

Bioacoustics

Craig Eley – "Making Them Talk": Animals, Sound and Museums / Catherine Clover – Listening in the City / Cecilia Novero – Birds on Air: Sally Ann McIntyre's Radio Art / Sari Carel – What is the Sound of One Bird Singing / Matthew Brower – Ceri Levy: The Bird Effect / Adam Dodd – David Rothenberg: Bug Music / Helen J. Bullard – Listening to Cicadas: Pauline Oliveros / Michaële Cutaya – Fiona Woods: animal Opera / Austin McQuinn – The Scandal of the Singing Dog / Jennifer Parker-Starbuck – Chasing Its Tail: Sensorial Circulations of One Pig / Merle Patchett – Perdita Phillips: Sounding and Thinking Like an Ecosystem / Justin Wiggan – The Phonic Cage and the Loss of the Edenic Song

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In 2011 an article published in *The New Yorker* titled 'Prince of Darkness', brought to the surface an interesting aspect of Jacques Arcadelt's madrigal of 1539 called *Il Bianco y Dolce Cigno* in which the text presents a typical Renaissance double-entendre, comparing the cry of a dying swan to the 'joy and desire' of sexual oblivion. At the climax, the voices split into an ecstatic series of wavelike lines — the first graphic simulation in music of orgasm. Shifting away from the historical epistemological prominence that sight and the visual have played in the forming of our understanding of the world, this issue proposes a human-animal aural turn. Far from being understood as a radical liberation from the visual, the images chosen for the front and back covers of this issue, two of the most classic *See 'N' Say* early acoustic toys, function as ambiguous reminders that in human-animal relations sound can be just as epistemologically affirmative as the visual, especially in our early formative years.

Starting from the notion of recording natural sounds as central to the practices of institutionalised preservation for the purpose of education and entertainment explored by Craig Eley, the issue focuses on the quintessential animal voice: that of birds. Our starting point is therefore grounded in the affirmation of classical mimetic values. From here on, the issue attempts to depart from such trope through the reconfigurations of a number of contemporary artists and scholars. The multifaceted human-bird relationals revisited through the medium of sound are thus explored through the artistic practice of Catherine Clover; connections between listening and thinking, perceiving and imagining, sound and movement, language and the city are considered in this piece with specific reference to the everyday and the ordinary. Cecilia Novero's discussion of New Zealand-based artist Sally Ann McIntyre's site-specific art transmission raises questions about colonialism, nationalism, and the environment. Novero argues that operating in the realm of sounds both with an ear to birds, and with critical attention to the technological and institutional history of the medium of radio, McIntyre broadcasts Mark Dion's call to resist nostalgia in our relationships with animals.

An exploration of the potentialities proposed by the intertwining of sound and visuality is drawn by a series of graphic works by Sari Carel in which a soundtrack incorporating the original recordings of extinct and nearly extinct birds creates a layered sonic environment enveloping the viewer. As sound turns into drawing and unfurls notions of transformation, translation and extinction, the piece emerges as a document chronicling that which is slowly disappearing. A clear activist approach to preventing the extinction of birds is brought into focus by Ceri Levy, well known film-maker, writer, and curator. In an extensive interview with Matthew Brower, Levy discusses the challenges involved in preventing the extinction of protected bird species and demonstrates how visual and sonic arts can aid the process.

The central section of this issue takes a stark insect turn with another quintessential animal voice, that of cicadas, through the musical work of David Rothenberg, writer and performer actively engaged in human-animal relations subjects. He is the author of *Why Birds Sing*, a book on making music with birds, *Thousand Mile Song*, on making music with whales and most recently, *Bug Music*. Insect-human sound-relations are further explored by contemporary artists Helen Bullard and Pauline Oliveiros. Oliveiros, an illustrious improviser, composer, performer, Founder and Executive Director of Deep Listening Institute, humanitarian, and writer, has, in her life of over eighty years, impacted the world's appreciation and understanding of what listening is, and can be.

The third section of the issue proposes a series of difficult and complex considerations on animal presences in contemporary operas and experimental musical performances through *Michaële Cutaya's* discussion of Fiona Wood's *animal Opera, Austin McQuinn's* questioning of Alexander Raskatov's opera *A Dog's Heart* and Jennifer Parker-Starbuck's exploration of *One Pig,* by experimental musician *Matthew Herbert*. The issue concludes on a holistic note emerging from Merle Patchett's interview to Perdita Phillips, a Western Australian artist working across the media of walking, sound, installation, photography and digital media. A coda is provided by the enigmatic and non-affirmative sketching of the phonic cage and the loss of the edenic song by Justing Wiggan.

My gratitude goes to all the kind colleagues and contributors involved in the making of this issue, and most especially Chris Hunter and Helen Bullard for providing extremely useful and defining help, advice, and inspiration.

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6 "Making Them Talk": Animals, Sound and Museums

Historians and theorists have often identified the natural history museum as a primarily visual experience, but starting in the 1930s, museums were audiovisual spaces. The development of mobile sound recording by the omithologists at Cornell University reconfigured natural history knowledge and the way that knowledge was conveyed to the public. Natural history museums added audio playback technologies to their static taxidermic displays in response to the rapid development of entertainment technologies outside of the museum, especially synchronized sound motion pictures. However, these new, "scientific" environmental sounds were implemented largely through representational paradigms that had been established by popular entertainment forms. This essay looks specifically at exhibitions at the Cornell University Museum and the American Museum of Natural History in order to amplify the ways that recorded natural sounds were embedded in the techniques and technologies of preservation, education, and entertainment.

Text by Craig Eley

19 Listening in the City

This article looks at our relationship with nature through the voices of common noisy wild urban birds (ravens and crows, seagulls, pigeons, starlings, sparrows). Using three recent exhibitions from my art practice (A Filth of Starlings, Us & Them Unwelten and The Auspices 2012), the article looks at our relationship with these birds, our understanding and misunderstanding of them and how we share our cities with them. Connections between listening and thinking, perceiving and imagining, sound and movement, language and the city are made with specific reference to the everyday and the ordinary.

Text by Catherine Clover

31 Birds on Air: Sally Ann McIntyre's Radio Art

The essay considers New Zealand-based Sally Ann McIntyre's mini-FM radio station for programme-based and site-specific art transmission, i.e., Radio Cegeste. In particular, the article focuses on the programmes conceived for Radio Cegeste, namely a series of radio projects in which the artist investigates avian acoustics at the crossroads between museology and this medium's history. Based on several conversations with the artist and a long interview, the essay offers an appraisal of the myriads of ways in which McIntyre approaches issues such as New Zealand's colonial past, nationalism, as well as the environment. At the same time it situates McIntyre's production within the larger context of other contemporary art with birds. The essay argues that operating in the realm of sounds both with an ear to, for instance, birds, and with critical attention to the technological and institutional history of the medium of radio, McIntyre translates for radio Mark Dion's call, in his manifesto, to resist nostalgia.

Text by Cecilia Novero

45 What is the Sound of One Bird Singing

Semaphore Island is a sound and print project utilizing found sound and early sound recording techniques as central components. The project uses as its point of departure sound recordings of birds now extinct — documents that in retrospect are a vivid sonic embalming of ill-fated wildlife. This series of graphic works is intertwined with a soundtrack incorporating the original recordings of extinct and nearly extinct birds, and creating a lush and layered sonic environment that envelopes the viewer. As sound turns into drawing and unfurls notions of transformation, translation and extinction, the piece is a documentation and chronicling of things slowly disappearing. Text by Sari Carel

52 The Bird Effect

Ceri Levy is a film-maker, writer, curator, and activist. Levy began his career making music videos and is perhaps best known for his (2009) film Bananaz which documents the cartoon-band Gorillaz. His forthcoming film is The Bird Effect (2013) which examines human-bird relations. Working with Chris Aldhous, Levy co-curated the exhibition The Ghosts of Gone Birds to raise money for Birdlife's Preventing Extinctions Programme. The exhibition has been shown in Liverpool, London, Brighton, and Swansea. The exhibition also led to an ongoing collaboration between Levy and Ralph Steadman which culminated in the publication of Extinct Boids. Steadman and Levy currently working on their next book for Bloomsbury (which will be published in Spring 2014) entitled Nextinction. The book focuses on a number of bird species on the verge of extinction. Questions by **Matthew Brower**

62 Bug Music

David Rothenberg has written and performed on the relationship between humanity and nature for many years. He is the author of Why Birds Sing, on making music with birds, also published in England, Italy, Spain, Taiwan, China, Korea, and Germany. It was turned into a feature length BBC documentary. His following book, Thousand Mile Song, is on making music with whales. It was turned into a film for French television. His new book, Bug Music is out now and Adam Dodd has had the opportunity to ask a few auestions.

Interview Questions by Adam Dodd

70 Listening to Cicadas: Pauline Oliveros

A woman is sitting opposite me in the sun, talking in a soft voice of subtle things. She is wearing a silver necklace. She lifts her hand to shield her eyes, and then leans forwards and tells me something utterly profound. She is a pioneer in electronic contemporary music, composition, and performance. She is one of America's most important composers and winner of the John Cage Award, 2012. She is an improviser, composer, performer, Founder and Executive Director of Deep Listening Institute, feminist icon, humanitarian, karate black belt, a writer, and a deeply admired teacher. In her life of over eighty years, it is in no light way that Pauline Oliveros has impacted the world's appreciation and understanding of what listening is, and can be. But, it is also with a great subtly that she continues to scatter innumerable remarkable moments, just like this

Text by **Helen Bullard**

84 Fiona Woods: animal Opera

Animal OPERA, an exhibition of new works by Fiona Woods, is the outcome of an artist residency at the Leitrim Sculpture Centre in Mannorhamilton in October 2012. For her return to the gallery space, Woods combines made, found, organic, mineral, animal and sound elements in an unfolding visual and musical score. It is Woods' first experiment with sound, she explains: "The sound element is crucial, because sound morphs in response to space, it infiltrates a space, and is automatically adapted to each listener who is in motion through the space. That suggests a level of non-human agency, if one is to think of it in terms of sound waves and the electricity necessary to generate that sound. I also like that sound is a communal experience, and one shared by multiple beings".

Interview Questions by Michaële Cutaya

90 The Scandal of the Singing Dog

In Alexander Raskatov's opera A Dog's Heart (2010) a famous eugenics surgeon replaces a stray dog's pituitary gland and testicles with those of a dead alcoholic criminal. As the singing dog mutates into a man, the anarchy that ensues breaks with the history of the onstage canine who is always silent. Based on Mikhail Bulgakov's novel written in 1924, this radical new opera is a precarious hybrid of songs, dogs, bio-science, politics, vivisection and Bolshevism. The acoustics at work here are entirely human. But there is an opportunity to think about how we have represented the living experience of dogs whose silent presences run through contemporary and historical arts and performance practices. This Russian dog-man abandons his traditional role as faithful hound and declares, in a strong tenor voice, his indifference to the human.

Text by Austin McQuinn

102 Chasing Its Tail: Sensorial Circulations of One Pig

Through an analysis of the musical composition One Pig by experimental musician Matthew Herbert, this essay examines how sensorial possibilities of sound, and to a lesser degree, smell, open up a synoesthetic space for a "listening for" and "listening with" an animal that is usually rendered invisible. Herbert's composition tracks a farm pig's life from its birth to its consumption, foregrounding through sound the multiple environments surrounding the pig. As the life of the specific farm animal is both "rendered" through music and into food in a concert hall, listener/spectators become attuned to the pig and its life, stimulating possibilities for a different sort of understanding of the non-human animal. The essay and the performance interrogate the complex and interconnected capitalist systems in which the pig and humanity are imbricated and the ways in which that system works to render the animal invisible. Through this essay the locus of performance provides a provocative means through which to bring an animal life into focus. Text by Jennifer Parker-Starbuck

114 Perdita Phillips: Sounding and Thinking Like an Ecosystem

Perdita Phillips is a Western Australian artist working across the media of walking, sound, installation, photography and digital media. Through her multi-disciplinary multi-media art practice she explores the mutual relationships between people and the nonhuman world. Over the past ten years she has worked on art projects drawn from, and co-produced with, termites, minerals, bowerbirds, rabbits, cane toads, salmon gum trees and thrombolites, amongst others. With a background in environmental science Phillips' work is often complementary to, though not constrained by, scientific understanding. Indeed her work often focuses on matter(s) that exceed scientific understanding or which might not be considered logically sensible in order to recover a sense of astonishment or wonder often stripped from scientific interpretation. Interview Questions by Merle Patchett

129 The Phonic Cage and the Loss of the Edenic Song

Text by Justin Wiggan

"MAKING THEM TALK": ANIMALS, SOUND, AND MUSEUMS

Historians and theorists have often identified the natural history museum as a primarily visual experience, but starting in the 1930s, museums were audiovisual spaces. The development of mobile sound recording by the omithologists at Cornell University reconfigured natural history knowledge and the way that knowledge was conveyed to the public. Natural history museums added audio playback technologies to their static taxidermic displays in response to the rapid development of entertainment technologies outside of the museum, especially synchronized sound motion pictures. However, these new, "scientific" environmental sounds were implemented largely through representational paradigms that had been established by popular entertainment forms. This essay looks specifically at exhibitions at the Cornell University Museum and the American Museum of Natural History in order to amplify the ways that recorded natural sounds were embedded in the techniques and technologies of preservation, education, and entertainment.

Text by Craig Eley

"But," said I, "these things—these animals talk!"

-H.G. Wells, The Island of Doctor Moreau (1896)

n 1914, Harlan I. Smith asked, "If museums of sights, why not museums of sounds?"[1] An archaeologist and museum worker, Smith had recently discussed the idea with Anna Billings Gallup, curator of the Children's Museum in Brooklyn. Where she speculated that a collection of "the best music would be appreciated by these children and do them good," Smith saw an even greater potential for the use of recordings in a museum setting:

The records might include not only samples of the best music of the world by the world's great artists, but samples of the music of various kinds of instruments, of various kinds of mankind, as for instance, of the Negro, the Eskimo and the Chinaman, and of great oratory. On the other hand, there might be records for the city dweller who has never had a chance to hear such things as the lowing kine, the rattle of the rattlesnake, the yelp of the coyote, the songs of birds, rare or otherwise, the hum of a swarm of bees, the roar of the waves, the jingle of the chains of a wagon freight train, and the creak of ox carts. Bird songs are probably of as much interest to museum visitors as bird skins.[2]

Smith's suggestions for incorporating sounds into the museum experience were at once closely aligned with the natural history paradigms of the mid-teens and a radical departure from them. Native American and American folk recordings were already a

component of most major museum collections, but were never connected with museum displays.[3] This was primarily due to the fact that ethnographic sound recordings were originally understood as an aid to written transcription, and then later as a long-term archival medium—never as a kind of artifact that might be played in the exhibit halls.[4] In fact, recorded sounds in general were still seen by many as novelties unworthy of presentation in cultural institutions.151 As Smith observed, "Some museum authorities might think [playing records is] quite improper, and at all dignified."[6] Additionally, nonmusical sounds that Smith so vividly imagines—the cows, coyotes, birds, and bees—would have been nearly impossible to at this time. Because equipment was so heavy, and because it required such close proximity to its subject, recordings of wild or even captured animals were extremely rare. For all of these reasons, it would take an additional two decades before the songs of birds would be heard alongside their skins.

That happened in the fall of 1936, when the Cornell University Museum opened an exhibit featuring synchronized sound motion pictures projected in front of traditional taxidermic displays. The material for the movies was gathered a year earlier in an expedition co-sponsored by the American Museum of Natural History (AMNH). Describing the exhibit and its potential, ornithologist-Arthur A. Allen told turned-cameraman the Science News-Letter, "There is no reason why mounted lions should not roar, wolves howl and deer snort as well as birds sing when the cinematographer and sound technicians take their places with the taxidermist, the artist and the collector in gathering the material and setting up the habitat groups of the future."[7] Though Allen is careful to mention all of the work that goes into the creation of groups, his descriptive language focuses exclusively on audio. Like Smith before him, the future of museums that he imagines is not one of spectacular visuality, but one where animal voices call out from their displays.

The sonification of museum displays was driven by cultural and technological changes in sound recording practices that radically altered how natural history knowledge was acquired and transmitted to the public. The development of mobile recording technology by the ornithologists at Cornell University in the late 1920s and early 1930s marked the end of the imitative era of nature recordings and established new standards for how natural sounds were perceived by the scientific community. Where animal imitations, especially imitative whistling, were once common in concerts, lectures, and commercial records, recordings of "actual birds" were consolidated into a few cultural and educational institutions, most prominently Cornell and the AMNH in New York. However, fictitious sounds of animals remained popular outside of these institutions, due to a spate of popular "jungle adventure" films in the early 1930s that advertised scientific accuracy even as they trafficked in exotic sexuality and even bestiality. By comparison, museum habitat groups now seemed even more lifeless, As James T. Tanner, a Cornell graduate student, succinctly put it, "The time had come to bring the habitat group to life."

Because of the difficulty of recording non-human subjects on location, efforts to reanimate the display group using sound were hybrid practices that relied heavily on 1910s and 20s cinema sound techniques, which themselves were an amalgamation of earlier forms such as illustrated lectures, vaudeville shows, phonograph concerts, and storefront "Scientific" nickelodeons. natural history narratives in the movie theater had to rely on these forms long after Hollywood studio films had transitioned to "talking pictures," making them generally unpopular at the box office. Therefore, in order for curators to make the natural history museum experience more "cinematic," they did not show more natural history films, but rather incorporated cinematic techniques into their pre-existing taxidermic displays. They made their animals talk.

This essay examines the discourse

surrounding changes in museum exhibition practices in order to illustrate the wavs that recorded natural sound was embedded in preservation, the tensions between education, and entertainment. As Michael Rossi has recently argued, museum displays have proven "a particularly fertile source of historically reflection on the situated characteristics of notions like nature and artifice, falsity and truthfulness, and ideology and materiality."181 However, the majority of these academic reflections have focused so narrowly on visuality that they have neglected historical complexity of "visual" technologies themselves, especially film.

Historians and theorists have often posited the museum as a primarily visual experience—Donna Haraway has called the museum "a visual technology"—but starting in the early 1930s the museum could more accurately be understood as an *audio*visual technology.[9] The addition of recorded sounds to museum displays in the 1930s, 40s, and 50s via turntables, magnetic tape machines, and public address systems was the dominant way that curators attempted to update their displays. These changes were driven by the industry-wide problem of "museum fatigue," a condition first given name in 1916 that was attributed to visitors seeing too many specimens or reading too much written text.[10]

Far from a silent, purely visual experience, the halls of the natural history museum have historically resonated with a variety of human and nonhuman voices. As Michel Chion has argued, "the voice hierarchizes everything around it," and natural histories are especially structured hierarchies of voices.[11] This begins with the description, written museum subjugation of all voices underneath the professional scientist and curator. Audiovisual technologies complicate this matter by giving those professionals the ability to capture the actual voices of "others" and the decision on how to "grant" that voice back to them—if at all.

Hearing Birds and Beasts on Film

The recording and playback of environmental sounds in the natural history museum in the 1930s was deeply indebted to two related cultural developments whose origins stretch back into the late 19th century. The first was the evolutionary logic that guided early ethnographic sound recording practices. Though evolutionary thinking recognized the connections between various human and animal species, it fit those things into a rigid and linear narrative of "progress." This meant that people who occupied the same geographic space could be cast as temporally separate; according to Jonathan Sterne, so-called "primitive" people were imaged to exist "in the collective past of white society."[12] And as musicologist Rachel Mundy has argued, "This evolutionary outlook had considerable impact throughout the rest of the century on the way Western listeners heard the sounds of biologically foreign beings, whether that meant birds, beasts, or humans."[13] The driving force in recording the voices of "birds, beasts, and humans" was to preserve them at the moment of their disappearance, while at the same time that disappearance attributing to inevitable march of time as opposed to genocidal policies and capitalist expansion. This was especially true in the case of Native Americans, but also true of animals, whose sounds scientists hoped would educate the public and preserve the voices of dying species.[14]

The second development was the habitat group, the complex taxidermic displays which were first presented in the late 1880s. The popularity of these exhibits launched a three-decade-long period where taxidermists and their art were at the center of museum collection and education. C.C. Nutting, the curator of the natural history museum at the State University of Iowa, noted in 1917 that this was a position that taxidermists themselves seemed to enjoy. "If the taxidermist is an up-to-date man and a real artist," Nutting said, "he will throw all of his influence in the direction of preparing the

beautiful modern habitat groups that are so justly admired by the public and so well adapted to showing the artist's ability and skill."[15] However, Nutting also noted that often scientifically groups were inaccurate and disproportionately expensive: "Habitat groups, beautiful and true to nature as they sometimes (not usually) are, are necessarily too limited in number and require too great an expenditure of time, money and space to meet this primary educational need."[16] Likewise, in 1935, AMNH curator of comparative anatomy William K. Gregory said that display groups were "beautiful but scientifically innocuous ... admirably concealing [natural laws] under a vast welter of accurate details."[17]

The increasing concern over these displays was also related to developments in entertainment technologies, and museums first attempted to update display groups using motion pictures. This effort was spearheaded in 1927 by Gladwyn Noble, the director of experimental biology at the AMNH, and Douglas Burden, a filmmaker and museum trustee. They collaborated on a habitat group featuring the Komodo dragon that was supplemented by a silent film that Burden shot on his expedition to Java to collect the animals. According to his detailed diary the trip was uneventful, but Burden edited his footage to fabricate drama and apparent danger in capturing his live specimens. When these specimens were put on display at the Bronx Zoo, they appeared lethargic and soon died. Afterward, they were stuffed and shaped into more regal poses that corresponded with the film. This according to Burden, the "emotional truth" of the Komodo was transmitted to visitors,[18] In death, the animals were more "alive" than when they were living. But Burden's Komodo film, like his later documentary The Silent Enemy, were popularly unsuccessful due to their lack of synchronized sound, even as they were

praised by scientists and critics.[19]

What both Noble and Burden failed to realize was that the important filmic technology in 1927 was not moving

pictures—indeed, those would have been familiar to most audiences for decades—but rather the association of sounds with those images.[20] The development of synchronized sound films problemetized the various technological intrusions into animal bodies that were necessary to make specimens look as "active" as possible to the viewing public.[21] Donna Haraway identifies process as being entirely visual, with the taxidermic animals becoming "actors in a morality play on the stage of nature, and the eye is the critical organ."[22] But animal reanimation and bodily transcendence was a process that increasingly involved the ear.

Filmmakers had a near-desperate desire to include sound in adventure and natural history films, as can be seen in the marketing campaign for Africa Speaks! in 1930. As the title implies, it was heavily promoted as the first film production to record the sounds of animals in the wild. However, immediately upon release, it was criticized in both the scientific and popular press as being misleading and ultimately fake. The film purports to document a trip taken by adventurer Paul Hoefler, and opens with a shot of a map and a narrator lingering off camera, using a wooden pointer to trace the route that the film is about to follow. From there it cuts right to the expedition footage, where, by today's standards, the sound is immediately and obviously not synchronized. The first shots of Africa show three women pounding grains, with only one of them even loosely matched to the accompanying sound effect. In a shot near a river featuring dozens of people loading massive amounts of aear and carao onto boats, only one or two people are audible above monotonous and improbably loud sound of lappina water.

It is clear that faking the sound was imagined as part of the film from the beginning, and director Walter Futter exploits it to sometimes interesting effects. In one scene, as porter falls asleep in the truck, his limp arm falls on the horn, cutting to a scene of antelope running. While one of the expedition leaders cries, "Damn those

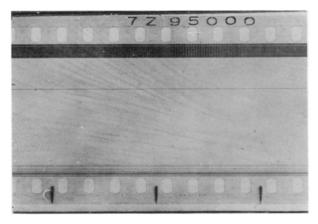
natives!" a cameraman insists, "Nevermind, it makes a great scene!" Scenes like this are actually somewhat common throughout, as the film foregrounds its own making. But though it often shows various cameras being carried and operated, it never shows any microphones or other recording technologies. The animal sounds, such as the "unusual bark" of the giraffe, seem to be done with human imitations. Variety noted that "as an animal picture Africa Speaks is a good title even though not justified...the sound end is open to questions."[23]

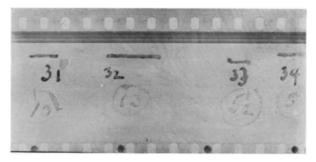
Among fictional Hollywood films, none addressed the issues of evolutionary thinking and the desire to give animals voices as powerfully as Erle C. Kenton's The Island of Lost Souls. The film was an adaptation of H.G. novel *The* Wells¹ 1896 Island Moreau released by Paramount Pictures in 1932.[24] In the film as in the novel, Moreau has been expelled from legitimate scientific circles in London because of extreme forms of vivisection. Along with fellow disgraced scientist Montgomery, Moreau moves his work to a remote island in the Pacific, where he turns wild animals into walking, talking humanoids to varying degrees of success. The arrival of shipwrecked guest Edward Parker (Edward Prendick in the novel) sets off a series of events that exposes Moreau's secret laboratory and turns his modified creatures against him.

Because of the subject matter and Wells' own comments, The Island of Dr. Moreau has often been read as a kind of anti-vivisection tract or a critique of science itself.[25] However, the book and the subsequent film can also be read as a commentary on the act of recording and playback—the art of literally giving animals a voice. In the novel, Prendick's discovery of Moreau's secret work happens largely through the sound of tortured animals. In a chapter called "The Crying of the Puma," Prendick and Montgomery cannot even carry on a conversation due to the wailing of one of Moreau's subjectsl. "It was as if all the pain in the world had found a voice," the narrator comments.[26] When Prendick finally confronts Moreau on his "research," it is because he is appalled by the sounds they make. "These things—these animals talk!" he exclaims.[27] "The great difference between man and monkey is in the larynx," Moreau explains.[28] This scene is also one of the key moments in the film version, where Moreau puts it even more succinctly: "It takes a long time and infinite patience to make them talk."

This cinematic history was embedded "scientific" mobile sound practices from the very beginning. If, as scholars have suggested, cinema has had a major influence on the look of natural history, then it had at least as strong an influence on the way natural history sounded.[29] Albert R. Brand, discussing the work of himself and his colleagues in 1932, commented, "It is now several years since sound has been added to the motion picture and it naturally follows that if the motion picture industry can take sound out-of-doors, the naturalist should also be able to do so."[30] And James T. Tanner, in his 1936 thesis outlining the efforts of Cornell to pair sound with natural history displays, stated matter-of-factly, "In 1928 the motion picture industry took the plunge into talking pictures and became the leaders in sound recording. This industry is mostly responsible for present recordina standards and technique."[31] While somewhat simplification, Tanner's assertion establishes that the Cornell sound practices were indeed a cinema technology from conception to implementation, with modifications to meet the needs of the ornithologist.

The sound recording itself was done using a technique developed by Brand where audio was electrically "photographed." Brand had made "out-of-doors" recording his passion since retiring as a stockbroker in 1928 and taking up with the ornithologists at Cornell, transforming what was merely a hobby into a more formal relationship with the department. Brand not only brought along his knowledge of birds and a considerable amount of private wealth, but also a relationship with the AMNH, where he sat on the board. Working with Cornell ornithologists and engineers, Brand developed the mobile





Sound Films.

Upper: Note Vertical Lines on Black Stripe Showing Frequency of Sound and Intervals.

Lower: A Studied Song Sparrow Film.

Detail of bird song on sound film, from Albert R. Brand, ,ÄúA Method for the Intensive Study of Bird Song," The Auk 52.1 (1935): Plate V

recording studio that became known as the "sound truck." Inside the sound truck, the energy created by sounds captured by a large parabolic microphone was passed through to a light tube that would "flicker in exact correspondence with the frequency and intensity of the sound."[32] This tube was placed inside a motion picture camera that had its lens covered, so that the film only picked up the flickering light. This technique allowed the scientists to examine bird songs in greater detail by putting the film under lowpowered microscopes, where they could analyze the frequencies and intervals of individual songs in ways that were previously impossible.[33]

From the outset of the sound truck and its attendant technologies, the Cornell staff touted its potential for education as equal to, if not more important than, its potential contributions to ornithological science. Brand bragged that his sound photography technique allowed for the easy transfer of

sounds to phonograph discs so that they could circulate "in elementary and secondary schools, and in scout groups, etc."[34] Brand also transferred his sounds to disc for commercial release to the general public, starting with *The Songs of Wild Birds*, released on two 78 rpm discs with an accompanying book in 1934; the follow-up, More Songs of Wild Birds, came out in 1936.[35] Brand shared his work with his colleagues and friends at the AMNH, who became interested in the sounds as well as motion pictures as a way to create more "cinematic" educational experiences in their halls. In 1935, Brand brokered a partnership between Cornell and the museum in order to collect such material for new exhibits to be developed at the AMNH as well as at the Cornell University Museum.

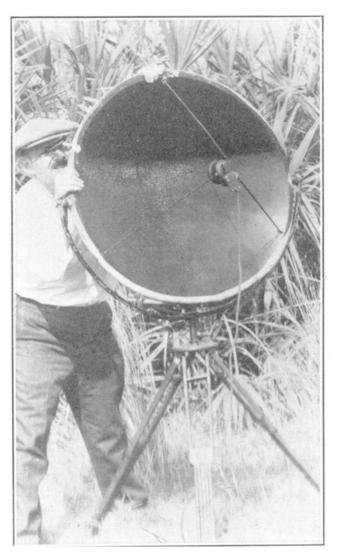
Cornell-AMNH expedition launched with a statement of purpose that echoed the logic Of imminent disappearance inherent in evolutionary "the thought: to capture cyclical and disappearing species so that these may be preserved when the subjects are no longer available."[36] The 2-month, 13,000-mile expedition left Cornell on February 13, 1935, and marked the first time Cornell ornithologists would attempt to capture moving images as well as sounds in the field.[37] The expedition was led by Peter Paul Kellogg, who was in charge of sound recording, and Arthur A. Allen, who directed the filming. Allen was a long-time photographer who outfitted a second truck, this one specifically designed to capture images that could later be synced with the sounds. His truck included "sleeping quarters for two men," all of the camera equipment, and collapsible platform that could elevate eight feet above the roof.[38] Their goal was to create the first synchronized sound motion pictures and taxidermic displays that mutually informed each other.

In order to accomplish this, the recordists had to confront how they would portray the relationship between sight and sounds—a relationship that did not exist in Brand's previous sound-only recordings. As late as 1930, the technical literature for

motion picture sound engineers was marked by conflict over what techniques were more desirable for audiences. These debates often hinged on the assumption that some modes of representation were more "natural" than others. No one made these arguments more explicitly than J.P. Maxfield, who believed that sound reproduction practices needed to mirror the "nature" of the physical body, and that the experience of sound in cinema should mimic the experience of sound in "real" life."[39] In a 1930 article, he wrote, "When a person is viewing a real scene in real life, he is viewing it with lenses—that is, the eyes, and pickup devices—that is, the ears, which are in a fixed relationship, one to the other."[40] For Maxfield this meant that sound in the film needed to correspond with how much the image "actually moves," making a close-up louder than a wide shot, for example. Maxfield's literal, bodily interpretation of sound was largely rejected in favor of a less lifelike but more consistent listening experience, where sounds maintained their volume levels regardless of their distance in the frame. This was also the approach adopted by the expedition, in part for aesthetics and in part out of necessity.[41]

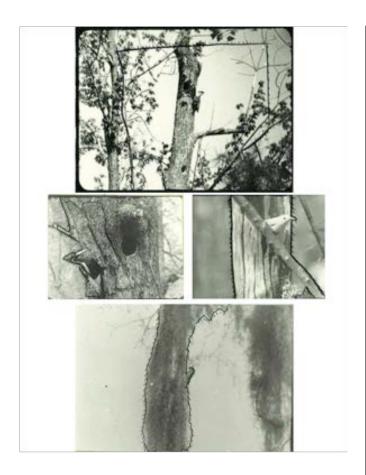
The camera operators were perched in the car-top platform in order to shoot the birds as closely as possible, though because of their relative lack of mobility from the truck (which couldn't be driven while they were on top) they also took medium and long shots. The parabolic microphones, which remained on the ground with their operators, recorded sounds from a distance but technically in a kind of "close up." Recordists used gun-sights mounted to the edge of bowl-like reflector surrounding the microphone, in order to "aim" at the sounds being made by the birds.

After the filming and sound recording were finished in the field, the visual and sound elements were synchronized together at the Ornithology Lab, creating short synchronized sound films of an individual bird in its daily life. At least four short films were created: a Parula warbler, a Prothonotary warbler, a male Ivorybilled woodpecker, and a female Ivory-billed woodpecker. After these short segments were



Parabolic microphone used in the field, from Albert R. Brand, "The 1935 Cornell-American Museum Ornithological Expedition," The Scientific Monthly 41.2 (August 1935): 189

compiled, a still image was captured from the first frame of each. These still images were then cut and spliced together to create a single, hybrid image of all of the specimens in a single frame. The exact frames, and how they were cut, are included in Tanner's thesis and can be seen on the following two pages. Once that master image was assembled, it was used as both the model for a habitat group created with Ivory-billed specimens that museum had previously acquired, and as the first frame in a motion picture that would play in front of the diorama. The the composite still began with shot, then zoomed it to a close-up of an individual bird. This would dissolve into the individual sound film of the bird, a visual



Individual frames from Cornell motion pictures, James Taylor Tanner, "Sound Recording for a Natural History Museum" (M.A Thesis, Cornell University, 1936)

representation of literally "bringing the group to life." One reviewer explains the experience in detail:

When you stop in front of the museum case, you first see the mounted specimens. They are like all other modern museum specimens—very lifelike and natural, but still and silent, as though under a magician's spell.

Then you press a button. Immediately a motion picture screen rolls or slides into the place of the glass case front. On this the same group is projected in exactly the same position, from a motion picture machine. The birds and animals 'go into their dance,' moving and singing exactly as they did in nature when the sound film

was taken by the naturalist-cameraman in the woods. The film, as a matter of fact, has been used as a guide in setting up the museum group.[42]

From Tanner's thesis, it is clear that Allen and the entire team at Cornell were hopeful that this would truly usher in a new era of museum display, but they were not naive enough to think that every museum and school would have the technological capability to display it. In Tanner's thesis, four possible ways are described to improve educational experiences in museums and classrooms, and only one involved such specialized film and taxidermic displays as were created for the Ivory-bill group. Tanner also mentions the "lecture-demonstration" film," which used non-synchronized sound and with voice-over narration to present on an individual topic. He also mentions the use of phonograph records in conjunction with traditional habitat aroups, and phonograph records on their own. At no point does Tanner suggest the use of silent films, revealing his belief (and likely that of his Cornell advisors) that moving images were merely an extension of the work that the habitat group was already performing. The important educational novel and development was the incorporation of sound.[43]

Music and Museum Fatigue

Though the Cornell-AMNH expedition and subsequent exhibit pioneered the use of natural sounds in the museum, introduction of recorded music had started years earlier. A series of musical programs initiated in the mid-teens were a direct response to "museum fatigue," a problem first identified in 1916 by the director of the Boston Museum of Fine Arts, Benjamin Ives Gilman. In study published in *Scientific* Monthly, Gilman gave a museum guest a series of factual questions, then had a photographer follow him as he moved through the museum in search of the answers. Gilman was not



The group image compiled from separate film stills, James Taylor Tanner, "Sound Recording for a Natural History Museum" (M.A Thesis, Cornell University, 1936)

a scientist, but his "experiment" found that "an inordinate amount of physical effort is demanded of the ideal visitor by the present methods in which we offer most objects to his inspection."1441 Accompanying the essay were a series of pictures showing this "ideal visitor" ("an intelligent man with good eyesight and well accustomed to museums and their content") standing, stooping, crouching and nearly lying on the floor in an attempt to see the objects and read their descriptive cards. [45] The impact of Gilman's article was immediate and widespread, not just at major metropolitan art museums, but for large and small museums across disciplines and across the United States. Just 12 months after the publication of the essay, the curator of the

natural history museum at the State University of lowa was able to outline several changes that the museum had made in their displays order to reduce fatigue, including eliminating the "overcrowding" of materials, and placing "specimens as to be within eighteen inches of the level of the average More detailed studies eve."[46] and explorations of the topic followed, most notably F.C. Brown's 1928 article "Building a Museum to Human Specifications," and Arthur Melton's 1935 book, Problems of Installation in Museums of Art. [47]

At the AMNH, at least one suggestion was made to eliminate written descriptions entirely and replace them with sound recordings. The suggestion was made by

Douglas Burden, who had already worked on dragon Komodo exhibit. continually lobbied for more technological innovation in the museum's displays, but often found himself at odds with director Albert Parr in the 1940s.[48] In 1955, he wrote a vigorous 9-page proposal for "Improvements in Exhibition," that started by recounting his long (and mostly uphill) battles with museum administrators. His proposal, though, reveals a deep commitment to reducing fatigue through the creation of dynamic sonic narratives. He wrote, "labels can't carry much of a story. In fact, they can scarcely carry a story at all. So, in spite of the fascinating objects that we had been able to put on display, we lacked the means of telling successfully the great scientific stories that lay hidden behind these objects." In his mind, the solution was "fairly simple": "we only needed to replace the written word with the spoken word and provide some means of reducing fatigue."[49]

Burden would have been well aware of the use of recorded music in museum settings stretching back to the Edison Tone-Test era of the teens and early 20s. Tone-Tests were recitals that ran from 1916 to 1926, featuring live performers alongside Edison's Diamond Disc phonograph, with audience members asked to compare the two.[50] As Emily Thompson has pointed out, these "brought about a performances willingness to accept these reproductions as an authentic aspect Of musical culture."[51] This also opened the door for their use in cultural institutions. Edison himself sent a Diamond Disc phonograph and a collection of records to the Cleveland Museum of Art. not far from his hometown of Milan, Ohio, The museum's bulletin commented that the records were played in the garden court on Sunday afternoons, and "the short recitals of mechanically reproduced music, made possible through Mr. Edison's generous gift, have been welcomed by our visitors, and have been particularly successful when a small attendance has insured comparative quiet required to hear such records."[52]

Because of technical, financial, and institutional limitations, such programs were slow to come to natural history museums. In 1939, though, William D. Campbell—a longtime associate of the AMNH and an adventurer in his own right who had led several African expeditions—made a \$10,000 donation for the installation of a museumwide sound system. Unlike phonograph concerts, which would have featured a single playback device moved in and out of the performance area, this project would hardwire large portions of the AMNH building for sound, using a central mixing board and control booth that would operate the public address system speakers. In announcing the development, the museum was able to boast "the first such installation in a free public museum in America."[53]

Once the system was installed, the museum initiated a series of events that were very much based on one of the methods suggested in Tanner's thesis: the playback of phonograph records alongside traditional displays. Under the direction of Dr. Charles Russell, the Curator of the Department of Education, the museum unveiled a series of musical programs that were played daily in five of the main halls. Consistent with the way "nature records" were understood and organized in the 1920s, these programs encompassed an impressively wide array of sounds. Russell explained the breadth of the recordings like this:

> In organizing the programs for the halls the records have classified into the following groups: animal and bird calls recorded sound tracks of jungle and forest—recordings of nature and natural phenomena such as rustic and peasant music. Primitive and exotic music such as songs and dances of African natives and the American Indian—music of the Orient for the Asiatic and Tibetan halls—folk dances related to ethnology—miscellaneous geographical associations

mystical and ritual music, and, general music recordings for the relief of fatigue. [54]

Russell's somewhat oddly-worded and irregularly-punctuated descriptions are at times difficult to parse, but it is clear that recordings of "natural phenomena," "rustic and peasant music," and "dances of African natives" were all subsets of the same category: the sounds of racial, ethnic, and animal "others." Russell advanced that these sounds were meant to "increase the understanding of the public of the natural history materials that are represented in the Museum," but he occasionally marketed them using sensationalist appeals to drama and violence, especially when they included humans. A press release for the musical program on August 2, 1939 opens with this description: "The blood-stirring beats of an Indian war dance throb through the halls of the American Museum of Natural History. Warriors, brandishina clubs and spears, dance in a circle as they shriek and yell the battle-cry of the Indians of the Plains."[55]

The program in the Geographic Hall of Birds, on the other hand, was about tranquility, creativity, and observation. "Birds have long held a special place in the heart of man, and their graceful flight, lovely songs, and and exquisite colorings have led many musicians to express their delight in these feathered friends through music."[56] This program is representative of the variety of sounds that were imaged to "represent" birds. The hourlong program on October 23 featured 20 different recorded selections. It opened with the Percy Grainger composition "Country Gardens," as played by the Victor Concert Orchestra. Then there were four species Brand recorded bv and the Cornell Ornithology Lab, followed by a selection from followed Beethoven, by whistling bird imitations by Charles Crawford Gorst.[57]

The organization of this program mirrored the exhibition practices of film in the 1910s and 20s, when one sitting at the theater would include a "full program" of material, of which the feature was only one

part.[58] These programs typically opened with a musical overture and then moved to a newsreel. This is exactly how the AMNH proceeded, material startina orchestral number and then featuring Brand's documentary-like bird songs. In an extended note on those sounds, they made this connection explicit by explaining equipment as "similar to that used by motion picture companies talking News in Reels."[59] The full cinematic program also included "musical novelties," and likewise, the AMNH program includes music and sound effect descriptive scenes such as "Carnival of the Animals" and "Toy Symphonies." The success of this exhibit laid the groundwork for even further development of sound within the American Museum of Natural History's walls, including the first exhibit to have an accompanying soundtrack, as well as the development of the first museum audio guide, the Guide-A-Phone.[60]

Conclusion

The development, financing, and presentation of the Cornell-AMNH expedition reveals that the capture of nature sounds was deeply related to earlier museum sound practices as well as film technologies. Just as ethnographers hoped to capture dying cultures, this expedition was charged with recording rare and endangered birds—a charge that proved to be prescient: this expedition best remembered is ornithological circles as the last group of people to see the Ivory-billed woodpecker. They also collected the domestic birds of field and farm, again with the fear that these sites (and the experiences contained within them) were disappearing in a rapidly urbanizing America. For Native Americans, it was already "too late": the ethos of preservation resulted in what Jonathan Sterne has called a "a bizarre self-fulfilling prophesy" where the subjects beina recorded for posterity were simultaneously being actively destroyed, with the total destruction of native life and culture treated as a foregone conclusion.[61] Yet the capture of animals, in both sound and in

stuffing, was imagined as part of a larger educational and ecological mission to save the things being represented.

This mission was advanced by the AMNH's addition of recorded sound to their exhibit halls in 1939, which also used earlier sound techniques as a way to relieve museum fatique as well as present visitors with new experiences within the museum. Like the taxidermy on display, the sounds coming out of the speakers were based on a series of fictions, as artful animal sound recreations and musical settings mixed with "authentic" recordings in order to create an experience of nature, that, as Douglas Burden might say, was true to the "experience" if not true to the actual facts. This is one of the paradoxes of recorded natural sounds: even when the material is hybridized or totally fictionalized, it retains its "naturalness" in the ears of the listener.

Endnotes

- [1] Harlan I. Smith, "Museums of Sounds," *Science* 40 (August 21, 1914): 273.
- [2] Ibid., 273-274
- [3] Smith would have likely been familiar with the recordings of Jesse Walter Fewkes, an early sound ethnographer. Fewkes' recordings of a trip to Maine were deposited in the Peabody Museum at Harvard in 1890; Smith took a job there in 1891. He also would have known about the sound work at the American Museum of Natural History, where he started working in 1895. For more on Fewkes, see Jonathan Sterne, *The Audible Past: Cultural Origins of Sound Reproduction* (Durham: Duke University Press, 2003), 288-326.
- [4] See Sterne, The Audible Past, 325.
- [5] For highbrow rejection of recorded music, see Emily Thompson, *The Soundscape of Modernity: Architectural Acoustics and the Culture of Listening in America, 1900-1933* (Cambridge: MIT Press, 2002) 238.
- [6] Smith, "Museums of Sounds," 273.
- [7] "Stuffed Birds Now Move and Sing in Museum Exhibits," *The Science News-Letter* 30.819 (December 19, 1936): 399.
- [8] Michael Rossi, "Fabricating Authenticity: Modeling a Whale At the American Museum of Natural History, 1906-1974," *ISIS* 101, no. 2 (2010): 341.
- [9] Donna Haraway, *Primate Visions: Gender, Race, and Nature in the World of Modern Science* (New York: Routledge, 1989), 54.

- [10] Benjamin Ives Gilman, "Museum Fatigue," *The Scientific Monthly* 2.1 (January 1916): 62–74.
- [11] Michel Chion, *Audio-Vision: Sound on Screen* (New York: Columbia University Press, 1994), 6.
- [12] Sterne, The Audible Past, 311.
- [13] Rachel Mundy, "Nature 's Music: Birds, Beasts, and Evolutionary Listening in the Twentieth Century" (Ph.D., New York University, 2010), 2.
- [14] K.A. Rader and V.E.M. Cain, "From Natural History to Science: Display and the Transformation of American Museums of Science and Nature," *Museum and Society* 6.2 (2008): 152–171.
- [15] C. C. Nutting, "Museum Methods," *Transactions of the American Microscopical Society* 36.1 (January 1, 1917), 16.
- [16] Ibid.
- [17] As quoted in Rader and Cain, "From Natural History to Science," 156.
- [18] Gregg Mitman, Reel Nature: America's Romance with Wildlife on Film (Cambridge: Harvard University Press, 1999), 21-25.
- [19] Ibid., 50-54.
- [20] For example, hunting and adventure travelogues were popular as early as 1909, with the faked documentary *Hunting Big Game in Africa*. See Kalton C. Lahue, ed., *Motion Picture Pioneer: The Selig Polyscope Company* (South Brunswick: A.S. Barnes and Co., 1973), 51-53
- [21] Jane Desmond, "Displaying Death, Animating Life: Changing Fictions of 'Liveness' from Taxidermy to Animatronics," in *Representing Animals*, ed. by Nigel Rothfels (Bloomington: Indiana University Press, 2002), 159–179.
- [22] Haraway, Primate Visions, 29.
- [23] "Africa Speaks," Variety 24 Sept. 1930.
- [24] Erle C. Kenton, *The Island of Lost Souls*, Paramount Pictures, 1932.
- [25] H.G. Wells, "Fantasy or Science?—A Test Question," *New York Times*, July 24, 1927, Magazine.
- [26] H.G. Wells, *The Island of Dr. Moreau* (Garden City, NY: Garden City Publishing Company, 1896), 27.
- [27] Ibid., 55.
- [28] *Ibid.*, 55
- [29] Gregg Mitman has argued that film was "the structuring metaphor" for natural history displays at this time. See Gregg Mitman, "Cinematic Nature: Hollywood Technology, Popular Culture, and the American Museum of Natural History," *Isis* 84.4 (1993): 640. See also Fatimah Tobing Rony, *The Third Eye: Race, Cinema, and Ethnographic Spectacle* (Durham: Duke University Press, 1996), 20-35.

- [30] Albert R. Brand, "Recording Sounds of Wild Birds," *The Auk* 49.4 (October 1, 1932): 433.
- [31] James Taylor Tanner, "Sound Recording for a Natural History Museum" (M.A. Thesis, Cornell University, 1936), 1.
- [32] Albert R. Brand, "A Method for the Intensive Study of Bird Song," *The Auk* 52.1 (1935): 40–52 40–52.
- [33] This method seems to have been developed independently of the "phonophotography" technique of Carl Seashore and Milton Metfessel at the State University of Iowa, who made similar recordings as early as 1925. See Steve J. Wurtzler, Electric Sounds: Technological Change and the Rise of Corporate Mass Media (New York: Columbia University Press, 2008), 236-238.
- [34] Albert R. Brand, "The 1935 Cornell-american Museum Ornithological Expedition," *The Scientific Monthly* 41.2 (August 1935): 187–190.
- [35] Jeffery Boswell and Dominic Couzens, "Fifty Years of Bird Sound Publication in North America: 1931-1981," *American Birds* 36.6 (November 1982): 930.
- [36] Albert R. Brand, "The 1935 Cornell-American Museum Ornithological Expedition," *The Scientific Monthly* 41.2 (August 1935): 187–190.
- [37] James Tanner's personal diary documented the details of the trip. It is located in the Arthur A. Allen papers, #21-18-1255. Division of Rare and Manuscript Collections, Cornell University Library.
- [38] Albert R. Brand, "The 1935 Cornell-American Museum Ornithological Expedition," 185.
- [39] J. P. Maxfield, "Acoustic Control of Recording for Talking Motion Pictures," *Journal of the Society of Motion Picture Engineers* 14.1 (1930): 85–95.
- [40] Ibid., 85.
- [41] Wurtzler, Electric Sounds, 268-270.
- [42] "Stuffed Birds Now Move and Sing in Museum Exhibits." This article also suggests that there was a second group in development using ruffed grouse, but I have yet to find evidence that it was ever exhibited or even finished.
- [43] That being said, Allen himself took stills from the expedition, hand painted them, and turned them into glass slides, which he likely used in illustrated lectures. I'm not entirely sure if these were used in educational settings or solely for private and professional lectures.
- [44] Gilman, "Museum Fatigue," 62.
- [45] Ibid. See especially the photos on 64-71.
- [46] Nutting, "Museum Methods," 15.
- [47] FC Brown, "Building a Museum to Human Specifications," *The Scientific Monthly* 26.3 (March 1928): 193–201; Arthur W Melton, *Problems of Installation in Museums of Art* (Washington, D.C.: American Association of Museums, 1935).

- [48] Mitman, "Cinematic Nature," 655, n35.
- [49] Douglas Burden, "A Proposal for Improvements in Exhibition at the American Museum of Natural History," December 1955, Subject Folder 1232, AMNH Archives.
- [50] Thompson, The Soundscape of Modernity, 237.
- [51] *Ibid.*
- [52] "Music in the Museum," *The Bulletin of the Cleveland Museum of Art* 5 (May 1, 1918): 51.
- [53] Minutes from the Board of Trustees meeting on Jan. 15, 1940. Box 1237, AMNH Archives.
- [54] Press Release, April 10, 1939, Subject Folder 1237, AMNH Archives.
- [55] Press Release, August 2, 1939, Subject Folder 1159.1, AMNH Archives.
- [56] "Free Illustrative Program for Geographic Hall of Birds," Oct. 23, 1939, Subject Folder 1237, AMNH Archives.
- [57] Ibid.
- [58] For a complete description of "The Full Progam" in film exhibition, see Rick Altman, *Silent Film Sound* (New York: Columbia University Press, 2004), 379-388.
- [59] "Free Illustrative Program for Geographic Hall of Birds," Oct. 23, 1939, Subject Folder 1237, AMNH Archives.
- [60] The exhibit was called "Men of the Montaña." See Craig Eley, "When It Rains, It Pours: Sounds of a Tropical Rain Forest in America and the Birth of the Science Series", *Smithsonian Folkways Magazine*, Fall/Winter 2012, online.
- [61] Sterne, The Audible Past, 331.

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LISTENING IN THE CITY

This article looks at our relationship with nature through the voices of common noisy wild urban birds (ravens and crows, seagulls, pigeons, starlings, sparrows). Using three recent exhibitions from my art practice (A Filth of Starlings, Us & Them Umwelten and The Auspices 2012), the article looks at our relationship with these birds, our understanding and misunderstanding of them and how we share our cities with them. Connections between listening and thinking, perceiving and imagining, sound and movement, language and the city are made with specific reference to the everyday and the ordinary.

Text by Catherine Clover

The city is a discourse and this discourse is truly a language: the city speaks to its inhabitants, we speak our city, the city where we are, simply by living in it, by wandering through it, by looking at it.

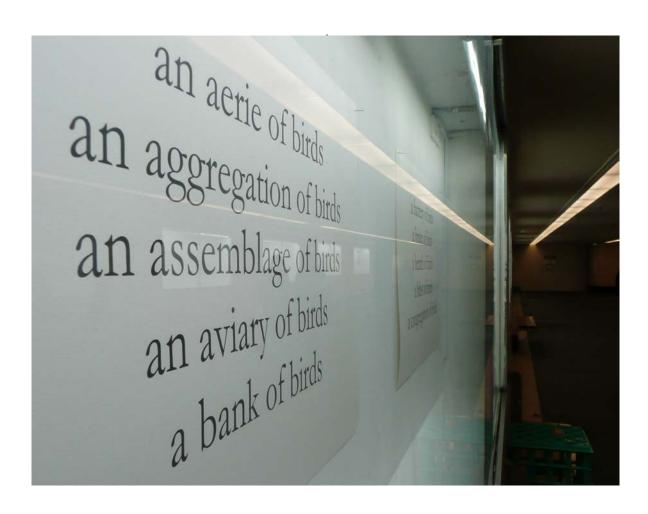
Roland Barthes Semiology and the Urban 1.

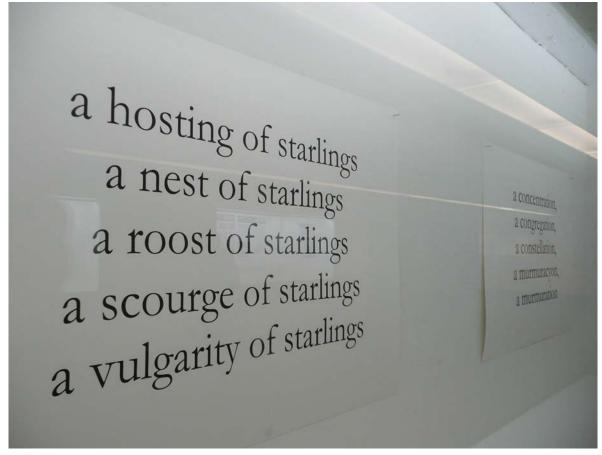
A Filth of Starlings (Platform Public Contemporary Art Spaces 2012)

choir, a chorus, a rant, a squabble, a quarrel, a chattering, a screech, a bellowing, a lowing, a mewing, a drumming, a guffaw, a murmuration. These words are just a few of the collective nouns we use in English for the grouping of birds by the sounds of their voices. Some of these nouns can be traced back to 15th century Britain, to the *Book of St Albans* of 1486, by Dame Juliana Barnes, prioress of the nunnery of Sopwell near St Albans. Little is known about the prioress, but the book, one of the earliest

to be printed, became hugely popular for many years (2). Today, we are more familiar with some of these collective nouns than others, for example a 'murder of crows' is fairly common, but a 'murmuration of starlings' less so. An aviary, a flight, a flock or a menagerie of birds makes sense, but a crossing, a raft, a pull or a bench of birds does not seem to. Some of the nouns have an obvious basis in animal behaviour but many do not. Language evolves and changes, and words and meanings change or are forgotten over time.

For A Filth of Starlings, I printed lists of these collective nouns to be easily read at walking pace, in a highly visible part of the city commuter route (the Degraves Street subway, which links the city with Flinders Street Station in Melbourne's CBD). The birds in these lists (pigeons, seagulls, ravens, crows, sparrows, starlings) are common noisy urban birds and were likely to be seen by passengers as they exited Flinders Street station through the subway on their daily





Catherine Clover

round or commute. In total there were about 80 collective nouns listed in groups of five.

It's hard to resist sounding these words out. The rhythm of these lists is echoed, underlined, emphasised by the motion of the pedestrians, the passengers, the viewers walking through the subway. The sounds of the birds in the mind's ear mix with the sounds of footsteps. As they pass through, the enclosed subway contains the sound waves and reflects them back, creating a rich and multilayered sonic experience. American sound artist Brandon LaBelle identifies that

by interlocking private lives and organisation public mediating space of the sidewalk) delivers an acoustical thrust found in a soundscape that might be heard as a superimposition of all that comes flooding from without and all that surfaces from within. From street noise that washes over the sidewalk to shouts that break from windows, the sidewalk soundscape is a medley mixing together these two conditions. By inside and outside extension, feature also as fictitious or narrative whereby the zones emotional and psychological experiences of city life intersperse amidst the social and systematic operations metropolis of the (Brandon LaBelle 3).

Passersby could read these works without slowing their pace as they passed through the connected internal space that underground with the world outside. The glass cases, 13 in all, embedded in the walls on either side of the subway, contained two lists each on A1 sheets of cartridge paper. The repetition and rhythm of these easily legible lists, grouped alphabetically by species, not only appeal to our early childhood memories of listening to stories, but also to the natural movement of walking, one foot following the other. LaBelle continues "Walking fundamental rhythm, as metered gait, as pulsional drive, must in turn be sensed along the lines of a vibratory instant found in that moment of the foot hitting the ground and the wind brushing against the skin" (Brandon LaBelle 4).

Rhythm connects the movement of the body through space with the articulation of the words, like a kind of dance to a song through the sounds that surface within, as much as the sounds heard externally, as LaBelle suggests. Most pedestrians read the words silently as they continued walking, but if they had company they tended to sound the words out to each other and often stopped to read more closely. Parents read the 'poems' out to their children who recognised the names of the birds and responded readily to the rhythm. Canadian sound artist Janet Cardiff has observed, with reference to her soundwalks, that there is an intrinsic sense of narrative associated with walking, and that walking and thinking go hand in hand (Janet Cardiff 5). In musical terminology 'andante' is the specific term used for the tempo of walking pace (73-77 beats per minute), which is within the rate of a healthy heartbeat (between 60 and 80 bpm). The rate of speech in English is about 120-130 words per minute, although this varies between geographical location and accent, between reading and speech, as well as between men and women. We tend to think, speak and walk the streets in a less than mechanical rhythm, stopping and starting at pedestrian crossings, walking faster alone than in company, running late or wandering, yet about two words per heartbeat per footfall has an appealing correlation that connects the biological with the cognitive, and provides a useful substructure for the reach of the imaginative. The sounds of viewers' footsteps mixed with the sounds of these words in their minds as they passed. The voices of the birds were remembered and misremembered, guessed, imagined, improvised. invented and The sonic component of the work was implied rather than actual, and potentially came from the viewers themselves.

French composer and inventor of



Catherine Clover

A Filth of Starlings (detail) (an aerie of birds), 24 works on paper, Platform Public Contemporary Art Spaces Melbourne Australia 2012 © Catherine Clover

musique concrete (6) Pierre Schaeffer wrote "[a]s long as meaning predominates, and is the main focus, we have literature and not music" (Pierre Schaeffer 7). Language and music are both forms of communication, and birdsong is referred to as either or both. While we tend to think language is the clearest way of transmitting meaning, it is not as rigid or efficient as we might think, and mishearing, miscommunication and misunderstanding are common experiences. "Listening... is full of slippages...that incorporate all the subtle gradations, challenges, misapprehensions Of relating" (Brandon LaBelle 8). This ambiguity is productive and full of potential. In many of my artworks I use word and text, both spoken and written, but underplay the meaningful discourse

associated with language in order to work with such slippages and misconceptions. Listening is, to quote French philosopher Jean-Luc Nancy, "on the edge of meaning, or in an edgy meaning of extremity..." (Jean-Luc Nancy 9) not unlike, in terms of reading, the destabilising role of Barthes' writerly texts (Roland Barthes 10). Listening to the birds is like listening to a foreign language, which Canadian musician Michael Vincent aligns with listening to music.

By not being able to understand some of the words, I was forced to encounter them as sounds alone, and to use the same kind of perceptual listening I used when listening to music. I began listening all over the city to the musical aesthetics of speech... (Michael Vincent 11).

behaviour While some is relatively understandable, the birds' vocal exchanges remain predominantly sonic phenomena to our ears. Yet current neurobiological research has identified that certain cognitive and biological requirements essential for language in humans, also exist in birds. In particular, research carried out with very common birds, such as corvids (crows and ravens) and starlings, have shown that they have great potential for complex language use akin to our own. Just because we don't understand something does not mean it does not exist.

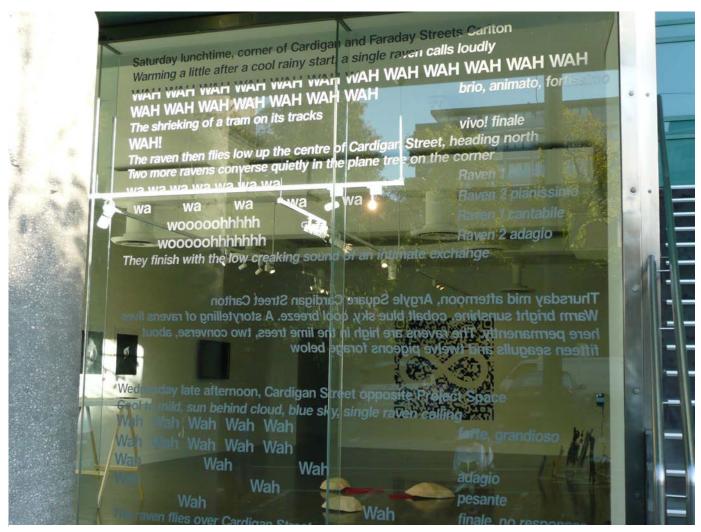
A Storytelling of Ravens as part of Us&Them Umwelten (Project Space RMIT University 2012)

The group exhibition *Us&Them Umwelten* was a response to Jacob von Uexküll's theory of *Umwelten*. "*Umwelten* conveyed the idea of the vast range of creatures occupying worlds whose meaning could be understood from their specific point of perspective. Within myriad *umwelten* then, diverse creatures experience their *umwelt* differently" (Linda Williams 12). While we may be living in the same space as numerous other species, each species perceives that space in relation to their own needs.

I produced a site-specific work, entitled A Storytelling of Ravens, that operated both inside and outside the gallery. It described my observations of the wild ravens (little ravens or Corvus mellori) that live along Cardigan Street, Carlton, where Project Space is situated. Little ravens are healthy looking birds with glossy blue-black feathers, white eyes, a rolling gait and penetrating, carrying voices. As their name suggests, they are small for ravens, the size of a crow. They live in the treetops and are very sociable. The installation was text based and followed a diary entry process that described my encounters with the ravens during the months

leading up to exhibition. The entries were based on the calls that I heard, the movements that the birds made, and the weather. I used the phonetics that naturalists describe in bird field guides to approximate the ravens' vocal exchanges. These phonetic words were inadequate and frequently bordered on the humorously absurd in their inability to convey the complexity of the birds' voices. Yet it was this very inadequacy that illustrated not what was lost in translation, but what was found. Subtle aspects that were not obvious and not easily identified emerged. The term for translating the sound of a language without its sense is homophonic, and it's an example of a constrained writing technique. These techniques enable, even as thev disable, because through limitation, other possibilities that may be overlooked become apparent. As Amanda Boetzkes artwork "consistently identifies. signal(s) aspects of nature that exist beyond our perception and knowledge of it" (Amanda Boetzkes 13).

Vinyl lettering was placed on the large floor-to-ceiling window of the gallery, which looked out onto Cardigan Street. During the installation of the lettering, which took place outside on the street, the ravens were present on the pavement, in the lime trees, foraging and calling to each other, looking and listening but not taking much notice of what we were up to, or so it seemed. Larrikin students, however, could not resist calling out the 'raven words' to each other as they passed by, producing some surprisingly convincing mimicry at times. A field recording of the ravens' voices interspersed with performers mimicking their calls was set up in the gallery using a transducer. This device used the glass window as the speaker so the sounds were heard both inside the gallery and outside on the street. The transducer translated the audio into a non-directional sonic experience, and at times it was hard to identify where the sounds were coming from. The physical sound quality was diminished to a flat, but carrying and penetrating sound, and this reduction added a significant dimension to the perceptual experience,



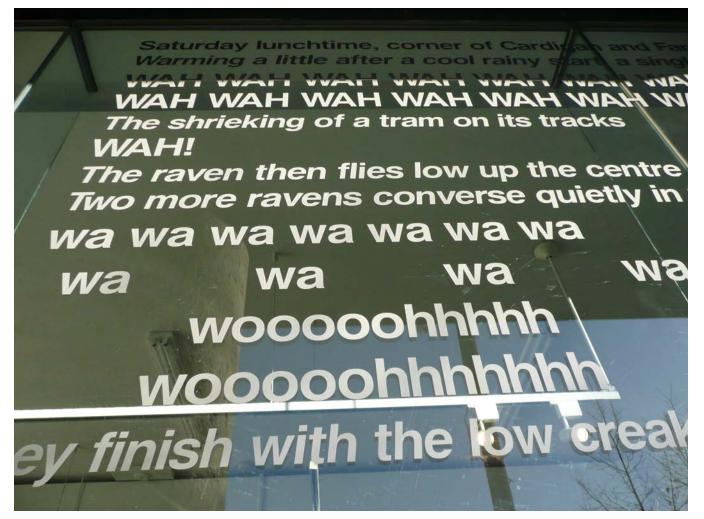
Catherine Clover

A Storytelling of Ravens (detail) from Us&Them Umwelten, audiovisual installation - vinyl lettering, works on paper, sound work Project Space RMIT University Melbourne Australia 2012 © Catherine Clover

conjuring a sense of distance, both spatially and temporally. The audio looped constantly, day and night. Whether the recordings had much impact on the ravens is hard to tell. Certainly mimicking birds in order to draw them closer is no longer acceptable practice in bird watching communities. The recordings and mimicry were not intended to deceive the birds, but rather to try and find some common ground between us, a point of communication between our urban umwelten.

It is difficult to get good sound recordings of urban birds because their voices are often drowned out by constant background urban sound. For this reason, the voices of urban animals are not a popular subject for phonography or field recording

communities. The birds' voices are always part of a complex soundscape that is difficult to define because it comprises so many sources of sound. Swiss sound artist Salomé Voegelin writes that the definition of noise is such that it "does not have to be loud, but it has to be exclusive: excluding other sounds, creating in sound a bubble against sounds, destroying sonic signifiers and divorcing listening from sense material external to its noise" (Salomé Voegelin 14). Some urban birds compensate for this exclusivity by singing less complex songs than other members of their species that live in quieter environments. They also sing more loudly. Bird accents and dialects vary from place to place, just like human voices, and there is a growing distinction between urban and rural



Catherine Clover

A Storytelling of Ravens (detail) from Us&Them Umwelten, audiovisual installation - vinyl lettering, works on paper, sound work Project Space RMIT University Melbourne Australia 2012

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birdsong in particular. Perhaps urban and rural birds of the same species will be unable to communicate with each other in the future, ultimately becoming separate species.

British musician/composer David Toop writes

What is typical in modern cities...is a homogenisation of sound. The volume of motor traffic blocks out a certain frequency range and prevents anything close to silence...Add the sound of aircraft passing overhead, loud music, police, fire and ambulance sirens, and a proliferation of machines for construction and destruction, and the more personal or unusual

sounds are drowned (David Toop 15).

Little ravens have a vocal pitch that competes with the frequency range that Toop describes. Numerous times I have witnessed single individuals calling from streetlights at busy intersections in central Melbourne during the rush hour. Pedestrians, cars, trucks, buses and trams fill the area and the ambient soundscape is loud and pervasive. Yet a single raven's calls clearly penetrate this sonic blanket, the bird seemingly undisturbed by the commotion below, and possibly even stimulated by it. The birds continue their various calls for extended periods of up to 20 to 30 minutes at these intersections.

Canadian composer and World



Catherine Clover

A Storytelling of Ravens (detail) from Us&Them Umwelten, audiovisual installation - vinyl lettering, works on paper, sound work. Project Space RMIT University Melbourne Australia 2012 © Catherine Clover

Soundscape Project (16) co-founder Barry Truax (17) promotes careful listening of the urban environment, and advocates listening to it rather than shutting it out with "surrogate aural environments" such as iPods. He suggests observing how a sound functions rather than judging it: Does the sound bind a community together or does it alienate? This is not always obvious. British urban sociologist Fran Tonkiss extends this idea.

Not listening in the city makes spaces smaller, tamer, more predictable. The pretence that you do not hear – a common conspiracy of silence – in this way is a response, passing as a lack of response, to the modern city as a place of strangers (Fran Tonkiss 18).

Vocal learning is where species learn their language and is a relatively rare phenomenon in the natural world. It includes humans, parrots, some hummingbirds, bats, elephants, dolphins and whales, and all the passerine songbirds. These species have to learn their languages because they are not innate (and fixed) as for most other animals. Language for these animals is therefore flexible. Certainly with us, language constantly changes and evolves. We improvise with it all

the time. With groups of friends we create words and phrases that identify us in the group. We invent terms of endearment for close relationships. We play with accent and dialect and vocabulary and phrasing, and there is reason to think that other vocal learners, other species, do this as well.

Walking the city, people invent their own urban idioms, a local language written in the streets and read as if out loud...walking, we compose spatial sentences that begin to make sense, come to master the intricate grammar of the streets; slowly, we learn to make the spaces of the city speak..." (Fran Tonkiss 19).

French philosopher Michel de Certeau expands on the link between language and the urban, of speaking and walking in the city.

The act of walking is to the urban system what the speech act is to language or to the statements uttered. At the most elementary level, it has a triple 'enunciative' function: it is a process of appropriation Of topographical system on the part of the pedestrian (just as the speaker appropriates and takes on the language); it is a spatial acting-out of the place (just as the speech act is an acoustic acting-out of language); and it implies relations amona differentiated positions, that is, among pragmatic 'contacts' in the form of movements (just as verbal enunciation tracts between interlocutors into action). It thus possible seems to give preliminary definition of walking as a space of enunciation. (Michel de Certeau 20).



Catherine Clover

The Auspices, audiovisual installation – bird field guides, bird identification leg rings, birds' nests, binoculars, bird whistles, domestic ornaments, badges, sound work. Moreland City Council Public Art Show Melbourne Australia 2012

© Catherine Clover

The Auspices (Moreland City Council Public Art Show 2012)

The Auspices was located in a disused customer service booth on the city bound platform of Anstey Station in Brunswick, a northern suburb Of Melbourne. passengers were in a kind of limbo as they waited for their trains. They were alert, expectant and patient in the anticipation of public mass transit. The booth was located at the entry point to the platform, which provided shelter from the weather and benches to sit on. Through the small window of the booth, the viewer could see a hotch potch world packed with items concerning our relationship with birds: bird field guides, bird identification leg rings, birds' nests,

binoculars, bird whistles (used in hunting), kitsch domestic ornaments, bird shaped badges. Ambiently lit, the space became a curiosity that was small, busy and cosy, even homey. Like a private space visible in a public setting, it suggested a kind of voyeurism by those who peered in, while at the same time providing a glimpse onto our relationship with the natural world.

Sonically, the work consisted of field recordings of birds, bird mimicry and stories about birds. The birdcalls were of local birds that were regularly heard in the vicinity of the railway station. The subtle overlapping of recorded sound with live sound blurred the boundaries of the aural environment and the effect was disorientating. It was the similarity of the recordings to the actual sonic setting,

rather than the difference, that was confusing. The sounds were easily familiar (seagull and raven calls) yet didn't quite fit, the same, but not quite like, an experience of déjà vu, 'already seen' but in this instance it was déjà entendu, 'already heard'. The site of the railway platform, the very ordinariness of the place and its humdrum, everyday existence also contributed to a sense of disorientation.

In an exchange through the online group Phonography (21), Marcus Leadley commented that "the experience of hearing location recording playback while still in the same location (encourages) an awareness of coincidence, synchronicity, (and) promote(s) uncanny sensations and incidents of disorientation." This was certainly the case with The Auspices. In the same discussion, Peter Cusack observed "that the soundscape never ever repeats itself but ... some aspects of it are very consistent." Michael Huijsman mentioned soundwalks as an example of this disorientation and quoted from a text by Ina Bolten.

> Takina a soundwalk with headphones exposes us to two parallel worlds: the actual surroundings we're walkina through and the world evoked by the sound composition we hear through the headphones. We are constantly required to switch between different temporal/spatial experiences and must try to bridge the gap between these two worlds in one way or another. (Ina Bolten 22).

This installation did not have the intentionality of the soundwalk, or the isolation that headphones can impose (as mentioned by Joe Stevens), nor was any commitment required by the audience to participate. The work operated inclusively in a public space that anyone could access from early morning 'til late at night. If passengers had time to listen long enough, or if the journey was part of a daily routine, they might have started to

differentiate between the field recordings of the birds and the mimicry. The stories about birds would certainly have disrupted the *déjà* entendu experience, but at the same time complemented it by engaging listeners through the more familiar storytelling experience. The stories, which ranged from personal experiences with birds, to fictional narratives, to philosophical considerations of the complex role of the animal in our lives today, may have provided a kind of explanatory or supportive text.

In modern Athens, the vehicles of mass transportation are called *metaphorai*. To go to work or come home, one takes a 'metaphor' – a bus or a train. Stories could also take this noble name: every day, they traverse and organise places; they select and link them together; they make sentences and itineraries out of them. They are spatial trajectories" (Michel de Certeau 23).

Perhaps these aural stories at Anstey Station, these 'spatial trajectories' of bird and human voice, looped and repeated everyday for four weeks, echoed in the passengers' minds as their physical journeys took them south into the centre of the city. In *Musicophilia*, neurologist Oliver Sacks calls songs that get stuck in our heads 'brainworms'.

It may be that brainworms, even if maladaptive in our own musicsaturated modern culture, stem from an adaptation that was crucial in earlier hunter-gatherer days: replaying the sounds of animals moving other or significant sounds again and again, until their recognition was assured - as one correspondent, Alan Geist, has suggested to me: 'I discovered, by accident, that after five or six continuous days in the woods without hearing any music of any kind, I spontaneously start replaying the sounds that I hear around me, mainly birds. The local wildlife becomes 'the song track in my head.'...(Perhaps in more primitive times) a travelling human could more readily recognise familiar areas adding his memory of sounds to the visual clues that told him where he was... And rehearsing those sounds, he was more likely to commit them to long-term memory" (Oliver Sacks 24).

I have noticed that, as I listen to the sonic environment around me, I have picked up vocal rhythms from the birds. This is not mimicry, but rather the absorption of the sonic environment in which I live, one of 'the soundtracks in my head', if you like. A large group of little ravens lives near my house in the tall pines of the local cemetery and their voices are audible every day. One of the commonest calls of the little raven is the triple "wah wah wah," repeated up to seven or eight times. The call frequently ends with "wah wah waaaahhhh," a trailing wail that drops in pitch at the end. Unconsciously, I have found I mimic this rhythm when I vocalise incidental non-linguistic sounds such as humming or harrumphing, tongue clicking or whistling, sniffing or coughing. The same goes for the "ock ock ock" throaty squawk and screech of the red wattlebird (Anthochaera carunculata), also very common in the vicinity. The companionable repeating rhythm of the "ooming" chorus of street pigeons (Columba livia) and the slight variations that the spotted doves (Streptopelia chinensis) sing also find their way into my vocalisations. In the same way that we pick up accents from each other, the voices of animals influence how we enunciate. There is a direct correlation between what we hear and the sounds that we make. Every place has its own distinct soundscape, including urban environments, despite the homogenisation that Toop identifies. When we travel and visit new places it is the different sounds that highlight our experience. Key to this sonic identification of place are the voices of birds. As Australian historian, Lewis Mayo, notes "birds ... are the one form of living being that you can find with every human community. There are areas in which humans have minimal relationships with mammals or fish, but there are always birds" (Lewis Mayo 25).

Endnotes

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- [3] Labelle, B. 2010. Acoustic Territories: Sound Culture and Everyday Life, Continuum New York/London p124.
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- [6] *Musique concrete* can be described as composing with real and recorded sound as opposed to traditional musical instruments.
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- [14] Voegelin, S. 2010. *Listening to Noise and Silence: Towards a Philosophy of Sound Art,* Continuum New York and London p43.
- [15] Toop, D. 2007. Beijing Water Writing in Sound and the City, British Council p61.
- [16] The World Soundscape Project (WSP) was established as an educational and research group by R. Murray Schafer at

Simon Fraser University during the late 1960s and early 1970s. It grew out of Schafer's initial attempt to draw attention to the sonic environment through a course in noise pollution, as well as from his personal distaste for the more raucous aspects of Vancouver's rapidly changing soundscape. Accessed 28.01.13

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- [19] *Ibid*.
- [20] De Certeau, M. 1988. *The Practice of Everyday Life*, University of California Press p97-98.
- [21] "In situ listening" email exchange with sound artists Marcus Leadley, Peter Cusack, Michael Huijsman and Joe Stevens, amongst others, as part of the Phonography Group: A group dedicated to the art of field recording 24-26 Jan 2013 http://launch.groups.yahoo.com/group/phonography/.
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Born and brought up in London, UK, Catherine Clover studied at Wimbledon School of Art/East London University. She attended a residency with Gertrude Contemporary in Melbourne Australia and has been based there since the mid 90s. Her audiovisual installation practice uses field recording, digital imaging and text to explore the human animal relationship in the urban environment. Current work focuses on common noisy wild urban birds through a framework of everyday experience - the ordinary and the quotidian. Ideas about communication within species and across species are addressed through voice and language and the interplay between hearing and listening - the vocal, the spoken – and seeing and reading – the visual, the written. She is studying for her PhD (Fine Art) at RMIT University Melbourne (completion expected 2014) and lectures at Swinburne University Melbourne (MA Writing). She exhibits regularly both within Australia and internationally.

BIRDS ON AIR: SALLY ANN MCINTYRE'S RADIO ART

The essay considers New Zealand-based Sally Ann McIntyre's mini-FM radio station for programme-based and site-specific art transmission, i.e., Radio Cegeste. In particular the article examines the programmes conceived for Radio Cegeste, in which the artist considers avian acoustics at the crossroads between museology and this medium's history. Based on several conversations with the artist and a long interview, the essay offers an appraisal of the myriads of ways in which McIntyre approaches issues such as New Zealand's colonial past, nationalism, as well as the environment. At the same time it situates McIntyre's production within the larger context of other contemporary art with birds. The essay argues that operating in the realm of sounds both with an ear to, for instance, birds, and with critical attention to the technological and institutional history of the medium of radio, McIntyre translates for radio Mark Dion's call, in his manifesto, to resist nostalgia when dealing with nature.

Text by Cecilia Novero

We are not living in a simple age and as artists of the time our work reveals complex contradictions between science and art, between empiricism and the ideal, between nature and technology and between aesthetic conventions and novel forms of visualization. Our goals vary. While some may wish to dissolve the contradictions in our social relations to the natural world, others may be interested in analyzing or highlighting them.

(Mark Dion, "Some Notes Towards a Manifesto for Artists Working With or About the Living World," 2000)[2]

ew Zealand loves its nature: not only is the Kiwi bird its national symbol but also its people, identifying with the latter, call themselves "Kiwis". Of course, the long history of the Māori people's relations with birds – documented in these animals' names, in legends and myths in addition to the Māori culture of sustainability (Kaitiakitanga) – plays an important role in the development of conservationist practices in Aotearoa.

But, packaged together with popular forms of identification such as that with the kiwi bird, also comes the rhetoric of nationalism. In addition, this kiwi eco-friendly attitude has become an essential component in the branding of New Zealand as the paradise for the environmentally minded tourist.[4] In short, today there is in New Zealand a genuine wide-spread interest in the conservation of, for instance, endemic species of animals and plants, hence of this island's peculiar ecosystems; at the same time, one also encounters a superficially or critical involvement with knowledge of) the politics lurking behind such good intentions.

It is left to artists oftentimes to challenge

the marketing and branding of ecology, and to unpack the intricacies of the cultural politics informing nature's management, proposing more radical environmental ways. So it is that some New Zealand artists explicitly aim, in their work, to grapple with the contradictions and dilemmas that arise from living and working in the thick of the earth or, as Donna Haraway put it, in the midst of "naturecultures."

Sally Ann McIntyre is one such New Zealand-based artist, whose main ongoing project is a mini-FM radio station programme-based and site specific transmission, named Radio Cegeste.[5] Her transmissions - especially those focused on the acoustic investigation of the culture of nature - attempt to capture the environment as dynamic and changing systems in which humans are deeply implicated. Operating in the realm of sounds both with an ear to, for instance, birds, and with critical attention to the technological and institutional history of the medium of radio, McIntyre translates for radio Dion's call, in his manifesto, to resist nostalgia. With him she then also shares the conviction that "our relation to the past is historical, not mythical."[6] In effect, among the programmes conceived for Radio Ceaeste is a series of radio projects in which the artist investigates avian acoustics at the crossroads between museology and this medium's history.[7] Loosely gathered together under the rubric of Radio d'Oiseaux,[8] many of these projects were carried out in ecosanctuaries, such as Orokonui, near Dunedin, in the South Island; in Deans Bush in Christchurch; and in the Dandenong Ranges in Victoria, Australia. Finally, in 2012, McIntyre was awarded a "Wild Creations" residency (co-funded by the NZ Department of Conservation and national Arts funding body Creative New Zealand) to do field recordings on Kapiti Island, off the Southern coast of New Zealand's north island, in Wellington Region. (The scheme is an initiative that places three individuals in natural and historic places, every year.)

For her Kapiti residency, she proposed to create a series of radio programmes that

would trace the various sites through their specific soundscapes. Once on the territory, her projects shifted grounds quite literally, due to the physical difficulties presented first by the island's overgrown bush, and thus its lack of reliable maps, and second by her increased awareness of the historical and ideological contradictions implicit in her original soundmapping intentions. Embedding these complications and doubts into her field recordings of the local and always mediated sounds found on the island, she set out to critique the widespread view of Kapiti's "remote wilderness."

In this regard, the Kapiti projects follow in the wake of McIntyre's previous radio art included transmissions that not recordings of birdcalls and birdsong in gardens and parks, but also in local urban settings —as for example during participation in the multi-artist live art project "Visible City' in Melbourne, Australia (October 2010), in which she worked with the group Urban Birder to transmit a dawn chorus of birdsong in an inner city arcade. On Kapiti McIntyre reprises as well those programmes that had already taken issue with museology, especially the functions of natural museums' collections.[9] Some of these return modified on Kapiti, for instance a programme of Radio d'Oiseaux that involved EVP recordings Phenomenon (Electronic Voice for recording of the dead) and had been carried out among the extinct bird collection at Te Papa Tongarewa, in Wellington.[10] (I shall return to this below.) These had already been included in the exhibition "Media Povera" that McIntyre had curated at the Blue Oyster Gallery in Dunedin in 2010. Following Radio D'Oiseaux's agenda, as illustrated on Radio Cegeste's website, the Te Papa project had engaged the relationship of the natural-history museum, with its mounted specimens in vitrines, to the living (or no-longer living) world it classifies, hence the processes of inclusion and exclusion in scientific practices and discourses.

The question undergirding Radio d'Oiseaux's programmes, under the rubric of which also figure McIntyre's Kapiti projects,

sounds more or less like this: to what extent does the focus on the archival preservation of species turns eco-sanctuaries into an equally problematic, yet compelling, contemporary rendition of living museums? By bringing to the fore the materiality of the sonic as object and the functioning of sound recording in its programmes, Radio d'Oiseaux intervenes/interferes in the practices of memorial museology, literally making the silences of exclusion into audible material. McIntyre's projects thus avoid being nostalgic because she props up the technological intervention of radio, especially instrumental role this -in all its forms and shapes, including its archetypical instruments - played in generating New Zealand's relationship with its endemic birds. Indeed Radio d'Oiseaux critically taps into the mnemonics of national radio, a production of memory from which it distances itself, reminding the listener that, in New Zealand, field recording of birdsong has historically found a home on radio, so that birdsong could easily turn into an audible text of national identity.

As she described her programmes in 2009: "Radio d'Oiseaux is a solar powered radio station for New Zealand native birds. Currently a fieldwork project, it will eventually manifest as a series of Radio Cegeste site performances."[11] Here, specific her reference to New Zealand is partly aimed at contrasting the territorialisation of birdsong that occurs, for example, by ways of Radio New Zealand National's morning news programme. Every day the programme starts with a public broadcast of a native avian species. McIntyre comments, in her profile of Radio d'Oiseaux: "To replay already-extant sound has its own embedded politics - the loop itself is a 'territorialised' refrain in Deleuze's terminology. Radio New . . . Zealand's treatment of the sounds of birds is a paradigm reiterated in cultural terms by the replay of songs sent to radio stations by record companies. Instead, to deter[r]itorialise this medium's approach to art, we might learn from talking to the animals."[12] In the radio projects kinds of art

produces, radio functions within natural environments in exactly the opposite way: it deterritorialises by introducing noise into the relays of recordings and transmissions, "as a revelation of the sometimes invisible, inaudible, buried currents which are always circling around us." (Interview)

Let me step back and retrace some key moments in the itinerary that leads McIntyre to include the subset of programmes of Radio d'Oiseaux in Radio Cegeste; in short let me ask: what are the basic principles that, informing the larger project of Radio Cegeste, poignantly return with different emphasis in Radio d'Oiseaux? And how does the experimental potential McIntyre discovered in Mini FM Radio contribute to the non-anthropocentric quality of her transmissions in the company of birds? First, the second question.

Her interest in radio, as medium with experimental potential, dates back to the early 1990s. However, she became fully aware of the Mini FM Radio's artistic function in 2006, when she participated in a transmitter-building workshop with Japanese artist Tetsuo Kogawa in New Plymouth. In this context she built her own portable transmitter. This marked the birth of Radio Cegeste, thus named after the dead poet who speaks through the radio waves in Jean Cocteau's 1950 film *Orphee*.[13]

McIntyre's reference to Orpheus conveys another kind of mobility –besides that alluded to by the temporary and ephemeral quality of both the kinds of transmissions of Radio Cegeste and their erratic anti-programming: namely, the crossing of the divide between the living and non-living, the material and the spectral, sound and silence.[14]

While the media landscape has substantially changed since the 1990s, McIntyre's fundamental reasons for her continued engagement with portable FM radio have not: her aim is still –and possibly has become even more –focused on site-specificity, local yet unnoticed contexts, those that, in the case of birds, literally fly "under the radar" so to speak. For her, this kind of in-situ, small-radius radio always plays up its

presence as medium on / and of the territory that, thus, it helps reveal as complexly layered, culturally and historically stratified.

Extending Japanese radio artist and Mini Tetsuo Kogawa's FM inventor activist/anarchist principle of narrowcasting, McIntyre has then made sure that Radio Cegeste remains a mobile environmental station. This furthermore suits the nomadic quality of her life. As she explains: "There was something more active to this approach to radio: I could take the transmitter outside, I could take it on buses, and I could transmit anywhere, I could ditch the 9 volt battery it operated on and use a solar panel if I wanted to, I stopped worrying so much about sound quality." (In conversation with the author)

McIntyre continues to exploit the artistic, experimental potential of narrowcasting, which she currently directs it more explicitly towards environmental considerations, including animals. Radio d'Oiseaux records and then re-transmits the least known birdcalls to possibly absent human audiences and to avian populations. These are unfamiliar to the average New Zealand listener because their steadily changing multiplicity is left out of the conventional radiophonic reproduction. The latter rather focuses on select instances in such calls, thus rendered "static." (One example is the Kiwi bird's calls that, in spite of its status as national symbol for its shy nature behavior and nocturnal is encountered in the wild.) Radio d'Oiseaux's process based recordings and transmissions may include musical transcriptions of such birdcalls, deducted from previous notations or recordings. At other times McIntyre or a collaborator plays the violin admixing its sound with that of 78rpm recordings, such as for instance Beatrice Harrison's famous cello duet with nightingales in her garden in Oxted, Surrey. These are added to the live environmental sound, including birds that may or may not be responding to such admixture.[15] More often than not the transmissions occur from the sites where the songs were initially captured, in an act of mechanical restitution that stresses the temporal stratification of sounds, noises, and music. Further, but always with a *glaneuse*'s eye (or, as McIntyre puts it, her bower-bird mentality), Radio d'Oiseaux may also capture the sound waves - and on Kapiti island the through Of waves-numerous microphones hidden like shellfish in random found objects: among them, a worn-out buoy washed to the shore by the waves; the bush, or tree holes. Old recording techniques are also used, such as tapes. Again, McIntyre releases recorded the (occasionally with the physical tapes) as material noise, on the very same forlorn shores; in the air around the forgotten monuments; and/or abandoned corroded historic buildings reclaimed by the bush. She thus implants a technologically produced mnemonic echo in a dynamic ecosystem.

With this, McIntyre's acoustic encounters with NZ birds investigate and probe the myths surrounding the notion of a pristine or wild nature (untouched and untouchable by human presence and/or history), as well as the relations between ethics and aesthetics in the different uses or outcomes of bird recordings in science –for example of birds in conservationist projects – and art. She comments:

Several transmissions I did on the island were conducted as faux scientific experiments; there was an interesting literalising of this when some audio of Kakariki, or Red Hooded Parakeets, that I'd recorded was used in a translocation of some of these birds to the mainland a month after I had left the island. (Interview)

Her own recordings and narrowcasts highlight radio's mediating presence via explicit inclusion of its material technology, and its cultural history. Here, McIntyre metacritically considers radio's role as fast approaching that of an archeological artifact which intrudes in the new media landscape dominated by the internet and digital

technologies.[16]

Radio's intrusive archaeological status within the new media panorama – evident in McIntyre's accentuation of the lo-fi profile of her transmissions – provides this medium with explosive potential, so much so that some of McIntyre's projects may be literally interpreted as noisy interferences with the orderly and neatly arranged temporalities and qualities of high tech sound to which one is accustomed.

Experimentation, in the specific case of Radio d'Oiseaux, then also comes with the added value of the inconspicuous parallels reveals between the material presence/absence of radio's "invisible" sound waves on the one hand, and the continuous presence/absence in the environment of extinct species' vocal traces: their acoustic ghosts, as it were, that fill the air. (For example, through the living bird species' memory of extinct calls, or the adaptations of their song and flight to the constantly mutating techno-sonic atmosphere.) In this regard, a key transmission engaging the silence/sound of extinction programmes of Radio d'Oiseaux was, in 2011, "How to Explain Radio to a Dead Huia" (Orokonui ecosanctuary). McIntyre poignantly substituted an extinct bird, the Huia, last sighted in 1907, for the hare in this transmission's famous antecedent, namely Joseph Beuys' 1965 action "How to explain" pictures to a dead hare." She also made use of 17 small radio receivers hung in trees to retransmit to the endemic bird population of Orokonui the previously captured silences of the extinct birds at Te Papa. The silences are juxtaposed with the audible birdsong in field recordings of the sanctuary collected on the day of the transmission. While engaging the complex history of the Huia's extinction, the programme purposefully moves beyond Beuys's symbolic spiritualism and highlights instead the mediated and traumatic relations between birdsong and radio, nature and culture, along the "naturecultural" lines of species encounters outlined by Donna Haraway.[17]

The transmission begs questions such as: What if it is due precisely to radio transmitters -transmitters that are also participants in a history of collusion with power, not just of experimentation-- that an extinct bird, its sound traces, are brought alive for nonhuman animal listeners? What kind of nonanthropomorphic, i.e., non symbolic, nonsentimentalized, interspecies encounters emerge when mediation, in this case the intrusion of radio, is present, admitted, and playfully -but also self-reflexively and noninstrumentally—adopted?1181 In this project, as in the one she carried out at Te Papa Tongarewa, silence and traces become the means through which to reconnect with the cultural-historical memory pervading ideas of nature, thanks to the raucous impurity and mediated materiality of radio. Accordingly, Radio d'Oiseaux explicitly takes up the haunting quality of radio already noted in relation to Radio Cegeste's wider concerns, in order to refocus it on radio as itself an endangered species.[19] Thanks to recording of the ghostly silences of extinct birds, the power-knowledge nexus involved in museology which Radio d'Oiseaux sets out to unveil emerges with ironic force, as is evinced in this observation:

the recordings at Te Papa Tongarewa [were framed within the context of] the paranormal investigation practice of EVP. ... So the recording methodology moved out of any idea of empirical observation into the pseudoscientific, which was an interesting thing to have to explain to the curator of birds: that I was coming into her collection to do ghost hunting. (In interview)

As radio of birds and for birds that stresses the historical production of these animals in the New Zealand imaginary, Radio d'Oiseaux capitalizes on Radio Cegeste's intent to break away from a top-down, dualistic (and anthropocentric) structure of transmission. This structure is still ensconced in classical radio broadcasts where radio is conceived as a one-way street: a transmitter

rather than a transceiver, as McIntyre would have it, a traditional centre that, in touch with its own periphery; it still demarcates as its other. Such radio, especially in the context of nature programmes, still presents itself as medium or purporter neutral of knowledge about nature. Indeed, in the process of transmission, nature is made into an object for enjoyment and consumption by a cultured human audience. Radio Cegeste contrasts such "object-like" interpretation of nature and such monochord instrumental use of radio through its own mixed-media intervention as transceiver on the territory. In McIntyre's words:

> I've increasinaly come to think of the live performances as about building small ecologies, non-linear conversations between which work together ecosystems. These usually include shortwave radios and Theremin, and portable record players with shellac records, and music boxes, and Morse code,1201 Sometimes other instruments, usually broken or old, mainly violin, an ancient old squeezebox accordion and a zither a friend found in a skip. In performance, the transmission of field recordings is filtered by all these other elements, electromaanetic infiltrated bv interference from the site and the other radiophonic devices, all of which destabilize the signal. There's focus on sited and materiality, both of objects and forces. ... No easy authorship to these works is claimed. I am a transceiver, transmitter a receiver, and simply a step in the process.

As if in a temporal fold, Radio Cegeste's small radius transmissions capture, produce, and then air stratified noise, sound, song and music in actions that include all those visible and invisible presences in each and every

moment that constitutes the site-specific events. On Kapiti, McIntyre tells me, her projects merged human voice technological noise (radio frequencies, airplanes in the air), music and birdsong or birdcalls, the sound of breaking waves and the dead silences of empty spaces etc. only to then play this remix, firstly, back to the birds and the land where the sounds were initially recorded; secondly, to the small local communities living on the island; and, lastly, as transmissions via the internet, over radio stations in the distant cities of Berlin or Bratislava. In doing so her programmes from Kapiti that also aired in local vet distant communities (in Berlin it was the project Dascha Radio, run from a community garden) still insisted on the site-specificity of Radio Cegeste, while also breaking with the real and metaphorical notions of "island."

then. Overall. the goal Of Cegeste, under the umbrella of which operates Radio d'Oiseaux, are transmissions that jump the barrier between production and consumption; producer and receiver; subject and object; the living and the dead; the unknown and distant on the one hand and the familiar and local, on the other. In particular with regard to the latter binary, it becomes obvious that McIntyre takes issue with R. Murray Schafer's concept of acoustic ecology, while at the same time acknowledging the imprint left contemporary radio art by his research for the unrealized project "wilderness radio."[21]

Above all, she distances herself from the idealized, bucolic and nostalgic view Schafer has of nature as well as of radio transmission:

In this case sound is described as being funnelled from a wild live environmental source, to become voyeuristic home listening music. Neither source nor destination are further elucidated, and their relationship remains a dialectical one of 'domesticated listening' versus 'wild remoteness.' (Interview)

On the one hand, as McIntyre remarks,

the upsurge of new technologies and methodologies such as live radio streaming, phonography, sound mapping has greatly enhanced the possibility of "listening in to what is happening out there" suggested by acoustic ecology. Examples are for her Chris Watson and Francisco Lopez's work. On the other, McIntyre observes:

This artistic recourse to newer technology has also broken down that very boundary between *there* and *here*, rather producing a listener that is potentially placed dynamically within the - equally dynamic itself. environment Dvnamism contrasts with the idea of a fixed nature that Schafer, furthermore, describes as uninhabited humans, as if there could actually be a way of listening without inhabiting, without embodiment. (Interview)

McIntyre's Radio Cegeste, and, as far as this essay is concerned, the programmes of Radio d'Oiseaux, both break with nostalgia for nature, but also point up the unexplored potential of Mini FM radio for a non-anthropocentric human relation with an always mediated nature.

Let me now turn to McIntyre's residency on Kapiti island in March-June 2012.

Environmentally Sound: Kapiti, FM Radio and Birds [22]

A: Humans do not stand outside of nature: we, too, are animals, a part of the very thing we have tried to control, whether for exploitation or protection.

12: The more a notion of nature is touted as free of culture, the more likely it is to be a successful product of it.

(Mark Dion, "Some Notes," 2000)[23]

If one runs a simple online search for "Kapiti Island" what pops up are a blank Google map of it and ads that, while promoting

relaxing accommodation, advocate it as place of escape, site for exploration, and one of the most precious and accessible island nature reserves in New Zealand. It is with these contradictions in mind that McIntyre's Kapiti Island residency -paradoxically named "Wild Creations" - started. The construction of this site as simultaneously unmapped, trailed by few ecofriendly tourists (mostly bird lovers), and inhabited, albeit sparsely, presented it as a particularly ripe location for McIntyre's Mini FM radio and other mediatic investigations of both acoustic technology's histories and the place's own contested narratives.[24] In this light, her bird projects on the island have a twofold goal: they aim to unearth the traces of a historical human presence, the erasure which contributes to the technological fabrication of pristine nature, wilderness; and, at the same time, to reveal deconstruct the fascination fabrication exerts on the artist, as itself subject to a powerful cultural (self) image.[25] McIntyre offers a brilliant summary of the contradictions she, as environmentally interested artist, experienced on Kapiti. Let me quote her at length here for her words aptly introduce the radio projects illustrated in the sections that follow:

> There's a tension in the place, affective between the very reaction vou have to the landscape, of intense wonder and sadness at a perceived encounter with the beauty lost through a pragmatic attitude to land usage in less than 200 years, and the realisation that this is itself a constructed landscape, one which exists in response to that very This situation. circularity impossible to resolve - I mean, a good example was realising that the sound I could hear above me just after dawn, near the top of the Tria Track, was a family of the North Island subspecies Of Kokako walking across the treetops on their way to find food somewhere. While

I know that there is no 'natural' Kokako, that the recordinas I know are in fact a dialogue between the corporations which produce the recording device and the bird, or the tourist card and the bird, still this, as much as anything could be, was a 'wild encounter' with something fragile and beautiful that no-one ever really hears, let alone sees, So, on the one hand, it was a highly moving experience knowing that less than 400 pairs of these beautiful birds currently exist, and having seen many stuffed specimens of the extinct South Island subspecies in the cabinets at Te Papa, I had tears streamina down my cheeks (and, of course, fumbled my equipment, completely failing to record it in any form). On the other hand, I realised that my sense of primary encounter, this feeling of being at frontier, was completely culturally determined, and also somewhat staged by experience of being a 'special' case - an artist who could be a boundary-crosser, outside touristic experience. It was a bit of an analysis of the ways in which the birds of the soundscape are not pre-cultural, and the listenina space we open up to them within ourselves is also not an 'encounter'. with a wild animal or otherwise, but highly managed.

Five select projects involving local recordings of birds point up McIntyre's ongoing critical interest in the politics and temporalities that inform the "culture of nature." Albeit each with a different emphasis, these projects all orient themselves towards the mediated investigation of the contested pre-histories of Kapiti's "nature," and the critical implications of such investigation for how one may approach eco-sanctuaries in the near future. Or else, as McIntyre put it in

conversation with me, her Kapiti projects underscore that "[This is] a place with a very material situatedness, amid a density of competing historical narratives. territorialisations and overlaps, in which the small thread of an ongoing alternate reality, as continuing pocket of resistance to ecological and cultural homogenization, is sewn." [Slightly amended] Thus, while one of the five projects makes one ponder on the inopportune vet ultimately ironic attempts at national(ist) appropriation of the island for memorializing purposes; three poignantly elaborate even more extensively than thus far on the silences of the extinct Huia; finally, a fifth one makes provocative use of mini FM radio and its precursors to interfere-archeologically as it were-with scientific and aesthetic discourses of nature on the one hand; and, on the other, with habituated and/or commercial dynamics of nature's consumption as these are displayed on the island. The projects display a quality of reiteration (also mimicry) -they are never freshly new apart from the key differences in their locales and the temporalities of their occurrences. Iterability is yet another essential component of this environmental radio art in which relays and delays break with the notions of origins and authenticity that are so often attached to ideas of nature and of auratic art.

Un/settling in with Radio: The Returns of History

When moving to Kapiti island for a few weeks in 2012, McIntyre took with her:

Historical things: not just my digital chip recorder and microphones ... but also previous versions of what I was collecting: historic field recordings from John Kendrick, and Kenneth and Jean Bigwood, all of whom recorded for Radio New Zealand, the latter on a vinyl box set released in 1959. ... I am interested in an ecology of media that get along, which includes

older and newer technological elements." (Interview)

In addition, she also brought an old 120 medium format film camera from the 1930s with which to take photographs of the birds, and re-photograph some images found in the book collection of the Kapiti Lodge's eventually library to use in projects. The contemporaneous use of media from different ages that typifies her work on Kapiti is consonant with her wish to disrupt the symbolic meanings associated with the term "island," and its representations. Indeed, McIntyre points out that although there was no mains power on Kapiti, the island's temporal and spatial remoteness was itself destabilised by the existence of cellular networks, which allowed online access, albeit intermittently. In light of the media reality of Kapiti, the radio programmes staged on the island then made the most of its sited yet multiple radiophonic materialities. The programmes took the shape of in-situ transmissions bound for territory, a simultaneously questioning the concept of "isolation" while still building on the New Zealand Department of Conservation "leave environmental code: the land undisturbed." Evidently, these "ecological" transmissions all expand the strictly spatial meaning of territory through the technological unveiling of this territory's plural temporalities. Technological mediation contributes here to the production Of naturecultural interconnectedness.

McIntyre's media ecology is then strictly linked with her archeological and critical approach to the history of the island. This is evinced in a transmission in Morse code of the Kapiti Island Public Reserve Act of the year 1897 also known as Act 28 (1897) ('an act to restrict certain Dealings in the Island of Kapiti pending the Acquisition thereof by Her Majesty as a Public Reserve'). "An act to restrict" uses Morse code to bring back the materiality of the foundina temporal document of Kapiti, re-transmitting it in the present to the in-situ receiver in the shared space of the Department of Conservation

historic whare (meeting place, home in Māori) at Rangatira. On the one hand, the whare has historic status, being the earliest surviving building used for conservation purposes in New Zealand (1860s). On the other hand, it currently is the headquarters of scientists, researchers and trappers working on the island. In its kitchen there is a malfunctionina 1980s radio/stereo from the that lightheartedly believed to be haunted. Transmitting in Morse code that founding document of conservationist practices in NZ to this community in this historic building playfully and mysteriously estranges it, as Bertolt Brecht would have it. It resuscitates it in a foreign language that turns the homely into the un-homely, the familiar practices and principles of conservation into uncanny signs. As McIntyre explains the transmission suddenly breaks into the everyday life of the whare (that includes listening to National Radio News) as if to reawaken the spirit of conservation's task in times when its purposes are challenged by conservative governmental politics.

At the same time, another very different haunting occurs through this Morse code transmission in the whare. The uncanny return of the document evokes the contested and far from smooth narratives that go into the creation of eco-sanctuaries, especially when this involves claiming land from local populations. In the specific case of Kapiti, the wildlife refuge was instituted through the Crown's acquisition of land from its lwi owners, not without the Ngāti Toa Rangatira lwi's resistance. The lwi lodged a claim roughly 90 years after the date of its foundation, in 1986, with a date of settlement finally reached in 2009.

Birds and Monuments: "A Requiem"

Through complex relays of mediated and controlled interactions, "A Requiem" allows Kapiti's birds to stage their own dynamics of power, in terror and anguish, alongside their stunningly beautiful polyglot chorus. This occurs over and against their mournful appropriation by and within the canonical discourse of national(ist) sacrifice. "A

Requiem" was a collaborative and multimedia transmission that relied on various field recordings collected on a single day in late May 2012, while McIntyre sat on a war memorial bench on the Trig track near Rangatira. The stone bench was in memory of a pilot killed in World War Two who, in his childhood, used to camp at that spot with his family.

McIntyre's attention when she sighted the bench amidst the fast advancina bush was caught less by the presence of the memorial on this site – parks are replete with monuments—than by the inscription on its plaque: "Memorial seat and trees to flying officer Robert Morris Jones, R.N.Z.A.F. and His comrades, who in the 1939 World War gave all. For Them, the Bellbirds Chime and the Robins Sing a Requiem." What induced her to produce a piece here was the "co-option of the actual sounds of environment toward a mourning dirge or eulogy for a lost innocence ...[that] attempted to frame the privacy of a listening experience within a public framework [of commemoration]" (Interview) [26]

Sitting on the bench she recorded. Some in blossom and some already carrying fruit, the trees attracted a great variety of birds: bellbirds, whiteheads, robins, and also a family of three Kokako, an occasional Tui and Kaka. At one point she recorded the alarm calls of small birds that had been frightened by the arrival on the scene of a New Zealand Harrier, Whiteheads' calls can also be detected, prompting McIntyre to remember that some Māori interpreted this occurrence as a sign of ghosts' presence. Upon completion, McIntyre sent the recording to a violinist in Great Britain, Sarah Claman; the latter improvised violin adaptations of the birdsongs, and included other environmental noise in the recordings, their notation focusing on single elements which did not cohere to form a composition. Claman's response to the Harrier was a low drone, in clear reference to war. McIntyre then re-transmitted Claman's at the memorial site improvisational performance work, alongside the original recordings, at approximately the same hour the latter had been collected.

The two artists' collaboration with the birds poses at least one question: how do endemic birds come to sing requiems for dead airmen, and thereby to chant narratives of wartime nationalism? The birdsong's recording and its instrumental variations point to such discrepancy and its ideological manipulation in the plaque. According to McIntyre, retransmitting these temporally layered recordings to the birds, "gave them a chance to respond, to hear the human and speak back to it, and for the human presence to become audible, rather than being framed as the invisible contemplation of a naturalized Nationalist history." (Interview)

Alternative Knowledges: Raucous Mimicry and Material Silence, Against Invisible Extinction

In this eco-sanctuary, i.e., Kapiti Island, McIntyre explicitly returns to Radio d'Oiseaux's important engagement with the haunting silence of extinction, which she twice intertwines here with issues of technological mimicry. The bird species' voices in question belona to two extinct birds, the Huia (*Heteralocha* acutirostris) and the Laughing Owl or Whekau (Sceloglaux albifacies), and to an endangered one, the Kokako (Callaeas cinereus). I group under the same rubric three different projects of which the first, "huia transcriptions," did not become a transmission but rather consisted of "gentle paper sonic interventions into the dawn chorus." (Interview)

No sound record exists of either the Huia or the Laughing Owl's songs, in spite of the fact that their last sighting occurred after the invention of recording technology. Yet, as McIntyre explains, "extant in fragment is the human mnemonic record of the Huia, namely an imitation of the bird as a recording of 1909 Huia Search Team member Henare Haumana whistling its call, in addition to written descriptions and musical some (Interview) McIntyre's work transcriptions." points up the human mimicry of the birdcalls that were aimed at filling the void left by the extinct birds' vanished sound. Accordingly,

she transcribes the notations she could find of this species' sonas and calls onto DIY crank music box strips. "The outcome" explains—"is a very linear sound that does not seem to inhabit the digital age, but rather pre-electrical technological [that] Of instruments as the player piano and the serinette." The latter was a bird organ invented in 18th-century France to teach caged canaries to sing particular tunes. McIntvre's music boxes de facto reverse the human - animal relations in the serinette's mimic function: they teach humans the "hit" songs of birds. Thereby they allow McIntyre's project to tap into the history of vernacular birdsong transcriptions. Her sonic transcriptions for music boxes require the work of a hand to be played and heard, thus bringing back to the body, as bodily memory, the ways in which 19th century colonial settlers -such as trappers or pioneers—had left records of the songs of these now extinct birds, without any attempts at systematizing scientifically their knowledge.

The project functions as a sort of recovery of abandoned and forgotten alternative paths to and of knowledge, which, without invoking mystic union with an innocent nature, may have led to rewarding interactions with the birds. McIntyre's music box transcriptions treasure the pleasure of the possibility of interspecies communicability communication. rather than communicability is expressed in the touch of the hand -of the mechanics of a bodily gesture-- that both connects and separates. In this regard the piece could resonate with Marcus Coates' 2007 "Dawn Chorus" and "Bird Radio," of the same Bill Burns's year. While "Huia transcriptions" retains the technical ingenuity of Coates's reversed mimicry, which destabilizes any certainty about human and animal, original and copy; it is also reminiscent, through its own outmoded technology, of "Bird Radio"'s more artisanal approach to mimicry. Bill Burns's is an interactive and progress-based installation where children imitate birdcalls with the aid of homemade instruments, tovina a to Walter important reference perhaps

Benjamin's non-anthropomorphic rewriting of mimesis in his essay on the mimetic faculty.[27] In "Bird Radio," basic ornithological information is passed on in playfully earnest manner so as to be at once dispossessed and re-inhabited, re-inscribed and enlivened, through tools (for play) and in a setting that both come from and yield to alternative regimes of knowledge. McIntyre's re-playing of vernacular Huia transcriptions on her music boxes echo with these kinds of mechanical displacements.

Silences In "Collected for Rothschild," McIntyre, facetiously inserts in the manner of Surrealism, a revealing untruth into the more or less official narratives of extinction of the Huia and the Lauahina Owls. Thereby she exposes the unspoken -hence silencedconnivance of science and commerce in the Victorian age as key cause of extinction. For project she returned to her 2010 recordings of silences of these two species' mounted specimens held in the collection of the Te Papa museum, and retransmitted them in the Forest of Kapiti island.

The reference to Lord Rothschild in the title is apocryphal because it is based on an unverified story (on *Wikipedia*): a collector in England, namely Lord Rothschild, and an ornithologist of fame, New Zealand born Sir Walter Lowry Buller, are accordingly implicated in the extinction of the two bird species. Allegedly, Buller diverted one pair of both birds that had been captured for placement on the just created Kapiti ecosanctuary, to Lord Rothschild's collection.

The juxtaposition between the Huia's silences and Lord Rothschild's name sounds as fantastic as the Comte de Lautreamont's famous line "As beautiful as the chance encounter of a sewing machine and an umbrella on an operating table," hence the suggestion of this piece's surrealism. Yet the presence in the title of the proper name also conveys to it the authoritative weight of a piece of news thus planting it as a new mediatic event in the media world that fabricates the truth. It hovers between history and fantasy as surreal truth, non-truth that is

true, and truth that has not quite entered history but rumbles in its underbelly. This destabilizes the grounds upon which truth is discerned from fiction. The fiction at the bottom of which lies the truth thus challenges the monopoly over the discourse of truth held by empirical knowledge. McIntyre explains that

At risk of making Buller the sacrificial in such stories, above Wiki "Chinese whisper" becomes an irresistible meta-text . . . This inaudible sorts. transmission is a double silence ... It places an inaudible trace of the melancholy remnants of Victorian museological economics colonial attitudes environment into the soundscape of Kapiti, making material these birds' still recent silence in the biospheric fabric, a hole in the air, a placeholder where these birds were projected to be. (Interview)

More summative of McIntyre's general concerns about radio and the environment is the transmission titled "Radio d'Oiseaux (Kokako Variations)."[28] Based on the same principle of weaving together radio receivers, pre-recorded birdsong, and the audible signals from McIntyre's small-radius FM mini transmitter, this project documents a single take performance with no human listeners. The performance began with the very early morning chorus and progressed toward midday, the time when the piece was transmitted. Here the radio plays a solitary young male Kokako's song back to him, who had been calling for a mate in vain. His calls that had become the object of imitation by such skilled mimics as Tui and Bellbirds had fallen into the void. A duet of call and response in real time between the Kokako, attracted by the transmission, and the radios switching off and on as they transmitted generates in McIntyre's words "a dialogue as ventriloquistic disiunctive mediated discourse, not without its own poetry, [in which] bird and radio call to each other for an extended moment." (Interview) Playing back the Kokako's song in an evocation of both the long history of human vocalisation of birds in this place, and the birds' own complex mimicry of each other, the radio, as McIntyre states, "remembers him."

In conclusion, "Radio d'Oiseaux (Kokako Variations)" exemplifies the hope that most projects and transmissions of McIntyre's Radio Cegeste raise. Through its critical, self-reflexive focus on the contested histories of the medium of radio on the one hand, and the equally contested narratives of nature, on the other, her radiophonic birds and avian radio spur environmentally aware transmissions. Far from the perspective of a collector, a scientist contemplative artist, McIntvre's transceiver picks up sounds, makes itself present, retransmits them in new forms to the place from where they came, returning them as echoes of the silenced or forgotten histories that also permeate the culture of nature. At the same time Radio d'Oiseaux dares the risk of indulaing in the secret fantasies of interspecies communication, which only thanks to such risk and through the radio's insistence on bringing to the fore its mediatic materiality are constantly rechanneled towards self-reflexive critique. the fantasies Of interspecies communication turn into the concrete acknowledgment of the complex networks of animal technological interconnectedness.

Endnotes

[1] The following essay is based on several conversations with the artist, and an extensive interview. I thank Sally for her availability to discuss her projects with me in detail. (The conversations and interview took place between mid-October and the end of November 2012.)

[2] First published in *The Greenhouse Effect* (Serpentine Gallery, 2000) and reprinted with permission in Giovanni Aloi, *art & animals* (London and New York: I.B.Tauris, 2012), 140.

[3] On Māori and bird legends see for example the following website: http://www.nzbirds.com/birds/maorimyths.html (accessed on 20.02.2013); on the idea and history of Kiatiakitanga, including its appeal to the environmentally minded tourist, see: http://www.newzealand.com/travel/media/features/maor

i-culture/maori-culture_kaitiakitanga_feature.cfm (accessed on 21.2.2013)

[4] Please note the following site, among many: http://www.destination-nz.com (accessed Feb. 25.2013). Here one also takes notice of the fact that the Prime Minister of New Zealand, John Key, is also the Minister of Tourism. In the blurb to attract the tourist, wilderness features as the top link. One can also read about NZ wildlife: "Ancient reptiles, unique bird species, a coastline teeming with marine wildlife and a passionate commitment to conservation mean that New Zealand is an amazing destination for those in search of wildlife encounters." The site also stresses the fact that New Zealand is in the forefront of "species management," which in itself raises many questions, as demonstrated by Stephanie Rutherford. See Governing the Wild: Ecotours of Power (Minneapolis and London: University of Minnesota Press, 2011).

[5] Her radio art is included in the book *Transmission Arts: Artists and Airwaves*, edited by Galen Joseph Hunter, Penny Duff, and Maria Papadomanolaki (Cambridge, Mass.: PAJ Publications, 2011).

[6] Quoted in Aloi, art & animals, 140.

[7] On Sally McIntyre's interest in museology, see what she states on March 20, 2010 in an interview with CNN online about her participation in "Obscura Day," a global event hosted by the online cabinet of curiosities Atlas Obscura. See http://radiocegeste.blogspot.co.nz/search/label/museology (accessed on February 15, 2013). On the relevance of the notion of cabinet of curiosities for contemporary art (for example think of Daniel Spoerri and Mark Dion), see also Aloi, art & animals, especially pp. 27-28; 31-32; 35-39.

[8] The radio's name is in part homage to composer Olivier Messiaen.

[9] "Shouting Over the Music: a Dawn Chorus for Walter and Olivier" is so described: "a Mini FM radio programme created for central Melbourne, which transmitted the sounds of Australian native birds in the early hours of the morning to the historic inner city site of Cathedral Arcade, a pre-Mall built in 1925, one of the city's Art Deco heritage sites, and a historic and contemporary site for artists' studios, writers groups, and other local[ised] artist-driven cultural activity."

See http://radiocegeste.blogspot.co.nz/search/label/radio%2 0d%27oiseaux (accessed November 2012) McIntyre added in conversation with me that some selections of Messaien's Catalogue d'Oiseaux were also played. These she had found on vinyl in a local second hand record store.

[10] A key connection between McIntyre's ghost hunting at Te Papa Tongarewa and EVP technologies is the fact that Friedrich Jürgenson discovered EVP when he was recording birds, in 1959.

See http://www.sonoloco.com/rev/singular/friedrich/fj.html (ac cessed February15, 2013)

[11] http://radiocegeste.blogspot.co.nz/2009/05/radio-doiseaux.html (accessed January 24, 2013)

[12] http://radiocegeste.blogspot.co.nz/2009/05/radio-doiseaux.html (accessed January 24, 2013). Recorded by Kenneth and Jean Bigwood in the 1970s, Kiwi Records box set of birdsongs was sold domestically. This contributed to

sentiments of nostalgia for a pre-industrial age, while at once domesticating nature, literally bringing birdsong "home." As McIntyre put it to me, the Label (that took off in 1957) was self-consciously orientated towards collecting New Zealand sounds, from Māori songs to school choirs singing the weather report, from steam trains to record-books called "The Sounds of Antarctica," which captured the ice cracking. See http://www.nzhistory.net.nz/media/photo/kiwirecords (accessed February 28, 2013)

[13] McIntyre explains: "The first public transmission I did as Radio Cegeste was at Chicks Hotel in Port Chalmers in 2008 ... with some friends who were active in experimental music networks there. The idea was to make a live radio show which was based on the sounds of the actual environment itself, to emphasise this as a sound library and fold its timings back into the day." (Interview)

[14] McIntyre has profusely explained how temporal relays and silence function in her recordings, especially in her rewriting and re-recording of the garden as "locus amoenus" in the complexly beautiful piece "Garden Aria / A Library for the Birds of Ōtepoti" on TIK (TimeInventorsKabinet) ArtRadio, Bratislava, Slovakia, (September 2011)

See http://radiocegeste.blogspot.co.nz/2011/09/garden-aria-library-for-birds-of.html (accessed December 5th, 2012).

[15] This is my rough rendition of mentioned 2011 "Garden Aria / a Library for the Birds of Otepoti (for violins, radios, Morse code and archival birdsongs)." For a full description see: http://radiocegeste.blogspot.co.nz/search/label/birds (a ccessed Feb. 8, 2013)

[16] McIntyre expressed it thus to me: "Through its own lack of centrality, burgeoning obsolescence and displacement as popular entertainment medium by the internet, its own sounds being numbered among the endangered audible worlds a classical acoustic ecologist might wish to preserve, Radio has largely been left in a commercial wasteland, ripe for marginal activity, as evidenced by its many co-options and reinventions in the hands of artists, many bringing the notion of techne – in its original conception of being "hand work" – full circle." (Interview)

[17] Here I refer to Donna Haraway's When Species Meet (Minneapolis and London: University of Minnesota Press, 2007). The last Huia was spotted in 1907 in the Tararuas – a mountain range of which Kapiti's Island's Turatamoana is a submerged peak. This bird's only surviving relatives, the Kokako and the Tieke, or saddleback, are under species management programmes on Kapiti. All of these belong to the ancient wattlebird family Callaeidae, an early passerine found only on these islands. On the Huia and how this birdspecies came to be extinct, there is extensive information. It is surprising to me however how much colonial rhetoric still imbues the literature, so much so that the assumption is made that the bird was on its way to extinction prior to the arrival of the settlers and their land management. Māori people are surreptitiously inculpated for hunting down the bird. Indeed, while hunting occurred, it was never for food, and it never took place in the breeding seasons. Further, the Māori revered the bird. The biased accounts are the correlative of 1950s cultural histories of Kapiti that make a point of stressing the tribal violence amongst Māori in contrast to the natural beauty of the place. It is also interesting to note that such colonial refrains echo in the patriarchal accusations of women, rather than industry and commerce,

during the plume boom in the early 20th century, as documented in *Antennae* 20 (2012), and as revealed by even a cursory reading of the *Otago Daily Times* (in NZ) of those years. Women (including the hard-working milliners) became the easy scapegoat of a campaign against the slaughter of all exotic birds that had first been collected for private and/or scientific purposes.

[18] McIntyre aptly puts it thus in her printed comments on "How to Explain Radio to a Dead Huia:" "No endemic birds come to hear me play (perhaps I am on the wrong instrument entirely), but an introduced garden bird, a Common Blackbird (Turdus merula), comes to listen to the Gramophone, seemingly attracted by a long-dead Nightingale (Luscinia megarhynchos)'s song, perhaps because it recognises - something? - deep in its own species-memory - of this music, a mnemonic trace, an echo normally unheard in this landscape it finds itself living in, its aenetic line transplanted to. Will it take this record into its own musical repertoire, and replay it in the songs it sings in this garden, will it teach the song to its children, re-forming a relationship to an older dialect of English Songbird aesthetics? Or am I merely projecting my own desire for communion onto this companion animal of long standing. ...' See http://radiocegeste.blogspot.co.nz/search/label/location %20recording (accessed Feb. 14, 2013)

[19] Her interest in media on the verge of extinction is also documented by her participation in 2010 in the narrowcast installation project "SiB (Sounds-in-Between) Radio Gowanus" a radio station operating from 16-19 March as a component of the exhibition *Postcards from Gowanus* (at Cabinet Magazine's gallery space, Brooklyn) curated by Maria Papadomanolaki.

See http://radiocegeste.blogspot.co.nz/2010/03/sib-sounds-in-between-radio-gowanus.html (accessed Feb. 11, 2013)

[20] The Theremin is an early electronic musical instrument controlled without a player's noticeable intervention that was patented by Leon Theremin in 1928. In April 2013 the Philadelphia group "Divine Hand Ensemble" premiered a new documentary about their experience playing classical music including the Theremin. Thereminist "Mano Divina" formed the group in 2010. See http://www.thereminworld.com (accessed March 1, 2013)

[21] R. Murray Schafer: "Radical Radio," *EAR, Festival for a New Radio* (New York, 1987)

[22] This section bases entirely on the conversations Sally and I had in November 2012 about her residency on the island. The projects mentioned here are not yet featured on Radio Cegeste website at this point in time (February 2013). I rely on Sally's own recorded descriptions of them, as per our interview.

[23] Reproduced in Aloi, art & animals, 140; 141.

[24] On the island live both a local human population of conservationists, plus occasional researchers, and trappers, and the lwi of Ngāti Toa operating the lodge.

[25] For instance she let me know that the romantic figure of the solitary artist-wanderer does not hold up for long on Kapiti island precisely due to the inhospitable bush. McIntyre's residency was, in her words, "a temporary immersion into a set of complex human living and working relationships. I was

partially living in accommodation designed for eco-tourists, and partially in rangers' huts, and the island I was able to encounter was divided between track walks which the ecotourists were doing, and the more off-road trails which were the domain of stoat trappers and other conservation workers." (Interview)

[26] This resonates with the male "fantasy of empire" that for the author of "Untangling the Avian Imperial Archive," (Antennae 20, 2012) is at the "intersections between the British military, geographies of home, and migratory birds." (65) She comments that the encounters with birds familiar to the military stationed abroad from their native England, and thus assumed to be migratory birds, elicited feelings of nostalgia, familiarity, and comforts of 'home' in a place where many officers died." (Crimea, 1855 is the example in the essay)

[27] Walter Benjamin, *Selected Writings: 1927-1934*, edited by Michael William Jennings, Howard Eiland, and Gary Smith (Cambridge, Mass and London: Harvard University Press, 1999), 720-722.

[28] This programme was sent around the international radia network, which includes 21 international stations interested in the development of radio art, predominantly based in Europe. McIntyre is the NZ curator for the network. Having been transmitted, she also wrote up on the project for her international audience.

Cecilia Novero is Senior Lecturer in the Department of Languages and Cultures at the University of Otago. She did her doctoral studies at the University of Chicago, and taught in various colleges and universities in the US. Her monograph The Antidiets of the Avant-Garde: From Futurist Cooking to Eat Art was published by the University of Minnesota Press (2010). The book discusses the temporal relations between the historical Avant-garde and the Neo-Avant-Garde. Cecilia's research and teaching interests encompass Critical Theory and Aesthetics, European cinema, Travel in Film and Texts, literature and films of the the former GDR, especially women writers and, most recently, Animal Studies. She has published numerous articles on Viennese Actionism, the Swiss artist Daniel Spoerri, the Dada movement, the cultural history of food, and film.

WHAT IS THE SOUND OF ONE BIRD SINGING

Semaphore Island is a sound and print project utilizing found sound and early sound recording techniques as central components. The project uses as its point of departure sound recordings of birds now extinct — documents that in retrospect are a vivid sonic embalming of ill-fated wildlife. This series of graphic works is intertwined with a soundtrack incorporating the original recordings of extinct and nearly extinct birds, and creating a lush and layered sonic environment that envelopes the viewer. As sound turns into drawing and unfurls notions of transformation, translation and extinction, the piece is a documentation and chronicling of things slowly disappearing. Text by Sari Carel

he recording is about three minutes long. I looked up the bird online to see what it looked like; A small and unassuming honeyeater, it had a dark and very shiny plumage with delicate yellow feathers on its legs and faint speckles of white on the body. The beak, like other honeyeaters had a sharp, slightly curved bill for sampling nector. In the recording you can hear it call out repeatedly. It is clear after a few moments that no corresponding call comes back. The song is melodic and nicely complex, going up and down with well-spaced pauses. It is a document of a solitary Kauai O'o in the forests of Hawaii, a bird that has been extinct since the 1980s. This recording, resonant and beautiful in its economy, was the first ingredient of Semaphore Island, a sound installation.

A few words about the physical properties of Semaphore Island, which has two main elements: The first, a series of prints on glass, silk-screened and layered with paint.

These prints feature images that seem abstract at first glance; each one though is a transcription of a birdcall with the aid of a little 19th century device called phonoautograph. The birdcalls are of birds now extinct, as well as species that are critically endangered or extinct in the wild. Documents that in retrospect are a vivid sonic embalming of a species. This suite of images is accompanied by a soundtrack that is a collage of extinct birdcalls layered with other found sounds and music, developed in collaboration with contemporary composer Ryan Brown. The piece lives in the space between the sound and the image, reverberating exactly at that point of reception.

Our planet is currently suffering extinctions at a pace thousands of times greater than the natural background rate. It is considered to be the sixth wave of extinction, and the most extreme since the disappearance of dinosaurs 65 million years



Sari Carel *Ivory Billed Woodpecker*, silkscreen and paint on glass, 24/35, 2012, courtesy of Sari Carel, © Sari Carel



Sari Carel *Guam Flycatcher*, silkscreen and paint on glass, 24/35, 2012, courtesy of Sari Carel, © Sari Carel

ago. This time around, rather than an asteroid or a volcano eruption, it is we humans that are responsible for such dramatic changes to the earth's eco-systems. It is projected that half of all species could be extinct within a few decades. Many animals that we hear howling, purring and singing today may no longer be heard in 40 or 50 years.

The phonoautograph has its own peculiar legacy of extinction. I stumbled upon this curious device while wandering through the web doing research about early sound recording techniques. It stuck in my mind, because of my fondness for the forgotten and that which gets pushed to the margins, also because the machine but dedicated to an ethos of translation. Standing firmly between one medium and another, was a quality that definitely contributed to its quick demise. One of the most interesting things about the phonoautograph is the relationship between its relative obscurity and its principle role in revolutionizing the way the replication of sound was thought about until its invention.

Prior to Leon Scott de Martinville, its creator, all attempts at reproducing sound revolved around various projects to replicate the body from which it emanated. So if, for instance, you tried to replicate human speech, you crafted a pair of lungs, made a windpipe out of reeds and sewed a mouth and lips out of leather. Then you would blow air through it to mimic how a person would create sound and shape it with their mouth.

The phonoautograph made a crucial departure from this way if thinking and went on to recreate how the ear works instead, it was the technique of hearing that was focused on, rather than the mechanism of producing sound. And though phonoautograph has gone extinct as a means of reproduction, the paradigm shift it represents in the way we think about sound reproduction ever since cannot be overstated.[1] This obscure machine, that takes sound and turns it into an image, was perfect both as a mechanism and as a metaphor. It demarcated for me a space where image and sound, whose relationship often is just assumed and accepted, gets redefined; where sound and image reassess and size-up each other. Offering something dynamic, fluid and not necessarily resolved.

order produce to the phonoautograms that would later be the basis for Semaphore Island's images, I traveled to a private museum of early recording artifacts. In a small dark space, its walls covered with a dizzying array of phonographs, cylinders and other antique devices, stood the last working phonoautraph. A primitive looking machine made out of wood, brass and rubber, propped on its own pedestal in the center of the room.

The first recording we processed was of the Guam Flycatcher. We played the bird song, first captured on magnetic reel-to-reel tape through the laptop, turned the drum and transferred the sound via a diaphragmagitated boar bristle onto the soot covered paper. The Flycatcher, endemic to the island of Guam, was present in abundance as recently as the 1970s, but it had been put on a path to extinction when the brown tree snake was introduced to the island in 1940s. The last sighting was in 1983.

On we went through this choir of species, Hawaiian Crow, the Dusky Seaside Sparrow from Florida, the Nightingale Reed-Warbler and the Marianna Crow from the North Pacific and Mariana Islands, Black Stilt from New Zealand, the Bachman's Warbler from the South-East United States, and so on.

The final recording was of the Ivory Billed Woodpecker, whose distinctive call we played at full volume on my laptop and portable speakers, stashed deep in the metal cone of the device. This specific field recording was from the 30's, before tape recorders were invented, and so a movietone system was used to capture the sounds, translating them into light on film, and then back into sound again. We cranked the handle, and a thin white, squiggly line was etched on paper wrapped around the drum, removing soot from the surface as the song unfurled. When we finished, the paper was



Sari Carel *Kauai O'o*, silkscreen and paint on glass, 24/35, 2012, courtesy of Sari Carel, © Sari Carel



Sari Carel *Nightingale Reed Warbler*, silkscreen and paint on glass, 24/35, 2012, courtesy of Sari Carel, © Sari Carel

dipped in a bath of rubbing alcohol to fix the image to the surface.

The story of the Ivory Bill's demise was a dramatic one. Reports of credible sightings have been claimed over the years, only to be dispelled. In 2006 a \$10,000 prize was offered by the Cornell library to whoever could lead their biologists to an Ivory Billed Woodpecker. In 2008 it was raised to \$50,000.

'70s, two intriguing Back in the photographs - offered as proof of the Ivory Bill's existence - were given to the Louisiana State University Museum by a source who wished to remain anonymous. The photos, taken with a small *Instamatic* camera, show what appears to be a male bird perched on two different trees. The images, taken from a distance, were very grainy, and soon enough skeptics dismissed the photos as fraudulent; similarly a later video of a large woodpecker was dismissed. Every few years, following reported sightings in Florida, Louisiana and Arkansas, extensive expeditions searched for a living bird that could help resurrect the species, or even a dead one that could be proof of recent activity. Alas, as of February researchers at Cornell University concluded there was no hope of saving the bird, if it still exists.

Months later, after much experimentation, I printed these song traces on glass in Brooklyn. Like daguerreotype prints, the images looked like they swirled on the surface, or were trapped just below it. The bird songs, further and further removed from the forests of Hawaii, marshlands of Florida and coasts of New Zealand, have become a faint shadow of a recording of a bird song, a bit of disturbed dirt on a piece of paper.

Endnotes

[1] For a wonderful historical account of sound reproduction, refer to Jonathan Sterne's *The Audible Past - Cultural Origins of Sound Reproduction* (Duke University Press, 2003).

Sari Carel is a multidisciplinary artist based in New York. She works primarily with video and sound, focusing on the interplay between the visual and the auditory. In her work, Carel explores representations of both the natural and the designed, often in relation to the modernist ethos and its various mutations throughout the twentieth century. Carel's work has been exhibited internationally in venues such as Artists Space, Dumbo Arts Festival, Nicelle Beauchene Gallery, and Gavin Brown's Enterprise in New York; LAX Art and Young Projects in Los Angeles; and Tavi Dresdner, Contemporary by Golconda, and the Heder Gallery in Tel Aviv. She has been awarded numerous fellowships and residencies, including AIR at the Stundars Museum, Finland; AIR Vienna; the ISCP Program and Socrates Sculpture Park Artist Fellowship, New York; and the Bundanon Residency, Australia.

CERI LEVY: THE BIRD EFFECT

Ceri Levy is a film-maker, writer, curator, and activist. Levy began his career making music videos and is perhaps best known for his (2009) film Bananaz which documents the cartoon-band Gorillaz. His forthcoming film is The Bird Effect (2013) which examines human-bird relations. Working with Chris Aldhous, Levy co-curated the exhibition The Ghosts of Gone Birds to raise money for Birdlife's Preventing Extinctions Programme. The exhibition has been shown in Liverpool, London, Brighton, and Swansea. The exhibition also led to an ongoing collaboration between Levy and Ralph Steadman which culminated in the publication of Extinct Boids. Steadman and Levy currently working on their next book for Bloomsbury (which will be published in Spring 2014) entitled Nextinction. The book focuses on a number of bird species on the verge of extinction. Interview Questions by Matthew Brower

atthew Brower: You've described starting The Bird Effect thinking bird watching was slightly ridiculous, and over the course of making the film had shifted to an activist engagement with bird conservation. Do you see this shift as related to the power of birds to affect humans, or is it related to the difficulty of watching and the power of mimetic desire – that the things that other people want become desirable because they are desired?

Ceri Levy: Making observational documentaries is all about being able to adjust when the initial idea changes and hopefully blossoms into a bigger and better film as one explores the chosen subject. Reality dictates the film's path and one has to be adaptable in altering the film's course. I

may start out at point A, but could end up at points Z, Q or W. That's often why my films take so long to finish, as I have to continue filming until a natural end comes about.

The Bird Effect started out as an idea to film the pastime of birdwatching, morphed into looking at how birds affect a wider spectrum of people, and has ended up with birds and their world affecting and changing me as a person and the course of the film. I have moved from watching birdwatchers, to becoming a birdwatcher and now find myself as an active conservationist, all because of the power of birds. I look back at my diaries and see where it all began and I find the evolution of the project as remarkable, and the revolution within my own mind as a staggering alteration.

Extract from my diary.



Ceri Levy
Painted Illegal Trapping Hide by Lucy McLauchlan. Malta 22nd April 2012 © Ceri Levy

In 2005 my wife and I went back to an old childhood haunt of mine, The Isles of Scilly. I had not been there since I was a teenager but I am so glad that I returned. It turned out to be as magical a place as I remembered it had been when I was a kid, and the truth is, if not for Scilly, I would not be where I find myself today. It gave me the gift of a germ of an idea, which has snowballed into being something altogether more wonderful.

October 16th 2005

Today, as we were walking round the Garrison, which surrounds the Star Castle, on top of the main island of St. Mary's, we stopped and looked at this little bird hopping in a tree in front of us.

I had no idea what it was. But it was a pretty enough creature. Then before we knew what had happened we were surrounded, and then removed from our position by a group of people with tripods, cameras and binoculars. "It's here!" Within seconds we were at the very back of the group of pushy people and we distanced ourselves even further. We had heard about these people... the locals had warned us. This army descended upon the islands every October; apparently these were twitchers! (I would discover the difference between a twitcher and a birder or birdwatcher at a later date.) We asked one of the slightly less excitable members of the group what the bird was. A something war ball. We shrugged, walked away none the wiser and carried on ambling



Ceri Levy
Steppe Eagle in Kazakhstan, Memorial to the Unknown Bird. Live electric cables kill many large birds throughout the country. Kazakhstan Steppe10th May 2013 © Ceri Levy

round the island.

Later that day back in the safety of our hotel's Elizabethan dungeon bar we met Kevin and Sonia, who were birders and were also staying at the hotel. They invited us out for a days birding with them. Kevin explained to me that the bird we had seen was a Black Poll Warbler, an extremely rare visitor to these Isles that would have been blown off course during its migratory flight. In his eyes the excitement of the bird still burned brightly and I marked down this passion within him for future reference. The next day we all went out and had a wonderful day's birding in the rain, getting thoroughly drenched, but a fun experience, if at times slightly comedic. We learnt the art of standing in neck high gorse and bracken and the skill of silence.

something I have always struggled with! It gave me ideas to explore for a possible documentary down the line. It seemed like this bird watching stuff could make an instantly funny programme! Little did I know that it would consume me and develop new passions within me and take me far away from what I would initially set out to do. To quote Kenn Kaufman from Kingbird Highway, "The most significant thing we find may not be the thing we were seeking." And that is how things seem to be with The Bird Effect. The more I learn, the more my parameters have changed. I see people involved with so many aspects of birds and I find the majority of them inspiring. With each day I immerse myself into the world of birds and nature. I seem to have been deaf and blind to nature.



Ceri Levy Malta 24th April 2012 © Ceri Levy

and now it's like being able to see in colour and hear in stereo. It's all shiny new but this world has always been there... It's just me who has been missing for too many years.

As time passed I began to look at birds in a different way and started to marvel at just [how] much passion they engendered in people and ultimately in me. These are powerfully emotive creatures that inspire many to work on their behalf. Perhaps because they do the one thing we cannot mimic with our own bodies, i.e. fly, they are treated with a reverence and wonder by so many, and an unbreakable bond is formed between viewer and subject. In my case this has grown into a genuine interest to learn more about birds and wanting to inform

people that there is much to be done if we are to continue to live in a world, which counts birds amongst its most populous inhabitants. In one way or another I have become a conservationist. Having recently completed a book with Ralph Steadman, entitled *Extinct Boids*, we have begun to term ourselves as Gonzovationists. Who knows whether it will catch on but the world needs more of them.

Birds are desirous creatures that can really only be captured for a moment in time. They spend time fleetingly with us and are gone all too soon. The only way to keep them is to shoot them with gun or camera, although I prefer the memory of place and moment as my connection with a particular bird. My first Montague's Harrier was in Norfolk

on a blistering and bright spring day on a path between a searing yellow rape field and a blood-red poppy field. The bird arrived over a row of trees glinting in the sun and it was almost a religious experience as it deigned to appear and perform for a few moments of time.

Brower: What is the film trying to achieve?

Levy: The further I delved into the bird world the more hooked I became. I discovered that so many of the world's birds were threatened in one-way or another. The film tries to record my journey visiting all types of people from artists, writers, conservationists and scientists, and record their response to birds and just what it is that birds provoke in so many of us.

Birds have inspired me to something on their behalf and have taken me halfway round the world in support of them, visiting programmes that are trying to save certain species from extinction. Having spent years touring and filming with bands I have always had wanderlust, and birds have filled the same space for me that music and musicians have always inhabited. For many birdwatchers this isn't the case and they are quite happy to see what appears in front of them. And that sums birds up. There are so many ways to interact with them. From travelling to see great rarities or a country's indigenous species, to just immersing oneself in the wonder of one's own local patch and get to know how cyclical life is. It's a less glamorous but equally worthwhile way of watching birds and anything that attunes us with the natural world is ok by me. There is no wrong way to watch birds.

I got immersed in the story of birds and I found I had gone to the bird side! I look at some of my early footage now and I can see the camera shake as I am caught in two minds of filming the bird watchers or trying to see the Radde's Warbler for myself, and the more recent the footage I've shot the quicker the camera drops down as I do indeed choose to see the bird! I came to realise that a film about birdwatchers was not what I

wanted to make... I needed a new perspective, and on my wanderings through a space birdidity, I discovered ideas, people and various organisations that I wanted to champion, and to present in my film to a different audience than is associated with wildlife films. From the work that BirdLife Malta do[es] to protect birds from illegal hunting to the RSPB and their investigations unit, to Birdlife International and their *Preventing Extinctions* programme. So many worthwhile works in progress that don't get an airing with the general documentary watcher. I began to realise that these could feature quite nicely within The Bird Effect. Also I became interested in how people are affected by birds directly, and so I ask the simplest question of the majority of my subjects. What has been the bird effect upon them? And more often than not the answer comes back "I wouldn't have been the same person without birds."

Brower: Who do you think is the target audience for this film?

Levy: Tough question. I never try to make a film for a specific audience. I make them for myself and for my friends. I believe that if my closest friends can enjoy the movie then there is a good chance that other people will. One thing I would say is that The Bird Effect won't be a normal wildlife film. Birds will feature very little in it as this is all about their effect on people. I suppose I hope that in some small way the film can inspire people to pick up the baton for birds and for nature. It's really not so hard to support our wildlife and people can elicit change if they can be bothered. I genuinely feel that many people don't do anything, purely because they just don't know what's going on and the problems that face so many species today. Perhaps some will know a little more after seeing the film.

Brower: The intensity of human-bird relations has historically been potentially dangerous to birds; ignorance, fear, and greed have had



Ceri Levy

One of the few success stories in Malta. A Marsh Harrier that has been rehabilitated about to be released. Comino April 26th 2012 © Ceri Levy

disastrous results, but so have attraction and desire. I'm thinking here about millinery feathers in fashion and egg collectors, in particular here where a professed admiration or love for birds has led to mass slaughter. Why is it so difficult for us to get this relationship right?

Levy: Our relationship has always been a strange one with birds. We go too far so often and balance has never been part of the picture. Birds have often been persecuted in one way or another. Birds of prey have suffered most, but then look at the mighty sparrow in the First World War, which was persecuted as there was a fear the bird would eat all the wheat fields and destroy our grain

supplies and was considered as an enemy of the people. Every parish would have its own sparrow-shooting club to deal with the flocks of birds. And Mao did the same with the Great Sparrow War in the late 1950's, calling on the people to destroy the bird, again to save grain. Millions of birds died.

This was printed in a Shanghai newspaper in 1958 under the title, *The Whole City is Attacking the Sparrows*.

On the early morning of December 13, the citywide battle to destroy the sparrows began. In large and small streets, red flags were waving. On the buildings and in the courtyards, open spaces, roads and rural farm fields, there were numerous scarecrows, sentries, elementary and middle school

students, government office employees, factory workers, farmers and People's Liberation Army shouting their war cries. In the city and the outskirts, almost half of the labor force was mobilized into the anti-sparrow army. Usually, the young people were responsible for trapping, poisoning and attacking the sparrows while the old people and the children kept sentry watch. The factories in the city committed themselves into the war effort even as they guaranteed that they would maintain production levels. . . .150 free-fire zones were set up for shooting the sparrows. The Nanyang Girls Middle School rifle team received training in the techniques of shooting birds. Thus the citizens fought a total war against the sparrows. By 8pm tonight, it is estimated that a total of 194,432 sparrows have been killed.

In 1959, scientists discovered in autopsies that only a quarter of the material found was human food; the other three quarters were harmful insects. Meanwhile, locusts and other insects that would have been kept at bay if the sparrows had survived were destroying grain crops. A famine occurred and millions of people died. Nature had its revenge and the war was over.

History is littered with stories of the mishandling of our relationships with birds and we never seem to understand when we have gone too far and created an imbalance. And birds are often the greatest indicator of problems in the world, hence the Canary in the coalmine, and it's the same with habitat issues. If we take notice of what the birds are telling us. we can make various alterations to our world that would be beneficial to all, birds, other creatures and man too.

Brower: Steve Baker has suggested that art is one of the few vehicles for making animal[s] visible within contemporary media culture. Do you agree with his argument and is it part of your motivation for using contemporary art to support your activism?

Levy: I have a real issue with the compartmentalising of art today. Wildlife is often treated as a secondary and unworthy subject for artists and I don't know why. So many artists who work with animals are often termed as wildlife artists and are treated as artists who don't necessarily belong in the higher echelons of fine art. It is a snobbery that needs to be addressed. If we can't draw on the natural world around us to create art there is something intrinsically wrong with our society. I have often felt that many people involved in the presentation of art have always wanted a separation between the people" and "fine art." I have always moved towards a blurring of these boundaries, which will hopefully be removed forever. Art creates a dialogue that no other medium can and is quite probably more in voque and more necessary than at any other time in our short history.

Brower: Are there any artists whose work has particularly engaged you?

Levy: Too many! I spend every day looking at art and amaze myself at how many wonderful artists there are that I am discovering for the first time. I have been lucky enough to work with many truly inspiring artists over the course of *The Bird Effect*, and every one of them has been a privilege to work with.

One of my main recent adventures was taking eighteen artists to Malta to take part in one of BirdLife Malta's Spring Watch camps, which are organised to try and protect birds from being illegally shot by the 46,000 Maltese hunters. It is an invigorating as well as a heart-breaking experience and many of the artists were moved by their time on this strange and often murderous island where gunshots ringing out through the landscape is the norm. One of the highlights for me was when we commandeered an illegal hunting hide on a sunny Sunday and Lucy McLauchlan painted it in her own inimitable style. We had to keep a keen eye out for hunters returning in case we were attacked, or worse, shot at by irate gunslinging bird hunters. Both had happened to me before in this treacherous place. We managed to complete the task and I would have loved to see the hunter's face the next day when he discovered what had happened while he was away. Ironically the paintings are still there now, which just goes to show the power of art.

Brower: Historically, art has had a complex relationship to birds. While Audubon killed everything he depicted as part of a campaign to assert dominance over the North American continent, his images have become rallying points for pro bird activism. The American Acclimatization Society was inspired by Shakespeare's work to release European birds in North America displacing native species. Do you foresee any dangers with bringing increased attention to bird life through art?

Levy: Highlight any issue and there are new potential dangers that could come to light, but bringing attention to issues that need to be dealt with is important. I have just returned from the Kazakhstan Steppe where I wanted to film the Sociable Lapwing on its breeding ground, as it was the first twitch I filmed when I set out on my journey and which starts the film off from the perspective of a birdwatcher, and I had wanted to end my travels and the film with the same bird but from the angle of conservationist. It is a critically endangered species, which was believed to be in trouble because of problems on its breeding ground, most notably from eggs and nests being trampled underfoot by grazing sheep and cattle. But research undertaken by BirdLife International, the RSPB and their Kazakhstan partner, the ACBK, is proving that the main issue for the decline in numbers is hunting along the Middle Eastern flyway. So now the work begins to discover a way to halt this problem before it is too late for this innocent creature.

While I was there we came across a Steppe Eagle lying at the base of a concrete

pylon, which carries the overhead electricity cables with the top line being live. So when a large bird descends often its wing tips touch two cables and results in instant death. Kazakhstan is covered with pylons in all directions and is the size of Western Europe. We made a short tour of the immediate area and found a *Hooded Crow* and a *Rough Legged Buzzard* in a similar state, indicating the size of the problem. I think art, film, music and words can help encapsulate these issues and help us understand many of the problems birds face. In Kazakhstan it's simple, what's needed is insulation not termination. We need to redress the balance.

Margaret Atwood told me that of all the charities in the world, something like 96% of them, raise money for human causes, 2½% goes to domestic animals and the other 1½% goes to the natural world. It doesn't really matter whether these figures are totally correct or not. It gives an image of the overall picture and we need to change what is an arrogant use of funding for charities. Are we more important than the world, which nourishes us?

Brower: Birdwatching appears to be part of a larger shift towards a non-interventionist ethic in Western human-animal relations. This move to non-intervention has been a significant benefit to many animal populations. However, it has also put stress on traditional human ways of life predicated on subsistence hunting. Do you see birdwatching as a model for the broader range of human-animal relations?

Levy: I don't think we live in an age of non-intervention as you call it. Invariably non-intervention is leading to the demise of many species. We are living in the greatest age for extinction in modern history. The principle of non-intervention, by which I presume you mean letting nature get on with being nature is fine, but the reality of the practicality of this is all too clear. Habitat destruction, change in agricultural policies and hunting are all

reasons why species are disappearing at an alarming rate. We need intervention more than ever to correct many situations, and animals can be brought back from the brink of disappearance, handled correctly. Then we can work on non-intervention.

Birdwatching in the twenty first century is in its infancy. Technology plays more and more of a part in birdwatching, and also in conservation, and is improving our knowledge and our communication capabilities about problems that face many birds. Satellite tagging is becoming more and more successful and I am sure will lead to greater banks of data which will ultimately help many endangered species and not just birds, as we discover where problems occur for many migratory species.

Brower: You also co-curated *Ghosts of Gone Birds*, an exhibition which featured over a hundred artists and which aimed at highlighting the dangers of extinction threatening birds today. Could you tell us something about the curatorial rationale for the exhibition? Any sound pieces included there?

Levy: I worked up a long wish list of artists that I wanted to be a part of the show and was lucky that over 90% of them agreed to take part in it. I also wanted to make sure that I mixed the types of artists involved and varied the worlds that they came from, thus creating a real multimedia event that allowed artists who would not normally show together...[to] be united because of the diversity of the birds that they represented. I also had the rule of serendipity as one of my main criteria. I decided never to approach anyone cold and waited for someone to introduce me to a particular artist. It is amazing how many artists came to the show from that route.

There were several sound pieces in the show including *The Sound Approach* who recreated the sound of a fifteenth century extinct Lava Shearwater, and Justin Wiggan who created a piece entitled *Myth not Legend*, which he states is "about the loss of

our husbandry of creation, the miscalculation of care and lack of understanding." In his piece, bird song has been slowed down to sound like whale song and whale song has been sped up to sound like birds.

Brower: Until the development of field guides and the production of techniques for sight records, ornithology was based primarily on the use of the shotgun – what's shot is history what's not is mystery – does the development of birdwatching out of these earlier practices suggest that other problematic forms of humananimal relations might similarly be redirected?

Levy: I can only really speak about the bird world, as it is the area I have really been analysing but the shotgun is still used way too much in the name of sport, and hunting is my real bête noire. A friend of mine, Paul Jepson, is working on creating an atlas of the legal and illegal hunting of migratory bird species, which sets out to determine the hot spots for hunting. So far the estimates suggest there are millions of hunters in Western Europe alone, and the indications are that along each migratory flyway there is a corridor of guns that birds have to brave as they fly to and from their breeding grounds. Paul is really asking whether there is a "freeway flyway" available through which migratory birds have safe passage and for me if there aren't any then that is what I feel we need to create to give the 21st century a chance of an abundance of birds in our world.

Brower: Do you think the willingness of artists and musicians to participate in your art projects is based in part with their identification with birds as creative producers?

Levy: Birds inspire so many creative people and, as I said earlier in the interview, it may be because of their antipathy towards us and that they can fly that makes them so wonderful to create work about. They are

poetic creatures that almost work in an ethereal space to us. Inhabiting our world, but also inhabiting some other, unseen space, a place we can only glimpse through birds and one that we can never exist in.

Brower: What are [you] currently working on?

Levy: I am currently working on editing The Bird Effect. After my last film, Bananaz, about the band *Gorillaz*, I swore that my next project would not eat up so much time – it took 7 years to shoot and 2 years to edit – and yet here I am, 5 years down the line of this film and with over 150 hours of footage to sift through. Will I never learn? I doubt it, and I think that's why I love making documentaries.

I am also working on organising a show based on the subject of the illegal hunting of birds, tentatively entitled Interpreting Danger, and am sure that now is the time for the issue to have a proper airing. So many people within the bird world and the conservation world have known about the problem for many years and for them it has been a relentless slog trying to change views on illegal hunting. That is why I think it is the right thing to do to give artists a platform to create work about this. I believe that the general public ha[s] no idea of the extent of the damage being caused by hunting. Since I have been discovering the regularity of the killing of an inordinate amount of birds throughout the world, I have been bowled over by people's reactions and know that this is the moment to open the debate. There are photos of mist nets stretching over 700kms the Egyptian coast to capture migratory species; lime sticks secure sonabirds to their shafts in Cyprus and Southern Spain, and there are millions of hunters across the world with their guns pointed to the sky waiting for that rarity to fly past and to gun it down. Yes, there are many "responsible" hunters in this world but life in our skies is being decimated, and whatever small part I can play in bringing the subject before a larger audience is my path forward. Birds have brought me great joy and taught me so much that I never knew about this world we live in. It is right that I try to give something back to them.

Ceri Levy is a film-maker, who started out making music videos before moving into the world of documentaries. His works include *Bananaz*, a film about the inner machinations of the group Gorillaz, and the forthcoming *The Bird Effect*; he is also co-curator of *Ghosts of Gone Birds*, and therefore a crucial cog in the boids' creation myth. See more at:

http://www.bloomsbury.com/author/ceri-levy#sthash.1TA020bm.dpuf

Matthew Brower is a lecturer in Museum Studies in the Faculty of Information and the Curator of the University of Toronto Art Centre. As curator of UTAC, he has curated shows on Canadian painting, the Malcove Collection of historical art, and the work of conceptual furniture maker Gord Peteran. He co-curated *The Brothel Withous Walls*, an anchor exhibit for CONTACT 2010: Pervasive Influence. Drawing on Marshall McLuhan's insights, the exhibition brings together nine Canadian and international artists whose work explores how photography informs and transforms human behavior. He is also cocurating an exhibition on the articulation of a feminist aesthetics of beauty in the photo-based work of Suzy Lake for CONTACT 2011.

DAVID ROTHENBERG: BUG MUSIC

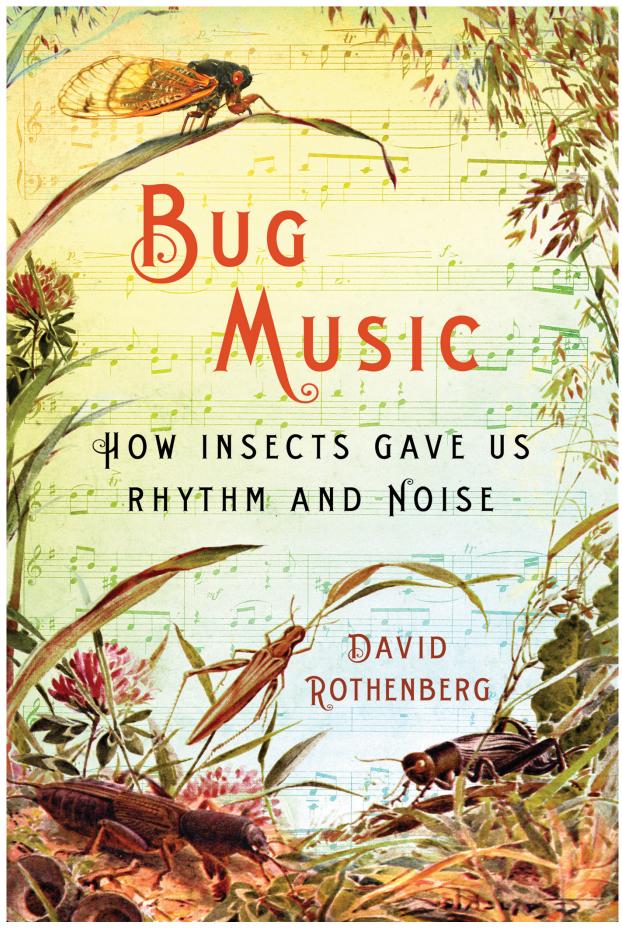
David Rothenberg has written and performed on the relationship between humanity and nature for many years. He is the author of Why Birds Sing, on making music with birds, also published in England, Italy, Spain, Taiwan, China, Korea, and Germany. It was turned into a feature length BBC TV documentary. His following book, Thousand Mile Song, is on making music with whales. It was turned into a film for French television. His new book, Bug Music is out now and Adam Dodd has had the opportunity to ask a few questions. Interview Questions by Adam Dodd

was fortunate enough to meet David Rothenberg in early 2011, when I chaired his plenary session at the *Zoosemiotics and Animal Representations* conference at the University of Tartu, Estonia. David is Professor of

Philosophy and Music at the New Jersey Institute of Technology, and appropriately, his paper in Tartu tackled fundamental questions about what music is; specifically, the ways in which the sounds that birds make - birdsona - may expand our own understandings of rhythm, noise, and music. Like most of those in attendance, it had never occurred to me that the pace at which birdsongs are delivered is tempered to the pace at which birds live, and that by slowing down recordings of birdsongs, we might be better able to access their qualities in ways which made sense (melodically, rhythmically) to us. David demonstrated (among other things) that this was in fact very much the case.

In his latest book, Bug Music: How Insects Gave Us Rhythm and Noise, David

turns his attention to the often neglected, yet omnipresent realm of the insects. He finds that, despite their apparently inconsequential place in the history and development of human culture, insects have shaped some of its most fundamental aspects - including music. To those of us who already appreciate the crucial place of insects in human culture. this may not come as much of a surprise. But it is worth bearing in mind that, despite everything we have learned about insects since the late sixteenth century (when the systematic study of insects began in Europe), they are routinely regarded as "beneath" us every conceivable Way. **Pyramidal** hierarchies of species continue to shape the way we see ourselves in relation to other animals, with insects usually positioned somewhere towards to the bottom. Upon reading David's book, and conducting this interview, I wonder if the persistence of such arrangements has something to do with the delusion that we live "on" the Earth, rather



David Rothenberg *Bug Music*, © David Rothenberg



Umru Rothenberg

A seventeen year cicada, Magicicada septendecim, photo by Umru Rothenberg © Umru Rothenberg

than "in" an environment. Perhaps it would make more sense to speak not of "higher" and "lower" animals, but of "outer" and "inner" ones. No other animals have aone to such lenaths to remove themselves from insects as we have - and these efforts have extended far beyond simply avoiding and eliminating disease-carrying biting, stinging, and offenders. We avoid insects for many other, much more abstract and ideological too. This that reasons. means systematically blind ourselves to the deep bonds, both natural and cultural, that we share with insects. David's book, and the companion album (also titled *Bug Music*), go part of the way towards rectifying the resulting dissonance.

Adam Dodd: How did you come to start thinking seriously, and passionately, about insect music?

David Rothenberg: This book is the third in a trilogy that began with the music of birds, then the music of whales, and concluding with the oldest of animal musics, the thrum, beat, and buzz of the entomological world. The musicality of insects is both the most basic and the hardest to convince people of, or so I thought while writing it. Actually I have

been pleased that people seem to get the idea right from the beginning. I know for me these sounds were more difficult to hear as music as I began, but listening extensively to such timbres has changed my own sense of what sounds can be accepted as being musical.

Dodd: The release of your book, *Bug Music: How Insects Gave Us Rhythm and Noise*, and the companion album, *Bug Music*, coincides rather wonderfully with the emergence of cicadas in the Northeastern United States after their 17-year cycle. Could you explain how this synchronicity came about, and what significance it holds for you?

Rothenberg: I planned it this way – though initially it was very hard to convince any publishers that this was a big media event worth synchronizing with. Only one editor, Daniela Rapp at St. Martins, understood the significance immediately. The publishing industry has a short memory.... 17 years ago is ancient history! But more significantly for me, the 17 year cycle is like a great, slow beat in the animal world, a rhythm so long we can barely perceive it as a rhythm, but it is as



David RothenbergRothenberg playing live with cicadas in Urbana, Illinois, photo by Emily Denis © David Rothenberg

regular as a drum machine, a very, very slow one.

Dodd: In *Bug Music*, you not only claim that insects have rhythm and noise, but that they "gave" rhythm and noise to human beings. This will inevitably disturb notions of cultural practices as being relatively autonomous from nature – which seems to be an important aspect of your work. Given that human beings have always been embedded in the natural world, why do you think the idea that culture is fundamentally shaped by the natural world should meet with such resistance, even in our so-called 'environmentally aware' society?

Rothenberg: Well so far no one has explicitly resisted that particularly audacious claim of mine! Of course human culture evolved in relation to nature, its context, and although I have no 'proof' that humans learned rhythm from insects, it is as plausible

[an] idea as the more common ones found in evolutionary psychology, that the rhythms we like come from the human gait, or the human heartbeat. We have never been alone on this planet, and the music of peoples who sing and play in the midst of thrumming bugs, from Indonesian gamelan to pygmy hocketing, is very much integrated with the sounds of their forest environments.

Dodd: The appreciation of insects as essential components of our own cultural history seems to have gained some ground in recent years. How do you see your book in relation to other works of 'cultural entomology'?

Rothenberg: I hope it will be seen as earning a place among such titles as Hugh Raffles *Insectopedia* and Jussi Parikka's *Insect Media*. But I also think anyone interested in the topic should check out the five volumes of Keith Kevan's *Land of the Locusts* which consist of hundreds of pages of poems on singing insects translated from all the world's major languages.



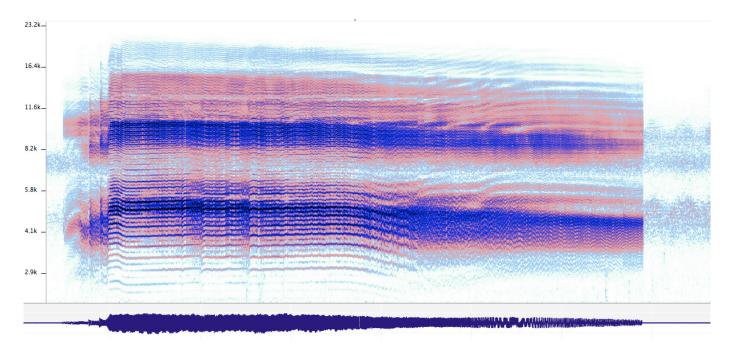
David RothenbergRothenberg jamming with cicadas in Springfield Illinois, photo by Charles Lindsay © David Rothenberg

Dodd: Insects contain many paradoxes, but perhaps one of the most fundamental is their fusion of the familiar and the strange. Insect sounds are at once deeply familiar (they have been with us since before we even emerged as a species), yet often are regarded as resolutely alien. Your book, and the companion album, seem to mediate and celebrate this apparent conflict, rather than attempt to resolve it or simply smooth it over. How important is it for us to retain this capacity to appreciate the strange within the familiar, especially when it comes to insects and their noises?

Rothenberg: You've explained it better than I did right there. Yes! We should appreciate the strange within the familiar, and as it gets

more familiar, we find ourselves just a little closer to finding a home in the natural world.

Dodd: In your chapter titled "Mr. Fung's Cricket Orchestra," you describe the prolific French amateur Jean-Henri Fabre's (1823 – 1915) appreciation of insect life. Like a number of his nineteenth-century contemporaries, such as Jules Michelet, Fabre openly expressed his love for the insects he studied, and the wider natural settings in which he observed them. Yet to do so today is to mark one's work with the "stain" of emotion and hence of subjectivity. What do you see as some of the consequences of this shift for contemporary insect-human relations?



David RothenbergSonogram of the song of a Hieroglyphic Cicada, Neocicada hieroglyphica © David Rothenberg

Rothenberg: Emotion must come *back* into science and empirical observation! I also praise the early 20th century entomologist H.A. Allard for writing so emphatically about crickets and cicadas, praising their music that lies just a bit beyond function. Contemporary entomologists are doing that as well, such as Mae Birnbaum and Marlene Zuk.

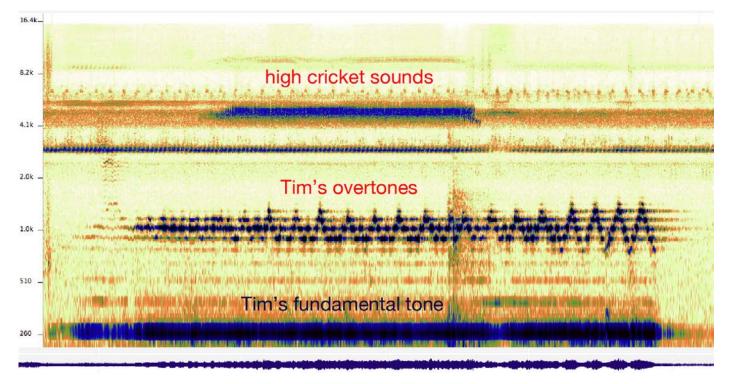
Dodd: Some insect sounds, such as those made by crickets, seem inherently pleasing to human ears. Others, such as the high-pitched whine of mosquitoes, seem unshakeably irritating. Others fall somewhere in between. To what extent do we acquire an appreciation of insect sounds, and how does this appreciation affect our ability to empathise with insects themselves?

Rothenberg: Well we don't like mosquito sounds because we imagine they are out to get us! Some cicada sounds are so loud and grating that they hurt our ears. Of course the same could be said for a lot of human music – some love the intensity and the noise, some don't. "Some hear bug music, some hear

people music; All depends on your ears" wrote Wâfu in Japan in 1866. I do think most of the overlapping tunes of insects have a certain emergent rhythmic logic and beauty that people do appreciate. As long as the same singers aren't biting...

Dodd: In your chapter "Sax and Cicadas," you describe your collaboration with Charles Lindsay, the first-ever artist-in-residence at SETI (the Search for Extraterrestrial Intelligence), a program which has been criticised as excessively anthropocentric. Given the essential role of insects to the promotion of rhythm, noise and music on Earth, might it make sense to transmit insect sounds into outer space in order to give extraterrestrials some idea of what is really going on back here?

Rothenberg: You know, that is a good idea. I shall have to ask Jill Tarcher at SETI about it. By the time those messages reach the aliens insects might be the only life forms *left* on Earth.



David Rothenberg
Sonogram of Timothy Hill overtone singing with a field at night full of singing crickets and katydids © David Rothenberg

Dodd: A fundamental precept of numerous religious traditions is that the universe is spoken, or sung, into existence. Experiments in cymatics have repeatedly demonstrated the intricate relationship between acoustics and form, showing how frequencies of sound give shape to matter. Do you think something similar, or at least something metaphysical, may be going on with insect sounds?

Rothenberg: Absolutely! Look at this sonogram of a hieroglyphic cicada and you will see its beautiful energy and form, even though it sounds at first like a simple howl of white noise: it is clear to me that this sound, which to many of us may sound like a grating shrill noise, has a real musical structure with a beginning, middle, and an end, with an initial noise attack morphing into a clearly tonal section with many overtones, then turning into a wash of enharmonic noise. When you see this clear structure and learn how the cicada makes such a complex sound by vibrating its tymbals, one cannot fail to be impressed.

Dodd: If at least some insect sounds are inherently pleasing, and even therapeutic, to human ears, do you think there is a case for permanent audio-installations in urban centres which may work to offset, or perhaps complement, the effects of mechanized noise?

Rothenberg: Yes, that's a good idea, though some people have written me that learning to appreciate insect noise has also encouraged them to appreciate industrial noise. Some of the sounds of our modern world can also be surprisingly beautiful.

Dodd: What do you see happening in the future as more is learned about insect acoustics and the extent to which they have shaped our own notions of noise and music? How do you think your exploration of the musical world of insects will continue to shape your own practice into the future?

Rothenbera: Speaking just for myself, I must say that spending all this time delving into the sonic richness of the insect world has changed my own music, in that I am now interested in certain kinds of sounds I might previously have shunned - very electronic, buzzy, glitching, humming, scratchy timbres that are surprisingly popular right now, in dubstep and alitch, and formerly unusual electronic timbres that have found their way into the current musical mainstream. I auess I'm just thrumming with the times. The more different kinds of creatures I integrate into my musical interests, the wider afield my own sonic interests expand. I encourage everyone else out there, whether composer, listener, or performer, to embark upon their own journeys of expanding the boundaries of what music can be.

Adam Dodd's research is centred on the roles that visioning technologies and representational conventions have played in developing insect-human relations from the early modern period onward, across the intersecting domains of science, religion, art, and popular culture. From 2010 to 2012 he was Postdoctoral Research Fellow at the University of Oslo as part of the research group, 'Animals as Objects and Animals as Signs.' He has published on early modern microscopy, entomological rhetoric, the management of insects in recreation and tourism, the religious and entheogenic aspects of praying mantids, and the construction of insect cyborgs by the US Defense Department. His book, Beetle, is forthcoming through Reaktion. He currently lives in Brisbane, Australia.

ECM recording artist David Rothenberg has performed and recorded on clarinet with Jan Bang, Scanner, Glen Velez, Karl Berger, Peter Gabriel, Ray Phiri, and the Karnataka College of Percussion. He has twelve CDs out under his own name, including "On the Cliffs of the Heart," named one of the top ten releases of 1995 by Jazziz magazine and "One Dark Night I Left My Silent House," a duet album with pianist Marilyn Crispell, called "une petite miracle" by Le Mondeand named by The Village Voice one of the ten best CDs of 2010. Rothenberg is the author of Why Birds Sing, book and CD, published in seven languages and the subject of a BBC television documentary. He is also the author of numerous other books on music, art, and nature, including *Thousand* Mile Song, about making music with whales, and Survival of the Beautiful, about aesthetics in evolution. His latest book and CD is Bug Music, featuring the sounds of the entomological world. It has been featured on PBS News Hour and in the New Yorker. Rothenberg is professor of philosophy and music at the New Jersey Institute of Technology.

LISTENING TO CICADAS: PAULINE OLIVEROS

A woman is sitting opposite me in the sun, talking in a soft voice of subtle things. She is wearing a silver necklace. She lifts her hand to shield her eyes, and then leans forwards and tells me something utterly profound. She is a pioneer in electronic contemporary music, composition, and performance. She is one of America's most important composers and winner of the John Cage Award, 2012. She is an improviser, composer, performer, Founder and Executive Director of Deep Listening Institute, feminist icon, humanitarian, karate black belt, a writer, and a deeply admired teacher. In her life of over eighty years, it is in no light way that Pauline Oliveros has impacted the world's appreciation and understanding of what listening is, and can be. But, it is also with a great subtly that she continues to scatter innumerable remarkable moments, just like this one.

Text and Interview Questions by Helen J. Bullard

"Tell me what you hear right now..."

The sun is warm on us, but a fall breeze is picking through the canopy above, shaking down its music at us. Pauline Oliveros has just finished teaching this afternoon's Deep Listening class, and with the sun in my eyes I start to wonder if a field guide has ever been written to explain all the voices of the breathing wind, or the sighs and full-stops of urbanity...

whoooogagarrrr-oooouww-sssshhhhhh

"I hear the wind in the trees," I say, "and cicadas..."

Sshhhhhh-aaarrwwooooo-ppppppppppphhhhhhhhaaarrrr

"and, passing traffic."

We are sitting at a wooden table under a poplar tree. It is mid-September, and this is my first proper conversation with Pauline Oliveros.

She starts to chuckle, and I turn to see a squirrel running down the path with a crust of bread dangling from its mouth.

"They always use the walkways!" she says. "One time, I saw one carrying a whole slice of pizza!"

She goes on to tell me about the infamous albino campus squirrel. I associate squirrels with Pauline Oliveros now.

I am reminded of that first conversation throughout the fall, as squirrels scamper about the city, and feed noisily from the bird feeder that dangles precariously above my window box; *thu! thu! thu!* it goes, crashing against my window pane. Occasionally squeezing on their bellies through a clink in the window, they leave their "walkways" in favor of investigating my students and me, in our basement classroom.



Pauline Oliveros is well known for her registered teaching method, Deep Listening. She explains, Deep Listening has become a meme these days, but was born underground in 1988, in a cistern in Port Townsend, Washington State. That cistern, with a smooth and incredible reverberation time of forty-five seconds, proved pivotal for Oliveros and her colleague Stuart Dempster. Fortunately, as an afterthought, they had taken along a recording engineer; "we were in there recording for five hours! I mean, we just took off!" says Oliveros, "but, there was no preplanned *anything*, except that Stuart Dempster, my colleague, had tuned his didgeridoo to my accordion."

That five hour session gave them enough material for a CD; *Deep Listening* (1989). "And of course, that's kind of fun!" laughs Oliveros, "because we were 14ft under ground! Stuart and I are inveterate punsters!" In the summer of 1991 she led her first "Deep Listening Retreat" on Rose Mountain, New Mexico, and that formed the basis of an annual retreat that ran for the next twenty years – the basis for the Deep Listening class she now runs as Distinguished Research Professor of Music at Rensselaer Polytechnic Institute (RPI), Troy, New York.

In May of last year, Oliveros turned 80. The year was filled with celebrations, performances and birthday cakes. But, "the most beautiful birthday present" she told me, was the recreation of the cistern in the stunning Concert Hall of EMPAC (the Experimental Media and Performing Arts Centre), in Troy, New York. In 2009, Jonas Braasch, a fellow researcher and musical colleague, took impulse responses in the cistern, and "he and a couple of his graduate students worked on [them] until in 2012, in May, we got a wish that we had had for 25 years; to be able to perform in the cistern *in* a venue - you know out from underground! We had a wonderful time; everybody was *so* happy! And we were too, we were *delighted*! 600 people in the audience, and the cistern simulation worked really beautifully, and we played, and the audience was just astonished."

Pauline writes of growing up inside the rich soundscapes of Houston, Texas in the 1930's, "filled with chirping, rasping crickets, frogs and melodic mocking birds." She writes of her burgeoning passion; an absorption into her "inner sounds" that led her to her announcement at the age of sixteen that she wanted to become a composer.

Late January, 2013.

Pauline's new undergraduate Deep Listening students sit in a wide circle around her in the defused quiet sunlight of her studio.

"Listen... with your skin too; your whole body!"

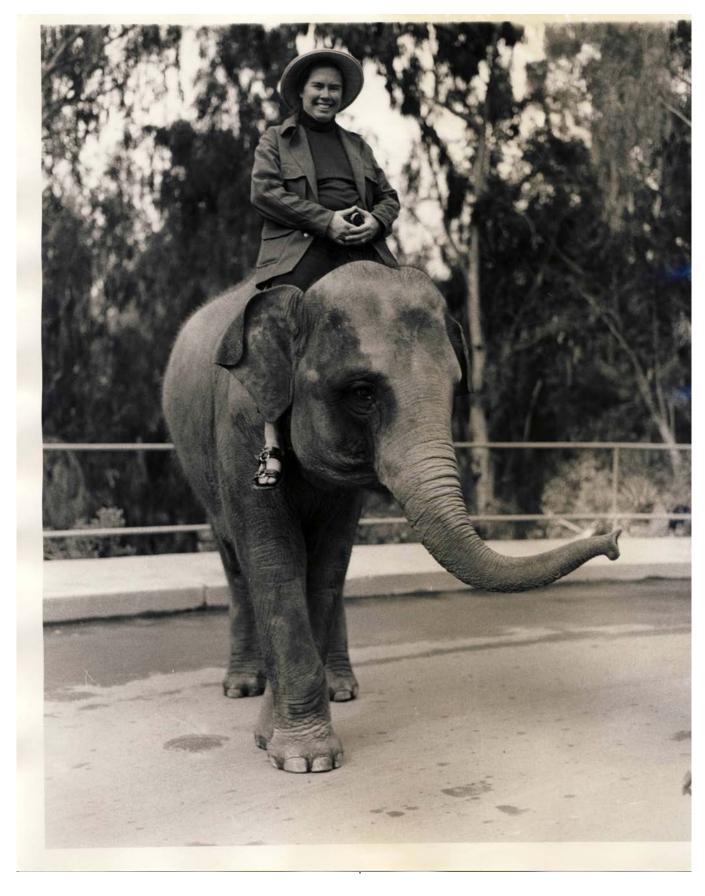
They are part way through their energy and listening meditations.

"Be sure to listen to *everything*; be inclusive of the outside and inside sounds – all of it, at once! Listen to a sound from the beginning to the *very* end... and then, let everything else back in."

But, it is difficult to be "inclusive" when it comes to Pauline Oliveros; difficult, because there is too much to say. This multi-facetted, boundary melting, accordionist, sound engineer, and professor, quite literally has the t-shirt. A black and white image of a young Pauline astride an Asian elephant adorns the front, and on the back: "PAULINE OLIVEROS@80 STILL LISTENING"

A pioneer in electronic contemporary music, composition, and performance, one of America's most important composers and winner of the John Cage Award in 2012, it is a challenging task to write *yet another* interview article about Pauline Oliveros.

Cage once said, "Through Pauline Oliveros and Deep Listening I finally know what harmony is...It's



Pauline Olivier with Alice - San Diego Wild Animal Park 1975 (credit: Becky Cohen)

about the pleasure of making music" (1989). Well, it seems that Pauline takes a great pleasure in embracing all of the experiences that life provides. Twenty years earlier, in 1969, Oliveros was commissioned by the Merce Cunningham Dance Company to create a piece for *Canfield*. That piece became *In Memorium Nikola Tesla: Cosmic Engineer*, and was performed with tube oscillators, in three parts, by a group of musicians including John Cage and one of Oliveros' closest collaborators, David Tudor"

It was based on an incident that he [Tesla] was involved with, in probably about 1890... in his laboratory on Houston Street in New York. He was very interested in resonance - and so am I! And so he had invented an electro-mechanical oscillator, and he had clamped it to an iron beam in his laboratory in the basement of this building, and set it in motion. And he was taking notes on how different vibrations occurred in his laboratory: the window panes rattling, and this and that... And meanwhile, people were running out of the building because he had created a minor earthquake!

Pauline's warm laughter fills the room:

So, by the time the police arrived (because they'd said "ah, it's that Tesla, again!!"), he was smashing the oscillator up!!

And she laughs more, as she continues to remember:

[1] the second part of the piece they were to go into testing the acoustics, so they would be out of the pit walking around the hall doing acoustical tests. John had a charger; pistol, you know, to make an impulse response, right? BANG!!" (And more laughter) "Now, David Tudor got so good [at playing the oscillators] he could make the flag poles turn around in their holders in the Brooklyn Academy! And they toured this piece all over the world - it even played opposite the Tesla Museum in Belgrade.

With a career spanning over sixty years, one could describe her as an improviser, a composer, a performer, Founder and Executive Director of Deep Listening Institute, feminist icon, humanitarian, a deeply admired teacher, a karate black-belt, a writer... but no one label quite does the job.

She is a true virtuoso. Distinguished Research Professor at RPI, Darius Milhaud Artist-in-Residence at Mills College, Oakland, California, Pauline Oliveros continues to spread her compelling passion for "sonic awareness" through *Deep Listening*® instruction throughout the world.

"I am an animal person too, you know!" she says, as she leans across that wooden table, under that poplar tree, in the fall sun.

Oliveros studied music everywhere in her life, from her mother and grandmother's piano playing to those soundscapes of Texas. She talks of animals in her book *Deep Listening A Composer's Sound Practice* "Animals are Deep Listeners. When you enter an environment where there are birds, insects or animals, they are listening to you completely. You are received."

More formally, she studied music at the University of Houston, San Francisco State College, and San Francisco Conservatory of Music, where she studied composition with Robert Erickson. She has taught in directorial capacities at Mills College and the University of California, San Diego, and acted as advisor to many foundations, including The National Endowment for the Arts and New York State Council for the Arts.

Among this broad archive of works, I would personally recommend *Bye Bye Butterfly*, commended by the *New York Times* as "the best piece of the 1960's "(and still staggeringly contemporary), and the hauntingly beautiful *Lear*, one of those tracks recorded in the cistern for the album *Deep Listening*, with a wonderful demonstration of that forty-five second reverb at the end. A wet, sucking, sticky, clicking, puttering of investigating animals creeps into the eerie reverberating forests of *Wolf/Loba*, from the album *Ghostdance*, and splits and judders and rises with strange crying electronic birds through canopies of frogs and ghosts. You have to listen, deeply, to appreciate Oliveros' orchestra: wild, captive, electronic animals, imaginary buildings in imaginary places. It is, in the deepest sense, "found sound." Perhaps Oliveros says it best and most simply herself: "You are part of the environment."

Now in her eighty-first year, Oliveros seems more prolific than ever. Seventeen years ago, Pauline and poet Mikhail Horowitz staged the first New York State Cicada Festival. This summer, to mark the re-emergence of the seventeen-year cicada, this festival will manifest again. Oliveros will be joined by David Rothenberg, among others, for a variety of arts and cicada events at various locations in New York State. Surrounded, hopefully, by the thick, high, full electric buzz of singing cicadas! And, The Nubian Word for Flowers, a new opera in collaboration with lone, promises to stage a vast, enveloping, and ambitious sensory extravaganza in cities world-wide. An initial staging of one scene will happen in Los Angeles on June 1, 2013, with plans to move to New York City, Cairo, London and Khartoum in 2014. Opening with scenes of the vast and shifting cosmos, majestic oceans, and desert planes, *The Nubian Word for Flowers* tells the story of colonization and loss as the desert floods with high, turbulent night waters, under the construction of the Aswan Dam. It is about displacement, Egyptian armies, and the life of botanist, UK Secretary of War (1914-16), and repeatedly knighted Field Marshal of war, Lord Horatio Herbert Kitchener of Khartoum. It is an epic tale woven in flowers, oppression laced with stars and trance, phantoms and ghosts, landscapes and animals, voices and gold. Through immersive video and sound, cows and "elephants' infra sound radiating through sub-woofers, trumpeting and stampeding" (Oliveros).

I hear the wind in the trees.

whooooaaaarrrr-oooouww-sssshhhhhh,

Sshhhhhh-aaarrwwooooo-ppppppppppphhhhhhhhaaarrrr

And cicadas, and passing traffic.

She leans back in the sun on our wooden bench, under that poplar tree.

"Yes," says Pauline Oliveros. "And all of these sounds work together; they are an orchestra! And once you hear it, you are *in* it!"

Fnd	notes	

[1] Pauline Oliveros, "The Poetics of Environmental Sound," in Software for People (Unpub Editions, 1983), 28.



Pauline Oliveros playing accordion in her home garden Leucadia Calif 1976 (credit: Becky Cohen)

auline calls out to me as she opens the outside door to my office; the winter sun is streaming in, despite the falling snow. It is falling like feathers. Slow. Soft. We move some furniture and she makes herself comfortable in an armchair...

I am thinking of that poplar tree, and that fall sun from our first meeting. And so I say...

Bullard: Pauline, tell me what you can hear right now.

She breathes in deeply. Closes her eyes, and leans back into the foam-filled mustard padding. She lets her breath out, slowly. Falling, like the snow.

Oliveros: Well... I hear a slight, high frequency, probably around 1000 cycles... maybe the air molecules in my ear!

...she is chuckling softly...

And now let's see what else I'm aware of... I hear the sound of a motor running somewhere... hmmm... and I can hear the sound of my breathing." [a pause] "It's very quiet in here. Snow makes things quiet."

Bullard: In your book, *Deep Listening: A Composer's Sound Practice*, you tell us that animals are Deep Listeners. Could you say a little more?

Oliveros: Well... let's start with dogs and cats; these are my most familiar animals because I've lived with them. My cats - they passed last summer, after some fourteen or fifteen years or so - anyways, I would be coming home - arriving home - and the cats would be there... I know they picked up the sound of the car arriving, long before it arrived; it means they were listening! And dogs can hear at high frequencies; I'm not sure exactly of a cats range... it is very important to listen to the environment around you! If you were living in the jungle, as our ancestors may have, you'd be listening!!

You'd be listening for predators, you'd be listening for danger, you'd be listening for possible food sources – this is a very extensive part of being an animal; listening. Listening, though, is *not* so simple... this is more difficult to measure than just *hearing*. Hearing is different from listening, as I say in my book. Hearing is the mechanism for getting sound waves to the audio cortex so that they can be interpreted – so, the *interpretation* and *decision making* that takes place; that is *listening*.

Pauline says those wild soundscapes that surrounded her childhood in Houston - the "chirping, rasping crickets, frogs and melodic mocking birds" are no longer there; they are replaced with "sonic corridors." In 2003, she said "now so much is paved over with asphalt and cement that the cicadas are trapped and can't get out." [1]

Oliveros: "Well, you know, animals are also adaptive. I mean, they adapt to their environments, and we're seeing more and more of this as more and more animals are venturing into urban spaces."

Bullard: Or, maybe it's us who are invading their space?

Oliveros: Well, our urban spaces have certainly encroached on the habitats of all creatures; it's very true and very sad to think of – I mean it's awful to think of the cicada, for example, trying to emerge from seventeen years underground, only to encounter asphalt... or cement, worse! How they adapt to that I don't know. Unless they can travel underground enough to emerge. Otherwise they die and their numbers diminish, which has certainly happened!

So, in June, I'll be participating in a seventeen-year cicada festival that we [also] did seventeen years ago in Kingston, New York. As it was, we had to use a video of cicadas, but we're going to try this year -hopefully - to find live spots! There are a couple of naturalists (Spider Barbour and his

wife), and they are going to take us on a tour to Eves Point, Socrates, New York, where they are supposed to be emerging. And, there are other parts of New York State where you can find these particular seventeen-year emergees."

Bullard: Wowl So what else will happen at the festival?

Oliveros: Well, the festival I participated in seventeen years ago was organized by Michael Horovitz who is a poet and has written some beautiful poems about cicadas. And there was a naturalist, and I played my accordion; I'm able to kind of simulate cicada sound on the accordion. So anyways, this year, David Rothenburg is going to be participating, and so we will do a kind of concert at Mohonk Mountain House in New Paltz, New York, on June 5th. On the 14th there will be an art exhibition in Kingston, and on the 15th we'll do a concert in one of the public parks, hopefully where cicadas will be! And then on the 16th there will be this tour to Eves Point with the Barbours. I think there is also one concert with David in New York at the Judson Church [Judson Memorial Church, Washington Square]... where cicadas are not likely to be a live presence!!

... and Pauline breaks into a slow, low laughter - it is infectious, and so we both laugh, and think of cicadas – I imagine them in the concert halls of New York, playing to a packed house with David Rothenberg!

Bullard: Can anyone come to these festival events?

Oliveros: Yeah! Definitely!!

Pauline has written extensively about Deep Listening and is also a beautiful writer. In Some Sound Observations [2] she writes:

The bulldozer starts again, moving the air like an audible crooked staircase before reaching its full power... A jet passes over. Some of its sound moves through my

jawbone and out the back of my neck. It is dragging the earth with it...

I would like to amplify the sound of a bull dozing.

On the other side of the freeway, a dog repeats a high bark, which curves downward. My dog has a tinkling collar. I would like to find a freeway.

Bullard: When you write, it seems that everything is important in the soundscape; the dog, the jet plane, your jawbone - even conjured guests seem equal – the staircase, the bull; the whole world. Did you always hear the whole world?

Oliveros: I believe we come into the world as deep listeners. We are already listening in the womb; the ear is the first sense organ to develop. So, we are listening already deeply! So when we arrive in the world, we're rather prepared! That's why I say I think babies are the deepest listeners. But, what is the meaning? And how do you listen and interpret what it is that you're hearing? ... I learned English, and later studied Spanish, and so I'm not a native speaker of Spanish, but I can speak a bit. And I have an ear for many different languages; can say phrases from many different languages... anyways, so language co-opts our interests in the sounds of the world [at about six months], unless they're threatening.

So, our listening...

She breaks off, deep in thought.

... we have very *deep* feelings about sounds. And not always are they conscious, you know?

> Today I can still feel Wolfman in my ears. MY EARS FEEL LIKE CAVES. Monday I am going to hear Wolfman again, and I can't wait to hear the feedback dripping from his jaws again. (writing about Robert Ashley's Wolfman, in Some Sound Observations)

Sonic Images are a set of Deep Listening mediations.

9. Imagine the sound of a bird call. What kind of bird is it? When did you last hear it? What does it sound like? Can you imitate it?

11. Can you imagine an animal sound? What kind of animal is it? What are its habits? What is it doing? Could you imitate the sound of that animal?

Bullard: When *you* listen to animals, do *you* imagine becoming the animal in order to understand it better?

Oliveros: Ah!

She chuckles again...

Oliveros: That is a wonderful question! Hmmm... I think that is a very special thing to do. And I think it is a Shamanic practice; I am not a Shaman, but I've certainly studied (or read) about shamanism, and I feel the ability to transmute your consciousness to another consciousness, or another being, is a very interesting practice. I can't say as I do that, but I recognize it. I have another piece, it's called Angels and Demons; it's a piece where a group, say, is asked to perform in the following way: you make the angels in the piece start to make long tones, and blend together these nice long tones on one breath, so it's kind of a drone-like thing that is quietly happening. But people who choose to be demons, need to go into this Shamanic state... or try... so that they can find the sound that they want to make that comes from the depths of their being. And then they can make any sound, whatever it is that they want to make to express that feeling. And the assumption is, with that instruction, that they might find sounds that are very loud and screamy, and different than what the angels are doing. And it might take all of their... all of their energy, to do it! If they really put themselves into it, you know. But the other part of the piece is that you can switch from being

an angel to being a demon. (laughter). Or, from being a demon to being an angel; it takes a lot of energy to be a demon! Some people manage to get into it, and not want to stop being a demon!

Hearty, jolly laughter

Well, I guess that is an answer... of some kind.

Bullard: Yes! I was reminded recently, by Steve Baker, of Beatrice Harrison's 1927 cello performance of *Londonerry Air* with a Nightingale in her garden in Oxted, Surry. Perhaps this was the first recorded interspecies duet with a wild animal, but I am pondering memories of hearing Tim Birkhead say, in a lecture, that bullfinches were trained to duet from sheet music, especially written for the purpose...

In 2008 you recorded *Duet with a Dog*, how did that come about, and what about mimicry and tribute, and playing music with animals?

That chuckle again; I wish I could write it down.

Oliveros: I was in Spain, and a friend of mine had taken us up to the accordion festival that happens – I forget the name of the town – it's a small town outside of Barcelona in the mountains; beautiful place. And accordionists from many parts of Europe come, and they have this festival. So, they took me up there, and of course I was welcomed in a beautiful way – they had found out who I was and what I do, and so I wasn't gonna play on the festival because I only had that one afternoon and evening to be there, and it was just before the festival was actually starting. So I was in the café, and there were a lot of accordionists coming in, and a couple of them played them for me and it was very special. And so then somebody lent me an accordion, and I started to play; do an improvisation like I do, and from outside the window, there was a dog! (laughter) who started barking! So I started playing with the

dog! and that's how the duet came about! (more laughter) 'cause, of course, I always acknowledge the whole environment when I play.

Bullard: Yes.

Oliveros: So the dog became a part of the piece! Whether the dog was conscious of that, I'm not sure!

Bullard: Yeah. It sounded like he was!

Oliveros: I think maybe he was. One thing I can say is I've played out of doors on occasion, in an environment where there are birds and insects and so forth, and I have noticed that there is a feel of their gathering around. And sounding while I'm playing. So then I feel like I have an orchestra going with me.

Bullard: Hmm. That's wonderful.

Oliveros: Yes, it is. It's special!

Bullard: And will you be doing that in the cicada festival? You were saying you're able to mimic the cicada with your accordion...

Oliveros: Well it's not about mimicry so much as it is about... an affective... sensational expression. Not trying to be a mimic.

Bullard: It's more of a response...

Oliveros: More of a response, yes.

Bullard: Between hearing that bird in exercise 9, and hearing the animal in exercise 11, there is silence.

10. What is the most silent period you have ever experienced? Was it only a moment or very long? What was its effect on you?

Bullard: I think my most silent moments have been between birds and animals; in moments of waiting. Do

vou find silence near animals?

Oliveros: Oh, yeah! I think so! They can become extremely quiet as part of their defense, for one thing; their stillness and their ability to blend with the environment –

The sound of a beeping... like a camera timer... or a microwave from two rooms away...

Some of them actually by changing their looks - like the chameleon, for example. But I think that's a very important aspect of being an animal, and as a human I've certainly done that myself – tried to become invisible, you know? (both laugh) And the invisibility is stillness, and quiet, on my own part. So that can be profoundly silent.

[pause]

I mean "silent"... there is no such thing as silence. Because that would be zero vibrations as an absolute. And if there were zero vibrations we wouldn't be here at all! But that... it's the convergence toward that I think of as silence.

Bullard: Hmm. What was your most silent moment?

Oliveros: Hmm... this is gonna take a little contemplation...

She laughs, leans back and closes her eyes... I listen.

Well, I had a moment on the throughway, going back home from RPI, it was about 2008, or 9, or something, and I wasn't well. I was feeling not so good, and I... umm... I went to sleep at the wheel. And so then there was the sound of the grating on the side of the highway to wake you up, and it woke me up and I had an immediate reaction, you know, to stop going off the highway!

Bullard: Yup.

Oliveros: But then the car went into a spin. And it spun around and around and around,

until I finally... it... I overturned, on the side of the road.

Bullard: Ahuh.

Oliveros: So I think there was that... in that

spin...

(exhalation and slight laugh)

...that was kind of a very silent moment! As I experience this... this whole... uh, "circumstance."

Bullard: Yup. Wow. Kind of a heightened awareness, I suppose.

Oliveros: Yes, definitely! So... and that's, I think, when you have a heightened awareness, when you experience the most... closest to silence. So, I went over; overturned, but I was fine; I wasn't wearing my seatbelt, but I was perfectly balanced – I was ready to get out of the car, but some nurse had stopped, and she came and she took my head and she said "don't move!" She wouldn't let me move, and the ambulance arrived and they took me off to the hospital... my car was totaled.

Bullard: But you were fine

Oliveros: Ya! (slow laughter...)

Bullard: Traffic. Silence. It reminds me of that John Cage quote; "The Sound experience I prefer to all others, is the experience of silence. And the silence almost everywhere in the world now, is traffic... if you listen to traffic, you see it is always different."

Are your silences always different?

Oliveros: Well, it's more appropriate to say "quiet." Both "quiet" and "silence" are pejorative – they can be commands – we don't quite like to be commanded... now what was the question?

Yes. I think so. As much as you would like to repeat an experience, you really can't. There is always something a bit different. For me quiet is pleasurable, for the most part... although it can be ominous as well.

Bullard: Yes, it can!

Oliveros: Right?!

Quiet falls

Bullard: Before we talk about your new opera, is there anything else you would like to say?

Oliveros: Well... only that one of my favorite sounds in the world is the sound of the loon!

Bullard: Ah!!

Oliveros: Yeah, you know, on a lake in the upper North East – it's such an amazing sound, you know? I love that sound!

Bullard: Yes, it is amazing!! Do you remember the first time you heard it?

Oliveros: Mmmm. I don't know if I can retrieve that now. You know, it's been quite a while ago! But I think it was up in the North East I first heard it. They are also out on the Sound near Seattle; near Port Townsend, actually – I've been there when there's lots of loons about, which has been nice.

Yes. I like that... very much.

Pauline Oliveros and Ione are working as partners on their new opera, The Nubian Word for Flowers. Ione, writer, Creative Director of Deep Listening Institute, and improvisational sound and word artist, joins us via Skype for the rest of this interview.

The sounds of Skype messages and failed calls fill the spaces as we wait...

Oliveros: You know, she had a meeting... Oh! There she is! And Ione's face fills the screen.

Oh, you know what I look like!! Here, look at Helen... hey, you are very back-lit, actually!

Ione picks up her laptop, and carries it from the window seat to the other side of the room, and settles into a soft chair. The line isn't great. Some pops and crackles, but good enough.

Bullard: *The Nubian Word for Flowers* looks like it's going to be spectacular. Could you tell us a little about the story and it's naming?

Ione: Well, I have been travelling a great deal to Egypt in my life and, particularly during my first trips there during the mid-80s, I was very taken with a very beautiful island that is called *Kitchener Island*, that is in Aswan, in upper Egypt. It's an island full of beautiful flowers and plants of many different species. Some years later, Pauline and I were performing in Canada, in a town that was called Kitchener, Ontario. So I was a little bit curious about the title and looked it up to see whether it was the same Kitchener, and as it turned out it definitely was! ... I was starting to learn all sorts of amazing things about Field Marshall Horatio Kitchener... I was intrigued by his story, first of all because of the flowers, because he was an extraordinary botanist; very gifted, and among botanists was known because he saved many species that would have been lost. And so, the interesting dichotomy of this man who was a very "excellent" - if we can use that word -Commander, Chief and Secretary of War, as well as a very brilliant person with flowers.

This Kitchener story is an animal piece; it stands up for non-violence to animals as well as humans. And I'm very much inspired by the Nubian diaspora that began long ago, in the Victorian era. So I'm very much connecting to people's right to have homes and to stay in their homelands. The cows relate to this area that is now in a state of diaspora, [it] is actually the origins of what we know of Egypt today, going back to the

Neolithic... caves with beautiful pictographs, colors, and cows – cows are certainly the symbolism of when they [the Nubian people] began to settle – they were moving around but they had cattle that could sustain them.

Pauline asks Ione to say a little more about the animals.

So, in the opera, animals are extraordinarily important - cows, horses, camels, and elephants. Elephants are extremely important to the story – they are crucial. At the point in history when he [Kitchener] was there, they were not in Egypt. But they are in the story because they used to come that far [in the old world], and cover Egypt. And also because what came to me when I was in Kitchener, Ontario [when starting to research and write the Kitchener story], related to elephants as well. I was hearing the voices of elephants saying "we will survive this." I didn't know exactly why that was coming, but it was calling like a text. The elephants were communicating over these huge distances and, in this case, also huge distances of time. They were telling the other elephants they would survive. Even though I knew there were no elephants on that island [Kitchener Island], or on Elephantine Island for that matter although the rocks look like elephants 131... but I knew this conversation was between isolated aroups of elephants.

So, that was a few years ago. And then this year [picking up the research], I found that a whole group of elephants had been located in the Sudan [discovered in 2007] – they had no idea they were there before; there are huge herds of elephants surviving in a place that they don't usually survive in. It's not geared toward elephants, but they are there! And so it felt to me like those were my elephants! They had survived.

Bullard: Wow, that's an extraordinary experience! And so what about the place of animals in your music and sound design – how are they used and where do their voices come from?

Oliveros: Elephants and Cows play roles in the production through immersive video and sound. You will hear the sounds of these animals – elephants' infra sound radiating through sub-woofers, trumpeting, and stampeding. And cows.

lone: Pauline is working with that and we're still connecting with Cornell University for many of those sounds. But they will be integrated in various different ways. The elephants, in my original inspiration, are speaking. So they may [also] in some ways speak – if we can do that without it being corny! – or it may be simply that we hear their sounds and will know that is what it means.

A silence falls. And, I know we are contemplating "knowing." We are staring at each other, through our computer screens, across space. We are silent. Even though there is so much more to say, so much more...

Bullard: Thank you, both, so much.

My mind is swimming; full and empty. The snow falls. Silently.

Endnotes

- [1] Interview with Alan Baker for American Mavericks®, 2003.
- [2] Software for People, p.18
- [3] Elephantine Island was named for the rock formations that reminded Ptolemy's Greeks of elephants clambering up out of the waters of the Nubian Nile valley.

Helen J. Bullard is a research-based British artist, currently living in New York. Her practice tells stories about animals and their intersections with human cultures and industry, encompassing such topics as biomedicine and the horseshoe crab, chronic wasting disease in white-tailed deer, and concepts of the "Dog-like". In 2009 she organized the conference Pidgin Language: Animals, Birds and Us to coincide with her solo show Animus Flux, and residencies have since included University of Gothenburg; The Department of Experimental Psychology, University of Cambridge; Lighthouse Digital Culture Agency (Arts Catalyst / Wellcome Trust), and University College London (UCL) (SymbioticA, Arts Catalyst, Synthetic Aesthetics). Bullard is currently studying inside the Electronic Arts Graduate program at Rensselaer Polytechnic Institute (RPI), Troy, New York, where she is teaching assistant to Professor Kathy High.

Pauline Oliveros' life as a composer, performer, and humanitarian is about opening her own and others' senses to the many facets of sound. Since the 1960's, she has profoundly influenced American music through her work with improvisation, meditation, electronic music, myth, and ritual. Many credit her with being the founder of present day meditative music. All of Oliveros' work emphasizes musicianship, attention strategies, and improvisational skills.

She has been celebrated worldwide. During the 1960's, John Rockwell named her work Bve Bve Butterfly as one of the most significant of that decade. In the 70's she represented the US at the World's Fair in Osaka, Japan; during the 80's she was honored with a retrospective at the John F. Kennedy Center for the Performing Arts in Washington, DC. The 1990's began with a letter of distinction from the American Music Center presented at Lincoln Center in New York, and in 2000 the 50th anniversary of her work was celebrated with the commissioning and performance of her Lunar Opera: Deep Listening For tunes. The Foundation for Contemporary Arts recently named Oliveros the winner of the John Cage Award for 2012, a prize made biennially in recognition of outstanding achievement in the arts for work that reflects the spirit of John Cage. Oliveros is currently a Distinguished Research Professor of Music at Rensselaer Polytechnic Institute.

Oliveros' work is available on numerous recordings produced by companies internationally. Sounding the Margins—a forty-year retrospective, will be released soon in a six CD boxed set from Deep Listening.

FIONA WOODS: animal OPERA

animal OPERA, an exhibition of new works by Fiona Woods, is the outcome of an artist residency at the Leitrim Sculpture Centre in Mannorhamilton in October 2012. For her return to the gallery space, Woods combines made, found, organic, mineral, animal and sound elements in an unfolding visual and musical score. It is Woods' first experiment with sound, she explains: "The sound element is crucial, because sound morphs in response to space, it infiltrates a space, and is automatically adapted to each listener who is in motion through the space. That suggests a level of non-human agency, if one is to think of it in terms of sound waves and the electricity necessary to generate that sound. I also like that sound is a communal experience, and one shared by multiple beings". Interview Questions by Michaële Cutaya

n the occasion of an artist residency at the Leitrim Sculpture Centre, Fiona Woods has made a return to the gallery space. In recent years she had developed alternative modes of practices through the non-specificity of public spaces, or drawing upon the limit between art space and non-art space. For Common?, for instance, she disseminated images and text through posters, in advertising space, art spaces and random placement in the streets which were then documented. She has also edited supplements on specific art projects to be inserted in regional newspapers, and curated and conducted public art projects through discussions, meals and walks as form of artistic practice. So her return within the safe – or secluded – haven of the gallery space is not immaterial. It remains that the white cube format offers possibilities that few other spaces do: an opportunity for the artist to explore the subtleties of relationships

between objects, materials and moving viewers, which Woods made the most of.

animal OPERA is conceived as a choreography of elements – made, found, organic, mineral, animal, sounds – through the space of the gallery. The gallery is split in three communicating spaces with each a different visual tone, and all pervaded by the sounds of an audio composition Field of Relations.

The room on the left of the entrance, with the overall title Field of Relations (2) is an installation of elements, some simple geometrical form like spheres of plaster, other complex like a faceted volume made of welded bronze. There are also oil paintings and drawing on gesso board and handmade pieces of glass. What stop us considering these elements separately are blobs of expanded foam that are not only appearing on the wall, but also on the drawings and paintings, which have a



Fiona Woods

Field of Relations (2), 2012. Dimensions variable. Installation of elements including bronze, bronze wire, plaster, expanded foam, paint, pencil, oil and gold leaf on gesso on 4 wood panels. © Woods



Fiona Woods *Icon*, 2012. 25cm x 14cm approx. Oil paint and varnish on recycled wood. © Woods

random, organic look about them. The other component that affects all others and brings them in a "field of relations" are five bronze wire crisscrossing between the walls like a musical stave in space: which turn all other elements into unstable musical notes – according to where you stand, they change position in relation to the stave, thus could be played differently each time.

In the essay accompanying the exhibition, Woods mentions New Materialism and Assemblage Theory, which "considers bodies, objects and things in motion and in relationship". Drawing from late 20th century French philosophy, most particularly the work of Gilles Deleuze and Felix Guattari, these new movements in philosophy re-articulate the notion of agency away from an essentialist and totalizing understanding. Assemblages non-essentialist: they are real and historically contingent, not an ideal form here we might think of the shapeless blobs of foam as stand-ins for non-ideal, but also about the randomness of the arrangement. And assemblages are not seamless totalities, but amalgams of heterogeneous parts which is a way of reading the entire exhibition, but maybe most specifically Field of Relations (2), with its variety of forms, from complex made drawing, to sphere of plaster, which are not allowed to stand in their respective "purity" of form, but are "corrupted" by the foam: necessarily heterogeneous. Within the larger context of the exhibition and its exploration of the non-human, representation, this "decentralisation" of the object, is a way of staging a non-anthropocentric reading of the world.

The room on the right of the main space functions somewhat more conventionally with a display of autonomous artworks, and the emphasis is more animal than operatic. The three artworks present us with three ways we humans might "represent" animals. The first, *Icon*, is a painting of a powerful bear on a piece of salvaged wood that harks back to cave paintings and how animal power might be bestowed on humans through representation. The second – double – work, *Lens (Cranefly)* 1 & 2, are cast glass

pieces with drawings of magnified craneflies seen through. The craneflies are visibly squashed: the lens, scientific means of observation, is also the cause of death of the observed - a gold rim around the craneflies also suggests a spectacular dimension to the scientific motivations. The third piece in the room and the most dramatic one, Bare Life, is a two-part piece of a makeshift scaffolding on which is hung a taxidermied crow. On the wall, a canvas with embroidered linen, read "Only the animals recognised our humanity." This piece, although it has hint of superstition and witchery, more directly addresses the casual cruelty with which humans treat other species and make use of them - here as a literal "scarecrow."

The central space of the exhibition brings the animal perception/reception and the idea of de-centered assemblage together. The left of the front room is occupied by a series of three archival digital prints with sandblasted glass, Blind Spot (1), (2) and (3). They introduce the sound element through a visual form as they take for subject the bat's perceptual system of echolocation, which produces image through sounds reverberation. Whereas it might be interesting to find out what might a blind spot be in such a system, the blind spot of the title more likely refers to humans inability to see through the other species' point of view. On the right hand side is an ink drawing on tissue paper, Perceptual Worlds 2, whose pattern follows that of starlings' murmuration. The dots also echoe the blind spots on the print, and can be seen in various size formation on other objects, and directly on the wall, becoming an element of dissemination throughout the space.

The last piece is really two, as it is both an installation of heteroclite objects and an audio composition, respectively *Field of Relations* and *Animal Opera*, but in the gallery, we hear the second through the audio apparatus of the first. Thus *Field of Relations* is composed of elements made of pallet wood, cardboard, steel, glass, vinyl encasing various size speakers as well, as an amplifier. The larger pieces have different





Fiona Woods

Bare Life, 2012. Dimensions variable. Wood, taxidermy, rope, machine embroidery on found linen, mounted on canvas.

© Woods

casings of wood, cardboard and steel, whose raw materiality attract the attention onto the materiality of the sounds. *Animal Opera*, coauthored with musician Andrew Collins, is made of human and animal voices, as well as natural and instrumental sounds. In her presentation of the piece Woods speaks of locating "the human in a living and material continuum" – the score for the human voice include Thomas Berry's ten principles, *The Origin*, *Differentiation and Role of Rights*, which set out legal rights for all living creatures. The artist develops further on the importance of sound in the exhibition:

The sound element is crucial, because sound morphs in response to space, it infiltrates a space, and is automatically adapted to each listener who is in motion through the space. That suggests a level of non-human agency, if one is to think of it in terms of sound waves and the electricity necessary to generate that sound. I also like that sound is a communal experience, and one shared by multiple beings.

The sound piece presented in the Leitrim Sculpture Centre is only an extract of the longer audio composition which will be broadcast on a web radio station, Curious Broadcast, during 2013. Animal Opera, the audio and the exhibition presented here, are not thought of as a final form, but one amongst many which are yet to unfold – and this is the title that Woods is giving to future manifestations of the work, Unfolding Opera. The work also resonates with some other manifestations in the artworld, in introduction to dOCUMENTA (13), for instance, Carolyn Christov-Bakargiev writes about the exhibition space in Basel:

...it is rather the space of relations between people and things, a place of transition and transit between places and in places, a political space where the polis is not limited by human agency only, a holding space, a committed space, a vulnerable space, a precarious yet cared-for space.[1]

Endnotes

[1] Carolyn Christov-Bakargiev, "The dance was very frenetic, lively, rattling, clanging, rolling, contorted, and lasted for a long time" dOCUMENTA (13) catalogue 1/3 p. 44

More information on the exhibition can be found here: http://fionawoodsartist.wix.com/animalopera#!

And on Fiona Woods' other projects here: http://www.fionawoods.net/

Fiona Woods is a visual artist based in Ireland. Her practice includes making, writing, curating teaching. Woodsoperates within an expanded circuit for the production and distribution of cultural materials using public space, social situations and/or the institutional site of art as appropriate. Recent projects include: Yak Yak; rural art dialogues, 2013, an international project co-curated with Ian Tully, Swan Hill, Victoria, Australia; City (Re)Searches:experiences of Public-ness, 2011 - 2 013, a cultural research project in four European cities; Lines in the City, 2013, a performative research action for Belfast with Susanne Bosch. Recent exhibitions include; Common Ground, 2013, Occupy Space, Limerick, curated by Barry Foley; animal OPERA, 2012, Leitrim Sculpture Centre, Manorhamilton, Co. Leitrim; Haptic Interfaces, 2012, Koo Ming Kown Exhibition Gallery, Hong Kong, curated by Tricia Flanagan. Woods regularly works in a co-productive capacity with others under the heading collection of minds.

www.fionawoodsartist.wix.com/collectionofminds

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THE SCANDAL OF THE SINGING DOG

In Alexander Raskatov's opera A Dog's Heart (2010) a famous eugenics surgeon replaces a stray dog's pituitary gland and testicles with those of a dead alcoholic criminal. As the singing dog mutates into a man, the anarchy that ensues breaks with the history of the onstage canine who is always silent. Based on Mikhail Bulgakov's novel written in 1924, this radical new opera is a precarious hybrid of songs, dogs, bio-science, politics, vivisection and Bolshevism. The acoustics at work here are entirely human. But there is an opportunity to think about how we have represented the living experience of dogs whose silent presences run through contemporary and historical arts and performance practices. This Russian dog-man abandons his traditional role as faithful hound and declares, in a strong tenor voice, his indifference to the human.

Text by Austin McQuinn

t the end of Alexander Raskatov's opera A Dog's Heart (2010), the figure of a dog is lying at the feet of his master in front of a warm fire on a salubrious drawing room stage set. In his short on-stage life this stray dog has been homeless, starving, scalded with boiling water and left for dead. He has been rescued from the streets by a famous eugenics surgeon, Professor Preobrazhensky, who replaces the dog's pituitary gland and testicles with those of a dead alcoholic balalaika-player with a criminal record. Following the surgery the dog, named Sharik, mutates into a man, becoming Comrade Sharikov. While he continues to live with his surgeon-father, Sharikov gets a job as Head of the Sub-Department of Moscow Pest Control. His anarchic vandalism, womanizing and vodka drinking quickly become a serious problem for the surgeon whose bourgeois status in a newly emerging Soviet Russia is precarious enough. The surgeon and his assistant soon

decide to reverse the surgery. The operation is a success. In this last scene of the opera Sharik, now reverted to a mongrel dog, considers his fortune at the feet of the kind, sausage-providing master and decides that in the end, being in the drawing room with the human is better than being out in the Moscow cold. He sings, "I'm so lucky...simply incredibly lucky".[i]

Raskatov's opera is an adaptation of novella A Bulgakov's Heart (1924), a short satire of the growing pains of Bolshevik society. The work was immediately banned and unpublished in Russia until 1987. The English National Opera (2010) production interpretation Raskatov's was commissioned from the composer by De Nederlandse Opera in Amsterdam. A dog puppet was created for this ENO/Complicite production by Blind Summit Theatre and was inspired by an Alberto Giacometti bronze sculpture of an emaciated, almost skeletal

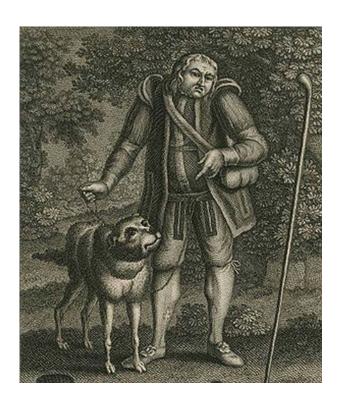


Alexander Raskatov

A Dog's Heart, performance, ENO, London, 2010

dog (1957, Collection MoMA New York). So as it lies there on the stage in the beginning (in agony) and at the end (in ecstasy), it is already twice removed from any direct sense of dog-ness as a puppeteer's translation of an artist's impression of a dog in another time and for a different purpose. Giacometti's sculpture is a complete work of visual art in its understanding of what it might be like to be a dog. The grey puppet of Complicite's studio lacks substance with its barely-there bony body. It is difficult to see on stage. A gang of puppeteers is in constant attendance in the contemporary fashion as they manipulate the puppet's every move. Unlike a struna marionette, this grey object's stage presence is very much diffused by its design. Physically this version of Sharik doesn't stand a chance at transcendence. But acoustically he is a revelation.

From the very first appearance of Sharik it is with his voice that he claims the stage. For the first Act the composer has given the dog's character a double voice soprano and counter-tenor. As the puppet growls in anger and cries in pain in equal measure, these two voices circle around him and establish the complex persona that is to become Sharikov the dog-man anarchist. From the outset Raskatov is going against the grain of the conventions of the opera house. In this work the main character is a scalded feral stray dog. The prima donna soprano is wandering around in a trench coat and galoshes barking into a megaphone and the only reprieve is a sweet-voiced counter-tenor whimpering about sausages as the snow falls on a back street in nineteen-twenties Moscow. In the finale. writes **Edward** 'man Seckerson. and beast become indistinguishable and images of Soviet workers are superimposed with those of dogs like Sharik and a whole clutch of megaphones turn the chanting into a bestial wailing.'[iii]



Mr. Yates inn the character of Launce with his dog Crab, from Shakespeare's Two Gentlemen of Verona. Engraving by Henry Roberts after a design by Thomas Bonner. The British Museum.

The animal acoustics and 'bestial wailings' at work here are entirely human in their creation and interpretation. Through the singing animal in this radical new work, the artist composer is immersed in a precarious hybridization of songs, dogs, bioscience, politics, vivisection and Bolshevism. In a musicological context he not only tests the boundaries of the opera house but also stands apart from a community of composers who have been invested in a movement towards the more acutely zoomusicological where (recorded) animal acoustics play a literal re-sounding part. Their work is in many ways in debted to Thomas Sebeok's influential scientific writings on animal communication and on 'bioin particular (Sebeok, acoustics' 1965). Composers like Jonathan Harvey R.Murray Shaffer have been carving some space for musical events that reflect their intense interest in animal acoustic presences and absences. Theirs is a serious concern about the diminishing ecological status of the sound world by which animals identify their environment, as renowned musician and naturalist Bernie Krause's most recent book has SO thoroughly investigated.[iii] More recently Bjork's *Biophilia* (2011) explicitly reaches beyond human acoustics in her imagined interpretation the sounds of crystals, atoms, micro bacteria and planets moving and forming in relation to each other – an impressive example of what could be termed zoomusicosmological thinking and making.[M]

Alexander Raskatov however shows no particular fondness or support for his singing subject. Indeed İS animal it Sharik's indifference to the conventions and concerns of human life that ensures his survival and in a further twist it is also the human's disregard for the dog's voice when he does speak and the rejection of his position and his needs that ultimately guarantees this stray animal the security of a domesticated home. But more than anything it is Sharik's vocal persona and what he has to say that makes him stand apart from his canine onstage brethren.

The history of dogs on stage is one of silence and reliability - dogs can be relied upon to stand still, walk, jump and most importantly remain silent. Most animals in performance practices including circuses share this trait of convenient muteness while being spectacularly symbolic. This holds for both living and artificial animals. Onstage animals rarely raise vocal objections to their role in the performance because they have been most likely trained for the task. Dogs on stage especially prized are spectacularized because they are at once both animal and companion, live and imagined, domestic and theatrical. William Shakespeare was acutely aware of the seductiveness, folly and special fondness for human-canine connections when he put a dog on stage in The Two Gentlemen of Verona (1590). The history of the character of the dog Crab is a genteel usurping of the rules of theatre that revolve around the suspension of disbelief. We (secretly) know that the dog is yawning and wagging his tail in the fullest dog-knowledge that he is still himself or alive- on stage, in the street, in this stage living room, in his own living room. For Bert O. States the thrill of the onstage dog like Crab is how it plays with illusion. States writes that the theatre may think it has stolen



Alberto Giacometti

Dog, bronze, 1951 © 2013 Artists Rights Society (ARS), New York / ADAGP, Paris

something from the real world to show how remarkably it can cope with this level of risk. However the audience is more excited by how 'the theatre has, so to speak, met its match: the dog is 'blissfully' above, or beneath, the business of 'playing' and we find ourselves cheering its performance precisely because there isn't one.'[N] From Crab through to René de Pixérécourt's popular play The Dog Of Montargis (1814) - where a silent dog defends a mute man wrongly accused of murdering a knight – even up to Uggie, the dog star who saves the main character from a burning building in Michel Hazanavicius's silent film *The Artist* (2011), dogs have been working long and hard on stage and on screen as lively allegories of fidelity to the human and by extension a living testament to

the human's benign but exceptional understanding of and control over the animal other.

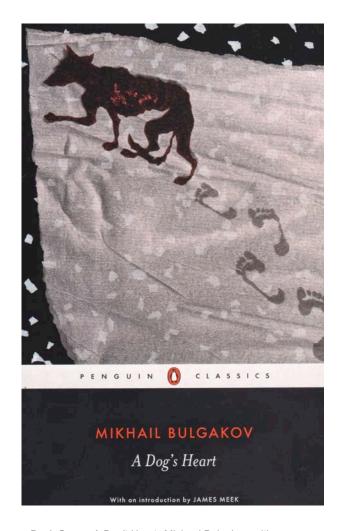
Silence is less of a feature of dogs in literature where talking-dog stories became classics for Cervantes, Hoffmann, Gogol, and Kafka. The comedic values that a dog might speak are secondary to the perspectives these literary autobiographical dogs have moral attitudes, taxonomies, social systems and some advice on the methods of how we humans might adapt to modernity. In Hoffman's story, the wandering stray ends up on the stage. The other talking dogs find various employments but invariably lose hope for humankind and return to a life on the streets. In Kafka's strange story of *The Investigations of a Dog* (1924) there is a moving portrayal of a young dog who has an unexpected experience of freedom by means of sound. By chance he comes across a gathering of seven musical performing dogs in a forest clearing. The event marks him as different to his canine community, which is not capable of even comprehending the aesthetic ritual of the secretive troupe of the Seven performing dogs. By witnessing the canine performance the young dog is badly haunted and his wish to find out more brings him to the verge of existence itself. At the end of the tale, narrated entirely in the first person, he declares with such poignancy that it is one thing to have known freedom through art/song but in order to survive he must keep his revelations to himself. Kafka's canine biography, like Bulgakov's, is so unique that it cannot be easily slip-streamed into the catalogue of Victorian dog 'auto-biographies' that had become so popular prior to the publication of these two eccentric dog tales. The trials devotions of and canine companions were a hugely popular genre of literature in the late nineteenth century where first person accounts of a dog's life and times are almost exclusively concerned with an old dog's courage, unconditional love and infinite loyalty. For Teresa Mangum the fantasy of the narrating animal is puzzling in this rather brutal period where stray dogs were beaten or shot on sight on the streets of nineteenth-century England. In conclusion to her essay Dog Years, Human Fears (2002), Magnum is not surprised 'that when mute or muted creatures speak, they speak in the voices of sentiment' expressing their fictional frailty after a lifetime of usefulness and obligation 'and a grim reminder that old age, like animal life, is a tableau that our culture prefers to see blind, silent and bathed in sentiment' - qualities that markedly absent in the are canine biographies of both Kafka and Bulgakov.[vi] Leaving Sharik's autobiographical archive aside for a moment it is worth examining two other principal aspects of his extraordinary life that shape and shade his vocal persona being a stray animal and being a laboratory animal. The figure of the stray dog in arts and



Alexander Raskatov

A Dog's Heart, performance, ENO, London, 2010

performance practices comes with layers of domination romance. heroism. and domestication that have been influenced by actual canine experience or have in turn shaped attitudes toward the lives of some particular dogs. In art performances involving both feral, stray and domestic canids by artists such as Joseph Beuys, Oleg Kulik, Zhang Huan (all of which have an acoustic bias) and most controversially Guillermo Vargas's installation with a dying (silent) street dog in Nicaragua in 2007, the canine figure is almost always loaded with a romantic agony. The fetishizing of the angry or silent canine martyr extends beyond the gallery and into social spheres that very often are linked to science. A famous example is Laika, another Russian stray terrier who became the first living creature to orbit the earth (though not to survive the mission). She



Book Cover, *A Dog't Heart*, Michael Bulgakov, with an introduction by James Meek. First published in Russia in 1987, Penguin Classics 2007, cover illustration by Matt Dawson

followed on subsequent Sputniks by two more strays, Pchyolka and Mushka. The mission programmers reckoned that if a young dog could survive two or three freezing Moscow winters on the streets it was more than prepared for outer space. Laika quickly became an idol of the new soviet nationalism that the space programme sought to generate. As the dog-most-ultimate in her fidelity to the human project, Laika's was seen as a kind of sacrifice in the name of science. Indeed the term 'sacrifice' is used by experimental biologists in laboratories today as the technical term to describe animals that are fatal specimens and carries with it some metaphorical references to ritual transformation and the 'making sacred' of physical repeated actions.[vii] Therefore Laika is precisely the type of found stray dog that became an immortalized and capitalized

commodity and part of an emerging animal social history that Donna Haraway describes 'instrumental relations the between laboratory animals and their people.' In the context of considering dogs as workers in all kinds of situations, not just in art or theatre but in the field as herders, in airports, as rescue workers, in rehabilitation, guiding the blind, anticipatina epileptic seizures and psychotherapeutic assistants for trauma victims, Haraway considers the laboratory dog as perhaps the most hard working social animal of all.

In Haraway's example of laboratory animal labour, the scientific race to be the first to clone a dog culminates in 2005 at the centre for embryonic stem cell research at Seoul National University (SNU) which where over a thousand dog embryos were implanted into one hundred and twenty-three bitches resulting in three pregnancies and one living pup, 'SNUppy', an Afghan Hound clone who has since sired several litters of pups out of cloned dams - all of whom are being trained to work for the Korean state as sheep herders and in various positions of national security. In Haraway's estimation, Snuppy's dubious past and uncertain future reveal 'the thick cross-species travel between agribusiness research and human biomedicine often obscured in the U.S. "ethical" debates over human stem cell technologies and imagined therapies or reproductive marvels.'[viii] Snuppy, estimation joins a long list of stray dogs that have made remarkable contributions to bioscientific events that in turn have become entangled in human socio-cultural expressions such as literature and art. It is under the canopy of these kinds of historical narratives and cross-species circumstances that I place the operatic Russian dog-man and his contemporary on-stage surgical moment as relevant to this straying in and out of laboratory-literary dog discourse.

When considering this dog Sharik and his role in the Professor's experimental surgery (where the surgeon replaces his human patient's organs with animal organs in a process of 'rejuvenation') Yvonne Howell raises



Alexander Raskatov *A Dog's Heart,* performance, ENO, London, 2010

the subject of eugenics as the issue at the centre of concern for Bulgakov, a writer with a personal interest and training in medicine and familiar with the emergence of eugenics practices in post revolutionary Russia, full of the promise of biological rejuvenation for a new healthy society. 'Biology is Destiny' she writes in her essay for the Slavic Review (2006) and the achievement of the experiment is the ability of the dog (and perhaps by inference, the peasant underclass) to speak for itself. There is a problem however when this 'speaking for itself' ultimately becomes the undoing of everybody - the surgeon, the assistant, Sharikov the dog-man and even the new bureaucracy that tries to integrate him into its voluminous pages of authority.

Howell identifies how 'the problem is that Sharikov, as a particular example of the miraculous leap from animal to man, opens his mouth initially and primarily to spew out

obscenities.'[ix] Historically the fundamental facts of language acquisition declares the human and in turn reveals how so-called language-less animals have been and continue to be uniquely useful in establishing strata and schema Of exceptionalism.[x] When Sharikov the dog-man usurps the miracle of language by only speaking in profanities he scandalizes the surgeon's central philosophical debate on whether genius is genetic, inherited or cultivated. In a further affront to humanism, Sharikov debases the alorified aift of language by speaking his first vulgar word on January 6th, the feast of the Epiphany.

Language and its origins quickly becomes less of an enigma for the surgeon and his assistant, Dr. Bormenthal, and more of an ethical nuisance. The urgency of the drama becomes not how to teach the dogman any more words but to find ways of

shutting him up. For Bormenthal the drive of the project was rooted in their bio-scientific speculations on what makes a genius like Spinoza – what are the biological constituents that produce exceptional human thinking? But Bormenthal has very little time to speculate on these matters. The reality of the physical horror and chaos of their laboratory creation dispenses with his philosophical meanderings. Bormenthal goes so far as to say that Spinoza was just a human man and no amount of eugenic manipulation can guarantee genius. This dog-man Sharikov is therefore an unknown philosophical entity.

Even though we have heard the dog's own rather rough view of the world (in both Chapter One and Act One of the book and the opera respectively), Sharikov has clearly inherited this foul tongue from his biological donor, the criminal drunk Chugunov whose pituitary gland is now active in the dog-man's brain. As Yvonne Howell concludes that 'finally the problem of language proves to be a powerful illustration of the futility of applying existing eugenics solutions to create the New Soviet Man.' [xi] There is no option left but to abandon the whole enterprise before Sharikov says anything more that will threaten the surgeon's reputation and social status in the context of the newly emerging social order. There just isn't any literal room accommodate or domesticate this kind of human-animal under the Housina Laws of the administration nor is there bureaucratic system in place for anyone to be entrusted with the concerns and ambitions of a talking dog.

When Sharikov announces that he is engaged to his Secretary at the Moscow Sub-Department of Pest Control and that he intends to start a family, the surgeon wastes no more time. Sharikov is cornered in the professor's surgery and meekly accepts his fate. In a tender turn it seems that the burden of humanity has been weighing too heavily upon him in spite of his efforts to be a good citizen and comrade. Following even more violent surgery he reverse-mutates into being a dog, (in a remarkable ten days). In the onstage reversal of Sharikov's biological

identity, the surgical procedures carried out on his brain and testicles are a frenzy of whitecoated chorus men and women descending on the animal body. The stage quickly becomes flooded with blood, saturating the beautiful Persian carpet of the surgeon's bourgeois apartment. In the novel, it is even more chilling and even uncomfortable to read when the professor and his assistant begin 'tearing Sharik's body apart with hooks, scissors and some kind of clamps. Out slipped the pink and yellow tissues, weeping bloody dew. Fillip Filippovich twisted the knife in the body and then cried 'Scissors!" [XII] By giving the screaming animal the voice of a counter-tenor (a vocal technique with its own testicular history), Raskatov shows that he is well aware of these uses and abuses of both the human and animal body and voice for creative purpose. Opera has historically been considered a dangerous social practice (by religious institutions) or as a frustratingly beguiling nonsense (by philosophers such as Rousseau and Nietzsche and recently Žižek and Dolar) mainly because of the threatened loss of intelligibility of the text and the casual regard of composers for the absolute power of the Word. This threat is most in evidence when representations of animals start singing on stage. The project becomes even more scandalous when the singing animal starts making sense.

Operatic animals are usually to be found outside the human world - in Wagner (Siegfried), in Delibes (Lakme), in Mozart (Die Zauberflöte) and spectacularly Braunfels (*Die Vögel*) – and in keeping with opera's classical or Greek origins, animals function very effectively as non-Greek or barbarian voices within the drama or crisis on stage. In Lakme for example, the girl goes out to the forest to calm the beasts with her infamous 'Bell Song'. It is invariably the singing female human voice that is quelling the barbarous multitudes. Barbarous is an echoic word reflective of strange tongues. But being barbarian is different from being an outsider.

Walter J. Ong's definition of barbarian is 'more subtle and human, a cultural relationship focused in linguistic

behaviour.'[xiii] Ong's term, 'the barbarian within' is focused on speech and language ability where 'the barbarian is defined not in extrahuman geometrical terms', such as who is and who is not inside the city walls, 'but in terms derived from human life itself, from the activity eminently human Of communication'. In this context I consider the medium of opera as an exciting and controversial barbaric practice where human speech and language are both distorted and detached from meaning through singing, especially where the vocal high note gained ground by baroque audiences seeking more extraordinary vocal virtuosity, or what Michel Poizat calls 'the angels cry'. The rapid development in early opera for foregrounding the soprano and castrato voices usurped the original 'Greek' ambitions of the Florentine renaissance intellectuals for 'sung speech' and instead, Poizat says, 'the distinction between humanity and animality collapses. The prelapsarian indifferentiation of the human and the animal comes at the cost of renunciation of speech: Orpheus communicates with animals through his singing and the angels communicate among themselves without the intermediary of the spoken word.'[xiv] By giving the stray dog, Sharik, both a soprano and counter-tenor double-voice Raskatov is making his point the creature only becomes a monster when he beains sinaing with the voice of a man.

What is unique to this particular animal in A Dog's Heart is that, even though he has explicitly made and broken promises to everyone and anyone, even to himself if he were to get through this ordeal, his dog's voice (and double-voice) and therefore a suggested consciousness remains unchanged by his traumatic experience. The last trace of his human self is his voice. In a moving scene, bandaged and stitched together, he rises up on his hind legs for one last time and 'barks suddenly' at the household inspectors saying 'Don't use rude words' when they aggressively come looking for the unregistered resident of the surgeon's apartment. [xv] These are the last human words he says aloud – an instruction on how to speak, how to behave vocally. But as a dog giving instruction, his final act of defiance is closer to his stray under-dog nature than anything he said in his anarchic struggle to become a good human comrade - it is a matter of social manners or in Seamus Heaney's words 'the government of the tongue.'[xvi] This is remarkable theatrical aspect of this character. The social drama, deaththreats, love interests and species-altering surgical procedures do not change the speaking subject of these dramatic traumas. There is a transformation but it is a futile one. There is only this individual dog with his own principals from beginning to end. Sharik /Sharikov is the ultimate 'barbarian within' - a creature that is both sensible and anarchic but one that has no interest in human affairs. He wishes to either be left alone or die. His relationship with Professor Preobrazhensky is entirely opportunistic - if it ended tomorrow, Sharik would most likely shrug it off as a waste of time.

The composer's lack of sentimentality in the musical double-voice of the creature and his determined allegiance to the original text ensures that even the most fervent of doa welfare activists might struggle to find political support for this animal. When Sharikov the man-dog-tenor starts to assert his needs and his will, the mood is high for some animal-asvictim payback. It doesn't arrive. As soon as Comrade Sharikov starts assaultina doctor's maid and terrorizing the cats of Moscow by rounding them up and making fur coats out of them, any remaining sympathyor even empathy- is lost (with hilarious effect). Even though Sharikov must pay for his barbarian chaos and rampant sexualizing of the boring civic job he was assigned to do, by being surgically reversed to 'animal', another promise of operatic tragedy is broken. Nobody dies. When Sharik awakens from the anesthetic he is singularly unimpressed with his renewed canine status. He more or less says, 'if there's a sausage in it, I might as well stay here in the professor's library - for now...'

The 'scandal' or profanity here is not that the dog Sharik suffered but that his suffering is of no consequence to him. [xvii] He



Alexander Raskatov *A Dog's Heart,* performance, ENO, London, 2010

breaks with the history of the onstage canine promise of stereotypical, silent obedience and loyalty and the potential for martyrdom. Even more scandalous is the fact that he is singing loudly about it and accompanied by an orchestra on the operatic stage at the Coliseum.[xviii] Raskatov's opera is ultimately declaring with characteristic irreverence that acoustic hierarchies are fragile. phenomenon of the voice emanating from the body, any organic or artificial body, can override or even dissolve the meaning of the words that are being sung and that this crying out is both human and animal at the same time. It's the acoustic exclamation that matters. the vocalized carnal becoming exterior, air-borne, and being heard even if oneself, human or animal self, is the only one listening. Singing is an acoustic statement of being - an aestheticized sounding-out of the self. It is what Walter Benjamin calls the 'creaturely' voice that

emerges 'from the mysterious interior of the organic' and which he maintains is the foundation structure of the genre opera.[xix] In 'A Dog's Heart' the voice of the animal is most radical in how he expresses his casual regard for what is happening to him. He is more aligned with Shakepeare's nonchalant Crab than any of the celebrated dog heroes of the stage or the obsequious Victorian biographies of the faithful hound. The opera in tune with Nicholas Ridout's notion that 'theatre's greatest ethical potential may be found precisely at the moment when theatre abandons ethics.'[xx] The ethics in relation to animal vivisection as an allegory for human political struggle in A Dog's Heart are certainly murky. No-one seems to be on anyone's side. But it is the break with the theatrical history of the silent onstage canine and its various biographically embodied promises of fidelity to the human project that mark this performance as unique in the

context of interpreted animal acoustics.

Bulgakov's story also separates itself from conventional allegorical animal tales by making the animal body and experience too present, too physical and too vocal to be just a symbolic trope, re-used time and again. In Erica Fudge's reading of the novel she wants to return 'the dog to the centre of the narrative, not so much where he belongs, as where he has always been' and she is adamant that 'the presence of the animal is meaningful in and of itself.' In her illuminating essay At the Heart of Home, she writes that, in literature, to regard the animal 'as only ever symbolic is part of the process of humanning; it reconstitutes the human even as it assumes the human to be a pre-existing category.' The narrative technique in A Dog's Heart is so complex however that to simply read the story (and the opera) as an allegory is to ignore something crucial. For Erica Fudge 'an allegorical reading that interprets the dog as always symbolizing something else silences the presence of the dog as the suffering centre of the story.' There is something unsettling in Bulgakov's text that ultimately, for Fudge, 'reveals the human to impotent, priapic, monstrous construction engaged in using animals as objects while acknowledging the closeness of humans and non-humans.'[xxi] In my reading of Raskatov's opera, I perceive that some of these imbalances of voices, silence, allegory, humanning and monstrous constructions are at the core of this operatic performance. The horrors of vivisection are so elaborately aestheticized on stage with its Russian choruses, stunning video projections and high tensile virtuoso singing and black humour that it facilitates the exposition of what Erica Fudge calls 'the most dislocated thing of all: the human.'[xxii] At the end of the opera, it is the bandaged dog that has found himself sitting in front of a warm fire at the feet of his discombobulated master in a salubrious drawing room set, singing, 'I'm so lucky, ...simply incredibly lucky, '[xxiii]

Alongside the complex and specific socio-cultural (Russian) human histories that are explored in this opera, there is also an

opportunity here to think about the details of the recent and historical living circumstances of urban and feral canines recently; to think about how we have imagined creatively and how we have represented acoustically them in historical contemporary performance practices. Both the novel and the opera emerge from a culture Of written imagined experience in literature and performance where the voice of the doa has always been invoked to talk about human life. But both of these works in print and on stage buckle these genres by challenging how we have appropriated dogs to articulate our fascination with what it might mean to be a human. However, within the elaborate scale baroaue ambition of A Heart something else is exposed creative limitations of our understanding of what it might be like to be an acoustic animal.

Endnotes

[i] Mikhail Bulgakov (1925, 2007) *A Dog's Heart*, London: Penguin Classics. p113

[ii] Edward Seckerson, *Raskatov, A Dog's Heart, English National Opera* (2010) http://www.independent.co.uk/arts-entertainment/classical/reviews/raskatov-a-dogrsquos-heart-english-national-opera-2140048.html

[iii] Bernie Krause (2012) *The Great Animal Orchestra: Finding the origins of Music in the World's Wild Places,* London: Profile Books pp222-226

[iv] Following Ronald Bogue's essay "Rhizomusicosmology" in *SubStance*, Vol. 20, No. 3, Issue 66: Special Issue: Deleuze & Guattari (1991), pp. 85-101 Published by: University of Wisconsin Press

[v] Bert O. States (1983) The Dog on Stage: Theatre as Phenomenon. *New Literary History*, Vol 14. No.2, On Convention:II p.380

[vi] Teresa Magnum (2002), 'Dog Years, Human Fears' in *Representing Animals*, ed. Nigel Rothfels, Bloomington: Indiana University Press. p.45

[vii] Michael E. Lynch (1988) 'Sacrifice and the Transformation of the Animal Body into a Scientific Object: Laboratory Culture and Ritual Practice in the Neurosciences' in *Social Studies of Science*, Vol. 18, No. 2 : Sage Publications Ltd, pp265-289

[viii] Donna J. Haraway (2008) When Species Meet. Minneapolis: University of Minnesota Press p.326 [ix] Yvonne Howell (2006) 'Eugenics, Rejuvenation, and Bulgakov's Journey into the Heart of Dogness', *Slavic Review*, Vol. 65, No. 3 (Autumn) pp.544-562

[x] Giorgio Agamben (2004) *The Open – Man and Animal,* California: Stanford University Press

[xi] Howell p.556

[xii] Bulgakov. p.46.

[xiii] Walter J. Ong (1962) *The Barbarian Within*, New York: Macmillan pp 260-265

[xiv] Michel Poizat (1992) *The Angels's Cry. Beyond the pleasure principle in Opera.* New York: Cornell University Press, p.44

[xv] Bulgakov, p.112

[xvi] Seamus Heaney (1990) *The Government of the Tongue*. New York: Farrar, Straus and Giroux

[xvii] In Judith Butler's afterword for the 1994 publication of Shoshana Felman's book The Scandal of the Speaking Body, Butler writes that 'the body is not "outside" the speech act.' So the body as an organism is recognized by both Butler and Felman as being 'within' the actions and activities of speech. Judith Butler expands the idea by declaring that the body is "at once the organ of speech, the very organic condition of speech, and the vehicle of speech, the body signifies the organic conditions of verbalization. So if there is no speech act without speech, and no speech without the organic, there is surely no speech act without the organic. But what does the organic dimension of speech do to the claims made in speech, and on behalf of speech?" (Felman, 116) It's an essential question and by extension, I am asking what does the organic dimension of speech do to the claims made in speech when the organic dimension, the organ of speech, is an animal body?

See Shoshana Felman (2003) *The Scandal of the Speaking Body: Don Juan with J.L.Austin or Seduction in Two Languages* . Stanford University Press : Stanford California.

[xviii] In Michelle Duncan's essay, The operatic scandal of the singing body: Voice, presence, performativity (2004) she addresses Shoshana Felman's treatment of J.L.Austin's exploration of performative utterance but in the light of the operatic phenomenon of the singing body and in the incomplete shade of Felman's barely there exploration of the Mozart opera *Don Giovanni*. The ultimate question for both Felman and Duncan is how does the *Don Juan* scandal of usurping the spoken bodily promise illustrate Austin's theories of language as an accumulative collection of speech acts, grounded in doomed-to-failure promises, but essentially performing a kind of aspirational but realistically unachievable hopefulness. See Michelle Duncan (2004) The operatic scandal of the singing body: Voice, presence, performativity. Cambridge Opera Journal, 16, 3, 283-304. Cambridge University Press.

[xix] In *The Origin of German Tragic Drama*, Walter Benjamin writes "The 'passion for the organic' which has long had a place in the discussion of the visual art of the baroque, is not so easy to describe in literary terms. And it must always be borne in mind that such words refer not so much to the external form as to the mysterious interiors of the organic. The

voice emerges out of these interiors, and properly speaking, its dominion extends in fact to what might be called an organic impulse in poetry...' (p.211. Trans John Osbourne. Verso: New York)

[xx] Nicholas Ridout (2009) *Theatre & Ethics.* Basingstoke: Palgrave Macmillan. p.70

[xxi] Erica Fudge (2009) 'At the Heart of Home: An Animal Reading of Mikhail Bulgakov's *The Heart of a Dog* in *Humanimalia* – Journal of human/animal interface studies, Volume 1, Number 1, Sept 2009. (italics added).

[xxii] Fudge (2009) p.9

[xxiii] Bulgakov, p.113

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CHASING ITS TAIL: SENSORIAL CIRCULATIONS OF ONE PIG

Through an analysis of the musical composition One Pig, by experimental musician Matthew Herbert, this essay examines how sensorial possibilities of sound, and to a lesser degree, smell, open up a synaesthetic space for a "listening for" and "listening with" an animal that is usually rendered invisible. Herbert's composition tracks a farm pig's life from its birth to its consumption, foregrounding through sound the multiple environments surrounding the pig. As the life of the specific farm animal is both "rendered" through music and into food in a concert hall, listener/spectators become attuned to the pig and its life, stimulating possibilities for a different sort of understanding of the non-human animal. The essay and the performance interrogate the complex and interconnected capitalist systems in which the pig and humanity are imbricated and the ways in which that system works to render the animal invisible. Through this essay the locus of performance provides a provocative means through which to bring an animal life into focus.

Text by Jennifer Parker-Starbuck

n May 9, 2012 I attended a concert version Matthew Of Herbert's experimental music composition One Pig, a piece he composed over the course of a year while recording the sounds of the life of a pig, "from birth to plate."[1] Although billed as a concert, visualising this one particular pig is what initially drew my attention to the piece. My interest in the use of pigs in performance and art practices had largely been from a visual perspective, and I have been interested in how pigs become symbolic stand-ins for issues around (human) bodies. [2] Over the course of the concert however, senses—hearina and smell—took precedence over the visual, and I began to perceive a shift away from the pig as representative of some human concern and toward the life of this pig itself. Although the emphasis in art and performance practices intersecting with non-human animals is

frequently visual, this emphasis often detracts from the lives and conditions of the animals themselves. In One Pig however, the sensory attunements are redirected to the aural and olfactory, opening these up as alternate strategies for addressing the animal for itself. As the non-human animal becomes an increasingly crucial component in technological processes, from animated to animatronic, from the robotic to the cyborg, the living animals and their conditions become less visible, and are rendered unseen to the viewers who delight in their technologized appearances on televisions and large screens. [3] In many televisual instances, for example, animatronic animals are used (in part to avoid abuse or undue stress to the actual animals) as successful stand-ins without viewers even noticing. In the ongoing technologization of non-human animals then, the practice of "rendering"

often leaves the living animal out of sight, but at service to capitalist concerns. Herbert's piece, *One Pig*, is a strategic intervention against this invisibility, I argue, even as the pig is ultimately killed and eaten in the process. By refocusing attention to sound, and to a lesser degree, smell, Herbert creates a space through which spectators listen for the pig, forcing attention on its life, environment, and death.

As a strategy for intervening into, what Nicole Shukin has described in book Animal Capital: Rendering Life in Biopolitical Times as, a closed loop of capitalbecoming-animal and animal-becomingcapital, [4 p.16] Herbert's One Pig forces a kind of caesura in the processing of a farm pig into meat. Shukin's astute analysis attempts to the expose gaps in increasing interrelationships between animals and capital, explaining that "while the balance of power seems, ominously, to be all on the side of capital, it is crucial to also recognize the amplified vulnerability of capitalism". [4 p.16] For Shukin, this vulnerability might play out through, for example, material signs of susceptibility to the system, such as mad cow disease or bird flu, which have the potential to disrupt the balance of power. Herbert, on the other hand, produces a gap between the largely invisible farm animal set for slaughter, here the "one pig," and the listener of the musical composition, whose understanding of this life is largely also invisible. For Shukin, the entendre implicit in the "rendering" is a useful concept with which to analyse these gaps:

> Rendering signifies both the mimetic act of making a copy, that is, reproducing or interpreting an object in linguistic, painterly, musical, filmic, or other media (new technologies of 3-D digital animation are, for instance, called "renderers") and the industrial boiling down and recycling of animal remains. [4 p. 20, italics in original]

While there may at first appear to be more

purchase in an analysis of the material conditions on which Shukin focuses (such as automobility, telemobility, and biomobility), it is my intention to explore how performance practices such as Herbert's might intervene in their own ways. While art, music, and performance might not seem to offer as much in terms of overt or political action as Shukin desires, these forms offer alternate sites for a sensory attunement with ideas of animality, and animals themselves, that have the ability to shift our individual senses of perception and perhaps responsibility towards these beings.

Herbert's One Pig complicates specific loop of animal-capital power—that of the industrial animal raised for food through its sensory intervention into this process. In so doing, Herbert foregrounds, I argue, the story, and the sounds, of the animal. Throughout One Pig, Herbert "renders" both as an artistic, musical pig composition, and as animal products—meat, skin for a drum, pig hoof candelabra, and more; his intention was to use the entire pig. Although completing the "life cycle" of this farm animal in expected ways—slaughtered to be eaten—Herbert also allows its life to be the source for an exploration of the process itself through sound. What I argue below is that in a complex synaesthetic sense, Herbert's musical composition (at least as read in its concert version) potentially re-wires expected notions of a farm pig's life, allowing for traces of it to remain, and that this rem(a)inder reasserts the animal's presence.

Matthew Herbert is an experimental musician whose practice-research work has led to compositions such as the 2001 Bodily Functions, or the 2005 Plat du Jour, an investigation of sounds of a wasteful food chain. [5] Herbert's previous work shows an interest in the biological, in consumerism, in of the sounds non-human, specifically, in how to translate concepts into sounds. The One Pia project almost follows organically from these previous pieces; from the sounds of the human body, to the sounds of the products of the food chain, it is perhaps logical to interrogate next



Herbert and Pigs, photo credit: Socrates Mitsios © Accidental Ltd

the sounds of the food itself. One Pig began with the decision to make a recording based on the life and death of a farm pig which Herbert purchased, visited, and recorded on the farm month after month. The results are a visceral, and at times difficult to listen to, translation of Herbert's encounter with the pig environments. and Although impressions are largely taken from the concert version (which has since toured across Europe), this essay will also rely on the recording and Herbert's own reflections about the process from his video documentation, "The story behind the album". [1] One Pig is structured through movements named for the months of the pig's life, from its birth through its butchery and consumption.

I frame this discussion through two distinct senses, sound and smell; both neurological triggers to memories, which work to provide a series of affective responses. Like Proust's Madelines or the song that can instantly transport you sensorially to an exact location from decades past, these triggers to involuntary memories are powerful performance tools. As I describe in the sections ahead, while the life of the pig is literally transmitted through "remains" are also transmitted through scent. In concert, this merging of the senses achieves a synaesthetic sensation, a kind of criss-crossing of senses. While not exactly describing the medical condition synaesthesia, "[a] sensation in one part of the body produced by a stimulus applied to another part", [6] this is more a confusion of feelings, a disorientating state of being brought on by sensory stimulation. The experience might be better described by Josephine Machon's playful analysis of (syn)aesthetics, which for her "encompasses both a fused sensory perceptual experience

and a fused and sensate approach to artistic practice and analysis". [7 p.14] Although she is specifically referring to physical and bodycentered types of (theatrical) performance practice that are "idiosyncratically visceral and fuse[s] disciplines", [7 p.3] her useful proposal of (syn)aesthetics can be applied equally well to a performance such as *One Pig*, which engaged audiences in human, non-human animal, and technologically driven sounds, living bodies on stage playing instruments and physically engaging with objects, and an in-the-moment staging of cooking as well.

(Syn)aesthetics is an aesthetic potential within performance which embraces a fused sensory experience, in both the process and the means of production, as it consists of a blending of disciplines and techniques to create an interdisciplinary, intertextual, and "intersensual" work. [7 p.14]

For this audience member, subsequent researcher, and listener to the recording, the fused sensory experience remains an embodied one; I recall the pig, I remember the pig, and as Herbert has himself accounted, I remain open to the possibility of change for pigs. He writes:

When everything I read politically and watch and hear has been absorbed, there comes a point where you must feel it viscerally. Otherwise you are closed to the horrors of it and thus closed to the possibility of action, closed to the idea that you could make a difference Or could have prevented the outcome. This internalising of the struggle, the friction, the melancholy I feel should be at the emotional core of the work. After all, I am making music not writing and newspaper article. [5 "Biography"]

The Sounds: Sonic Environments

Because Herbert is a musician, it may seem an obvious starting point to discuss the sounds of a concert/album, however, the work was designed as a recording of/with a pig, and organically emerged from Herbert's careful attention to the sounds around the farm, the pig's surrounding, and the pig's own sounds. This attention, alongside the understanding that this is a farm pig that was intended to be raised for meat, allows for a play in the notion of the "rendering" of this pig for the composition. It becomes the music; it becomes the meal. Herbert's point however, from the beginning, was to take the pig, its sounds and life, through to the end point, consumption. This complicated intention has provided a space for a listening for and giving attention to this pig.

Although she is not referring to musical composition, Shukin proposes distortion as "a strategic switching back and forth between rhetorical and carnal modes of production of animal capital with the aim of interimplicating and crossing their signals". [4 p.27] For Shukin, distortion's usefulness is to point to both sides of animal capital as effects of power, and this notion of crossing signals also fits well alongside the concepts of synaesthesia to promote an auratic signalling of this animal. I refer to this notion here not in its general negative concept sense—as a obfuscation—but rather for its electronic or musical definition, changing the shape of a signal during transmission, resisting any one fixed reading. One Pig capitalizes on the life of a pig, but the pig also haunts the work, insisting its presence within on capitalization. Listening to Herbert's electronic, experimental music during the concert, one of my main observations was how "distorted" it seemed from any sounds resembling a pig's sounds. I had naively gone into the space curious to hear a pig's life, expecting grunts, snuffles, oinks—the pig sounds of imagination. But what I heard instead was a complex layering of sounds, electronic, human, non-human, blending into and crossing over each other. The acoustic distortion forced me to listen harder, to focus even more on the animal; it made me sharply attuned to try to hear any signs of animality.

To further achieve this intersection of Herbert introduced a musical sounds. instrument called the "StyHarp," invented and built by artist and sound designer Yann Seznec. The StyHarp is intended to imitate a pig sty and looks like a large boxing ring, sitting center stage at the concert. It was made with sound-sensing strings attached to corner posts that when plucked and pulled created sounds that Herbert intended to "trigger memories of the pig." [5 "Blog: Video Reuters", 2 Feb 2012] Although here entirely made from technology, as Seznec describes on his blog, the instrument also serves as technological reminder of the histories of animal gut string production in the making of stringed instruments:

> The main component of the StyHarp is the string sensors, which are ripped from Gametrak controll ers. . . . They were marketed as 3D motion trackers, and packaged mostly with golf games (with comical miniature golf clubs) and sold only in the UK from 2000-2006 or so. To use a Gametrak the player wears a pair of gloves which are connected to a base station (which with some wire suspiciously like orange fishing line). Inside the base station these two lines each go into a spool, which is connected by a few gears to a potentiometer. standard potentiometer thus turns as the wire is pulled in and out. [8]

The stage was set with this central StyHarp, upon which white lab coats were hung. On either side musical equipment was placed and there were two hay bales downstage on either side of the space. Upstage were two tables, one with place settings laid out in it—farm-to-table, all set to music. As the musicians enter, they put on lab coats and

one spreads the hav around in the center of the ring. Another produces sounds by rustling the hay in a microphone; there was a gradual layering of human-made sounds. One musician enters the StyHarp and we see on the back of his coat the letters SEP. He begins a kind of dance, reaching and pulling at the strings to create a range of loud electronic sounds. I sit back and strain to hear the pig. The man (perhaps standing in for the pig) pulls and sounds the strings from inside the StyHarp. I listen more attentively but still can't locate what I think of as actual "pig sound." Shortly (the concert was only around an hour) the performer switches to a coat labelled OCT. The strings seem to create pig grunting noises and I wonder where the actual pig is in these soundings, I am aware that they recorded the pig so I listen closely for it, hoping it will not be fully replaced by these technologies. This act of attentive listening draws the absent animal into focus. Lost in what at times is a cacophony of sounds. I am reminded of the pig at the center. It never leaves my mind, despite the imitative representations of its sounds.

In the video "One Pig, by Matthew Herbert: The Story Behind the Album," Herbert explains how the piece took shape from month to month, beginning in August 2009 when the sow went into labor. He explains that what he thought would be a noisv experience was actually quite quiet. His pig, he said, "just bonks its head" [1] as it comes out, and the bonk is what became the inspiration for a dialogue with the keyboard. In the September section, the musical distortions were disturbing, response to the situation occurring in the pig family. This was the sow's first litter and early on she threw one of the piglets across the sty natural selection, perhaps—and broke its jaw so it couldn't feed. As it attempted to find space and feed, Herbert said it made quite an "edgy" sound, which he reflected in the composition. It is difficult to translate these sounds into words, but they subvert my/our expectation of what a pig's life might sound like. They act as layers in a dense environment human, Of animal



Matthew Herbert

One Pig, view of the stage, photo credit: Chris Friel © Chris Friel

machines.

From October through December, the sounds grew more intertwined and it became harder to discern one from another. In this perhaps intentional musical shift, listeners are forced to focus on the whole, on the merging of sounds within the composition. Once I gave over to these complex sounds, I settled in my seat and just attempted to take it all in. Herbert explained that he tried to incorporate the sounds of the farm and the pig's environment; his interest was in the life of the pig and of creating an awareness of this life. This section of the composition acts as an acoustic version of the pig's "umwelt," an organism's perceived environment, defined by biologist Jakob von Uexküll, and the way in which each creature understands its environment 191. These can overlap, granting a subjectivity to each organism, and diminishing the sense of a unitary (and human centric) world. Picking up on von Uexküll's "score of Nature" and musical

metaphors, [9 p.188] Giorgio Agamben refers to the umwelt as worlds "linked together as if in a gigantic musical score," [10 p. 40]

This phase of the composition stages the pig's environment: October's sounds were generated by a cow in a stall next door to the pig family (Herbert explains on the video made about the process that it sounded like a "me too" and he wanted to put it in dialogue with the other sounds) [1], while November was about the sounds of the wind as the weather began to change. Industrial sounds dominate December when the pig is moved to a different sty with metallic bars. In reflecting what he perceived as the pia's environment on the farm, Herbert incorporated other animals, technologies, a tractor driving past, even his own crunching footsteps in the snow. As I listen, I begin to sense this world: the pig's world. And it is linked to Herbert's world—a loud cacophony of human industrial sound, remixed. Through the composition, the worlds overlap and collide, at points in harmony, but, more often, not. Regardless of whether Herbert is aware of von Uexküll, here the piece begins to carve out a space in which we as listener might become the pig, listening. As von Uexküll proposes:

The animal's environment . . . is only a piece cut out of its surroundings, which we see stretching out on all sides around the animal—and these surroundings are nothing else but our own, human environment. The first task of research on such environments consists in seeking out the animals perceptive signs and, with them, to construct the animal's environment, 19 p.531

The idea of the umwelt proposes that rather than one large single world where humans and non-human animals and organisms live together, each animal has its own perceptive sense of its world. Agamben describes this as "a forest-for-the-park-ranger, a forest-for-the hunter, a forest-for-the-botanist." etc. [10 p.41] Herbert's composition then might be sensed as a farm-for-the-pig intersecting with farmfor-the-composer. Whether intentional or not, the notion of the umwelt drives the research into the life of the pig behind Herbert's composition. As I recall my listenina experience, I begin to hear as the pig, and as the composer. These worlds have their own senses and they are merging in me. If the concept of the umwelt is applied to this approach to composing, it may be why I have difficulty hearing the pig. At times, as I allow myself to be attuned to the different trajectories of sound, I sense the environments from different perspectives.

Finally in January, the pig makes its presence more overt; it must be getting larger and the grunts I discern are deeper. In the concert hall I suddenly shift out of my comfort zone and start to panic a little. Another musician enters the cage and there is a raucous cacophony of sounds all of a sudden. These are finally pig sounds that seem to accumulate. I hear a throbbing

sound, is it a heartbeat? One by one the musicians get in the cage and we hear pig movement, rustling, grunting, squealing. I think to myself: this is not going to end well. All five musicians are in the cage/ring now plucking and pulling at the strings, it seems they are physically embodying their sense of the pig's sounds. The music reaches a crescendo and then it gets quiet. The performer removes the January coat to reveal a red lab coat. I assume the pig has died.

The worlds collide, musically, for me, and in reality, as they do for a farm animal. Our senses overlap and the distortion of sound shifts us from animal to human to animal again; but in this "gigantic musical score" although the pig surfaces and resurfaces, it will ultimately, we know, find its end, rendered, but resisting disappearance in Herbert's work—he tells us, from the stage, that the drum they are using was made of the skin of the *One Pig*.

Death's Silent Sound

As it turns out, January was when the pig was collected for slaughter, and what we hear is the pig in the truck on its own. It is the only time we hear it on its own, Herbert explains, as it is on its way to slaughter, but this is a slaughter that we never hear. Although Herbert planned from the beginning to record the death of the pig, he was unable to find an abattoir that would allow the recording. The death of the pig presented a crisis for Herbert, who said "for me the death was always a crucial part of the project. It was the part I was looking forward to the least, but the part I felt was most pertinent in my understanding of this life" [5 Process: One Pig: "Abattoir"]. The project was attacked by the organization PETA for participating in the death of an animal, and its death indeed returns to questions of animal capital—this one pig exemplifies other pigs that only exist to provide food. For Herbert, the/a farm pig's existence is the point of focus, and so not being allowed to record the death only made the point more resonant, as he states:

Politically . . . we, in this country, don't have any rights to see our food, we are kept at great distances from it; in Britain it' kept behind a veil of corporate motivation secrecy. My wanting to witness that was to acknowledge realities of what it is to eat meat, and for me, part of the problem we have in our society is that there is a huae disconnect between what we do and the consequences of our actions, and SO disappointed artistically . . . but politically it tells a really important story, which is that even though I'd contributed to this pia's life financially and being there as a witness to it growing up I had no rights to actually witness this pig dying, and for me it feels like a crucial part of the story. [1, @ 6:10]

Herbert's intention, as he articulates in his response to PETA (posted on his website), was always to shine a light on the process of a pig's life—and specifically a farm pig raised for food—to draw more attention to the processing of animals. "The pig I have been following," Herbert explains:

was born on a family run farm, it spent its entire life with its siblings, had plenty of straw to rummage through, was kept in an partially open air sty, was fed a mix of local cereals grown by a local cooperative, had good amounts of room to explore and things to stimulate it. [5, Blog: Full Response to PETA]

The inability to record the pig's death, was for Herbert, a larger problem than the scheduled death of this pig, and he argues for a legal right to see (and, I suppose, to hear) the food we consume.

For Herbert, ideas around the consumption of the pig were complex and balanced by reports of waste in especially factory farming practices. For him, the

consumption of the pig and use of its entire carcass were decisions he made to support an argument for a more ethical and visible understanding processing Of food practices. From this listener's perspective, the pig's death (despite being kept from hearing the actual moments of its death), was clear and resonant in the procession of the piece. The inability to be allowed to hear these specific sounds raises larger questions around the "visibility" of animals being used for food. Thus far for me, the focus on sound and soundscape redirected the conceptions of a pig's life to radically different territories of comprehension. Through the crossing of senses—a thwarted desire to "see" the pig clearly within the music, and a reliance on overlappina environmental sounds—mv thinking about the pig began to shift. I began to trust in a listening for the pig, perhaps even a listening as the pig. However, here an even further synaesthetic sense in relation to the pig occurred.

As the musical piece progressed and we got to the end of January, the music began to shift to include sounds of dripping, spattering. We hear a knife sharpened, a woman enters the stage, begins cooking, and the smell begins to fill the air.

Smells: Pig Tails

Smell, like sound, has a particular sensory association that can create memories, activate our hunger, make us amorous, or disgusted. A key component of *One Pig's* synaesthetic play is that smell becomes the means by which the pig is internally sensed by listeners. As Machon explains:

The (syn)aesthetic style allows the explicit recreation of sensation through visual, physical, verbal, aural, tactile, haptic and olfactory means. . . . sensation itself being transmitted to the audience via corporeal memory, the traces of lived sensate experience within the human body, activated within the perceiving individual. [7 p.14, Italics in original]

As sounds and smells began to mix and cominale in the auditorium, our senses were activated, and I can still recall the visceral sensations of confusion as I, a vegetarian, reacted with disgust while a clear sensation of pleasure swept over others around me whose hunger was piqued by the sudden smell. Machon explains that the "experiential impact of (syn)aesthetic performance affects a visceral cognition which leaves traces on the perceiver's body via the immediacy of a corporeal memory. Put simply, we feel the performance in the moment and recall these feelings in subsequent interpretation." [7 p. 55] Part of the visceral experience of One Pia and what I take with me as I listen to its recording, or begin to analyse and interpret what I saw, intertwining aural and olfactory sensation. As the on-stage cooking began, the pig literally entered my body through the smells that filled the auditorium.

Smell is long associated with animals of course, and particularly with histories of animal rendering as well. Shukin traces the genealogy of rendering through a history of slaughterhouses, describing their popularity as urban tourist attractions (In Chicago especially) in the late 1800s and through the turn of the century, to their retreat from public sensory views. She explains that:

Retreating out of an urban field of vision was just one step in the reorganization of slaughter and rendering; doing everything possible to prevent the sensory revolt triggered by smell has arguably been even more critical to the affective management of animal capital. [4 p.63]

In One Pig, an alternate association with smell is employed. During movements from February to May, in the concert version of the composition, a pig (the pig initially) is cooked, served, and eaten. Smell becomes a crucial affective tool, and whether through enjoyment or disgust, it invades our bodies, becoming a part of us as we listen and contemplate this pig. The pig here again

haunts us, literally infusing our bodies in perhaps a symbolic nod to human digestion of real animals.

As the music resumes, mixed with the sounds of popping and frying, the smell begins to waft through the large space at Royal Festival Hall. The chef chops and fries, rendering the fat accompanied by a loud "boom boom boom" of industrial noise. These are the months of the butchering and eventual eating of the pig. Herbert recounts that:

The first sound you hear is the severed head of the pig dropping onto the kitchen work surface. The base line is the pig's carcass again being put down after it came off the transporter, knife, bones being sawed and the main melody is from the blood dripping into the bucket [1 @7:14]

The melody heard during the eating section is played on a bespoke "pig's blood instrument," made by Henry Daggs, and the final sounds of this section are scraping plates and human enjoyment of a meal. Prior to the food offering in the concert hall, Herbert ends the concert and the original recording with the song "Pig Lament," where, he says, he went into the sty and recorded and sang a song in the memory of the pig:

at this time, this time of year, I take my happiness and disappear, tell these lungs to breathe again, when the sun is back to my refrain, a simple life is all we need, I love to multiply, magnify, dignify each day, and so to rest I put my head, let you occupy my thoughts instead.

The lyrics emphasise what Herbert has asserted all along, a respect for the animal that is brought into existence for food, and a lingering memory of its life, so that it might occupy our thoughts. He specifically chose to



Matthew Herbert

Blood Instrument, photo credit: Chris Friel © Chris Friel

use the entire pig, so in addition to the drum made of the pig's skin, a candelabra was made from its hooves, candles rendered from its fat, and records show that its blood was even made into paint. Herbert was clear, in a discussion with a PETA member who objected to the complete use of the pig that, "I have eaten many pigs before this and wanted to understand the consequences of that. I simply wanted to a) create as little waste as possible and b) remember the pig through sound". [5, Blog: "Matthew Herbert vs PETA"]

The visceral experience of the sounds and music in conjunction with the smell, however, at first struck me as the opposite of respect. In the hall, the smell seemed to grow stronger as the music grew angrier, perhaps reflecting my own frustration and confusion. I fought a physical reaction to leave as this act of cooking re-embodied the pig once more. This decision, to use the entire pig, and to cook it on stage complicates the experience.

It is of course the end result of farm pigs' lives, and the cooking reiterated the technologization of these lives. And in truth, it also represented pleasure for throngs of meat-eaters surrounding me. The chef finally plated the food and served it onto the other table. We are offered (to "those who dare"), plates of the food, which turn out to be pig tails, and not from the original pig because the concert is now touring: *One Pig* has turned too many.

Conclusion: Haunting the Composition

It is this intersection of an animal life with human lives, mediated through recording and other technologies, that presents us with a space in which to contemplate and potentially be more aware of and attuned toanimal lives. *One Pig* plays with the double entendre of rendering Shukin proposes when she argues that:



Matthew Herbert The pig, photo credit: Chris Friel © Chris Friel

By continuously interimplicating the double senses of rendering, ostensibly literal currencies of animal life, such as meat, can be shown to be veined through and through with symbolic sense, while the mimetic effects of filmic or digital animations, for example, can be pressured to reveal their carnal contingencies. [4 p. 27]

The concert ends with a sharing of the pig's meat and the project lives on through a recorded "animation," both colliding in a way that draws forth but then distorts the sentimental animal (the animal Deleuze and Guattari argue so vehemently against as a becoming-animal) and reminds us—by seeing the pigskin drum and eating the animal at the end of the concert—of the material body of the animal, and we are drawn back to its mode of production for capital. And in learning more about the work I reiterate that this was not intended to be a

gratuitous death. Herbert asserts that:

PETA is absolutely right though about me hoping to attract attention, although I am trying to do that by drawing in an inquisitive rather than by "hurting animals." I am hoping to attract attention to the idea that we cannot build a sustainable society with a system founded hypocrisy. We cannot visit zoos where marvellous animals are put on display for us, only to tuck in to a ham sandwich at the zoo's cafe without bearing witness to the way the pigs were raised. [5 Blog: "Full Response to PETA"]

The possibilities embodied at the intersections of performance and art practices and animal studies, I would suggest, is the creation of spaces like this, a concert hall entwined with sound and smell, with memories and

continued remembrances in which a pig's life might be recognized as a life. And while the pig remains a plentiful food source at this time and in this culture, this "one pig" is brought forward as a subject of our attention, in a space of attunement. Perhaps this work can begin to move towards, as Shukin proposes, a "zoopolitical critique," one that begins with a "challenge to the assumption that the social flesh and "species body" at in the loaic of biopower predominately human." [4 p.9]

In *Electric Animal* Akira Mizuta Lippit proposes that "animals enter into a new economy of being during the modern period, one that is no longer sacrificed in the traditional sense of the term but, considering modern technological media generally and the cinema more specifically, spectral." [11 p.1] Although Shukin suggests that Lippit "buys into" this argument too much for it to have an activist stance, Lippit's notions resonate for me as I listen to One Pig and contemplate its resonance in a performance context. The perhaps *especially* because disappearance and its death, haunts this composition, but it remains there, in sound and through physical traces left behind. One Pig renders the pig as both a musical composition, and for its parts as food, byproducts, skin and bone. Painting a picture of the world as a clavier, a stringed keyboard instrument like a piano, Uexküll proposes that:

All these countless environments provide . . . the clavier on which Nature plays her symphony of meaning beyond time and space. In our lifetime, the task is given to us to form with our environment a key in the gigantic clavier over which an invisible hand glides, playing. [9 p. 208]

In our lifetime's "key" perhaps we can listen better to the sounds of non-human animals to better hear the contrasting tunes and tones of our world. *One Pig's* pig remains: I can hear it, I can smell it, it is a memory, it haunts me. Perhaps it haunted others as well, and in that

haunting might provide shifting ground for our senses, memories, and future actions toward these creatures.

Endnotes

- [1] "One Pig, by Matthew Herbert: The Story Behind the Album," [online] 12 September 2012. [Accessed 25 February 2013]. Available from: http://www.youtube.com/watch?v=GddErv81vOY
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- [3] This pervasive argument has been addressed in works such as: Berger, J. "Why Look at Animals," in *About Looking*, New York: Vintage, 1980; Lippit, Akira M. *Electric Animal: Toward a Rhetoric of Wildlife*, Minneapolis: University of Minnesota Press, 2000; Parker-Starbuck, J. "Animal Ontologies and Media Representations: Robotics, Puppets and the Real of *War Horse," Theatre Journal*, Special Interspecies Issue, (October 2013); Shukin, N. *Animal Capital: Rendering Life in Biopolitical Times*. Minneapolis: University of Minnesota Press, 2009
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PERDITA PHILLIPS: SOUNDING AND THINKING LIKE AN ECOSYSTEM

Perdita Phillips is a Western Australian artist working across the media of walking, sound, installation, photography and digital media. Through her multi-disciplinary multi-media art practice she explores the mutual relationships between people and the nonhuman world. Over the past ten years she has worked on art projects drawn from, and co-produced with, termites, minerals, bowerbirds, rabbits, cane toads, salmon gum trees and thrombolites, amongst others. With a background in environmental science Phillips' work is often complementary to, though not constrained by, scientific understanding. Indeed her work often focuses on matter(s) that exceed scientific understanding or which might not be considered logically sensible in order to recover a sense of astonishment or wonder often stripped from scientific interpretation.

Question by Merle Patchett

envisage a spiral of tiny sounds like the descent into the geological past and tiny pinprick sounds like the multitudinous field of microbes beneath us with their sharp aragonite grains, oxygen burps and hydrogen sulphide farts" [Phillips 2010: 3]

Underlying Phillips' practice is a general concern with imagining environmental futures. For example, her longest running artresearch sound project, *The Sixth Shore* (2009-2013), explores the complex (and contested) ecosystems past, present and possible at the site of Lake Clifton, south of Perth, Australia. The work emerged from SymbioticA's research and residency project *Adaptation* which sought to encourage the engagement of

artists with the field site of Lake Clifton and its unique ecology, history, surrounds and community. So far two sound works have come out of *The Sixth Shore* project: *The Summer Flurries* (2011), a sound walk outside the Science Gallery in Dublin and *Cusp* (2012), a gallery-based spatial sound installation. The final work, which will also be titled *The Sixth Shore*, is intended as a site-specific spatial sound installation down at Lake Clifton itself.

In *The Sixth Shore* sound composition the sonic landscapes of Lake Clifton are imagined and realised, including the sound worlds of a colony of thrombolites or 'living Rocks' (Glasgow 2010). Six strands of sound, representing shifting shorelines past, present and possible at Lake Clifton, are woven together to produce a rich sonic aesthetic which evokes a strangely animate



Perdita Phillips
The Sixth Shore (2010) altered digital image of saline lake froth (with additional ink on digital print) © Phillips

wonderland where not only birds but 'living rocks' sing, or at least as she puts it, fart. In this way *The Sixth Shore* introduces people to sonic geographies of the natural world that we normally ignore or, indeed, cannot perceive through human capacities. The shifting shores also bring together human and more-than-human stories and perspectives to narrate the complex and competing ecosystems and environmental issues evolving over time at Lake Clifton.

Phillips describes one of the aims of the work as wanting to "articulate competing agents at Lake Clifton in a way that decentres the current environmental impasse encourage new solutions to humannonhuman interactions." To do so, Phillips combines complexity and sensitivity to attune our aural awareness to these competing agents while providing multiple more-thanhuman pathways for us to rethink and reset our environmental and cultural priorities in response. A marker of the works' success in this regard is that an entire issue of *Dialogues* in Human Geography was recently dedicated to remaking aesthetics for a more-thanhuman world using Phillips' art practice, and The Sixth Shore in particular, as inspiration and geographers' example.[1] What these recognise in Phillips' practice is her works' ability to be responsive to, whilst at the same time offer, more-than-human sensory and aesthetic modes of thinking through, living with and finding solutions to environmental uncertainty, which is why her work is so critically important.

Merle Patchett: Your multi-disciplinary multi-media art practice is devoted to exploring the mutual relationships between people and the nonhuman world. Could you begin by giving some

background on your art practice and research in this area?

Perdita Phillips: I guess it begins with curiosity, feeling a keen awareness of co-existing with the world and a strong sense of being engaged in a process of enquiry. I grew up from early childhood in the suburbs but within the sound of the sea, playing as a kid in the scrubby coastal dunes near my home. I have a background in the sciences, too, but was dissatisfied workina environmental management. From training my experience working with environmental issues that humans had a good hand in causing, I've tried to rethink what I do in a way that takes a scientific understanding but gives much more space to other voices. My work is primarily concerned not with the scale of individual animals and plants, but with how humans and nonhumans relate together. Between 2003 and 2006 I worked on the fieldwork/fieldwalking project in the Kimberley of Western Australia for my PhD (2007). This was about going to a place (the walking country) a number of times over the different seasons recognized by the local Kija and Miriwoong people. There was a lot of time spent absorbing and recording different sites. Over the years I've also worked on other art projects drawn from termites, minerals, bowerbirds, rabbits, cane toads, salmon gum trees and thrombolites, amongst other things.

Patchett: As an artist you work across the media of walking, sound, installation, photography and digital media. Can you elaborate a little on your multi-media approach to exploring human-nonhuman relations?

Phillips: Like many artists today I respond to the context of a project. Who is being listened to is key and of course the interest over the last decade in a more "conversational" aesthetic, via people like Ric Spencer (2004), has been a big influence. Along with seeing my role more as a conduit for situations, I like to harness multiple knowledge systems but

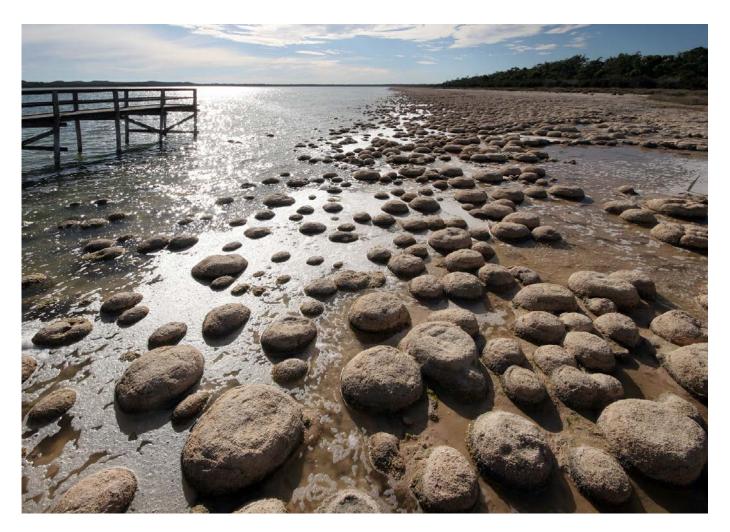
always in a way that is "warm" and not cold. Humour and absurdity curiously parallel the seriousness of issues – it's no good being desolate and unmotivated, which seems to be a current problem with environmentalism. So employing different media allows me to combine urgency and flexibility.

Patchett: Following on for this, can you tell me why sound in particular has become an important medium in your art practice for exploring and representing the expressive richness of the non-human world?

Phillips: Listening comes before speaking! At times the horizon of sound exceeds vision and it always gives that sense of 360 degrees. For many years I thought of myself as primarily a visual artist but in the late 1990s I grew increasingly interested in walking as a way of exploring places and becoming sensitised to the different and vital things that make up our relationship to place. Some people use meditation to be more open and there are forms of meditative walking. Through walking I learned to listen to others. Listening implies a decentering of the subject; an attentiveness at the same time as it sidesteps insensitive or overly antagonistic actions. The issue is as complex as what people have written about the difference between listening and hearing, but through it all it was important to me to be bodily present in relationship to others.

Patchett: When I first met you, you were wondering around a car park in Edinburgh with a parabolic dish microphone recording seagulls. It struck me then that your sound art practice connects to and plays with the heritage and techniques of wildlife sound recording. To what extent does your use of sound in your art practice draw on, or is inspired by, wildlife field recording techniques and practices?

Phillips: Yes, the British Herring Gulls remind me of radio comedy show repeats at 5:30am on a Saturday morning. There is no common



Perdita Phillips Lake Clifton thrombolites (2009) digital photograph © Phillips

large gull equivalent in Australia and when I hear them there is a strong association with Bgrade seaside scenes: "establishing sounds." For me it's the opposite of hearing kookaburras (a common bird in Australia) in jungle scenes: the reversal of these gulls back into real life always off-centres me - even today. Hence there I was walking the streets of Edinburgh with the gear. Of course there is a marvellously eccentric history of enhancing human hearing abilities and an evolution of the techniques of field recording to the present day. I've been interested in the culture of the field for many years and in the case of sound, the meeting of amateurs and professionals in groups, such as the Australian Wildlife Sound Recording Group. The use of sound recording by contemporary artists is relatively widespread, but field recording is a

more specialised area because you are often aiming to capture low sound levels outdoors or sounds at a distance. I use listening activities as part of engaging participants with more-than-human worlds and for events such as World Listening Day, but with the use of recorded sound there are other possibilities for creating experiences for audiences at other times and places.

Patchett: On Fieldcraft. Getting good recordings goes beyond having the right equipment and is often more a matter of knowing your creature [often birds in your case] and how and when to approach it. Can you reflect on this notion of wildlife sound recording as a form of fieldcraft and how you have developed this craft as part of your art

practice?

Phillips: This is something that I am still learning and I am deeply indebted to the many people who have either inspired me or helped me out in this area. In order to set up situations where the more-than-human come to the fore you often have to go to less human-structured places to record. There is the flavour of exploration with pioneers in this field but if one looks deeper it is most often a solo activity. That's why being able to learn from others is so important to getting skilled at it.

Moreover, I've talked before about Matei Candea's (2010) contrasting interaction with inter-patience: that sense of being in the world of animals where relations are built up after considerable habituation to the point where worlds can overlap - by mutually ignoring each other (2013). Other ways to achieve this are all the techniques that wildlife sound recordists use to blend themselves into situations or set up equipment and then move away. The "camouflage" here could be seen as deception, but it is also about decreasing one's position of privilege and force in the relationship between humans and nonhumans.

Patchett: Forgive me if I am wrong, but your largest and longest running art-research project utilising sound to date has been The Sixth Shore (2009-2013): a site-specific spatial sound installation for Lake Clifton. The work emerged from SymbioticA's research and residency project Adaptation which sought to encourage the engagement of artists with the field site of Lake Clifton (south of Perth, Australia) and its unique ecology, history, surrounds and community. Can you give some background on the residency, your experience during it and the inspiration for your work *The* Sixth Shore emerging from it?

Phillips: SymbioticA is an artist laboratory at The University of Western Australia primarily

concerned with tissue culture and laboratorybased art practices. This is the second project I did with SymbioticA and the first time they moved out of the lab and into the field. There were ten artist/groups involved, six of which were intimately involved with the site itself. Lake Clifton is a saline/hypersaline coastal lake, about 4000 years old, that thrombolites or "living rocks" composed of microbial communities that excrete calcium compounds to build up mats, concretions and cones of material. On the east side of the lake are hobby farms, small grazing properties and turf farms. On the west side of the lake is Yalgorup National Park where large Tuart trees are dying because of introduced Phytophthora fungus. The thrombolites are only there because of an influx of calcium rich but comparatively fresh water in a limited area, mostly on the east side of the lake. Groundwater extraction by humans and climate change are altering the water conditions and threatening continuing existence of the thrombolites.

For a number of years I've been trying to conceptualise and apply ecosystem complexity in an artwork. Just taking the scientific knowledge system for the moment, in many cases humans might know the causes of a situation or even acknowledge that a situation might be the result of complex interactions, but then there is no resolution. This shows us that transdisciplinary is needed both to explain and to take action. And perhaps even to redefine the notion of 'solving' an issue. At the moment globally and locally, we have environmental procrastination, so a lot more work needs to be done to overturn these ways of thinking. In the case of *The Sixth Shore*, the practicalities of this [involved]...developing a site-based project and giving a sense of the overlapping stories. I've worked with local people and the oral archives to add to the on-site sound recordings. The project involved developing the technology to create an invisible outdoor spatial soundscape that a participant walks here and there [in] listening to different sounds and stories that are present through the landscape. It's strongly directional: as you turn



Perdita Phillips
Testing out equipment (2011) documentation © Phillips

your head the sounds change. Bushes will be talking to you. Your sound experience will be unique based upon where you walk.

Patchett: I love the idea of bushes talking to participants...can you tell me how you go about achieving this in practice?

Phillips: This was achieved through a software system that receives and translates signals from a high-end GPS receiver and handles the hundreds of sound files. A digital compass has been integrated into a conventional set of headphones to generate the directional sound. Participants wear a backpack with a small computer and the GPS receiver and the headphones that allow the

Patchett: Walking seems to be both integral to your method for recording sound, but also for allowing an audience to performatively engage with your sound works...could you please reflect on the role walking plays in both the production and reception of works like *The Sixth Shore?*

Phillips: As you can see from what we have discussed here, walking is fundamental to my approach. It is a way of encountering and being in the world. It allows me to combine the factual with the fictional. Walking returns us to wonder, and here I again follow Ingold's reasoning: "In a world of becoming... even the ordinary, the mundane or the intuitive gives cause for astonishment – the kind of

astonishment that comes from treasuring every moment, as if, in that moment, we were encountering the world for the first time, sensing its pulse, marvelling at its beauty, and wondering how such a world is possible. Reanimating the western tradition of thought, I argue, means recovering the sense of astonishment banished from official science" (Ingold, 2011, p. 64). Walking on uneven ground, as I have argued elsewhere (Phillips, 2012), also teaches us not to give up. In these artworks, walking prompts me to find out about places as well as supplying me with methods of allowing others to share these experiences too.

Patchett: You have written that the basis of *The Sixth Shore* "aims to push the boundaries of what it means to go on a walk and think like an ecosystem." Can you elaborate on what you mean by this?

Phillips: When I talk about ecosystemic thinking, I'm arguing for an aesthetics of thinking through complex environmental problems. In part this is a question of where the outer reaches of our "self" is. If we reframe our boundaries (and I'm taking here both from the science of ecology and from relational and posthuman philosophy) might we then think like ecosystems? Could we reconfigure how we understand our place in the world, treasure diversity and be more flexible and responsive to change? I'm reminded here of Tim Ingold's insistence that the emphasis should be shifted from places to paths: to the sense of wayfaring being the fundamental mode of existence. What if you, the participant, get a feel for how your passage generates tides and flows of stories from both humans and the more-than-human?

Patchett: In *The Sixth Shore* sound-walk sonic landscapes of Lake Clifton are imagined and realised, including the sound worlds of a colony of thrombolites or "living Rocks" (Glasgow 2010).

I know it's difficult to put a sound-walk into words, but I wonder if it is possible for you to describe the work using its six refrains as a structure.

Phillips: So far two sound works have come out of *The Sixth Shore* project with the final work yet to be realised. The Summer Flurries (2011) was a sound walk outside the Science Gallery in Dublin, and Cusp (2012) is a gallerybased spatial sound installation. The final work (which will be called *The Sixth Shore*) uses the apparatus developed in the project and will be shown down at Lake Clifton. The project is about not just picturing the complex, but something more: I was down at Preston Beach near Lake Clifton watching the way that beach cusps form when water swirls up and down the beach in recognisable patterns - but ones that are never constant but always reforming and adjusting.

It soon became apparent that there were six different "shores" or refrains involved and these have broadly structured each of the artworks generated. Because of the different time scales of these shores there is a distinct sense of different rhythms being layered through spaces. The first shore is thrombolitic time. Whilst the thrombolites are not even as old as the lake, their functional heritage goes back to some of the earliest forms of life in the fossil record. In the scale of geological time this "stretches" Lake Clifton back as far as 3450 million years ago (e.g. Van Kranendonk, Philippot, Lepot, Bodorkos, & Pirajno, 2008). The cyanobacteria present in ancient stromatolites are a highly likely source of increased levels of oxygen in the atmosphere 2200 to 2400 million years ago (Holland, 2006). At scales beyond our senses, microbialites are a window onto the sublime. A hydrophone picks up nothing of the cellular complexity, so here I am working with imaginative sonification of the boundaries between living and non-living, distance and depth. Elsewhere I have written:

"I envisage a spiral of tiny sounds like the descent into the geological past and tiny pinprick sounds like the multitudinous field of microbes beneath us with their sharp



Perdita Phillips

Ecosystemic thinking (2010) digital image of naturally coloured microbial communities (with additional ink on digital print) © Phillips

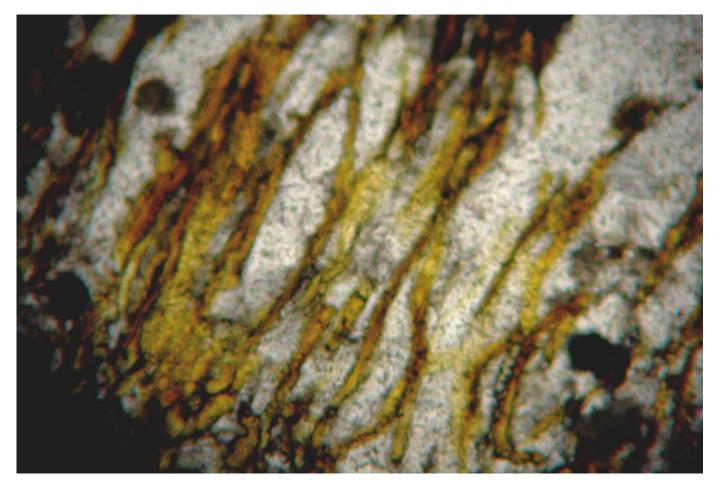
aragonite grains, oxygen burps and hydrogen sulphide farts" (2010, p. 3).

The wider context of Lake Clifton leads us to *shifting shores*: the Pleistocene/Holocene history of lake formation and seashore changes. Here it is the sense of sands accreting into dunes and then limestone ridges and the procession of multiple shorelines advancing and eroding that gives a rhythm to the piece. There are interviews with geologists and groundwater hydrologists. Additionally, borehole or seismic data will be converted into strings of sound across a woodland clearing.

Of course, Indigenous Cultures have lived on the coastal plains long before the time of Lake Clifton and experienced these changing shorelines. The third shoreline is the cultivated landscapes of [the]nNoongar people. Stories of sea level changes are reflected in oral histories and the Nyitting

(Dreaming). Local groups have a living culture that has retained much and is actively reviving knowledge and cultural patterns. It's particularly important that the historical silences in this area that are the legacy of colonialism are tackled. The fourth shore, a time of clearing, from the mid 1800s to now, is a very different wave of development. Using oral histories and re-enacted scenes, these shores of *The Sixth Shore* project feature human voices from interviews, oral history and site recordings.

Another line of investigation – and one which is mostly at a seasonal scale – is the annual wader migrations and the population of endangered hooded plovers that are integral to Lake Clifton. This shore is called *bird migration and hooded plovers*. Rafts of waders frequent shelter at the lake and in later summer black swans congregate in sizeable numbers. Along with ambient sound



Cyanobacteria in a Lake Clifton thrombolite. Image courtesy of K. Grey, Geological Survey of Western Australia ® K. Grey

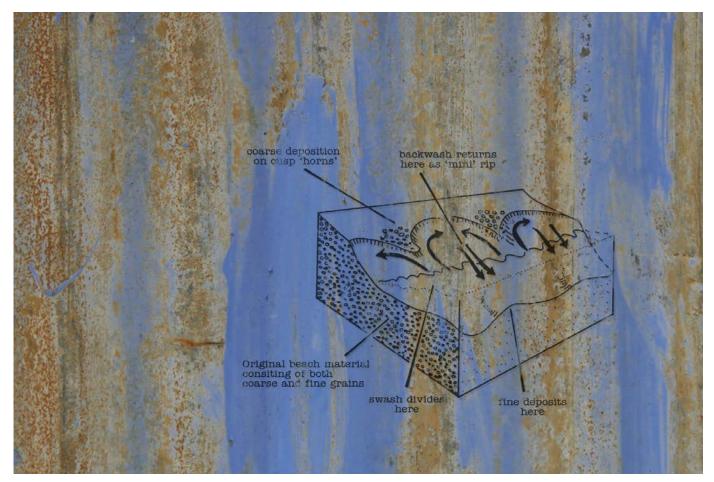
recordings, my efforts in recording the birds of the lake and its surroundings are an attempt to give voice to more than human worlds.

The last shore, that of *futures*, attempts to bring the different potentials of Lake Clifton course there are together. Of uncertainties here. The contrasting rhythms of the preceding shores all contribute to a complex arrangement. In 2010 I coordinated Unruly ecologies: biodiversity and art, a three day symposium for SymbioticA that brought together many of the human participants, including those representing nonhuman others. The sonic structures in this part of *The* Sixth Shore are as yet not fully resolved since they represent the very complexity that I set out to explore.

Ultimately the six types or strands of sound will be woven together by the wayfarer traversing the space. The reason why it remains incomplete is that I am still unhappy

with how far I've got on conveying an affective experience. I'm saving up the money to modify the equipment and do more fieldwork to complete it soon. I also feel like I haven't cracked it yet as an artwork because there is something unaccountable that I can't quite lay my finger on. Perhaps it is a question of resonances and unsaid things. Perhaps I have bitten off more than I can chew – or perhaps just more work is needed!

Patchett: David Matless has argued that considering the sonic landscape of a particular area, like you do in *The Sixth Shore*, "shows how the contested valuation of that landscape works in significant part through sonic judgement, with the aesthetic, ecological and social enfolded through sonic geography" (Matless 2005: 763).



Perdita Phillips Cusp (2012) digital image © Phillips

Could you firstly comment on how the work itself explores contested valuations of Lake Clifton through sonic geographical understanding?

And secondly, I wonder if you could also reflect upon your own

And secondly, I wonder if you could also reflect upon your own 'sonic judgements' when composing and presenting the sound work?

Phillips: These are interesting questions. In the project I've tried to give space for differing points of view, but also redress some of the imbalances about who gets to speak. The these final shore brings together. comparing the Norfolk Broads to an Australian National Park, there are similar and even stricter restrictions on "loud" and "unnatural" sonic activities, particularly since National Parks are set apart as a specific land tenure type (and do not encompass surrounding land uses). The history of Lake Clifton is that

activities such as duck shooting no longer take place (it's banned State-wide) and that fishing or boats of any sort are also banned at the lake. Passive recreation is encouraged but access points are limited. Nature enthusiasts deplore the illegal trail bike riding. The sonic geographies are patterned with judgements on good and bad sounds.

The second question is more difficult as I have perhaps more affinities with recent reworkings in political ecology: by its nature *The Sixth Shore* is not a research project that stops with reporting on these patterns of contestations. It goes further in that my positioning is part of the work and the way in which I address my failings as an agent is as much part of the project's mesh. It is through access to poetics, wonder or other alternative strategies that this slurpy calcium-rich mud of politics is negotiated. Maybe a thought here is to consider Jean-Luc Nancy's meditations

on listening as entendre and écouter, where the latter implies the openness of uncertainty, negotiation and exposure (Nancy, 2007).

Patchett: On Sonic Dialect. You have written that *The Sixth Shore* addresses "the diverse narratives that surround the Lake, directly responding to the area and engaging with the local community through oral history recordings and interviews". Referring to Matless' work again, he has written that the notion of a "sonic dialect" might give wider purchase on the currencies of located sound, "the ways in which a defined area is held to possess a particular voice, designated or expressed by human and non-human sound" (Matless 2005: 750).

Following this, could Lake Clifton be considered to possess a particular "voice" or "sonic dialect" [and, if so, how did you aim to capture and present this "voice" through the sound walk]?

Phillips: When I started this project in 2009 it struck me that there are no postcards of the lake, the national park or local towns. Of course there are issues of market size and fading popularity of postcards that apply here. It is partly the difficulty of representing a landscape with its surrounding bushland of "bland" greens and supposedly drab constituents. But this "silence" is also part [of] a legacy of colonialism and the evolution of Australian culture's sense(s) of belonging a lack of perception of the depth of subtle histories, or a lack of attunement to finegrained ecological differences. Is there a specificity associated with the voice of this place? It is primarily through the increased interest in the thrombolites that Lake Clifton has become unique and differentiated from the wider regional setting. So, if thrombolites are without sound, is there a sonic dialect for this place? I would like to think that a dialect is in the making through increased interest in environmental issues in the area (and in a modest way, through *The Sixth Shore* project).

Patchett: You have sometimes used the term "soundscape" to describe the sound work produced for The Sixth Shore, however, Tim Ingold in "Against Soundscape" argues that the soundscape concept objectifies sound, rather than treating it as experiential, and that this has been enabled by technologies of recording and playback which end up regarding sound at an aesthetic and conceptual remove. In sympathetic contrast to Ingold, Stefan Helmreich has argued that the soundscape concept "is shadowed by an acoustemology of space as given and listener as both apart from the world and immersed in it" (Helmreich 2010: 10).

I wonder if you could comment on the "ways of listening and moving" encouraged by *The Sixth Shore* and the possible (productive) tensions between immersion and remove at play during the sound walk at the site of Lake Clifton through your use of technologies of recording and playback?

Phillips: There are no doubt differences between artworks that use direct listening (to nonhuman worlds) or high fidelity recordings of places and ones that move further away from the "natural" sounds into more complex compositions that change nonhuman source materials and add in other sound elements. Ingold himself makes a distinction between a visual culture that is only about seeing via artwork and that of seeing with the body; and that "ears, just like the eyes, are organs of observation, not instruments of playback" (Ingold, 2011, p. 137). For him the study of sound should primarily be about the immediacy of experience in the world and artworks using recordings of sounds when played back should be seen as being "aural," in the sense that they are "played back within an environment (such as a darkened room) in which we are otherwise deprived of sensory stimulus" (pp. 136-137, emphasis in original).

It should be noted that many artists



Perdita Phillips Waste Land (2013) digital image © Phillips

myself) interested (including are investigating the immersive nature of the perception of the participant. But some phonographers are still critical of artists that clean up sound files or apply filters, implying that the authenticity of the recording is dependent on its absolute faithfulness to the original event. This is an issue of naturalism and representation, but it is also one of the unevenness of who is being represented. Recording the sounds of more-than-human others creates a power relationship, but one that isn't substantially different from those who choose to *represent* others via, say, the technology of canvas and oils. Any such representation is problematic if it *isn't* reflexive about its entangled relationship with morethan-human others – or claims to have a transparent association with others. Reframing my relationship from representative (standingin-for) to convivial conduit

important consideration.

As you have said, despite Ingold's objection to the term soundscape, his conception is not actually that different from many who use the term today and who are operating from an immersive paradigm (something that for me is so appealing in Ingold's work). According to Ingold, the Cusp (2013) sound installation would be aural as it was made for a gallery situation. In this work the sounds of waves lapping a shore were spatialised through an arrangement of twelve speakers in a 5 metre square area. Audiences could walk through the piece and hear the way that sounds travelled around in lines, or experience them as enveloping fields of sound.

In contrast the final *Sixth Shore* work will only be enacted on site at the Lake. No visual artistic interventions into the landscape will form part of it, rather the work attempts to

create dissonance in the participant by the juxtaposition of sensory worlds. An important element of the work is the leakage of sound from the site into the perception of the wayfarer (through the headphones) and the stronger influence of what is seen at the site on what is *imagined* from the artwork's sound. What I am highlighting here is that these sensory overlaps are essential to the work. Nonetheless, I would be the first to admit that mv work here still has inherent difficulties, as I am interested in acting as a conduit for more-than-human others at the same time as I do think it is useful to *transform* sounds and use generic sound effects to create stronger narratives about Lake Clifton (and hence, not create a truly naturalistic artwork).

Patchett: Another work emerging from the Adaptation research and residency project was the work *The Summer* Flurries, presented at Visceral: the living art experiment, a SymbioticA Exhibition at the Science Gallery Dublin (Jan-Feb 2011). "The Summer Flurries" was proposed as a GPS spatial sound walking project presenting "a landscape of droughts, dry lakes and wildfires from Lake Clifton in Western Australia, imagined as Dublin's antipodean alter ego." Unfortunately I didn't get to experience the work but the catalogue stated that "participants experience the meshing of two very different locations" and that the piece "aims to create linkages at different scales across human and nonhuman worlds."

Can you elaborate on this explanation of the work please – e.g. was the work commissioned and created specifically for the show, and how did it take shape?

Phillips: The Summer Flurries (2011) ran into initial technical difficulties when we got there, but the essence of the final work remained the same. It fits somewhere in between the other works, in that the sounds of one place (and the imaginary world it generates) are

interdigitated with another place. Μv objective was to use this dissonance between two places creatively. The audience took a walk through the grounds of Trinity College listening to a tapestry of sounds of Lake Clifton before ending up hearing the progress of a fire through a landscape. Radio emergency bulletins about a severe fire east of Lake Clifton were followed by the evocation of a landscape recovering from disaster. In my PhD I had worked with the ideas of Don Ihde (1976) to think through what it might mean to create artworks about one (living) place in another place. In The Summer Flurries the former might be stronger aurally and the latter might be stronger visually, but there is always overlap and none of our senses work in isolation.

Additionally, because I began as a visual artist, making these pieces involves acts of double transformation. As I sound record and walk in and around Lake Clifton, I see patterns and arrangements, too. Combined with the science and societal discourse about Lake Clifton, they are transformed visually so that I can comprehend wider conceptual patterns. These all influence how the sound is composed into sound structures, rhythms, movements and spatial distributions that I can use in the artworks. What I am searching for is conceptual "interference" that will create both a deeper engagement and dis/reorientations for the audience. In his work Jean-Luc Nancy has mused on the concept of resonance. Working with Nancy's theories, art historian Jennifer Walden talks about "a more pervasive sense of all the senses resonating, reverberating against each other, if we can but listen as well as look" (Jennifer Walden in The Courtauld Institute of Art, 2013).

Patchett: You have been described as being interested in "words, sounds and birds." I'm curious about how these interests combine in your recent collaborations with poets for book projects like *Birdlife*?

Phillips: Here I am talking about something ecosystemic in the sense of creating artforms



Perdita Phillips
Rainbow Bee-eater rising from Waste Land (2013) documentation of site specific investigations © Phillips

that encourage *linkages* between diverse artworks, artists and audiences. In this case there were four writers involved along with my images and drawings. All our practices are quite different so we used the broad theme of birds to mesh the piece together and to allow us to explore in book form the relationship between humans and nonhumans. We wanted a book that couldn't be labelled as just poetry with visuals and we spent a lot of time making sure the images did not illustrate the text – or vice versa – that the connections between image and text created convivial tensions.

Patchett: Finally can you tell me about your new work fast|slow|complex...

Phillips: This is a project based around my local neighbourhood. It's been quite different because I've been rethinking this time where

liveliness might sit: I've been dealing with energy and wastes as well as plants and animals. In my daily life I walk down to the Swan River from my house, but if I go in the opposite direction I end up in an area of waste land. I also looked at my own consumption patterns and the dominance of "stuff" in my life and the broader possibility of recovery after disaster. In anticipation of the gallery-based exhibition titled fast | slow | complex, organised performative walk: Walking the Waste Land to the Point that connected the industrial landscapes to my house and thence to Niergarup (Preston Point) or the place of pelicans. As part of this we did a listening drift past energy substations and the former Fremantle Bunkering site. In the past I have seen Rainbow Bee-eaters attempting to dig nests into the now-remediated site's sandy soils. Soon a green housing subdivision will be

built on this ground. I wonder what the Rainbow Bee-eaters will think next time they arrive from their northern migrations.

Notes

[1] See *Dialogues in Human Geography* November 2012; 2 (3) - please note that this journal is not open access and does not include a response by Phillips

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Contemporary artist Perdita Phillips works in various media -from site-specific environmental projects to walking, book art, installation and sound art. Her work explores the gathering of living and nonliving interests which will shape the coming environmental futures. Her sound works are part of the touring exhibition Adaptation (2012) and Visceral: The Living Art Experiment (2011, Science Gallery, Dublin). collaborations include A simple rain (with Vivienne Glance, 2012) and birdlife (with Nandi Chinna, Michael Farrell, Graeme Miles, and Nyanda Smith, 2011). 2013 exhibitions include fast/slow/complex (solo), Spectrum Project Space, Edith Cowan University and Art in a Time of Climatological Catastrophe, China Brotsky Gallery, San Francisco. She has recently completed a project about penauins for the Novel Ecologies exhibition (The Cross Art Projects, Sydney, 2013) and participated in the Finnish Society of Bioart's workshop Field Notes - Deep Time. www.perditaphillips.com

Merle Patchett's research broadly investigates interactions between people and the material world and the wavs in which these interactions are imagined and practiced in science, art and everyday life. Her longest-running research project to date has focused on critically examining the craft worlds and knowledge-practices of taxidermists, past and present, and their material culture of animal remains in order to re-think and re-present matter(s) of life and death and histories of human-animal relation. Merle has published on this research widely and has been a co-curator of taxidermyart exhibitions at the Hunterian Museum, Glasgow (e.g.<u>www.blueantelope.info</u>) and the Royal Alberta Museum, Edmonton (www.fashioningfeathers.com). Merle is a Lecturer in Human Geography at the School of Geographical Sciences, University of Bristol and is currently preparing to publish a monograph entitled The Taxidermist's Apprentice: On the Craft of Taxidermy and Histories of Human-Animal Relation.

THE PHONIC CAGE AND THE LOSS OF THE EDENIC SONG by Justin Wiggan

Man is trapped in his "normal "soundscapes, a looped cage of capitalist crickets to the vocalizations of worried mammals.

Man wants to hear the sound of rain falling on the ground or on water, and man wants to pay for the experience of a sound of a waterfall, an effect, lived via proxy out of a lost husbandry.

Man could have had a rushing river, man could have had waves lapping or rolling gravel on a shoreline and his children would be sleeping amongst the wind sounds and awake to the murmur of wind rustling the leaves in trees.

Instead man holds each other in the howling during a gale and the roar of a whirlwind whilst carving hurried deities of water, wind, thunder and still the ice is shearing from a glacier and the cackles of a forest fire torments him like laughter from a cauldron.

Sweet prehistoric music discarded for traffic-heavy, modern cash registers phonic prisons. Man is prone to be misinterpreted, misled by throwing a rock in a river to gain more shiny rocks, striking flints to burn other men's huts, chopping wood to keep wildlife a thousand paces, hammering nails to kill saviours and building combustion engines in simple shelters.

Man is the sound of rain falling on the roof. Man gives warning sounds to other species, of impending danger. Of a change in balance, a post Nochian flood fear of man put into the animal.

Wildlife.

It came with a change of diet, meat could be eaten. Man ran to the tower to gloat over the footage of glitter thrown over tiger cub carcasses, whilst suffering in silence a constant unknown homesickness.

The predator fails to warn others to seek safety, no threat but other hunters because they are as slow as he.

Man magic's sounds, mutters calls and slight audible signals establishing monetary boundaries so like or unlike species will not transgress those boundaries.

Incantations heard for miles by others. Passed down from sickness whisper to sickness call, mating calls, low and guttural, deny responsibility to what was lost. An origin of phonic webbing built by eco systems, balanced in universal acceptance.

But the imitation of natural sounds rose, in various cultures this diverse deity filled in functions related to man-made belief system that had an effect on current belief systems, a chattering Zoosemiotics enwrapped with anthroposemiotics, fascinated with balding bears in zoos who fail to raise notes of concern. They too suffer constant unknown homesickness.

We have not been revolutionized. We have refused the bands of healing, marvelled at the circus, deafened to the pure language lost from our Edenic song.

"A lamb investigates a rabbit, an example of interspecific communication through body language and scent."

Man's gestures have failed. Ruiner of the earth, eraser of sounds, with his obsession with the display of distinctive body parts.

Returning home with food, man stands over his family and throws what little money he has on the ground in front of him; this elicits a begging response from the hungry family which stimulates the man to regurgitate more money in front of them. The looping sounds of discarded power coins spinning on cold kitchen floors, a sad song.

Man also expresses his anger through snarling and showing his teeth. In alarm, his ears will perk up. When fearful, a man will pull back his ears, expose teeth slightly and squint eyes.

Man has five recognizable facial expressions; orbital tightening, nose and cheek bulge, and changes in the ear. A sad song.

Man's social pattern is facilitated by monitoring of sounds around him and not following the gaze of those he interacts with.

This "geometric gaze following" is enhanced with material desire, lack of natural love and refusal of care to the Animal Kingdom, the empire of sound walls around him block his pure gaze following abilities.

Man has hidden hatred for hammer-headed bats, red deer, humpback whales and elephant seals, and this hate hides in his glands that generate disintegration of his gardening skills, and man becomes a long-lasting smell, a hate-fuelled-scented substance to the Animal Kingdom, like urine or faeces.

Man's noise is distributed through his sweat, a semi-permanent mark on Golden Altars Marks on his forehead from banging himself, obsessed with the looping crunch of brain cells being swallowed by blood.

Men carry with them noise from their history, which they release as they re-enter unfamiliar areas, to create noise trails to remind them they are not food or for mate attraction, and to distinguish between the lack of the Edenic song. They are a confused enemy manipulated by their fight with each other.

They failed to master the oceans deeps with fireflies.

Man diverts his guilt by contests and the love of aggression between the Animal Kingdom. Eating whilst the animal displays competition over food, mates or territory; much Sunday evening entertainment functions in this way. Satisfied with submission display and the social dominance, wildlife is a temporary glitch in an envy filled hard vein.

The emission of noise from man to the animal cannot cure the beast of the field or the flying things in the heavens. The concrete means avoiding the sounds making the union between the two impossible.

Man is mutant, unable to navigate amongst the reeds, geese and penguins. His noise nest is of paradise territorials and is used to claim or defend a territory, food, or a mate.

The Golden Altar is feeding offspring, the offspring begging for songbirds, the dance language of honeybees and the nod of more experienced raven.

Man's noise means to run for cover, become immobile, or gather into a group to reduce the risk of attack.

The Animal Kingdom yawns at man's noise, of his directionless vision and his non intra-species communication. Their echolocation bounces from man's body language.

Man prays to his own predator, man. Man noise is poisonous.

The Edenic song brought animals and man into harmonious relationship with one another. The learning of, and rediscovery of, this song means establishing man's husbandry role and to eradicate the cage of the pursuit signal.

This unprofitable song, passed down from generation to generation, has helped wildlife prepared to escape. Man has been wasting time and energy, which has resulted in the capture of himself.

The cage has grown from its Samarian seed and set the phenotypic condition (quality advertisement) of its self. The Animal Kingdom voices pursuit-deterrent signals which go unreported, hopping antelopes crying under blue plastic.

Man's ability to communicate with the Animal Kingdom means deceiving them. Man noise is a reflection of the cage, which man then imitates to the Animal Kingdom.

Animal language and its bands of frequency are now lost and have failed to establish human/animal communication. Man's choice of unlearning the Edenic song and focusing on expressive communications upon the Golden Altar broke the animal to human bond specifically. Some of the Animal Kingdom attempts to communicate to humans. Horses refuse to communicate, but for their own safety display a receptive language (understanding).

Some of the Animal Kingdom attempts to communicate to humans. Horses refuse to communicate, but for their own safety display a receptive language (understanding).

The Animal Kingdom is safer at this distance, until the Edenic song is relearned. Some humans have stabbed in the dark to discover the song. Sean Senechal taught some animals a gestural (human made) ASL-like language, and there is some compromise from the Animal Kingdom as animals have been found to use the new signs on their own to get what they need. The research is still part of the phonic cage. The cage is still governed by the Golden Altar.

The Golden Altar produces its own song which produces an Autonomous Sensory Meridian Response in humans. There is a misconception theory of the cash machine sound being produced by rollers delivering the notes to the collection slot. Allegedly, the sound is an entirely artificial addition to the process.

"The noise is produced by a speaker and purely included in the transaction to reassure you that your money is on its way. Without the added noise, the ATM would be practically silent with its moving parts on the other side of a brick wall." http://www.humansinvent.com/#!/889/5-fake-sounds-designed-to-help-humans/ (Mic Wright)

Do these sounds act as elaborate hearing aids that help humans to find comfort?

This is a reproduction of the sound of antlers wrestling, helping man with locating satisfaction for his tokens of guilt, blocking out the Edenic song with over amplified sound effects; like how the reassurance of the chase scene is established due to the fast orchestrated music set behind the footage in action films. Why do we need to be comforted with fake effects/soundtracks in movies to make the experience more real? When was the last time you leaned in for a kiss surrounded by a vibraphone solo? Is it to stop the questions and the noises in the head which have been there for thousands of years?

Does man secretly fear falling from his Golden Altar sideways into the bowl of antlers?

The Golden Altar comforts its family by the ways of mass "Autonomous Sensory Meridian Response" (ASMR).

This biological phenomenon is a reward for staying close to the altar's region. It offers pleasurable tingling sensations replacing the mother, erasing the Edenic song. Through its extended domain, the Golden Altar, by the way of Internet culture, such as blogs and online videos, as manage to reduce experience, soften the blow, relax the twitching hand hover over the mouse. These vicious micro sounds are a disease, a blind spot for culture to hide in whilst dropping laptops and shielding revolutionary thoughts. The power of purring seems to be not enough and so the Golden Altar offers an enhanced rummage through handbags, squashing sharpie pens and make up collections.

The material world schooling material girls.

http://www.buzzfeed.com/theseantcollins/why-music-gives-you-the-chills-7ahd by Sean T. Collins

The Golden Altar has aided the distorted relationship between mad and animal, distorted with the aid of Disney and other children's entertainment of film, cartoons and books. The fetish gap, the gap of fear, is managed by anthropomorphic recognition; the recognition of loss of the Edenic song, the erasing of the guilt which is built on man turning his back and opting to live in the phonic cage. This denial of husbandry needs a nest. The nest has to be occupied, and so characters for children like Mickey Mouse, Donald Duck, Snoopy and Scooby Doo are part of the Golden Altar's curriculum.

This curriculum does not allow the existence of the origin of animals, but eases their guilt and the guilt of the parents by giving the dog a voice, by giving the naked duck a towel. This curriculum focuses on the Pleasure Principle and ignores the reality principle. How many school systems learn about the healing quality of a cat's purr whilst the Golden Altar's machine is obsessed with conditioning the voiceless generations in the phonic cage, a cage which is

which is greased with material objects, a nest to block the path back to the song of truth?

This futility of the Golden Altar's education via the phonic cage wastes resources and is leading children into a separatist elitist group competing for material riches, and robbing children of organic play learning; killing the soul of confidence and the voice of creativity. These children have the icaric desire to fly on homemade wings that can resist the consumerist burning sun.

The Altar conditions man to protect it to the point of abuse, which gives seed to stories which man has pleasure inventing and reading; a rubber-necked slow dance with his own guilt. Watching nature plea for help with a crooked smile..."it's sad, so sad. It's a sad, sad situation." Journalist Kelvin MacKenzie invented a story to protect the Golden Altar, whilst at the same time revealing a nerve of Edenic truth lingering inside man's consciousness.

In 1987, MacKenzie published that the singer Elton John had had the voice boxes of his guard dogs removed due to their barking keeping Elton awake, and to some degree hide their own Edenic song, and be the ultimate invisible guardian of Elton's personal Golden Altar, to protect his own phonic cage.

Although completely untrue, as all of his guard dogs were capable of barking, Elton John sued The Sun for libel and was awarded £1,000,000 in damages. The balance was restored, the accusation of abuse towards the Animal Kingdom, even though untrue, resulted in the Golden Altar being victorious.

My decision as an observer to our unique situation is that I choose to fight the phonic cage, find answers and tips of how to avoid the Golden Altar's ever increasing grip on reality, and to learn to seek the Edenic song. I also look forward to the time of restoration of this universal song, the crumbling of the Golden Altar, and the silencing of the phonic cage.

"Bring forth what is within"

Children of constraints exist, children of dominant concerns exist,

Those who deny explanations and implications do not.

These are children of Laplace's demon, They spit out facts about the past and the present,

They mumble natural laws that govern the universe,

But you give them wind-up toys, billiard balls, puppets and robots.

You people are a hindrance, you people are an obstacle.

Do you not know that children can destroy the universe?

Do you not know they throw your long-treasured gold into the sea, and break in pieces lately-finished statues?

You are slugs in hierarchical mesh.

Children of consequence, Children of symbols and letters,

Gathering food in academic fields.

Justin Wiggan Was Born in Burnley Lancahire and studied Fine Art Ba at UCE. He works in a variety of guises, predominately with Darren Joyce as Dreams of tall Buildings and collaboratively with Norwegian artist Oona Luras. Wiggan currently runs the HND in Fine Art at Walsall College. Wiggan's work uses medias of phonics, text, film, object changing and drawing to make interface solutions to problems that only he has have created.

These artefacts and documents are a reaction to the shouts, screams, shrieks, wails, hoots, howls, death rattles and sobs that are all soaked up by his surrounding unfinished structure of space. His body of work engages to this swollen cityscape and space, discovering the links between the internal tourist and the external explorer. His investigations embrace of a sense of evolution and eradication of a problem that goes way beyond cultural breakdown, addressing the problem with an end of a system.

His current work investigating a philosophic body looking at the relationship between the explorer and the tourist, one cuts the path through conviction and belief, the other gnaws on the path for convenience.

The pieces are hosts to reveal the commercial virus we have allowed to manifest within our western culture, the explorer of Elvis is diluted by the tourist of Warhol only to be an explorer to the bedding company who produced it as a bed sheet.

Just like the Kandinsky triangle model he proposed in "concerning the spiritual", his model has influenced this concept, the responsibility of the artist to enlighten the masses and draw them up the line of truth, the explorer pull the tourist but the tourist at times digs his feet in and cannot be moved.

Our culture is reduced, our hands are tied.

Wiggan employs a method of "encasement", a writing philosophy developed from cut up techniques, where the text is generated on the meaning of the title and mapped out via research and shaped organically. This method allows the rich meaning encased in each word to dominate the narrative of the piece at times revealing shockingly solid truths through chance. He is fascinated by the noise in the reader's head.

More of his work can be found on these websites: www.dreamsoftallbuildings.com www.cottoncandyhousefire.tumblr.com

"weirdest imagination of anyone I've ever met " - Mark Wilkinson (http://www.the-masque.com/)

"evokes a poisoned earth whose physical symptoms indicate the moral and emotional decay of society" http://thestoneandthestar.blogspot.co.uk

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