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A DIFFERENT PITCH: LISTENING TO WATER THROUGH CONTEMPORARY ART IN A TIME OF EXTRACTION

RUTH BEER AND CAITLIN CHAISSON

Abstract: *This article addresses the intersections of water, extraction, and environmental justice through a consideration of sound in contemporary artworks by Ruth Beer, Rebecca Belmore, and Mia Feuer. Qualities of sound have been tied to environmental studies and assessment for decades, but these artists consider audio-visual and immersive situations that foster the ability to listen amidst ecological complexity.*

Résumé: *Cet article examinera l'intersection des questions de l'eau, de l'extraction et de la justice environnementale à travers l'étude du son dans les créations artistiques contemporaines de Ruth Beer, Rebecca Belmore et Mia. Feuer. Depuis des décennies, les qualités du son ont été liées aux études et mesures environnementales, mais ces artistes s'intéressent à des situations audio-visuelles et immersives qui fournissent la capacité d'écouter dans un contexte écologique complexe.*

"[E]arth, waters, and climate, the mute world, the voiceless things once placed as a decor surrounding the usual spectacles, all those things that never interested anyone, from now on thrust themselves brutally and without warning into our schemes and maneuvers."

- Michel Serres, *The Natural Contract* (1990)

"[C]limate crisis is also a crisis of culture, and thus of the imagination."

- Amitav Ghosh, *The Great Derangement* (2016)

INTRODUCTION

The debates and discourse pertaining to resource extraction and environmental justice are increasingly being framed

through water. If we look to the ways that extraction and global warming are covered in mainstream and social mediascapes, the tragedies of water feel particularly imminent. We hear, for example, of vulnerable watersheds that face threats of contamination, pollution, and devastation from extraction processes, and of countless communities whose access to safe drinking water is compromised by heavy industry (Lui). Over sixty long-term drinking water advisories still remain in public systems on Indigenous reserves, and there exist many more still that are not yet designated as long-term, or are outside the purview of public systems (on the former, see “Ending long-term drinking water advisories”). We also now hear of treacherous and unforgiving waters. Rising sea levels due to carbon-induced climate heating, and increasingly frequent and severe storms due to warming ocean temperatures, which present an encroaching and potentially indomitable force. Water is a powerful example of how environmental destruction exacerbates existing social vulnerabilities, and affects human and other-than-human lives with differential consequences.

Resistances to mega-extraction projects throughout North America are thus increasingly advocating for the preservation of inland and coastal waterways, signaling the highly permeable and porous relationship between water and land. In Canada—and across the globe—there has been a remarkable surge in environmental defenders forming “Water Protectors” or “Water Keepers” groups, primarily led and mobilized by Indigenous peoples. These protectors position themselves on the frontlines of large-scale fossil fuel, mining, and hydroelectric projects that jeopardize important watersheds, taking up affirmative strategies (like protection) in place of merely dissenting strategies (like protest). This recent and crucial shift in terminology aims to “break the negative predetermination of the generic terms ‘activist’ and ‘protestor’ that portray defenders as just another group engaged in vacuous struggle and vague threats” (Glazebrook and Opoku 90). This distinction is a vitally important one when it comes to challenging the stigmas of civil disobedience and risks of criminalization, as the alignment of protest with *protection* takes up the unequivocal human right to water as a way to make it more

difficult—and hopefully unconscionable—to dismiss these struggles against extraction projects.

Today, these contentious land-use debates are taking place amidst a major federal attempt in Canada to market an empathetic government that “listens,” an activity that has been largely oriented around campaign promises of reconciliation. But given that reconciliation is a “troubled and troubling term often used to impose a sense of closure on experiences of colonization that are very much alive and ongoing” (L’Hirondelle Hill and McCall 1), and governmental duties to engage in honourable and meaningful consultation have repeatedly failed in court challenges, more competent strategies of listening are evidently required. Pamela Palmater, a Mi’kmaq lawyer and Chair of Indigenous Governance at Ryerson University, demands environmental reviews consist of “not just listening to concerns but taking substantive steps to address and mitigate them” (9). Palmater’s concise call to action is distressing in its obviousness and unnerving for even needing to be said. But as reports, recriminations, non-binding policies, recommendations, approvals, predictions, denunciations, outcries, denialism, and catastrophism continue to bubble up in the form of heated and vitriolic debate in the various mediascapes, where do we—as general publics—begin to listen? How can we learn more expansive and comprehensive listening strategies by attuning ourselves to these resources and places? What ways can contemporary art inspire and instruct us in alternative forms of listening?

As both concerned citizens and creative practitioners, our interest in these topics emerged from our involvement in a research-creation project entitled *Trading Routes: Grease Trails, Oil Futures*, which explores the role of extraction in Canadian communities, especially those affected by industry infrastructures. *Trading Routes* emerged at a time when corporate and governmental proposals to further expand the network of crude oil pipelines across the country were growing. These pipelines would efficiently and invisibly move Albertan oil across a vast distance to tidewater amidst a climate emergency. *Trading Routes* was developed with a desire to examine the relationship between water and extraction through an artistic lens. As researchers and artists, we are committed to exploring how *Trading Routes* can broaden the way extraction is considered in the public

realm, by using creative practices and contemporary artworks as vehicles for galvanizing imagination and creating provocation.

In this article, we present an exploratory overview of contemporary engagements with sound, the environment, and extraction. In so doing, we examine Ruth Beer's practice-based artistic research (emerging out of her creative contributions to *Trading Routes*) alongside the powerful artworks of Rebecca Belmore and Mia Feuer. Throughout, we consider sound from the perspective of artistic practice, as distinct from the important work that is already being done in sound studies and musicology, as the artists pursue various audio-visual relationships that produce multi-sensory and immersive engagements. While the artworks we discuss remain firmly positioned within exhibition practices—at a safe remove from the frontlines of disruption—we hope to underscore some of the ways they might be able to suggest allyship with direct action strategies. These artworks are not obvious illustrations nor indictments of the colonial extraction project, but, through their difficulties and challenges they pose to interpretation, the works become important for developing the skills needed to grasp the complexity of extractive industries. The artworks are also invitations to explore imaginative possibilities of engaging with the world and materials around us in a way that will begin the long work of changing social consciousness about water. As we suggest, listening is *not* a passive gesture of oversensitivity, but an affirmative and creative strategy that plays an important role in the transformative power of environmental social justice. If “both in theory and practice, listening is the crucial interface between the individual and the environment,” how can contemporary art support divergent forms of listening in a divisive time of extraction (Truax 13)?



Figure 1

ECOLOGICAL SENSITIVITY THROUGH SOUND

Much work has been done to contextualize and theorize the role of sound within environmental concerns. In 1962, Rachel Carson published *Silent Spring*, a widely influential analysis on the devastating biological effects of industrial and domestic pesticide use. The book begins with a fable of an unusually quiet spring dawning on a small American town. The familiar chorus of songbirds has disappeared—as populations have been devastated by chemicals like DDT—and other environmental changes as a result of the loss of the birds begin to ensue. This narrative, which places sound at the heart of a major disturbance, is poignant in its use of a sonic unit-of-measure—the birds’ chirping—to apprehend the sometimes furtive or otherwise “invisible” aspects of ecological health. In the 1970s, the analysis of sound as an indicator of well-being emerged evermore forcefully. The World Soundscape Project (WSP), developed by R. Murray Schafer and collaborators at Simon Fraser University, and the Pula Group’s Harmony Ranch at the Yale School of Art were followed by the proliferation of fields like acoustic ecology, soundscape ecology, ecomusicology, geophonography, and bioacoustics—among other variants—that contend with anthroponic, biophonic, or geophonic sound systems. As sound artist Hildegard Westerkamp exclaims, these projects attended to the way “the small, quiet sounds in the natural environment are symbolic of nature’s fragility, of those parts that are easily overlooked and trampled, whose significance in the ecological cycle is not fully understood”

(91). Today, projects like the World Forum for Acoustic Ecology, among others, continue the education, study, and preservation of the sonic environment.

The relationship between sound and environmental concerns is not a new proposition—but there are marked differences in how that relationship is considered today. At their time of emergence, projects like the WSP were aligned with the prevailing models of sustainability, conservation, restoration, and homeostasis (Demos 35). The focus was often on the social effects of noise pollution and the health impacts that result from the transition from a harmonious soundscape in nature (a hi-fi environment) to the oppressive noise of modern life (a lo-fi environment) (Schafer, *The Book of Noise*). Noise pollution continues to be an important issue for acoustic ecology; but while it might have formerly been the centre of attention, it has more recently yielded to the incommensurable topic of the climate crisis. In particular, this shift is evidenced by the major growth in practitioners who are engaged in the creation of field recordings to generate “baseline” sound maps from which to measure the effects of climate change, predictive models for future aural environments, and the explosion of practices that experiment with the sonification of climate change data—including information related to the statistics on rising temperatures, flooding severity, storm intensity, and refugee migration patterns (Insley *et al.*; Paine; Polli).

Extraction can very concretely impact soundscapes, through, for instance, the incessant hum of industry, or—even more specifically—through the legally required periodic cannon blasts meant to spook aviary away from landing on the toxic surfaces of tailing ponds (Hern and Johal 98). Much of the quantitative scientific work of acoustic ecologists has offered insight into the severity of these sonic events. But extraction is clearly changing acoustic complexity in other significant, albeit more circuitous, ways that require our listening capacities to change and evolve as well.

IMMERSIVE MODES OF SENSORY ENGAGEMENT

Neither Beer, Belmore, nor Feuer identify as sound artists specifically, but instead work through interdisciplinary artistic practices that incorporate disparate media and polyphonic elements. Together their works help enable new perspectives on the use and interpretation of sound. Their practices fuse sound and sculpture by using the latter as a tool for amplification. These sonic objects collect sounds that are beyond the normal realm of our immediate hearing or attention. Rather than extracting or manipulating these sounds, the artists yield to the “physical medium of sound transfer” and the way that sounds can be imprinted and “accounted for through the physical layout of the environment” (Traux 15 and 61). This entangled relationship between aural and visual perception serves to heighten the complexity of interpretation, requiring audiences to draw upon multiple modes of sensory engagement.

The artists’ strategies of immersion experiment with and manipulate audio-visual experience. This experimentation is achieved primarily through a relationship-oriented form of immersion, which builds upon Pauline Minevich’s estimation that immersion “suggests a social life of sounds that situates them in relationships created around a particular sound, the material of its media, and the physicality of its surrounding” (5). Here, the forward-facing experience of visual understanding is paired with sound that “comes at us from behind or from the back, from any direction, and surrounds us” (Berland 34). Their immersive strategies also require in turn multidimensional, multidirectional modes of analysis that are able to come at the work from many different angles.

In an immersive situation it is difficult for artists to direct their audience’s attention. Instead, attention roams and flows. Listening becomes multivalent—perhaps even divided—because sonic attention constantly shifts. This state of distracted reception has been compellingly theorized by the Stó:lō scholar and artist Dylan Robinson. In Western sound studies, the *perfect* listener is the listener who is devout and unwavering in their attention, whereas the distracted listener is demeaned and dismissed as lackadaisical and inattentive. Robinson deconstructs this hierarchy, and posits distracted listening as a

tool for subverting the assumed superiority of direct or autonomous listening, “acting in opposition to normative, teleological, and structural regimes of contemplation” (8). Distracted listening is fundamentally *not* about the listener’s direct acquisition and comprehension of sound, but is instead about relational practices that undergo continuous change. As Robinson argues, distracted reception is the result of complication—the inability and inadequacy of listening that is “precise,” “efficient,” or “objective.” To shift the understanding of distracted listening “from its current connotations of inattention, to a polyvalent, de-centred method of reception allows us to re-conceptualize reception from a goal-oriented search for understanding a product (disrupting the flow of information as stable commodity) to an understanding of reception as a continual process” (15). By analogy, we could say that complication is the definitive quality of ecological understanding. Cultivating the skills to be able to listen both through and with complication will be vital in the efforts to untangle the complexity of the social, political, economic, and environmental aspects of extraction.

NAVIGATING CHANNELS: RUTH BEER, *ANTENNA* (#1) (2016)

Ruth Beer’s artwork experiments with immersion and distraction through the simultaneous possibilities of radio. In radio, simultaneity is not only temporal, but also geographic. A sound emits in one place, only to bridge vast geographies by its reception elsewhere. Territoriality is entrenched in radio, as “broadcasting is in part about the constitution of space” (Berland 33). The connective power of radio emerged historically out of the “military-industrial lineage” of the medium (Lander 13). As the politics of Canada shift towards various economical and ecological crises, questions regarding the ways in which resource use is communicated and conveyed to publics have led Beer to consider further the presence of radio and the motif of the tower in a number of recent artworks.

Antenna (#1) is a weaving made out of thin-gauge iridescent copper wire that is suspended from a tall steel structure. At the base of the structure, a dense black form appears as a backdrop for the weaving. Playing with ambiguities in weight and scale, the dark shape anchors

the steel structure at the same time as it is buoyed by it. The weaving billows around the framework as though it were the undulating line of an oscillograph, which eventually pools into a fringe on the ground. One of these loose strands of copper is pulled away from the rest, and connected to a small broadband radio. A powerful conductive material, the copper wire transforms the entire weaving into an enormous antenna, which dominates over the receiving box. The artwork connects a multitude of spaces, acting as a bridge that condenses, grasps, and translates vibrations into sounds we can hear.

The radio is programmed to scan live channels, looking for any acceptable transmissions or signals within the area. This programming has made the work highly variant and site-dependent. Beer, who initially conceived the work to be shown in gallery-spaces near the coast, was interested in the way the amateur radio scanner might collect snippets of maritime traffic, weather reports, and search-and-rescue transmissions. But in practice, the scanner also picked up a substantial amount of communications sent and received through taxi dispatches. In one of the saved recordings of the radioed scan sequences, we rapidly ricochet between water and land. Vibrations of diesel motors cut through the heavy static as somewhere nearby, captains navigate boats in and out of traffic, radioing one another as a means to avoid collision. Intelligible conversation subsides and we hear sporadic transmissions that include white noise and muffled voices that buzz, crackle, and purr. The radio scanner makes the leap from disjointed conversations to the constant drone of the weather station, where highs and lows are distinguished by the authoritative radio-voice. The scanner leaps again. We hear the inflections of richly diverse languages, as a predominantly immigrant population of taxi drivers coordinate the pick-ups and drop-offs of passengers. The sounds are disjointed, interruptive, and non-linear in their broadcasts. Rather than dismissing these sounds as a negatively distracting compilation, *Antenna (#1)* offers us an opportunity to perceive the conjunctions between marine and ground transportation. The initial desire to fill the gallery space with the sounds of water inevitably brought with it other complications that materialize on land. Despite the limited reach of the radio to detect signals from only close dis-

tances, the sounds are surprisingly and compellingly representative of the global flows of people and products.



Figure 2

The ordinariness of the projected sounds and the banality of information we hear pulsed back and forth through the radio is made more substantial through Beer's material exploration of the physicality of the transmission of sound: firstly, through copper, and secondly, through oil. Navigational mediums like radio, GPS, and other electronics are simply not possible without copper wiring. Copper has fundamentally changed the capacity to traverse distant spaces through technologies that shape how we communicate and locate ourselves. And yet, the production of copper generates long-term and devastating environmental impacts as it is mined and refined, particularly in relation to water systems. Mining involves blasting through the crust of the earth and scavenging through dense heterogeneous rocks, whereby minerals are synthetically separated through toxic solvents and rinses that produce effluent waste in tailing ponds (Place and Hanlon). This energy-laden process is possible entirely through the technologies developed and enabled by petrochemical powers. As artist A. Laurie Palmer notes, most mineral commodities are "linked in some way to oil," whether it be through military or defence strategies, or through the way that oil profits are often used to invest in the high capital costs of mining projects (7).

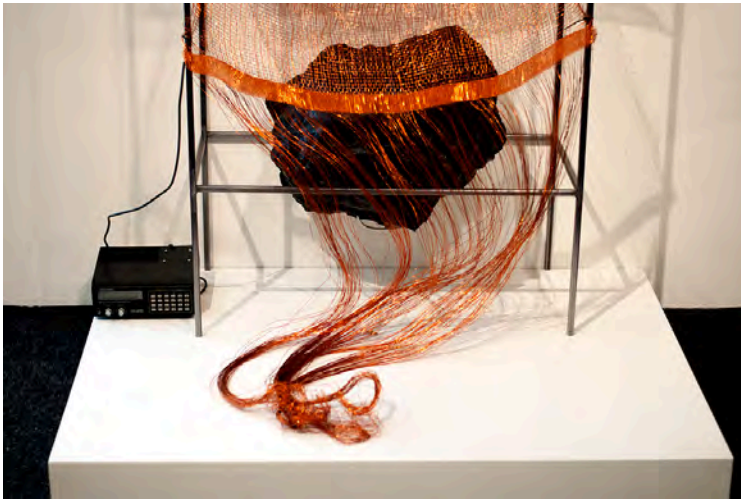


Figure 3

We don't hear the sounds of extraction processes directly in *Antenna* (#1), but we do hear the consumption of some of those products in real time as we are visually confronted, head-on, with the way our ability to even listen to these sounds is ecologically compromised. The artwork takes up the simultaneity of radio to bring together sounds of the water, the land, and the cultural ambient noise of the gallery, experimenting with weightiness and scale in relation to our understanding of extracted materials through the single unit of the radio receiver—which appears so small, in relation. Importantly, it also allows us to experience the multitude of relationships between extraction and navigation in a more nuanced and multi-directional soundscape.

AMBIENT THRESHOLDS: REBECCA BELMORE WAVE SOUND
(2017)

In an interview following Rebecca Belmore's premiere of *Fountain* at the 2005 Venice Biennale, the artist noted, "we are approaching a time when water could be an issue more serious than oil. I hope that day never comes" (Belmore and Watson 27). In the years since, Belmore's prediction has distressingly come true, and her art-making has certainly reflected this shift in concerns. Recently commissioned as part of the *LandMarks* curatorial series, *Wave Sound* (2017) is comprised of four sculptures situated in Banff National Park (AB), Pukaskwa National Park (ON), Georgian Bay Islands National Park (ON), and Gros Morne National Park (NL).



Figure 4

Each of the four sculptures has been cast from the terrain immediately surrounding the site where the piece is installed, which has the effect of making the sculptures quite difficult to distinguish from the immediate environment. The aluminum-cast sonic cones are placed with their receiving-ends facing bodies of water. The sculptural form funnels the distant aquatic sounds to the narrowed point where the sculpture meets the listener's ear. The installation of *Wave Sound* in Banff, Alberta, cannot be experienced from an upright position, and the sculpture directs you to crouch down and rest your body close to the land. Applying your ear to the end of the cone, your entire auditory focus shifts. The ebbs and flows of the water are amplified in tremendous detail through *Wave Sound*, which channels sonic events heard from as far as the middle of the lake. The remarkable sharpness and clarity even allows you to overhear conversations aboard the recreational boats servicing guided tours, where international visitors learn about the traditional grounds of the Stoney people, and the historic townsite that was submerged during the damming of the glacial lake for a hydroelectric project ("History of Lake Minnewanka"). As you listen, it becomes apparent how the very geogra-

phy around you has been smoothed and shaped by the water's forced and forcible movements.



Figure 5

In a number of ways, *Wave Sound* can be seen as a re-visitation of one of Belmore's earlier influential artworks, *Ayum-ee-aawach Oomama-mowan: Speaking to Their Mother* (1991, 1992, 1996, 2014). Belmore produced a two-meter wide wooden megaphone that travelled through remote and urban communities from coast to coast, intended as a direct expression of protest in the wake of the Oka Crisis—and the ongoing trauma of resolving Indigenous land claims. By offering an invitation to Indigenous peoples to speak to their Mother—the land—the work operated in sync with a shift in the political landscape for Indigenous people at that time. *Ayum-ee-aawach Oomama-mowan: Speaking to Their Mother* began a reverberation throughout the natural landscape, by both symbolically and physically offering agency to communities to address the land and their relationship to it. From hilltops, valleys, and lakeshores, hundreds of voices rang out into the distance.

Ayum-ee-aawach Oomama-mowan: Speaking to Their Mother operates very clearly in the realm of protest and has been historicized as such, but is it appropriate to interpret *Wave Sound* as a similarly political act? In many ways, the answer is yes. In both of these works, Belmore challenges the assumed thresholds of hearing. The megaphone changes the threshold for which Indigenous voices are heard by the nation-state, and *Wave Sound* changes the threshold by which we are able to hear the water around us. But in the two and a half decades between the creation of these artworks, *Wave Sound* might indicate certain shifts in engagement—particularly in modes of listening—that are relevant to decolonial activism today. In particular, the transition from linguistic to a nonverbal auditory realm opens up possibilities for the recognition that sounds carry their own intelligence, putting the water in a more-than-ambient role (Oliveros). The non-linguistic listening required by *Wave Sound* requires sensorial, intuitive, holistic, and deeply personal modes of engagement. The stillness of the body in relation to the unending movement of the water in the work, and the humility in the relationship between the body and the water significantly changes the hierarchies of communication. *Wave Sound* encourages us to alter our ethical, political, and conceptual relationship with water by nurturing empathetic modes of listening.

INTERFERING FEEDBACK: MIA FEUER, MESH (2015)

The relationship between sound and the physical transformation of landscapes or geographies resonates clearly in the work of Mia Feuer. Exhibited simultaneously at Locust Projects in Miami, Florida and Esker Foundation in Calgary, Alberta, *Mesh* (2015) presented the shape-shifting qualities of water in a work that traverses multiple states of governance. In a transcontinental undertaking, the installation created connections between Svalbard (Norway), Florida (United States), Alberta (Canada), and Louisiana (United States).



Figure 6

As an artwork, *Mesh* is a complex interlaced structure where sound, material, and place are integrally linked. Emanating from speakers surrounding the work are the rushing sounds of water and the creaking and groaning of underwater Arctic glaciers. Recorded with hydrophones at the Hornsund Fjord, Svalbard, the aquatic noise registered by scientist and ocean acoustician Grant Deane is used to measure the calving of glaciers below the visible surface of the water. The recorded sounds convey endless activity. The recorded audio is streamed into Feuer's multifaceted, reciprocal, and even unstable representation of the relationship between water and land.

The artist created two different sculptural installations for each exhibition in order to reflect the environments in each respective place. In the coastal city of Miami, the sculptural form takes the shape of blocks of concrete and jugs, suggesting the seawalls or floatation materials that preoccupy municipal planners in this sea-level municipality (Urbina). In Calgary, a moss-covered tree is anchored by a con-

veyor belt, a scene not too dissimilar from the felled trees at clearcut extraction sites throughout the oil-rich province of Alberta. In both exhibitions, a salt carving of the three-dimensional topographic map of coastal Louisiana lies below the suspended forms. As the ambient sounds of the underwater recordings fill the space, the installation is programmed to release a drip of blue indigo dye each time a calving event is heard. The bubbling, humming and roaring of the glacial sounds excites a visual transformation, as each drop of dye dissolves the mapped sculpture below. *Mesh* composes a situation where resonant sounds alter our visual evidence. In a sense, listening reveals the ways in which certain forces re-shape the visual world.

The sounds of glacial events rebound against the bayous of Louisiana. Feuer has starkly condensed the miles of distance between Norwegian fjords and southern United States. The artwork is unapologetically direct: melting in the Arctic destroys the coastal landscape of the American South. In fact, “Coastal Louisiana has experienced one of the highest rates of relative sea level rise in the world” (Maldonado et al. 606). In Terrebonne Parish, where Feuer conducted much of her research, the impacts of these changes are already being felt by the Indigenous nations in the area, including the Pointe-au-Chien tribe, and the Isle de Jean Charles Band of Biloxi-Chitimacha-Choctaw.

Mesh positions listening as a series of feedback loops that have visual and sonic consequences. Feuer’s unabashed use of petro-products like vinyl plastics and styrofoam, bathed in an eerie glow of cool light, is dystopic in its excess. These products are part of the carbon economy that leads to the melting of the glaciers in the first place, but the glaciers exact their own costs on the sculpture’s visual form. The use of recorded sounds situates the experience in the midst of events already past, furthering the bleak determinism of these processes.

CONCLUSION

As the struggles against extraction projects become louder and noisier in the public realm, contemporary art can contribute by enabling us to listen to the sonority of water in new and vital ways. Sound is not a discrete event in the same way that an ocular experience might be, and its immersive and responsive

qualities towards surrounding environments allow for different forms of perception. The way that sounds unfold through space and time opens possibilities for thinking about the far-reaching repercussions of extraction politics and global warming. Shortsighted policies that fail to see the vast horizon of these implications might very well be improved by embracing the complexity of sound.

The focal points of auditory attention differ significantly in the work of Beer, Belmore, and Feuer. The artists present multifaceted sonic objects that immerse the audience in an environmental experience that manifests up-close in Belmore's *Wave Sound*, from mid-range in Beer's *Antenna (#1)*, and from an unthinkable distance in Feuer's *Mesh*. Despite these differences in spatial relationships, all of the artists present their audiences with complex and simultaneous issues, requiring them to listen through different scales, change their thresholds for listening, and ultimately listen through feedback and interference. In all these artworks, the auditory significance of water speaks through materials, space, and form.

As T.J. Demos observes, "there is no single solution or sole approach to our ecological predicament. Indeed, multiple paths are required" (260). Since we cannot expect to find a precise answer that will fix every ill, multi-disciplinary approaches are both desirable and necessary. Exploring these ideas through creative methodologies, we understand how the visual can provoke straightforward contemplation, while sound transcends these confrontational boundaries. Sound can sometimes be more difficult to pinpoint, however, making heightened forms of listening all the more important. The capacity of art to lead to real and measured change in relation to geopolitics and environmental destruction is similarly difficult to pinpoint. While what needs to be done to achieve the scale of change required to divert the world away from environmental calamity is exhaustive, there is a compelling simplicity to the belief that "patterns of behaviour, including listening, can be changed" (Truax 27). Listening differently and dedicatedly to complexity—instead of listening in spite of it—will be imperative.

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IMAGE NOTES

Figure 1: Ruth Beer, *Oil & Water*, 2014. Photographic prints. 101x76 cm. Photo courtesy of the artist.

Figure 2: Ruth Beer, *Antenna (#1)*, 2016. Copper weaving, steel tower, polyurethane, short-wave radio. Installed in *Ground Signals* group exhibition curated by Jordan Strom at the Surrey Art Gallery, 2017. Photo courtesy of the Surrey Art Gallery, SITE Photography, and the artist.

Figure 3: Ruth Beer, *Antenna (#1)*, 2016. Detail. Copper weaving, steel tower, polyurethane, short-wave radio. Photo courtesy of the artist.

Figure 4: Rebecca Belmore, *Wave Sound*, 2017. Cast aluminum. Installation at Lake Minnewanka, Banff, AB. Photographed by Kyra Kordoski. Commissioned for Landmarks2017/Repères2017 by Partners in Art. Photo courtesy of the artist.

Figure 5: Rebecca Belmore, *Wave Sound*, 2017. Cast aluminum. Installation at Lake Minnewanka, Banff, AB. Photographed by Kyra Kordoski. Commissioned for Landmarks2017/Repères2017 by Partners in Art. Photo courtesy of the artist.

Figure 6: (Left) Mia Feuer, *Mesh*, 2015. Styrofoam, rockite cement, metal, papier-mâché, polyethylene carboy, indigo blue aniline dye, solenoid, vinyl tubing, PVA glue, salt, MDF, paint, cast driftwood sourced from the Arctic Ocean, Spanish moss and cast bark sourced from the bayous of Pointe au Chien, Louisiana. Esker Foundation, Calgary, Alberta. Photo by John Dean. (Right) Mia Feuer, *Mesh*, 2015. Styrofoam, rockite cement, metal, papier-mâché, polyethylene carboy, indigo blue aniline dye, solenoid, vinyl tubing, PVA glue, salt, MDF, paint. Locust Projects, Miami, Florida. Photo courtesy of the artist.