

Performing Loss: Sonic Rhetoric in Maya Lin's *What Is Missing?*

Marilyn DeLaure

It's not just what's missing, it's the memory: that we literally forget with every successive generation what used to be. It's called 'shifting baselines' or 'landscape amnesia' How do we even know what to protect if we don't even realize what's gone?

—Maya Lin

If this period of incredible loss cannot rouse in us an awareness of our place in, and our responsibility for, a shared world, then I am not sure what can.

— Thom van Dooren

For more than a decade, world-renowned artist Maya Lin has been building what she calls her “last memorial” project, titled *What Is Missing?*—a multi-site, multi-media, collaborative work that draws attention to the present crisis of habitat destruction and extinction. *What Is Missing?* (*WIM*) includes sculptures, temporary exhibits, and a perpetually evolving website that catalogs memories and stories of loss, transformation, and hope from around the world (whatissmissing.org). The memorial's sculptures include the Listening Cone, an 18-foot long bronze form shaped like a megaphone installed at the California Academy of Sciences in San Francisco, and Sound Ring, an empty oval frame containing a hidden array of eight speakers that play field and ambient nature recordings located at the Cornell Lab of Ornithology. Lin's Empty Room was a traveling exhibit mounted in 2009, where visitors entered a darkened room filled with sound but no objects, holding optical plexiglass pieces with which to catch video projected from the floor. And for Earth Day in 2010, a series of *WIM* videos played on MTV's electronic billboard in Times Square, New York City. Lin's fifth and final memorial is her first to employ media: a series of sound and video recordings featuring endangered

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flora and fauna unify the various parts of the project. These core videos play inside the Listening Cone and are accessible on the *WIM* website; they also showed in Times Square and Empty Room. These videos feature the images, sounds and voices of only non-human species — no people appear, and human voices manifest only as written text.

The title of Lin’s last memorial is a haunting question, one that can never be definitively answered, given both the vast planetary scope of extinction and the limits of human understanding: What *is* missing? This question forces us to ponder that which is not present, or not readily apparent; to grapple with the aporias in our knowledge; and to confront the widespread human failings of inattentiveness, ignorance and inaction. Each of the memorial’s core videos opens with the title question, followed by a singular answer: Forest Elephants, Coral Reefs, The Winter Home of the Monarch Butterfly. But as Lin explains, “*Missing* is not just about specific extinct or endangered species, it’s about absence, and it’s about a more fundamental level of not knowing what we’re losing . . .” (SF Arts Commission). By carving time and clearing space for human animals to engage affectively with other species, past and present, *WIM* helps to remedy the “landscape amnesia” that afflicts so many of us today.¹ *WIM* offers a dearly-needed opportunity for us to listen, reflect, and grieve; such mourning work is crucial to understanding our deep entanglements with the more-than-human world. Lin’s rich, complex, multimodal last memorial is especially powerful because it *performs*, rather than merely informing us about, loss.

To date, *WIM* has garnered only modest press coverage and limited scholarly attention. The few critical analyses of *WIM* published in academic venues focus heavily if not exclusively on the website, privilege verbal and visual registers, and emphasize representations of, and by, humans.² I offer here a different approach to *WIM*—one that critiques the full memorial, including the site-based sculptures

¹ On “landscape amnesia,” a term borrowed from Jared Diamond, Lin elaborates: “We have actually forgotten how abundant the planet used to be and I think if I can pique your memory and make you realize how incredible biodiversity was in your own backyard, then maybe it is going to spur you to action” (qtd. in Toomey).

² Sarah Chihaya offers a brief reading of Lin’s website, but *WIM* serves as a foil for the real object of her analysis, a short book called *Ragnarök* by A.S. Byatt. Lauren Kolodziejcki focuses exclusively on *WIM*; but, like Chihaya, she attends only to the *WIM* website, excluding from analysis the site-based elements of the memorial. Kolodziejcki writes at length about the visual elements of the core videos—their beauty, aesthetic appeal, how they make for a “pleasurable experience”—and argues that *WIM* both employs and disrupts the “human gaze.” Jennifer Ladino’s primary focus is analyzing the personal narratives in the “Contribute a Memory” part of the memorial: she employs digital data-analysis tools (word cloud, AlchemyLanguage) to assess the emotional valence of these stories. Ladino also claims, “Despite the evocative videos, which attempt to thwart anthropocentrism and represent the autonomous lives of other species, *I suspect it’s easier to have empathy for another human experiencing loss than for another species that is on its way to extinction*” (198, emphasis added).

and an updated website, and that specifically tunes in to sound.³ While critic Lauren Kolodziejski faults *WIM* for its “notable absence of human agents” (441), I argue that this absence is in fact central to the memorial’s rhetorical force: by muting human voices and amplifying sounds of non-human species and landscapes, *WIM* decenters human subjects and works to temper the human exceptionalism that underlies so much of Western thought and fuels our extractive, destructive approach to the natural world.

What is Missing? speaks powerfully to the thorny tangle of environmental crises we now face: a warming planet, rising seas, widespread habitat destruction, and accelerating species loss. By immersing us in the sounds of more-than-human nature—humpback whales and the common loon, tropical rainforests and tall prairie grass—*WIM* arrests our fantasy of visual and vocal mastery, compelling us to *hear* what we do not (or cannot, or refuse to) see, to *listen* rather than speak. Lin’s memorial creates zones of friction⁴ by performatively displacing human subjects, at least temporarily, from our centered position of putative authority and autonomy, effecting a “rupture of our everyday grounding in the world” (Reeves 308).

This essay joins the robust interdisciplinary conversations about the rhetorical force of sound and the performance of public memory in memorials, and is inspired by a range of scholarship calling for attention to the ambient, multimodal, affective, internatural, bodily, and performative dimensions of rhetoric.⁵ Sound is not the only sensory register at work in this memorial, of course, but it is more prominent in *WIM* than in Lin’s other work, and, indeed, than in most other memorial sites. Following Gunn et al, I do not argue here for the primacy or superiority of sound in contrast to other registers of suasion; certainly, *WIM* (and my analysis of it) both engage the visual and verbal. But tuning our ears to sound is crucial to understanding the performative power of this particular memorial, which derives from the interaction of sounds, images, bodies *and* words.

WIM invites us to listen carefully not to human declamations but to natural soundscapes; the memorial’s sonic rhetoric helps forge new connections with the more-than-human world. As Gunn et al. assert, “Sound signals can help us better understand our shared predicament. Listening can serve as a complement to seeing and reading. Sound can serve as the ‘more so’ to and of rhetoric. As [soundscape ecologist] Bernie Krause discovered, our eyes inadequately warn of the damage we have done to our environment. But if we listen, we can understand just how destructive humans have been—and turn even destruction to reinvention” (487-88). The evocative sonic rhetoric of *WIM* offers a poignant intervention

³ It is telling that so much of our common analytical vocabulary is rooted in the visual: highlight, focus on, foreground, illuminate.

⁴ I borrow this phrase, which I discuss in more detail below, from LeVan.

⁵ See Alaimo; Blair and Michel; Comstock and Hocks; Dickinson, Blair, and Ott; Eckstein; Goodale; Gunn et al; Hawhee; Rickert; Plec; Presley and Crane; Salvador and Clarke; Sodaro.

in the Anthropocene, by teaching us to sense differently—to slow down, get quiet, pay attention and really listen—so that we might recognize and mourn the irreparable losses happening all around us, every hour of every day.

“Can you hear me?”: Seeking Resonance in the Anthropocene

We humans⁶ are currently presiding over our planet’s sixth mass extinction: an immense, accelerating die-off of myriad species.⁷ Just as we have come to learn—in the past 300 years or so, a mere blip in geological time—about the five major catastrophic extinction events that predate human presence on the earth, we are coming to the harrowing realization that our species, *homo sapiens*, is causing the sixth (Kolbert 2014). With our migrating, hunting, gathering, fishing, harvesting, clearing, planting, paving, damming, mining, burning, poisoning, and polluting, humans are making a massive impact on earth’s ecosystems. So much so that at the turn of the millennium, atmospheric chemist Paul Crutzen and biologist Eugene Stoermer advanced the term “Anthropocene” to name our current geological epoch.⁸ As Lin put it in a talk at Cornell University in 2014, “We’ve basically diminished the entire planet. Our reach as a species has been enormous.”

⁶ I recognize that using the pronoun “we” to refer to all human beings is a fraught endeavor: certainly, there is a tremendous diversity of experiences across our species in terms of our contributions to climate change and extinction, our precarity and suffering due to ecological destruction, our cultural and emotional connections to nature, and our practices of mourning more-than-human beings. The IPBES Report mentioned in a subsequent note, for instance, notes that ecosystems managed by indigenous peoples shows a smaller degree of biodiversity loss than those managed by nonindigenous peoples (United Nations). By using “we” in this essay to refer to human beings, I do not mean to uncritically gloss over these important differences. However, I follow Timothy Morton’s example where he claims: “I’m going to be using we in part to highlight how the beings responsible for global warming are not seahorses: they are humans, beings like me. It’s about time we figure out how to talk about the human species, while at the same time not acting as if the last few decades of thought and politics had never happened” (xvi). And even more relevant to this essay, I draw inspiration from Judith Butler, who writes that “[d]espite our differences in location and history, my guess is that it is possible to appeal to a ‘we,’ for all of us have some notion of what it is to have lost somebody. Loss has made a tenuous ‘we’ of us all” (20).

⁷ Estimates of the rate of species extinction, which rely on computer modeling, vary widely: in 2007, the U.N. Convention on Biological Diversity claimed that we are losing up to 150 species a day. Actual documented extinctions have been far fewer than this (see Pearce). In May 2019, the U.N. released the most comprehensive ever Global Assessment Report, compiled by 145 experts from 50 countries and based on the review of 15,000 scientific and government sources. This report stated that over one million species are threatened with extinction in the coming decades—“more than ever before in human history”—and that three-quarters of land-based environment and two-thirds of marine environment has been significantly altered by human activity (United Nations).

⁸ In the introduction to their book *Arts of Living on a Damaged Planet*, Gan et al. explain that

In terms of sheer numbers, *homo sapiens* has so far been faring quite well in the Anthropocene—the global population has tripled since the end of World War II, and increased ten-fold since the start of the Industrial Revolution. But in the process of our own species flourishing, we have destroyed habitats and pushed myriad flora and fauna to, and over, the brink of extinction, thereby putting our own earthly habitat at risk.⁹ With each passing week, scientific evidence mounts that we’re careening towards a drastically altered planet, with temperatures higher than the Earth has seen in the last 125,000 years, and extinction rate tens to hundreds of times greater than the average across the last 10 million years. The IPCC’s October 2018 “Doomsday report” warned that humans have a slender dozen years to take meaningful action to draw down carbon emissions and hopefully contain the global temperature rise to 1.5 degrees Celsius.¹⁰ One United Nations official described the IPCC report as “a deafening, piercing smoke alarm going off in the kitchen” (New York Times Editorial Board). But are government officials listening? In April 2019, sixteen-year-old Swedish climate activist Greta Thunberg spoke to the UK Houses of Parliament, criticizing leaders for their inaction. In the middle of her speech, Thunberg pointedly asked: “Is my microphone on? Can you hear me?” Is anyone paying attention?

In the United States, polling data reveals that a majority of people (69%) do accept scientific evidence about anthropogenic climate change; only 16% of Americans think that global warming is not happening (Leiserowitz et. al.). However, until very recently, environmental problems have ranked low in terms of priority, certainly below health care, the economy, and immigration (Newport).¹¹ We seem

“‘Anthropocene’ is the proposed name for a geologic epoch in which humans have become the major force determining the continuing livability of the earth. The word tells a big story: living arrangements that took millions of years to put into place are being undone in the blink of an eye” (Gan, Tsing, Swanson and Bubandt, G1). The debate over the Anthropocene remains open: when do we mark the beginning of humans’ geological impact? The advent of agriculture in 11,000 BCE? The start of the Industrial Revolution in the 1700s? The “great acceleration” in the mid-20th century? Or the first nuclear explosion in 1945? The International Commission on Stratigraphy (ICS) is the global body in charge of officially naming geological epochs; to date, the ICS has not formally adopted “Anthropocene” (Meyer).

⁹ The threats posed to human health and well-being by environmental degradation and global warming are many: air and water pollution, topsoil depletion, more frequent extreme weather events (droughts and wildfires, hurricanes and floods), sea-level rise, food insecurity, forced migration. People around the world are already suffering and dying from the grave impacts of climate change; those living in vulnerable and frontline communities, particularly in the Global South, are bearing the brunt of these impacts.

¹⁰ In a similarly urgent call, the May 2019 report issued by the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) states that over one million species are threatened with extinction, many in the coming few decades, unless we make immediate transformative change at every level, local to global (United Nations).

¹¹ Brulle and Norgaard report that climate change is a low-salience issue, with “never more than 3% of the population identifying it as the Most Important Problem facing the US” (2).

to have a “resonance dilemma,” to borrow John Meyer’s term: environmental problems generate some concern, but don’t resonate deeply enough to mobilize the political will needed to effect swift, deep, and widespread change. Robert Brulle and Kari Norgaard call this phenomenon “social inertia.” There are many likely contributors to the resonance dilemma and social inertia: doubt sown by the sustained, fossil fuel-funded disinformation campaign; disorientation at the vast scope and complexity of climate change;¹² distraction fostered in part by ubiquitous public screens;¹³ devout faith in a *deus ex machina*. We don’t care—or don’t care *enough*—because we’re uncertain about the problem, because the problem is too large and too remote, because we’re too preoccupied with other things, or because we assume that technology will save the day.

Another explanation for social inertia is not that environmental problems fail to resonate—that we are apathetic because we don’t care—but rather, that we care very deeply, and perhaps feel too much. We tune out and turn away in order to shield ourselves from the cultural trauma presented by climate change and environmental degradation (Brulle and Norgaard 14).¹⁴ In her book *Environmental Melancholia*, Renee Lertzman argues that “people can care a whole lot and still do very little because a deep sense of fear and anxiety underlie our concern for the future” (5). She challenges the common diagnosis of “apathy”¹⁵—assuming that people are failing to act because they don’t care about the environment. Lertzman explains that what looks like apathy may actually be an overwhelming surplus of affect, and that unprocessed grief about environmental destruction can prevent people from taking meaningful action. She writes, “As environmental losses are usually not explicitly articulated in many social or cultural contexts as experiences that need ‘working through,’ such losses may go ‘underground’” (101). Lertzman and others assert that we need opportunities to confront openly the traumas caused by environmental losses: to process anxiety about our futures; grief about

However, this seems to be changing: Yale Climate Change Communication’s April 2019 survey found that 64% of Americans polled said that the issue of global warming is “extremely,” “very,” or “somewhat” important to them personally, in contrast to 36% who say that it is either “not too” or “not at all” personally important (Leiserowitz et. al.).

¹² Timothy Morton coined the term hyperobjects to name things “that are huge, and, as they say ‘distributed’ in time and space—that take place over many decades or centuries (or indeed millennia), and that happen all over Earth—like global warming. Such things are impossible to point to directly all at once” (xxx).

¹³ See DeLuca and Peebles.

¹⁴ As David Kidner puts it, “[s]taring reality, and not least ecological reality, in the face can indeed be unbearable, and it is therefore unsurprising that many of us engage in mental gymnastics in order to avert the full psychological impact of the destruction of the natural world” (140).

¹⁵ Etymologically, “apathy” means an absence of feeling, derived from the Greek *a-* (without) + *pathos* (suffering).

past and present losses; anger at the instigators of these traumas; and guilt over our own complicity.¹⁶

The past decade has seen growing awareness of the psychological impacts of climate change on individuals.¹⁷ But there seem to be few public spaces or collective opportunities to confront and mourn extinction as a global phenomenon.¹⁸ Some artists have mounted smaller-scale memorials, like the Altars of Extinction and Lost Bird projects; a few theater collectives have created performance events, including the Remembrance Day for Lost Species.¹⁹ Still, the dominant mode of public communication about environmental destruction is what Timothy Morton calls the “information dump”: news reports summarizing scientific studies documenting an increasing number of alarming planetary changes. This dump mode, Morton argues, actually inhibits deeper ways of *being ecological*, of thinking and feeling and living as though we are connected to natural systems (2018). We need other ways, aside from the apocalyptic news reports, to experience and engage with these threats and losses. Underscoring this point, Catriona Mortimer-Sandilands reflects that

[t]here are few if any public rituals of environmental mourning (which are different from public announcements of catastrophe, of which there are plenty), *little keening and wailing* for extinct species or decimated places (which are different from lists or maps of them, of which there are also plenty). In short, there is lots of evidence of environmental loss, but few places in which to experience it *as* loss, to even begin to consider that the diminishment of life that surrounds us on a daily basis is something to be really sad about, and on a personal level. (338, emphasis added)

¹⁶ See Kidner, Pihkala.

¹⁷ The terms “ecoanxiety,” “climate grief,” and “solastalgia” are becoming more common, and the American Psychological Association released reports in 2014 and 2017 detailing the psychological impacts of climate change, including shock, post-traumatic stress disorder, anxiety, and depression. There are manuals for clinicians, networks of support groups and 10-step programs like the Good Grief Project, and online communities like the Near Term Human Extinction Support Group on Facebook, to name a few.

¹⁸ This is not to deny that many people have been and are mourning ecological losses. Indigenous peoples, many of whom have a deeply felt connection to the land and more-than-human species, have also been on the front lines witnessing environmental degradation and changed landscapes. See Simpson; Cunsolo and Landman.

¹⁹ See for instance the Altars of Extinction Project (San Francisco Bay Area, 2003), the Lost Bird Project (2008-12), Extinction Witness (2012), Remembrance Day for Lost Species on November 30 (since 2011), the LifeCairn Project, Extinction Witness, Feral Theater, and the Earthalujah work by Reverend Billy and the Stop Shopping Choir.

Note how Mortimer-Sandilands emphasizes the sonic dimension of mourning—“keening and wailing”—and also touches on the shared, public nature of mourning rituals as well as the intimate, personal dimensions.

Mourning is not only the private, individual process of coming to terms with loss; it is also cultural, political, and deeply ethical work. In her book *Precarious Life*, Judith Butler explores mourning as a way to reimagine “the possibility of community on the basis of vulnerability and loss” (20). Our bodies are fragile, vulnerable, mortal; loss and death are unavoidable. The process of mourning reveals that we are inextricably bound to others, and that these very ties constitute who we are. Losing another “tear[s] us from ourselves,” transports us, undoes us (Butler 25). The point of mourning is not to “get over” the loss by replacing the lost object with another, or to return to some prior state of being; rather, Butler muses that perhaps “one mourns when one accepts that by the loss one undergoes one will be changed, possibly for ever” (21).

Butler also famously asks *whose* lives are grievable—“for, if a life is not grievable, it is not quite a life” (34). While Butler’s concern is marginalized human lives,²⁰ Joshua Trey Barnett makes a compelling argument that we can and should “think ecologically” with Butler, noting her insistence that human subjects are “in no simple sense autonomous because ‘we’ depend on all sorts of more-than-human creatures for our bodily form and sustenance” (Barnett 5; see also Stanescu). Mourning extinction and the loss of natural landscapes recognizes that our relational ties of dependency extend beyond just other human beings.

So, rather than tune out or turn away from the pain of environmental losses, perhaps there is something to be gained from “tarrying with grief,” as Butler puts it. “If we stay with the sense of the loss, are we left feeling only passive and powerless, as some might fear?” she asks. “Or are we, rather, returned to a sense of human vulnerability, to our collective responsibility for the physical lives of one another?” (Butler 30). The ethical work of mourning can have profound political impact by refiguring our understandings of self and community and amplifying our shared responsibility for each other. Lin’s last memorial invites visitors to tarry with grief, so that we might realize our shared precarity, and feel more deeply our dependence upon other species.

²⁰ She notes that only some human deaths register as worthy of public recognition, such as an obituary: “There are no obituaries for the war casualties that the United States inflicts, and there cannot be. If there were to be an obituary, there would have had to have been a life, a life worth noting, a life worth valuing and preserving, a life that qualifies for recognition” (34).

Sounding Loss²¹

Memorials are arguably the most concrete, enduring, and (usually) officially sanctioned sites for public mourning. Typically, memorials commemorate human lives and loss: great leaders and heroes, fallen soldiers and victims, people who have “lived an extraordinary life or died a ‘good death’” involving sacrifice for a noble cause (Blair 5).²² Most memorials are anchored in rhetorically significant places, including sites where deaths occurred (battlefields, 9/11’s Ground Zero), symbolic public spaces (the National Mall, town squares and parks), and museums narrating historical events (the US Holocaust Memorial Museum). Some memorials are mobile (the AIDS quilt), some temporary (shrines at sites of mass shootings or celebrity deaths), and some virtual (the 9/11 Sonic Memorial). In most cases, memorials address audiences as citizens of a local/regional community or nation-state, or as members of particular cultures. Lin’s *WIM* memorial is unique, then, in that it commemorates more-than-human species and landscapes; is both site-based and virtual; addresses past, ongoing, and future loss; and hails us as members of the human species.

In several respects, *WIM* reflects changing conventions in memorial design through the late 20th and early 21st centuries; in fact, all of Lin’s memorial projects, starting with her critically acclaimed Vietnam Veterans Memorial, have pushed the boundaries of the memorial form. Whereas older, more traditional figural monuments are “intended only to be viewed, often from a distance,” newer “spatial memorials” are “designed to invite visitors to enter, draw close, and even to touch parts of the memorial” (Stevens and Franck 5).²³ Spatial memorials engage bodies via multiple senses, such that audiences are not merely spectators, but active participants in the memorial-as-performance.²⁴ Another relatively new commemorative format is the digital memorial; while online platforms might seem to be the inverse of the spatial memorial that one can physically enter and touch, they can offer readily accessible modes of affective engagement and collaboration. For instance, in their analysis of National Public Radio’s September 11 Sonic Memorial

²¹ Michael Stocker explains that “[t]he noun ‘sound’ refers to the acoustical energy that we hear, but the verb ‘to sound’ refers to an examination, to find out, question, or query. The allusion is to plumbing the depths of the ocean, to gauge a dimension which we cannot see” (3).

²² In some rare cases, animals who served humans in battle or rescue operations have been memorialized.

²³ The public controversy over Lin’s first project, the Vietnam Veterans’ Memorial, was in part a clash between these two approaches: Lin’s wall with the names of the 57,939 dead, carved into black granite and set below grade, created an intimate space for mourning and reckoning. A group of detractors, including veterans who felt “dishonored” by Lin’s design, insisted that a figural statue of three soldiers and an American flag be added to the site. See Blair, Jeppeson and Pucci, Jr., and the documentary film *Maya Lin: A Strong Clear Vision*.

²⁴ For a compelling analysis of Lin’s Civil Rights Memorial in Montgomery, AL, as performance, see Blair and Michel; see also DeLaure, and Sodaro.

project, Elisia Cohen and Cynthia Wills write that “digital memorial projects may function as a participatory form of memorialization, helping individuals across distances to coordinate and share symbols and meanings” (593). Just as the September 11 Sonic Memorial allows people to contribute their own sounds and thus help to build the memorial, so too the *WIM* website invites visitors to “add a memory.”²⁵

The *WIM* website lends well to performative analysis, thanks to its aural and visual richness, and its complex, interactive organization: it is decidedly *not* a flat archive of dryly catalogued facts. In his exploration of digital performance modes, Michael LeVan notes that they can engage “new forms of audiencing and performing, new distributions of performance space and time, new distributions of sensation” (213). I argue, borrowing from LeVan, that Lin’s memorial is performative in that it creates “a zone of friction and encounter between viewing [and listening!] and doing, a *becoming of sensation*” (218).

Lin’s final memorial fashions zones of friction and encounter by removing us from our quotidian routines, transporting us to unfamiliar places, and interrupting our habitual modes of being in the world. With its innovative design and artful use of sound, *WIM* effects a kind of temporary displacement that Joshua Reeves calls *atopos*—meaning out of place, or no place—that renders us strangely unmoored, prompting a state of what he calls “suspended identification.” Reeves explains, “All our lives are marked by the nonchalant competence with which we carry out everyday tasks—such as walking, speaking, and seeing and making sense of the objects that surround us—instances of ‘atopic’ displacement compel us to puzzle over our surroundings, to struggle to regain common ground” (314). The rhetorical power of unorthodox, *atopic* memorials, Reeves argues, is that they have the potential “to transform how we situate ourselves toward one another and toward the world that we share” (323).

In my analysis here, I read both the spatial/site-based exhibits and the digital/online elements of *WIM* performatively, with an ear for what the entire memorial does:²⁶ how it unmoors and displaces us, creates zones of friction and encounter, and evokes affective responses especially via sound. Sounds reverberate throughout various practices of mourning, from the spontaneous screaming, wailing, and sobbing at the pain of loss; to intimately whispered condolences and publicly spoken eulogies; to the ritual performance of funeral hymns, dirges, saying Kaddish, requiem masses, or a lone bugle playing taps. Moments of silence marshal the absence of sound to mark loss and pay respect to the dead.²⁷ Like life

²⁵ See Ladino for an in-depth analysis of the “Add a Memory” contributions to *WIM*.

²⁶ As Della Pollock explains, “performance is primarily something *done* rather than something *seen*. ... It is less the product of theatrical invention or the object of spectatorship than the process by which meanings, selves, and other effects are produced. ... It is the embodied process of making meaning” (20, emphasis in original).

²⁷ Joshua Gunn writes, “As a vestige of prayer in our increasingly inclusive social spaces,

itself, sound is fleeting and ephemeral: it is “bound to the present time by the fact that it exists only at the instant when it is going out of existence” (Ong 101).

Sound is a powerful affective register: sound waves travel through the air and vibrate not only our eardrums, but our entire bodies.²⁸ Whereas sight works in straight lines—we have to look *at* something to see it well—“hearing is hemispherical; we hear sounds from all around us, not just where we cast our ears” (Stocker 18). Sound is thus a deeply connective force; as Brandon LaBelle poetically puts it, sound is “intrinsically and unignorably relational: it emanates, propagates, communicates, vibrates, and agitates; it leaves a body and enters others; it binds and unhinges, harmonizes and traumatizes; it sends the body moving, the mind dreaming, the air oscillating” (468). Sounds help us orient ourselves in time and space, and yet sounds can also be profoundly disorienting and even haunting, such as when the source of a sound is missing—whether it is invisible, unknown, or deceased.

In his essay on the spectral voices of 9/11, Joshua Gunn explores the performative force of sounds—especially the recorded voices of the dead. He offers a theory of sonorous haunting, a “psychical force motivating performances that attempt to mourn” (93). Gunn borrows Diana Taylor’s distinction two modes of memory work: the “*archive* of supposedly enduring materials” and the “so-called ephemeral *repertoire* of embodied practice/knowledge” (Taylor 19, emphasis in original). Mourning, Gunn argues, has an archival impulse, which is “imagocentric” and “resolved by means of spectatorship ... by eclipsing sound with image” (102). Melancholia, by contrast, resists the closure of mourning. Melancholic haunting is “experienced as a sonorous phenomenon whereby the archive and the repertoire recycle acoustically” (Gunn 102). Gunn’s focus is the haunting effected by recorded human voices after 9/11; I maintain that the non-human sounds and voices echoing throughout *WIM* perform a kind of melancholic haunting as well. Lin’s memorial clears affective bandwidth for mourning but does not aim for archival closure or resolution to the trauma of extinction in the Anthropocene. Rather, the memorial maintains the tension between the archival record of the past and the performative repertoire, by muting humans while amplifying the sounds and the voices of more-than-human species.²⁹

moments of silence are effective in eulogistic moments because of their enthymematic invitations to the atheist and religious alike” (101).

²⁸ Kim Tingle writes, “What we hear is penetrating and physical — a wave entering our head. Even the deaf perceive internal jangling and external sonic feedback. The tactile nature of sound — the way it bounces back to us from other surfaces — helps us locate ourselves in relation to our surroundings and to know what’s behind us or around a corner” (2012).

²⁹ On the concept of “voice” as it relates to environmental communication, see Peeples and Depoe—especially the Introduction, and essays by Tschida, Kunisue, Carbaugh, and Watts.

Elegy for a Planet

The first piece of *What is Missing?* is the Listening Cone, a permanent sculpture installed in 2009 at the California Academy of Sciences in Golden Gate Park in San Francisco. The sleek bronze form, 18 feet long and 8.5 feet tall, is reminiscent of a gramophone horn or megaphone, and is lined with reclaimed redwood. (A smaller traveling version of the Listening Cone, made out of recycled plastic, toured eight cities in China in 2010.) The Listening Cone is large enough to climb into—in fact, the sculpture all but demands this if you want to see up close the video screen mounted inside the cone's tip. There, a series of Lin's core videos about a number of endangered species play on a 20-minute loop.³⁰



Fig. 1: The Listening Cone. 2009, San Francisco, USA. Photo by Bruce Damonte, used with permission.

The sounds of the animals in their habitats is clear and envelops the observer, thanks to the conical shape of the sculpture. The video, however, is shifting and blurry, and the written words detailing facts about the threatened species are fleeting. The reflection of sunlight on the screen can also make it difficult to see clearly. So, seeing is limited, even frustrated, but sound is all-encompassing: the mournful howling of grey wolves aurally transports us to a frozen tundra; the raspy, guttural

³⁰ At the end of the video, white letters appear, informing viewers that in the time it took to complete the loop, on average, the planet lost one species.

growl of the koala accompanied by rustling leaves, creaking branches, and faint twittering of birds creates the sonic sense of sitting under a eucalyptus canopy. While the Listening Cone immerses visitors in natural soundscapes, it cannot entirely overpower the human sounds of urban San Francisco. My experience of the Listening Cone was not a “pure” sonic one: for much of my time sitting inside the sculpture, other museum guests and staff were chatting in the picnic area behind the cone, and the low hum of city traffic remained constant.³¹ The Listening Cone created a zone of friction between the immersive natural soundscapes inside the Cone and the everyday sounds of the human world, mirroring the incursion of anthropophony (human sound) into the biophony (natural sound) that is one concern of soundscape ecologists.



Fig. 2: The Listening Cone. 2009, San Francisco, USA. Photo by Bruce Damonte, used with permission.

³¹ This experience prompted me reflect upon times I've taken my students into Golden Gate Park and asked them to do a quiet walking or seated meditation. The most common observation by my students has been noticing the mix of natural and anthropogenic sound in the urban park.

Lin also launched in 2009 a temporary exhibit titled *Empty Room*, mounted in both Beijing and New York. For this exhibit, visitors receive a piece of optical plexiglass about the size of a legal pad of paper, then enter a darkened room empty of objects but filled with sound, and with flickering projections from the floor. A symphonic rainforest soundscape engulfs human interlopers with twittering and screeching, buzzing and chirping, all reverberating among physically absent but sonically present trees. By guiding the glass panes over the projections, visitors “catch” the video on their personal screens as they are immersed in the sounds of the species and their habitats. Like the *Listening Cone*, *Empty Room* requires human action: effort must be expended in order to find and capture the videos, and to hold temporarily the species or moving landscape in one’s hands.



Fig. 3: *Empty Room*. 2010, Beijing, China. Photo by Matthew Niederhauser, used with permission.

Empty Room performs the ephemerality of endangered species and habitats: the ghostly projections are fleeting, and the images disappear when one steps away from the projection spot. On one hand, this act of watching video on individual hand-held screens is utterly familiar, as humans (especially in the Global North) consume ever more media on personal mobile devices. But on the other hand, the *Empty Room* shifts this quotidian performance in subtle but important ways: rather than searching YouTube or scrolling through social media feeds with a flick of the thumb, visitors must physically move through space to capture the

projected videos, and then can only experience what they hit upon, for as long as it lasts.³² There is no pause or skip, rewind or like or share; visitors must patiently adapt to the slowed time frame of the exhibit. And even if they fail to “catch” the visuals, or step away from a projection point, the soundscape recordings continue to reverberate throughout the room. The act of holding the fleeting species in one’s hands metonymically performs our relationships with, and responsibility toward, the non-human world, reminding us that we live “in a world of beings who are, by definition, physically dependent on one another, physically vulnerable to one another” (Butler 27). We are beholden to our environment, rather than masters over it.



Fig. 4: Empty Room. 2010, Beijing, China. Photo by Matthew Niederhauser, used with permission.

The second *WIM* permanent sculpture, Sound Ring, was unveiled at the Cornell Lab of Ornithology’s main entrance in 2014. Crafted from American walnut, Sound Ring is a large oval frame containing an array of eight hidden speakers that play field and ambient recordings from Cornell’s Macaulay Library, which holds the largest archive of animal sound in the world. Sounds that emanate from the

³² Lin mentioned in an interview that while most people spend 1-2 minutes looking at video artwork, the Empty Room visitors reported spending 15-20 minutes immersed in the exhibit (Toomey).

large oval frame include the dueling clarinet squeaks of Indri lemurs, and the sci-fi underwater recordings of Weddell seals, whose calls are reminiscent of synthesized lasers. Pat Leonard explains that Lin created a “spatial acoustic experience,” such that “[t]here’s no one ‘sweet spot’ for visitors to stand—the sounds have a depth and range that works no matter where you’re positioned in relation to the Sound Ring.”



Fig. 5: The Sound Ring. 2014, Ithaca, New York, USA. Photo by Jason Koski/Cornell University, used with permission.

Of the site-based elements of *WIM*, the Sound Ring most explicitly displaces sight and centers sound; still, though, there is a visual object to regard, one that prompts contemplation of absence. Frames conventionally hang on walls in museums and galleries, containing paintings or photographs within them. Sound Ring is visually empty—as though the frame is awaiting the installation of a painting or mirror—and it rests on the floor, leaning against the wall, “as if left there temporarily” (Leonard). The unconventional placement and curious missing center of the frame induces visitors to pause and listen, which takes more time and interaction than casting a quick glance, or snapping a photograph. Reflecting upon Sound Ring, Lin said this in an interview with Public Radio International:

As an artist, I like to get you to rethink what you’re looking at so if I can arrest and focus your attention on sound ... of course it’s really important

to us, but we tend to focus on what we see first. So the Common Loon was one of the first species I heard that made me realize how critically important it was to hear and bring these incredibly, at times, haunting sounds to life. There are things that I want you to almost get to know in a more intimate, personal way and I think sound is our way into these species and places. (Leveille n.p.)

Here Lin notes that sound is deeply haunting, and suggests that it offers a powerful way of connecting with the natural world. With *Sound Ring*, we are unable to gain visual purchase on what we're hearing: there is a lack of information about what the species look like, where they live, to what extent and why they're threatened—we can only attune ourselves to the sounds vibrating through space and our own bodies. Such careful listening creates an intimate and personal encounter with the natural world: as soundscape ecologist Bernie Krause explains, “What reaches out to us from the wild is a deeply profound connection—a constantly evolving multidimensional weave of sonic fabric” (2012, 31).



Fig. 6: Maya Lin with the *Sound Ring*. 2014, Ithaca, New York, USA. Photo by Jason Koski/Cornell University, used with permission.

Finally, the *WIM* memorial includes an expansive and evolving website linking these site-specific installations. The *WIM* splash page has changed over the years; initially, upon going to the whatismissing.org URL, a black screen

appeared, accompanied by the symphonic soundscape of a rainforest. White dots swirled about the screen, coalescing into moving forms evoking animals in motion—a flying bird, swimming fish. Users would have to wait for at least twenty seconds until the home page appeared: a dark grey-on-black map of the globe. As of this writing, sound no longer accompanies the splash page; the dots and small icons that appear are now brightly colored, and begin clustered at the equator, then migrate slowly to specific locations on the black map.³³ As this migration happens, an introductory text on the *WIM* website appears:

Welcome to What is Missing
 Creating a Global Memorial to the Planet.
 The species that have gone extinct
 The species that will go extinct in our lifetime
 The species that we will never know
 Because we destroyed their habitats
 Before we could ever know them.
 Our goal is to raise awareness of what we are losing and show what you
 can do to help.

A key at the bottom of the home page shows the types of items cataloged: timeline, video, stories, conservation and disaster. The various items can be viewed geographically or temporally: clicking on the “view in time” button near the top of the page causes the dots and small icons to travel from their locations on the map to a timeline, stretching from 10,000 BCE to the present day.

Since the first iteration of the website launched in 2011, Lin and her team have been revising and expanding the content. The early Map of the Past included dots that opened either into the core videos, or into short written explanations about extinct or endangered species, or evidence of diminished abundance. Visitors have also been invited to “add a memory” to the map by contributing brief narratives about changes they’ve observed to local landscapes in their own lifetimes.³⁴ The *WIM* website is participatory and performative: users are not passive viewers or readers, but must navigate, explore, ruminate, and “connect the dots

³³ According to Casey Carter, of the *What is Missing?* Foundation, the original animation was removed from the website because it took too long to load, and may have driven impatient viewers away from the site. A major redesign is currently underway, planned for release in 2020.

³⁴ One example of a contributed memory: “ANCHOVY RUNS / By Scott Smith / Personal Memory — Monterey Bay, United States — 1969 CE / When I was in high school, I loved walking on the beaches of Monterey Bay in the chilly, foggy evenings of summer. Out in the bay - and out of sight - I could hear a hundred thousand invisible wings slapping the surface of the water. It was the sound of vast flocks of marine birds that followed the anchovy runs into the bay each summer. The anchovy runs simply disappeared maybe 25 years ago. So did the birds and their water music. Where’d they go?”

ourselves ... [which] entails a certain degree of willingness to feel complicit and, perhaps, accountable" (Ladino 194). The Map of the Present, launched 2012, features conservation in action, with stories about what various organizations around the world are doing. The Greenprint for the Future was added in 2016 and has been steadily growing: it's now a lengthy series of slides offering detailed information about the costs of environmental degradation and conservation, and suggesting a wide range of solutions.³⁵

More than sixty flickering colored dots on the *WIM* map open into Lin's core videos, which are one to two minutes long and have a unified aesthetic form. Navigating the map sets in motion two fine thin lines marking latitude and longitude; hovering a cursor over a core video dot triggers sound, as well as the appearance of a date and title. Clicking on the dot expands the circular image, opening the video to nearly full screen size. Each core video starts with clear, abundant sound, coupled with a blurry image. The words "WHAT IS MISSING?" appear, the letters fading in and out intermittently. As the question disappears, the image slowly comes into focus, and the specific answer to the memorial's titular question fades in: "Koalas," "The white-handed gibbon," "The tall grass prairie," "The most beautiful songs of the humpback whales." When we encounter a particular flora or fauna, then, we enter first into its acoustic habitat, hearing the unique voices of one or more members of the species, along with ambient sounds of wind, water, and occasionally other animals.

The videos all have a dreamlike quality: time is stretched, and animals move in slow motion. Many of the species are shot in close-up or extreme close-up, and are slightly out of focus. In some cases, the featured animals emerge into the visual field—walking, swimming, swinging or flying into the frame as they come into focus—and then exit the frame near the end as the visuals blur: the loon dives under water, the humpback whale and her calf turn and swim away from the camera. With these exits, and the blurry fading to darkness, these core videos perform the loss of the species, "implicitly arguing that the featured subject will disappear" without our intervention (Kolodziejcki, 435). Furthermore, the soundtrack is not synced with the video: we don't see the animals actually uttering the sounds we

³⁵ While Greenprint offers "interesting thought experiments"—for instance, comparing current global expenditures on perfume, or gambling, to what certain conservation actions would cost—Ladino critiques Greenprint for putting the onus on individual consumers rather than giving clear sense of the social and economic causes driving these priorities (202). I agree with Ladino, and would add that the current iteration of Greenprint feels rather flat (and silent) in comparison to the rest of the memorial. Greenprint has a wealth of information and some excellent graphic illustrations of consumption, expenditures, and potential carbon savings, but it's delivered as a series of dense slides, and so does not have the rich, multi-sensory performative power of the core videos and site-based parts of the project. A new version of Greenprint is slated for release on Earth Day 2020, and promises to "offer innovative mapping scenarios that will show us how by altering our way of life we can help protect species and reduce climate change emissions."

hear, which creates some friction between the ear and the eye. This out-of-sync quality makes the voices more haunting, since they are disconcertingly detached from the visuals. Over the slowed-down moving images of the focal species, short lines of explanatory text fade in and out, requiring viewers to pay attention and read the words before they dissolve away. As we are acoustically steeped in a soundscape, we read about the threats to the fauna or flora—various sources are cited, explaining the past and present state of affairs, and posing questions about the future that implicate us.

The Common Loon video, for instance, opens with the plaintive call of a single bird, ringing out across what sounds like a wide, open landscape: *woo-HOOOoooooooo-oooo, like a faraway wooden flute playing a grace note scooping up a minor fifth interval then again, a half step lower, woo-HOOOoooooooo-oooo*. Slowly, the image of a loon serenely floating across a lake comes into focus. As the loon's melancholy song continues, these words appear and recede: "Thirty years ago [loon shakes its head side to side, as if saying "no"] / residents of northeastern North America [loon looks directly into camera] / noticed a decline in population of this "common" bird. / When researchers began studying the birds / they noticed high levels of mercury / in their blood and feathers. / The lakes where they made their nests / had been poisoned [loon dives under water and disappears] / by pollution from coal-burning power plants. -National Geographic." The loon's solitary song, which continues even after we see the bird dive under water, has an eerie quality, a lonely repeating call that reverberates and then dissipates, unanswered. The voice of the loon is haunting, as is the harrowing realization that humans have inadvertently poisoned this species—defiling their homes as we power our own.

In contrast to the solo loon, *The Most Beautiful Sounds of the Humpback Whales* video features multiple voices in concert. We are serenaded by the incredible voices of the humpbacks—ranging from high-pitched chirps and glisses, to mid-range bellows and smears, to deep bass guttural growls. As we listen to this majestic underwater ensemble, we read an historical account about the humpbacks: "The Bermuda whales of the 1960s, were not / just ordinary singers ... / they were great singers, composers, and poets ... / before they vanished. / Sometime between the late 60's and early 80's, / the Caribbean whale fishery probably killed the / greatest humpback whale singer. / It could explain why today's humpback whale songs / are such pale copies of those of the 60's / and why the North Atlantic is so musically / lackluster today." The text christens the whales of the 1960s "great singers, composers, poets," and recalls a single virtuoso, perhaps the cetacean equivalent of Billie Holiday or Ella Fitzgerald? Once that legendary singer was killed, the whole community of artists suffered, and an entire regional soundscape remains diminished to this day. Here, *WIM* celebrates the singular uniqueness of a non-human voice, and mourns its specific loss. One might object that this video achieves its power by anthropomorphizing the humpback whales—a thoroughly anthropocentric move, suggesting that whales have special value

only by virtue of their similarities to humans. However, I would assert the contrary, that this recognition of an individual non-human voice and celebration of the virtuoso singer works to trouble the hierarchical dividing line between humans and animals, and to challenge the mistaken assumption that only humans have unique voices.³⁶

The second half of the humpback video explains that international agreements to limit whaling have helped bring these whales back from the brink of extinction, but concludes by noting that now, “Unfortunately the harpoon for the whales / is the high level of toxic pollutants in today’s oceans / which pose one of the greatest threats / facing all large marine species. -Roger Payne.” Like the Loon video, this one indicts us all: whales and their songs will not be saved solely by treaties curtailing the whaling industry. Our pervasive and ongoing pollution threatens to silence forever these great artists of the deep.

Next, I turn to touch briefly on two videos that are unlike the others: one features anthropogenic sound, and the other, no sound at all. The Natural Sounds of the Ocean performs the loss of a natural soundscape by putting the listener aurally into the subject position of marine species who suffer greatly from sonic pollution. Here, there are no visuals of ocean or animals; rather, a single blue line stretches across the bottom third of the black screen, a visualization of the sound itself. When the natural underwater sound commences, the blue line vibrates slightly. The text reads: “Whales rely on their sensitive hearing / and unique vocalizations / to communicate with one another / find food and avoid predators.” Then, with the words “Shipping traffic: 219/190 decibels,” we hear the mechanical sound of passing motors droning above the ocean sound, which causes blue line to modulate with greater sine variation and more chaotic speed. The text continues: “It has been said that shipping noise / is inescapable / that it can be heard / in every corner of the ocean.” Next, we see “Navy sonar: 235/209 decibels,” followed closely by the loud, high frequency echoing “ping” of sonar, which sends an intense ripple across the blue line, repeating four times in all. We then read, “Navy sonar is thousands of times louder / than a jet engine / and can cause debilitating / and even fatal injury to whales.” The final startling assault — “Oil exploration: 250/224 decibels” — manifests as a series of jarring, ripping drill sounds that sends the sound wave line into jagged paroxysms. As listeners attempt to recover from this unexpected percussive series of blasts, we read that “Oil exploration

³⁶ Recent work in animate/animal/bestiary rhetorics “challenges the privileging of the solitary human voice and actively engages with the voices of a world already speaking” (Seegert 78). And Western thinkers are learning (or finally admitting?) that non-human beings do have unique voices: Diane Davis, for instance, references a biological study that found that bottlenose dolphins have individually distinctive “signature whistles” (545). Many indigenous peoples have long recognized the voices of more-than-human nature, and celebrate listening to the land and other creatures for wisdom and spiritual guidance. See, for instance, Carbaugh, Kunisue, Salvador and Clarke.

represents the most / severe acoustic insult / to the marine environment / short of naval warfare. / Manmade sound waves can drown / out the noises that marine mammals rely on / for their very survival / causing severe injury or even death. - Christopher Clark & NRDC.” This acoustic assault, we learn, can be fatal for some denizens of the deep.

The sound recordings here, with volume set to high, reverberate through one’s entire body, demonstrating the tactile nature of sound; on my first viewing of this video, the sounds of sonar and especially oil exploration nearly startled me out of my skin. This core video gives us a brief but powerful experience of being on the receiving end of the “severe acoustic insult” issued by human activity, prompting us to consider what it might be like to be powerless to escape such pervasive sonic pollution. From a human perspective, the sound of the ocean is typically soothing and relaxing—indeed, the rhythmic cycle of waves lapping or crashing onto shore is a popular choice for “white noise” machines and apps. But Lin’s *WIM* video performatively puts us underwater, to experience the sonic violence visited on marine life by human economic and military activities. Furthermore, the sources of these aggressive sounds remain unseen, which intensifies our disorientation and vulnerability: we are unable to locate ourselves in relation to the submarine or drilling operation, making the invisible source seem ubiquitous and inescapable.³⁷

In stark contrast to *The Natural Sounds of the Ocean* and the other core videos, *The Dodo* is completely silent. Viewers may already know that the dodo has the “dubious honor” of being the first species whose extinction was recognized (in writing, by humans) to be caused by us (van Dooren 3). The Dodo begins with a blurry image of an abstract white shape against a sepia background. As the text unfolds, the grainy image very slowly comes into better, but not perfect, focus: we are looking at the thoracic skeleton of a large bird, cobbled together with wire. The camera gradually zooms out until we can just barely register the full form of the skeleton, before it fades again to blur. The text begins by explicitly marking the absence of the dodo’s voice: “Nobody knows the true sound / just as nobody knows / what the dodo ate / or how it lived. / First sighted around 1600 on Mauritius / the dodo was extinct / less than eighty years later. / No complete skeleton has ever been found / and the last full set of bones / was destroyed in a fire / at a museum in Oxford, England / in 1755. -National Museum of Natural History & Encyclopaedia Mauritiania.”

Here we are confronted with a triple loss: the species itself (which went rapidly extinct thanks to humans), the physical remains (the last full set of bones

³⁷ Michel Chion calls this “acousmatic sound”: in film studies, the *acousmètre* is an invisible character that is heard, but not seen. According to Chion, “The cinematic imaginary regularly bestows on the *acousmètre* the powers of ubiquity, panopticism, omniscience, and omnipotence” (466).

destroyed in a fire), and, perhaps most disconcertingly, our missing knowledge about the dodo. We have no sound recording, no account of the voice of the dodo, so this *WIM* video can only perform a profoundly elegiac silence. As Mladen Dolar writes, “The absence of voices and sounds is hard to endure; complete silence is immediately uncanny, it is like death [N]ot all voices are heard, and perhaps the most intrusive and compelling are the unheard voices, and the most deafening thing can be silence” (540). Against the rich sonic texture of the rest of the memorial, the ghostly silence of the dodo is deafening indeed. What other voices have already gone missing, we must ask ourselves, and which voices remain unheard? Which voices will be silenced by extinction in the not-so-distant future?³⁸

Coda: “Can we learn to share the planet?”³⁹

We are living (and dying) in a time of great planetary upheaval. The changes we *homo sapiens* have already wrought—and those that are ongoing, accelerating, compounding—must be acknowledged, if we are to have any chance of stemming the tide of irreparable loss. As Lin reminds us, we cannot act to save what we don’t know is missing. Learning about the abundance that preceded us, the species that have gone missing, the habitats now being destroyed: all of this factual, archival knowledge is important. But we also urgently need the performative repertoire—with its affective engagement, its “keening and wailing”—in order to be truly moved by loss. Maya Lin’s *What is Missing?* artfully merges these two modes of memory work: the website catalogs abundant information about species loss and conservation efforts, but the memorial as a whole also works performatively, employing sound in particular, to facilitate personal and shared mourning.

WIM’s sonic rhetoric creates fertile zones of friction and encounter: sounds embrace us, envelop us, haunt and even assault us. All parts of *WIM* I have examined here—the Listening Cone, Empty Room, Sound Ring, and core videos—immerse human visitors in natural soundscapes. In most cases, we bear earwitness⁴⁰ to the majestic and haunting sounds of threatened species; in one instance, we ourselves are cast *as* those species, vicariously hearing from their position what

³⁸ Warning of a silent future, absent of birdsong and other sounds of nature, was a powerful rhetorical tactic employed by Rachel Carson in her 1962 book *Silent Spring*, widely credited with launching the modern environmental movement in the U.S. Carson’s opening chapter, “A Fable for Tomorrow,” conjures up a poisoned future marked by a strange stillness, a “spring without voices” (2). In Carson’s fable, indiscriminately applied pesticides have poisoned not only the offending insects, but also the birds, fish, landscapes, and even humans: the silence is a harbinger of our own demise.

³⁹ This question is posed at the end of one of Lin’s longer *WIM* compilation videos.

⁴⁰ R. Murray Schafer, who inaugurated soundscape studies in the 1960s, uses this term in his landmark book *The Soundscape: Our Sonic Environment and the Tuning of the World*.

deadly racket humans cause. Lin's artful use of sound throughout the memorial troubles the mastery of the eye/I, displacing us from our comfortable position of command and control.⁴¹ Knowing is commonly rooted in the visual: as the saying goes, seeing is believing. But *WIM* frustrates vision, the sense that has become synonymous with knowing, thereby performing a kind of epistemological displacement: without clear and stable visual referents, we must strain to listen for that which is absent. This state of uncertainty opens the possibility for new ethical modes of being-in-relation, where the individual human subject is no longer a discrete autonomous entity, and where we recognize that our lives are unavoidably entangled with those of other beings.

The displacement effected by Lin's last memorial also operates ontologically, though performing the destabilization and loss of the very ground of our being. In our daily lives, many of us blithely assume ourselves to be standing on and speaking from stable ground, but *WIM* troubles this presumption, calling us to understand that we are *of* and *with* the ground/earth, not *on* or *above* it. By atypically unmooring us, *WIM* reveals that the stage upon which human history has unfolded is eroding beneath our feet: the background (of nature as scene, as source, as storehouse) is falling away. *WIM*'s haunting voices and disappearing soundscapes herald the loss of common ground effected by the climate crisis. As Bruno Latour laments, "If the anguish runs so deep, it is because each of us is beginning to feel the ground slip away beneath our feet" (5).⁴² There are two possible responses to this loss of common ground: 1. Rushing to seize remaining land, retreating to private enclaves, hoarding whatever is left, and fortifying the borders (what Naomi Klein calls "climate barbarism"), or 2. Coming to terms with our shared precarity and interdependence on one another and the earth. Latour, in theorizing the latter option, argues for the recognition of "the Terrestrial as a new *political actor*," an agent participating fully in public life, rather than simply serving as the background of human action (40-41). By muting human voices and amplifying sounds of nature, Lin's last memorial helps to vivify the Terrestrial, and helps foster in us clairaudence—excellent hearing, or the ability to perceive what is usually inaudible.⁴³

⁴¹ In this respect, *WIM* constitutes humans as ecological beings who are vulnerable and dependent upon nature—the inverse of the "master naturalist" subject position described by Aoki, Dickinson, and Ott in their analysis of the Draper Museum of Natural History in Cody, WY. The Draper emphasizes space over time—with silent, immobile taxidermied animals—inviting visitors to "see the earth as theirs to control and use" (238).

⁴² In his book *Down to Earth*, Latour frames migration, inequality, and climate change as one and the same threat, manifesting in the crisis of the old universal ideal promised by globalization of a common world, shared by all: "it is as though a significant segment of the ruling classes (known today rather too loosely as 'the elites') had concluded that the earth no longer had enough room for them and for everyone else" (1).

⁴³ On clairaudence, see Shafer (10).

WIM obliges us to listen closely to more-than-human voices. This is consequential, as we commonly tie recognition of subjectivity, agency, and rights of human interlocutors to the ability to speak and be heard.⁴⁴ As Elizabeth Povinelli exclaims, “Let them speak! The nonhuman animal, the rock, the beach, the wind and soil: let them be heard, let them be represented and representable in the governance of the earth. They have language too. They are agents too” (436). Lin’s memorial helps attune us to the voices of flora and fauna, of earth and ocean, prompting us not to treat them as a kind of background “nature soundtrack,” but to really listen to their ethical demand to be heard and recognized.⁴⁵ *WIM* proclaims the lives of disappearing species to be grievable ones; the haunting voices of the loon and the humpback whales call out for us to listen, mourn their loss, recognize our mutual precarity, and then work together to repair and reestablish common ground. (And, if we listen carefully and pay close attention, we will also discover that we are not the only beings who grieve the dead.⁴⁶) In the context of accelerating habitat destruction and the looming threat of extinction, how can we fail to answer this ethical demand? If we do fail—if we turn away from, ignore, or disavow those voices—then we ourselves are morally diminished, and we will only hasten the arrival of our own extinction.⁴⁷

⁴⁴ Rhetorical scholarship on sound and voice focuses almost exclusively on anthropogenic sound and human voices, emphasizing the uniqueness of individual human voices and the political import of having one’s voice heard. As Eric King Watts argues, voice is “constitutive of the ethical and emotional dimensions that make it an answerable phenomenon” (180).

⁴⁵ A question for further research here might be how can we establish and safeguard what Susan Senecah calls the “trinity of voice” for more-than-human beings? Senecah’s model for effective human participation in environmental decision making includes access (opportunities to express oneself), standing (civic legitimacy), and influence (efficacy). Finding creative ways to extend the trinity of voice beyond humans might help strengthen “rights of nature” efforts to grant legal personhood to natural entities (Zartner 2019).

⁴⁶ In the Pacific Northwest in the summer of 2018, a mother orca carried her dead calf on her head for seventeen days, covering over 1000 miles, a performance of mourning that drew attention from around the world (Cuthbert and Main). A lesser known story of animal mourning is recounted by Bernie Krause, who reports that “truly, the saddest vocal expression I’ve ever heard came from a beaver” (2017, 31). He explains that in a remote pond in central Minnesota, some game wardens blew up a beaver dam for no apparent reason, killing a female and her offspring and disrupting a thriving ecosystem. A fellow soundscape recordist witnessed the event, and then remained behind and “captured an altered habitat that no photo could have revealed. After dusk, the surviving and likely wounded male swam in slow circles around the pond, crying out inconsolably, its voice breaking in obvious pain as it searched for its mate and young family. Its vocalization is so forlorn and tragic that the recording is always emotionally difficult for me to hear or even speak about” (Krause 2017, 32). See also van Dooren on the mourning rituals of crows.

⁴⁷ Jill Stauffer writes powerfully about the injustice of not being heard. While her concern is with the ethical loneliness suffered by marginalized humans, I suggest that what she has to say about hearing the voice of the other might also apply to more-than-human beings. She writes,



Fig. 7: The Listening Cone. Photo by Bruce Damonte, used with permission.

“If we misunderstand what autonomy is and what conditions its successful exercise requires, we may fail to comprehend how the selves and worlds of some human beings can be destroyed by other human beings. That might mean that *we will have no idea how to listen* to those who survive such harrowing loss. And, *because we don't hear, we fail to learn something about the limits to our own autonomy* and, more important, simply don't understand what conditions make successful recovery more or less likely after world-destroying events. Finally, *we don't see how very unjust it is to believe, in some circumstances, that we are responsible only for what we've done and intended*” (11, emphasis added).

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