are those differences (McCartney "Ethical Questions" 162)? Such enquiries and their responses carry weight in the organization of social and political powers for not only the inhabitants of a rural landscape, but for those such as recording soundwalkers who seek to represent authenticity of place and their connection with the location.

CHAPTER 3: METHODOLOGY - WHAT THE DESERT REQUIRES

A methodology of immersive listening techniques was determined onsite as intuited responses to accessible grounds while mindful of private property lines and protected Joshua tree habitats unique to high-desert altitudes. In understanding of the near-tranquil landscape as alive with native life-forms and natural energies as elements of its atmospheric aura, attenuated listening praxes brought swift perceptual shifts to privilege aurality above the visual sense in this vast space of unknowing. Cultivation of site-specific listening practices felt appropriate as "response-able" methods of enquiry for critical listening in a fragile habitat without causing much disturbance to its human and non-human inhabitants (Haraway *Staying With The Trouble* 97). Authors David Paquette and Andra McCartney remind us of a soundwalking consideration for conscious listening when moving through an environment that was applied in-situ by stating that "bodies become meaningful through the spatial choices they make... they recompose their surroundings at every step and every stop" (Paquette & McCartney 138). Considerations for lessening my human impact on the site's ecosystems and desert-safety instructions became constant guides.

3.1 "Making-kin" with a kilometre of desert

An ethical lens borrowed from author Donna Haraway's concept of "making kin" with "critter-kin" from her compostist work Staying With The Trouble was summoned into place by the rugged terrain onsite. Haraway tells us that "making kin" requires stances of compassionate stewardship and "response-able" engagement with any environment and its inhabitants (Haraway Staying With... 2, 97). "Making kin" with "critter-kin" requires an approach of attentive awareness, empathy and compassion toward the presence of human, non-human and hybrid beings encountered as "active participants" as they are holders of situated partial knowledges worthy of respect in precarious spaces where we must try to survive together (Ibid 97, 79). Haraway posits that "making kin" means tasking humans "to become more capable... to make kin in lines of inventive connection as a practice of learning to live well and die well with each other in a thick present. Our task is to make trouble, to stir up potent response to devastating events, as well as to settle troubled waters and rebuild quiet places" (Ibid 2). The author explains that "response-ability" is cultivated through "passion and action, detachment and attachment" in crossings with others of all species (Ibid 34). Haraway suggests that if there are openings for extending oneself to grasp the ways of living in unknown "damaged" landscapes, we must embrace such opportunities in a spirit of trying to survive together on a planet leaking of its resources (Ibid 87). Her notion pointed to desert flora and fauna that have long evolved on inhospitable terrain yet survive by adapting to their extreme habitat conditions.

Communities such as Joshua Tree that sit on the rim of the Mojave Desert contain multitudes of unique species, innumerable visual vantage points and a wide range of human opinions or reasonings for dwelling there, with each deserving respectful empathy and care. As foreign Other visiting North Joshua Tree to explore its sonic atmospherics by listening to a situated landscape of human and numerous non-human inhabitants, I sensed that this auratic desert environment judges its guests more by approach, action and attitude than human logic. I felt an onus to show this kilometre of desert that my actions intended no harm toward resident resilient beings who live and die by its rhythms while undergoing its rituals of adaptational challenges. Haraway's notion of "making kin" meant making "response-able"

efforts in attentive listening during daytime soundwalks and when practicing awareness-enhancing DL exercises at night, as local policy asks humans to remain quiet after 10pm (Haraway 2, 97). This concept led to conscious stewardship during soundwalks and recording outings by picking up windblown trash and keeping respectful distances so as to not disturb plants, animal burrows or neighbouring humans, as all beings dwelling within this environment contribute to its auratic atmosphere. "Making-kin" also meant prioritizing respectful listening when speaking with 'desert-dweller' humans encountered onsite and off.

Haraway's directives became a mind-set in recognition that as guest in this location, human and non-human critters were aware that my human presence posed a threat to their worlding. Her notion of 'making kin' became duty to treat the site with respect and deference to all creatures passing through the property as acknowledgement that these surroundings constitute their territory. An element of aura in this desert setting could be considered as a paradox of vast peaceful spaces that carry underbellies of danger and risk where one wrong decision could mean death from heat over-exposure, animal attack or human calamity.

3.2 Soundwalking and Deep Listening: Pathways Into Aura

Walking is a peaceful way to actively engage with a situated landscape. As we invoke agency to physically move our bodies through space, each step and stop begins the formation of a multi-sensorial relationship with place. When we listen attentively while walking in a new environment, our ears open to unique "sounding details" that enliven the immediate soundscape by placing attention on sonic characteristics that shape its location and help to orientate curious visitors in a new place (Westerkamp "Soundwalking as Ecological Practice" npag). When we consciously focus our ears, aural perception grows as other senses awaken to elements around us: sounds and feel of ground textures under our footsteps, temperature and breezes ruffling skin, scents wafting through the air (Westerkamp "Soundwalking" 1974/2001). We note visible landforms in nature or by architectural design that determine how acoustics move around a situated environment, any presence of human and animal life nearby, and a rising feeling of creating "a living connection between listener and place" (Westerkamp "Soundwalking as Ecological Practice" npag).

A soundwalk is intended to raise attention to what author-composer Hildegard Westerkamp says is "the total content of their environmental composition and is therefore very analytical" (Westerkamp 1974/2001 npag). We are meant to consciously listen to the environment while inviting inner sounds, thoughts, emotions, positional biases and personal listening experience that shape how we listen when focusing attention on sounds that surround us, akin to the use of global and focal attentions introduced by Deep Listening. Early in-situ practice with DL's focal and global attention forms were invoked to raise my listening capacity toward perceiving sounds in both close proximity and in "expansion to multiple sources sounding simultaneously" from what I considered to be unique 'sound bowls' on the property (Oliveros DL 24). While I was exploring only several of its modalities, consciously Deep Listening to daily and nightly soundings in the wider valley soundscape quickly grew into amateur meditations on grasping the unique sonic characteristics shaped by its acoustic contours when both stationary and while conducting soundwalks or listening walks. Soundwalking provided me with a serene sense of agency, independence, orientation and purpose as a participant in daily soundscapes when roaming within and around the situated location. With regular practice,

soundwalking offered not only unspoken information about the situated location, as it also served to cultivate an enchantingly fond relationship with place and its soothingly peaceful soundscapes.

3.3 Recording/ Production/ Post-site Production: Sound Gathering

Listening took hold upon arrival, while recording began after several days of acclimatizing to an 'initiation rite' of overheated physiological and psychological effects in an overwhelmingly unfamiliar environment. Perceptions shifted quickly from ferally acute hearing to a stance of conscious listening and growing awareness by concentrating on proximal sounds which rose from the raw wilderness surrounding my lodging. Distanced sounds flew into my ears from all angles, causing discernment of sonic directionalities to be a source of perceptual confusion as they traveled through the erosion-carved basin. My lodging was a studio attached to a house, which included two outdoor seating areas positioned toward the valley's expanse to the northeast in which I stationed my gear. Listening spaces on the opposite side of the building were off-limits when other privacy-seeking guests were present throughout half of my time onsite.

I excitedly began recording in stationary positions during daytime and evenings to capture quiet impressions of the situated rural soundscape while gaining courage to venture into sparse land where desert creatures roamed. Technical devices employed onsite included a ZoomH2 digital recorder, EKG earbuds, Sony MDRV4 headphones, and a 2012 MacbookPro with Garageband as DAW. Heavily-corded headphones caused friction noise on my recorder when mobile, so I settled for earbuds' lesser quality. Yet the desert immediately imposed its own climate-induced constraints on my recorder whether using batteries or connected to an electrical outlet. High temperatures foiled initial mobile soundscape recordings attempted during peak daylight hours (9am-4pm), requiring adjustment of the recording schedule to 5pm onwards. Safety precautions were imperative during soundwalks in the oppressive heat, necessitating shorter walks to be taken in late afternoons while the site was still lit by daylight.

When being led by my ears during mobile recording as "connected by a phonic umbilicus to the surrounding world", I found the prioritized focus on amplified listening to be complicated by a need for careful visual observation with every step so as not to trouble defensive plants and critters (McCartney "Soundwalking: Creating Moving Environmental Sound Narratives" 221). I had entered their terrain with a "making-kin" ethos of respect and empathy for desert lifeforms, but after a close first encounter with a rattlesnake in the wildland two weeks into time onsite, my soundwalks became unrecorded listening walks. Recorded soundwalks made within unknown desert spaces held importance but were not worth risking my life (see Westerkamp "Cricket Voice" 1987; see also McCartney "Alien Intimacies"). As Haraway notes, "[t]he decisions and transformations so urgent in our times for learning again, or for the first time, how to become less deadly, more responseable... must be made without the guarantees or the expectation of harmony with those who are not oneself – and not safely other, either." (Haraway Staying With The Trouble 98). That first encounter with a rattlesnake later saved my life in a second encounter under bright moonlight, due to having previously experienced the sound of its buzzing rattle and having learned that the safest way out of such a potentially dangerous meeting is to promptly turn in the opposite direction and leave the snake to its hunting spaces within its natural habitat.

I was working onsite with a different research-creation concept for sounds recorded. That original concept upon arrival was a 'freeform' approach to record sounds from a then-unknown location. After discernment and selection, captured sounds were to be broadcast as layers of either lightly treated or raw natural recordings. Mono-channel recordings were collected onsite as non-detailed environmental sounds to function as natural soundscape washes, with intention to layer them with dialogue and potential interviews for prepared and live radio programming content. That plan involved layering of these recordings with live-microphone natural sounds and narration for pirate radio on localized FM-radio bandwidth. However, the close presence of Twentynine Palms Marine Base scuttled radio works in progress. I was informed (with only five days before departure from my desert location) that the base employs a nine-kilometre ratio of radio signal-blocking around its perimeter. The situated location in North Joshua Tree did in fact constitute a 'radio desert' where only signals from huge radio station antennae could reach. A sense of failure ensued.

Adjusting and moving forward, I opted to play with Haraway's concept of speculative fabulation onsite and post-site for short radio works for later broadcast. These would be centered on a female character who had traveled across the continent to reach the desert as escape from dying urban centres in which populations had been killed off by poisoned air. Elements of this idea were borrowed from versions of a 2007 & 2018 radio work titled "The Joy Channel" by Anna Friz and Emmanuel Madan, in which I played a tiny role and thought about developing my character's back story (Friz & Madan "The Joy Channel", September 2018 www.iosound.ca/2018/09/iota-001/). This idea was cleared with Friz in spring 2018; however, I ultimately dismissed this approach involving character development as it did not feel original to borrow from Friz and Madan, compounded by dissatisfaction with the improvisational monologues that I created in a rush onsite and post-site during a stay in Los Angeles.

Since that time, several concepts for reworking and reinvigorating this research-creation project have been thought through then discarded. Each did not fit with the situated desert recordings nor with their sensual memories and experiential resonances that are embedded into each from the period spent onsite. The recordings themselves are not of great quality and do not capture the numerous sense-based components of atmospheric and visual qualities that make up the whole of the situated auratic desert atmosphere.

I decided to listen to inner guidance once more as means of resituating what I consider to be the 'failure' of my recordings. Listening back after a long interval between initial listens and the time of initial source recordings did in fact reactivate a rush of 'aura' between my headphones which reverberated as intense somatic memory. Several do reactivate the rush of movement and wonder within a rustic setting of tranquility which can be perceived aesthetically as a remote 'somewhere' by a listener. In resituating from speculative fabulation, I re-examined and decided upon those recordings which captured entirely real sensations of moment when blending into the space/time continuum of the soundscapes, as those recordings were less performative and based more in authenticity in expression of ephemeral experientiality. The source soundwalk used in "Reverence" was captured on August 10, 2018, which began with my own loping rhythm and commentary. It emphasized movement by seizing the agency to move the bodily self into an uncompromisingly rough landscape to actively participate in its ephemeral soundscape (McCartney "Soundwalking: Creating Moving Environmental Sound Narratives" 221). I discovered a combination of synthetic sounds within the iKaossilator app to compose an improvisational musical piece that

surprisingly worked as accompaniment to the bodily rhythms and speech in this soundwalk recording, which invigorated my original (now-captured) experiential sense of discovery. Instruments incorporated through the app were used as soundings for both desert critters and personal inner emotional responses.

Author Estelle Barrett introduces the concept of "tacit knowledge" as it emerges from trials and labour of artistic practice. The recordings were worked through using what the author terms "sense activity" which depends upon "emotional, personal and subjective concerns" giving way to the "tacit knowledge" of experiential learning and artistic creation (Barrett "Experiential Learning in Practice as Research" 1). Barrett says that tacit knowledge is revealed through the doing and making, as "the key term for understanding the relationship between experience, practice and knowledge is 'aesthetic experience'... The continuity of artistic experience with normal processes of living is derived from an impulse to handle materials and think and feel through their handling" (Ibid 1-2). I had to wrest myself from overthinking on underwhelming recordings as 'failures' in order to creatively work through the transformational process of turning my recordings into representations of experiential synthesis in a brief yet intense relationship with place. The recorded materials had to 'speak' for themselves while I wordlessly intuited compositions and arrangements, which led to the creation of instinctive musical compositions that embellish the moods already set by my soundwalk and night-walk captures. 'Tacit' is a term that means providing an answer without speaking. In musical terms, a 'tacet' passage is a type of pause, a moment where an instrument does not 'sound', and the musician is in a type of consciously attentive silence. Both terms are implicated here as translations of reflections upon my experientialities of immersive listening and the lessons learned from their material recorded remnants in order to come to conclusions while working through isolating creative processes to bring forth realization and completion of creative sound works.

I allowed only several pieces of music to permeate my mindset of listening in solitude onsite, two of which delivered stunningly spacious 'vibes' informed by unique territories which became central in their works. Composer Harold Budd spent long periods of his life residing in the Mojave Desert region near Joshua Tree. His solo piano album *Perhaps* (2007/2013) delivers expansive peace in a work of transcendence that speaks to a sense of wistful loss, as this compositional album was recorded during a live performance which served as requiem for fellow composer James Tenney. Perhaps feels limitless in its minimalistic approach, which I interpret as a musical communication of Budd's lengthy, innate relationship with the open desert. Pauline Oliveros, Stuart Dempster and Panaiotis performed together as Deep Listening Band (DLB) to record the album *Deep Listening* (1988) in a reverberant underground cistern located in the state of Washington. Undulating resonances of DLB's instruments' deep tones moving through that large space set an otherworldly mood which distantly relates to my desert experience. While many readings on composition made for (too many) considerations and I am not a musician in any capacity who seeks to emulate Budd or Oliveros' long practices of music composition and creation, these two recorded works of emotional profundity have been influential on compositional moods in realizing my own pieces.

Budd's composed songs of sparse piano notes, chords, delays and soaring moments of silence lend *Perhaps* an improvisational and emotionally-driven feel. On the track "Moss Landing", he includes pauses, stillness and room sounds with his piano chords and spare notes which convey both an emotional elegy and its inherently existential questionings tilted

skywards. The sparsity of Budd's composition and its use of the piano's sustain pedal remind me of my perceptions of sounds as they travelled across the parched desert valley then briefly echoed for listeners who may have borne conscious witness to their passage. My musical composition for the track "Fevered Crossings" was not at all intended to emulate Budd's sublime performance on *Perhaps*, yet within my 'tacit' consciousness there remains the memory of blissful comfort found in this album while listening it outdoors onsite. I listened to *Perhaps* during desert mornings while experimenting with perceptive determination of the carrying distances of sounds that traveled across my site. I now can hear that Budd's work resounded closer to the surface during my creative process on the presented sound pieces than I had realized until reaching their deliverance.

Deep Listening Band's use of a uniquely cavernous space for its sonic properties of delay, reverberation and resonance led to the creation of work that still elicits responsive awe from its listeners 33 years after its release. Beginning with a gravitational tone set by the opening track "Lear", DLB's editing and mixing of improvisational accordion, horns, didgeridoo and voice sounds recorded in that singular underground space transform the sum of their instrumentations and compositional skills into profoundly affective vocalizations and ethereal dronings of wise if wordless soundings that reverberate from the core depths of the earth to the 'ears' of its surface. Low stretches of synthetic 'guitar' music composed for my track "Reverence" come from applying time stretching, echo and delay to near-constant instrument pluckings that wrap around the human 'above-ground' voice which centres the piece. I used the musical composition to give an extended 'sounding' to subterranean vibrations sensed onsite; the use of stretched and dimmed musical phrases that emphasize recorded rhythms of my walking cadence were arranged to 'sound' the thrums and pulses coming from beneath the surface of the living desert itself.

In this section, I have discussed my approaches into the worlding of North Joshua Tree CA, by using the lenses of "making kin", Deep Listening and soundwalking praxes and field recordings as exploratory components of my methodology. In the next section, I reflect on the findings of my research-creation project.

Chapter 4: FINDINGS/ RECORDINGS

Recordings made in-situ were created to capture serene soundscapes situated in near-isolation within the remote desert location. Each recording was logged by hand and listened back to many times. Notes were made on each successful capture then roughly edited for handling noises, then re-noted again for content, time and clarity or lack thereof. My working concept upon arrival onsite included layering raw environmental recordings to create soundscapes of a peaceful "nowhere" as sound collages that can soothe ears and minds by transporting a listener away from daily turmoil and stress.

In realizing the presented sound productions from this process of research-creation, I have instead created two prototype sound pieces as short 'soundtrack'-styled works of narrative audio art that are informed by specific and general locative recordings within the situated North Joshua Tree desert. They contain sounds of my feet walking over gravel that surrounded the lodging, moving along the soft crust of wild terrain, packs of coyotes howling in the distance after making a kill for their band late into the night (which was difficult to capture due to its momentary temporal sounding), desert birds cackling and cooing as they soared around my side of the site, my voice in-situ, and a backdrop of pastoral stillness that was nearly always present onsite (aside from shocking bomb drops from the Marine Base).

I strived to apply listening methods employed onsite into the tracks' electroacoustic creations but discovered that attempts to reconstruct personal experiential moments of DL's perceptive balance between its global and focal attentions were problematic to recreate in these works as an amateur composer. I consciously attempted to answer several of DL's listening questions in the track "Reverence" by using original sounds composed on the iKaossilator app to perform interpretive 'auralizations' of scurrying ants, the buzz-rattle of a defensive rattlesnake, and glimmering rays of sunlight in addition to using three recordings from freesound.org for other effects (Oliveros "Auralizing in the Sonosphere" 162). I blended short recordings of afternoon winds with a windswept narration segment that was captured on August 10, 2018, as I first walked out to a specific Joshua tree onsite to offer my respects to its enigmatic form. I chose not to erase the handling noises of bodily agency experienced when moving into that uncompromisingly raw landscape and actively participating in its ephemeral soundscapes. I wanted the track to offer an authentic feel of walking in the desert, which "Reverence" conveys by sounding the experience of developing a relationship with place.

In the track "Fevered Crossings", I used my own distant recordings of howling coyote evenings and an extra recording of coyotes from freesound.org in combination with a short whispering narrative that was recorded during late-night hours on August 20, 2018. Its mood of mild paranoia is a slight nod to desert-based conspiracy theories that surround the secrecy of military bases, alien visitors and subsequent government coverups that proliferate (for profit) in the JT/ Landers region. The track features a lengthy moment of silence, as that pause is a recording of the authentic sound of a dark summer night as situated in the expanse of North JT desert. While working within the limitations of Garageband software (as a statement on a certain low-technology level of accessibility for Mac users), I then experimented with EQ settings, delay, compression, echo, reverb, and panning effects to render what sounds to my ears as fairly realistic atmospherics, although as mostly mono recordings they are lacking in the fuller dimensionalities of a desert soundscape.

Included on both tracks are sparse amateur musical compositions also made with the iKaossilator app that lean into an aural notion of 'westernicity' as considered in listening to a languid soundtrack for the 1984 film "Paris, Texas" composed by musician Ry Cooder. My comprehension of music-making apps is limited, yet I discovered several synthetic 'acoustic instrument' sounds including piano, acoustic guitar, horns and accordion in iKaossilator to use as a compositional tool which aided in expressing experiential feelings of focused listening and conscious movement in near-seclusion while situated in the 'wild west' that were embraced onsite. I felt that the two tracks each needed a musical or rhythmic 'mood' to become fully realized, yet it was only when combining selected field recordings with two original musical compositions that an audio 'atmosphere' within each was truly struck. "Fevered Crossings" contains an original composition on an 'acoustic' piano-like instrument from iKaossilator that gives voice to the experience of rural solitude and vast, "silencious" space in its minimal notes in the key of C (Dorian) (Oliveros "Auralizing In the Sonosphere" 166). In "Reverence", each musical 'instrument' acts as a different voice for numerous species of plant and animal critters that were encountered onsite, with nods to Oliveros' instrument of choice when an accordion briefly sounds. I set the composition of "Reverence" also in the key of C for the purpose of continuity and cohesion as the pieces began to take form.

The works produced are simple yet considered collages, as it is the aural quality of embodied seclusion within uninhabited desert wilderness which resonates most clearly in mediated memories of time, effort, and experiences drawn from a period spent immersed and listening within an auratic location. These sound pieces aim to distill an encompassing 'vibe' gained from attentively listening and walking within a landscape that offered moments of subjective personal wonder and lasting embodied peace. McCartney makes a profound yet obvious observation in saying, "environmental sounds form a powerful conduit to memory. Hearing a particular sound or ambience can launch a chain of related memories, whether experienced consciously or working unconsciously, that reconnects us to particular places and times in our lives" (McCartney "Circumscribed Journeys Through Soundscape Composition" 1). In listening back many times to rework site recordings, my emotional responses to them have evolved from tightly protected memories of 'being there' into memories of an opportunity that resulted in an ongoing sense of failure. I felt that I had failed in attempts to capture what I considered distinguishing temporal sounds that could represent parts of the whole of that lone opportunity to be situated with a recorder in a truly unique sonic environment. Acoustic ecologist-author Garth Paine posits that "sounds become part of a single unity of place and presence", which connects here to Benjamin's notion of aura as an element of atmosphere surrounding a singular landscape that is considered as a natural work of art (Paine "Ecologies of Listening and Presence: Perspectives from a Practitioner" 365). Paine states that sounds tied to a specific place which rest within us tend to further recall its climate, conditions and spatial elements, suggesting that sound impressions and sonic experiences held as somatically ingrained may not be as ephemeral as are usually considered (Paine 363).

Questions abounded during audio creation: how to rework these recordings into subtle sounds of walking and listening in an auratically remote place when the raw recordings provoke regret in my mind and body of lost recording opportunity and overall disillusionment with the recordings brought back home? How to express the feeling of a hot climate as part of a sound environment if there were no sizzles or drips of sweat to be heard because high desert

temperatures wicked away perspiration before it could form on the body? Do I dare express in-situ paranoia felt due to the presence of deadly non-human critters traversing my path? In doing so, is it good compositional practice to risk unsettling sounds for the listener? I relate to author Angus Carlyle who writes of his own process, "I am working with circularity: listening to my recordings as prompts to trigger memories of being in the field while simultaneously using those very recordings – now cut into fragments and overlapped – to construct something of a facsimile of that memory" (Carlyle *Sonic Thinking* 74). Carlyle is a professor of Sound and Landscape at University of the Arts London (UK), a soundscape composer and a research member of Creative Research into Sound Arts Practice (CRiSAP) at UAL. As a professional field recordist, he also admits to the "shortcomings of my own compositions ... shame at lack of amplitude or clarity or presence and the muddiness of their composition" (Carlyle 74). It was comforting to learn that amateurs are not the only ones who experience this sense of field recording failure that can result in creative blockage.

I found that elements of what were initially perceived as sounds of residual desert aura captured on my recordings began to decay and fade upon leaving the research site. Benjamin had warned us about the ephemeral experience of aura in the presence of an original work becoming "withered" once it becomes detached and copied through mechanical reproduction. When listening back while immersed in the desert location, I perceived the recordings as accurate (if sometimes muddied) representational sounds as I was still situated amidst their natural sound sources and other multi-sensory components that composed the totality of the perceived auratic atmosphere of North Joshua Tree. Once departed, dissatisfaction grew as I listened back and began again numerous times to reconceptualize my work, only to realize the recordings were not great representations of the location itself nor of my efforts and experience and would be difficult to enliven.

This decaying effect led me to believe that perceptions of an auratic experience and its mechanically-reproduced memories embedded in recordings or photos can become unstable as we make our movements through time when presented with difficult challenges that are considered as parts of daily life. It is within our minds, memories and bodily perceptions of an aesthetic experience where impressions of time spent in the presence of aura can linger if its impact made upon us was strong. These memory-based bodily sensations can certainly become reactivated by a number of sense-related material 'memorabilia'. But I have found that auratic experiences held close as memories can become destabilized by cracks caused by further information which may crumble our impressions of what we have lived, listened to and absorbed.

Locally-situated social conditions began to chip away at the auratic effects of my impressions of the Joshua Tree desert region just before departure, and further again over time. In several instances of meeting new acquaintances, residents were curious to enquire about the reason for my four-week stay. I gave a simple response by saying that I was present 'to listen to the desert', which brought looks of astonishment from locals who had seemingly never considered that the aura of tranquility emanating from their situated environment could cast such an allure as to invite the purpose of my visit. Their astonishment in turn quietly surprised me due to the magnificence of their peaceful setting, in that perhaps they take the sounds of rural stillness in their natural desert world for granted or have become so accustomed to its soothing effects that they forget about the power of sound to heal swirling minds

Many musicians and sound workers reside part-time or full-time in Joshua Tree and surrounding communities, yet outside of popular activities such as hiking and camping, I did not encounter or locate a significant number of organizations who specifically use natural soundscapes found within the Joshua Tree region as a healing modality (see Downs "Highway 62 Revisited" www.palmspringslife.com). Popular if expensive 'healing retreats' have become one example of the commodification of wellness that takes place in the area, yet natural sound is rarely considered in favour of performative sound baths led by crystal bowl players, gongs or yoga chanting. On August 25, 2018, I ventured alone to The Integratron in the nearby unincorporated community of Landers for a sound bath led by one its owners playing crystal bowls but left that experience with a sense of disappointment due to one participant loudly snoring, which ruined the intended hypnotic effect of the sound bath for all of those present.

I returned later that afternoon to my site where a New-Age 'magickal and spiritual retreat' of yoga and herbal-based workshops for paying patrons was in progress on the host's neighbouring property. Several retreat participants and I took a 15-minute listening walk during a break as a means of trying to explain to them the purpose of my stay in very few words. (It had been explicitly stated during my proposal defence that I was not to lead any soundwalks with others due to my lack of preparation or training to conduct such research, a directive which I duly obeyed). I asked participants only to open up their senses in order to feel the winds and sun on their bodies, to listen for any notes or harmonies that wind-song blew in, and to try to locate the directionalities of sounds coming from the situated kilometre while walking or standing in place, as that is how I began to create a relationship with the site's radiant wilderness. Second-hand feedback was positive, yet the retreat leader asked instead to borrow a CD of The Integratron sound bath for their final meditation session.

While both McCartney and Westerkamp posit that a microphone can become "a tool of access" for a visitor in a foreign country, microphone-led access did not constitute the entirety of my listening and recording experience (McCartney 2014; 220). The appearance of my pocket-size recorder was regularly treated with skepticism and mistrust in any company of desert-dwelling humans who perceived the device as an invasion of their privacy that is so valued in the Joshua Tree region. When walking down the dirt road with recorder in hand. I was confronted by a neighbour living on the situated kilometre who boldly asked who I was, where and with whom was I was staying, and why did I have a recorder (which was turned off) before telling me to stay away from their grounds. In another example while at a private Joshua Tree music venue, an employee angrily approached to order me to turn off my recorder and remove it from the premises. Similar reactions were made clear in locations within and beyond the desert, including those by several people who walked away upon seeing the device. Due to my position of "making kin" by prioritizing empathy and "responseability" toward others, I deferred to each request in treating every being encountered with respect as I was a foreigner displaced in a strange land not willing to upset or cause further confrontation. In hindsight, the loss of agency with recorder in hand was understandable when in the company of others as it was reinforced several times that southern Californians constitute a culture which considers privacy a high priority. I read these reinforcements as having become too assumptively ignorant of this abiding custom by getting comfortable with wandering alone in the desert space of North Joshua Tree. Yet upon reflection, I would not have wanted that month of pure listening and imbibing the situated essence of my North JT site, far from others, to have constituted anything but what it encompassed.

Chapter 5: CONCLUSION

5. 1 Aura

When contemplating Benjamin's notion of aura as it relates to the situated 'singular work' of a desert landscape inhabited for a month, I did perceive an aura of singular uniqueness which surrounds the region of Joshua Tree as an awe-inspiring quality within the composition of its atmospheric mystique. The experience of aura that emanates from a uniquely singular place is in its subjective perceptive acts, as perception and reception of aura are contemporarily considered to be personal aesthetic responses of intuited 'feeling' when exposed to the presence of breathtaking natural environments and exceptional works of art. In what constitutes a tiny section of the Mojave Desert, the auratic element of environmental singularity discovered within the JT area is heralded for its appeal to residents who choose to settle there, in addition to its attraction for millions of tourists who descend upon its communities in search of its natural atmospherics each year. Residents and visitors understandably focus on an experiential totality in response to the JT environment, as opposed to selecting one element from its atmospheric dimensions that may become a highlight which could embed itself as prominent somatic memory.

This research-creation project has focused on the subjective experience of aura as located within natural atmospheric sounds that surround and animate a fragment of remote JT desert landscape. I have realized through this experience of lengthy creative trial that the perception and embrace of naturally-occurring auratic sounds in a rural environmental may not assuredly translate into auratic audio recordings captured during careful site exploration. immersive listening practices and low-technology equipped field recordings. Subjective perceptions of audio-based aura enmeshed within situated rural soundscapes are difficult to articulate beyond the ears of the recordist's own understanding. Such perceptions of sounds are challenging to reproduce due to the temporal passage of a moment of sound, and inner personal perception of auratic sound is problematic to capture on non-professional. technically-mediated devices. Instead, memories of auratic sound experiences can reside within us as personal sonic affect that may change our outlook on the act and the art of attentive listening. Auratic qualities we may ascribe to sonic-bound memories made from technological audio reproductions as experienced and recorded in the presence of a singular landscape tend to rest deep within the individual as multi-sensory aesthetic response and recall. These memories can become subject to decay and ruin when removed from the site of aura, degrading further in times when our own impressions or new information may perceptively damage their character of recording-as-memory. Instability of aura can present itself when exposed to others' opinions or information from media reports that crumble dimensions of our past lived experience. The instability of experiential aura can also 'wither' when our own self-criticisms and life circumstances alter lenses of perceptive conditions in which we listen back, remember and restart the process of creative audio production. These nuanced features of aura are not discussed by Benjamin, perhaps due to his overwhelming focus on visual modes of artistic representation (see Chapman "The Elusive Allure of Aura"). Such cracks in the 'integrity' of auratic experiences were omnipresent throughout my work on this project, and this realization around aura's instability, even when recorded and remediated, is one of the key findings of this project.

5.2 Deep Listening and soundwalking as pathways into aura

The perception of aura in moments of naturally-occurring sound can be shaped and encouraged through attentive listening and conscious awareness brought forth by listening praxes including Oliveros' practice of Deep Listening and the mobile exploratory act of soundwalking. Dependent upon original sound sources and our own situated position in meeting them, DL trains ears and body to heighten our own awareness in reception to the continuum of sounds that surround us. By engaging in sounding exercises that 'tune' our bodies to open our perceptions to differing dimensionalities of sound within the everyday, we learn to distinguish detailed sound from a close sound source by using "focal attention" to concentrate on its unique qualities. Once we isolate close sounds in perceptive understanding, we can then focus on numerous sounds within larger dimensions of present soundscapes by invoking "global attention". This form of attention turns our attention both to receiving wider fields of sound flowing past us, reminding us also of our position as receiver/compassionate witness within these passages of sounds. DL can enable a place of balance between aural perceptions of focal and global attentions in our subjective reception of sound. Once balance can be achieved, we can then 'flicker' between these two forms of attention, a learned position in which I discovered how to attenuate my listening to wondrous moments of rural quiet that resulted in a bubble of encompassing aura. The concept of DL in opening up to sound with an empathetic stance proved simple when focused on training; with practice, moments of achieving balance between attentions and dimensionalities transformed 'hearing' into silently thunderous celebrations of breakthrough in my own perceptive act of listening.

As a mobile form of attentive listening, soundwalking acted as a locative method which enabled me to establish a relationship with the presence of a uniquely situated place. Soundwalking gave me the ability to perceive characteristics of a location through its sounds that shape its uniqueness in understanding a sense of place by listening attentively without speaking while moving through an extremely foreign environment. Soundwalking enquiry allowed for independence and purpose as a pathway of exploration in my situated location. formalized further when using the agency of a recording device and earbuds as amplified extensions of my ears. But in privileging hearing and listening during soundwalks, several situations became troublesome or threatening when not also prioritizing the visual sense, as discovered during my desert walks. While group soundwalking events have taken place at Joshua Tree National Park led by author-acoustic ecologist Garth Paine to introduce environmental stewardship through sound to the local community, soundwalking in a desert environment is not a common occurrence (Paine et al. "The Listen(n) Project: Acoustic Ecology as a Tool for Remediating Environmental Awareness"). Outdoor adventure is the main attraction in the JT desert region, yet the element of natural sound is perceived as a mere fragment of its healing nature experience and is not commonly its sole focus. Environmental sound is a vivifying aspect of the desert that serves as a multi-dimensional element of its auratic atmosphere, while also providing crucial information to such studies as environmental conservation, wildlife preservation, geography, ecology, acoustic ecology, and other earth sciences. But the act of walking in the desert signals a lack of belonging to its resident communities where basic desert-safety awareness and utmost respect for others' privacy are embedded early as common sense. Walking for the sole purpose of movement along a road in desert regions can also mark one as 'othered' due to the presence of its lethal summer climate conditions and its deadly non-human inhabitants. Local residents and visitors alike interpret the perception of a human walking in the desert as mentally ill or as someone of abject

poverty who has no access to a vehicle. It is impossible to function as required for daily life in desert locations without a vehicle due to its punishing climate and lengthy distances between points of population and commerce.

5.3 Sound work and composition:

Aura proved to be elusive as a sound recording quality. When listening back to recordings, I remember the auratic glow of the situated desert environment within mind and body, but I do not perceive its atmospheric realism in my captured sounds. The aura surrounding my site oddly reminded me of the cholla "jumping" cacti (*cylindropuntia fulgida*), one of my non-human neighbours. Chollas sense human or non-human sound, vibrations and reverberations; when threatened with close invasive approach, chollas defend themselves and their habitat by shooting barbed spines within a three-foot diameter. The cholla cactus is a good analogy for the aura that surrounds JT: do not get too close to what fascinates you about the desert or it may turn on you. While I still vibrate with its resonances, it is time to take my exit from the desert and leave its aura intact.

In summation, I view my project as a contribution to knowledge for people who wish to listen to the desert in complex ways. I also learned valuable lessons about conducting research within adverse environments, and I understand many of the thoughts assembled in this report as a cautionary tale to those looking to do the same, especially in terms of being aware that technologies will not always work for us in the expected ways they tend to behave under normal circumstances.

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