A human place in the sound of wildness

David Rothenberg1,*

1Department of Humanities, New Jersey Institute of Technology,
University Heights, 07102 Newark, NJ, United States

Abstract

What is the place for human sound in the beautiful world of nature? Will we ever be anything more than intruders in the midst of a pristine sonic wilderness? This essay considers what two of America's greatest field recordists, Lang Elliott and Gordon Hempton, think of such questions. If there is no place for our species in the result of field recording, that we cannot and should not record.

Introduction

Sound is the best human sense to situate ourselves in a place. We cannot close our ears, so as sight gives information, sound sets us in the midst of a world. How can we be sure that sound world is real? The hyperreal touches something in all of us. In sound, this is equivalent to Hollywood's idea of the jungle, where monkeys are actually an Australian bird, the Laughing Kookaburra, because seems somehow better than reality. Or too much reverb, or too many sounds swirling all around inside our heads when we're wearing headphones, that mosquito droning inside our brain looking for somewhere to sting. We know it is easy to be seduced by technology into the hyper-real, what philosopher Timothy Morton calls the hyperobject (Morton, 2013). This kind of sound doesn’t take you there but to a there that exists nowhere.

There is a kind of nature photography where everything gels together, a mixture of beautiful subtlety and perhaps the wonderful precision of technology. A precise shot of an eagle catching a fish, the kind of thing only professionals used to be able to grab, but now the sheer opportunity to shoot thousands of images with exact lenses is now more easily accessible than ever before. More of us can have the technology, that’s one thing, but on the other hand, noticing the possibility for beauty is as important as having the right technology.

Much more has written about the visual than about the aural, perhaps because it is easy to keep staring at images and wonder what they mean while sound quickly escapes our grasp the moment it arrives. Sometimes attention begins with an idea. Like that unusual National Geographic cover photo of...
Yosemite that tries to show night and day in the same image (Wilkes, 2016). Actually, the photographer tries to show all the best shadows and light on each part of Half Dome and the whole valley by stitching together hundreds of images of the same scene, taking the best coloration and shading from each, from midnight through sunset, kind of a time-lapse single image of one spectacular site in the world.

Stephen Wilkes is trying to make a single image show the procession of time, time over a landscape where no things move in it. It is the visual equivalent of an hour long recording that might claim to be “a day in the life of a rainforest” where all the sounds you need to hear are heard, from a rainstorm to a coqui to a screaming pitta to a jaguar, even though in any one hour you would never hear these things. It is a musical composition in sound, trying to bring nature into your ears, into your head but outside your head, to offer up the wilderness as an image in the heart of civilization.

Critics have made fun of this honorable desire for centuries. Remember Diderot’s famous essay on the Salon of 1767 where he is supposed to review an exhibition of landscape painting by Vernet and refuses to go into the gallery, instead heading straight for the forests which the paintings purport to represent (Diderot, 1995). Of course, this is a better place to be! Perhaps our nature-inspired works exist solely to continually remind us of the superiority of nature to art. We are all children of artifice, and can never totally live in the midst of nature no matter how much we pretend. We need to be reminded what is great about this world from whence we came.

Or John Muir taking a tour group of artist to Tuolomne Meadows, as they endlessly search for just the right view to paint, the perfect place to set up their easels. He gets so fed up with this crew that he disappears for a few days into the very landscape they are trying to paint, where he gets soaked while sleeping through a furious storm, dries out, is enveloped by the sun, charges down the mountain energized and more alive than ever, where he finds the artists worried, nervous, uncomfortable, but talking about the beautiful storm clouds they were trying to commit to canvas. "I know," smiled Muir. "I was there, in the midst of it" (Rothenberg, 2002). A feeling he will never forget.

The visual is so much easier to speak about, but working with natural sound has many of the same pitfalls. Sometimes what most evokes the real is not the real. Every field recording is still a construction. How do the best nature sound recordists hone their craft? Lang Elliott wants to make you feel you are actually present in the midst of his soundscapes, and will do what it takes to make it happen. Gordon Hempton, in his pursuit of pure silence, makes you wish you weren’t there and gives you a pang of sorrow when we realize nature can no longer escape our intrusions.

**Lang Elliott seeks the most beautiful sound**

Lang Elliott learned early on he had an ability to tell when a recording was good. He found this talent drew him deeper into the field than the need to answer questions with the scientific method. Like so many great lovers of nature, he never finished his dissertation. He had too much else to do. According to Elliott, nature sound recording should not be science fiction recording. “I find my recordings, I don’t construct them. I want to know they are the real thing.” (Elliott, 2016) Starting out as a recordist for the Cornell Laboratory of Ornithology, collecting material for what is now called the Macaulay Library of Natural Sounds, Elliott was disappointed in the poor quality of so many of their recordings. When he found out that Cornell was more interested in comprehensivity and quantity, that is, trying to get recordings of every species out there even if the recordings didn’t sound all that great, just checking each one off a master institutional life list, he struck out on his own, convinced that a living could be made with recordings of the highest quality.

But, like the wanderer in Zen and the Art of Motorcycle Maintenance, (Pirsig, 1974) Elliott had to figure out just what quality means, never an easy task even if you go all the way back to Plato and Aristotle. Now, after 35 years on the job, he has a simple and clear answer: The recording that takes you there. The sound that truly brings you out into a wild and natural place. Unlike some recordists, he doesn’t think these places are all that hard to find. “They are near to where we live, there is wilderness, there is silence and peacefulness. Maybe it’s not all that many minutes before a car
goes by or an airplane flies overhead, but the sounds of nature are accessible. We need to capture them and present them so that more people will learn how to listen to and to value them.”

Elliott favors a modified binaural approach, that is, stereo microphones fitted on a model human head that re-create the way we humans equipped with two symmetrical ears listen to the world. Many nature recordists swear by this contraption but it has always looked a bit extreme (Figure 1).

This technology has been around for decades but may not have been taken so seriously because people in general did not listen to music with headphones. But now most of us do, it is a method whose time may have at last arrived. Lang Elliott improved the standard binaural setup by using better microphones, and he has been carrying it around the world now for many years. So, his recordings work best when heard with good headphones, but the technique translates to stereo speakers as well.

Technology is one thing but attitude is another. For Lang, the key thing is a deep focus on sound. “The answer must lie in aesthetics,” he smiles. Since a long-ago accident, Lang Elliott has not been able to hear any sound above 3,000 hertz. So, he misses most of what the birds and insects are singing! That hasn’t stopped the development of his listening talent, maybe it has even improved it. He invented the first truly advanced hearing aid for birdwatchers, the SongFinder, (Elliott, 2015) that shifted the higher frequencies down in precise ways to enable the many birdwatchers who don’t hear as well as they used to still be able to notice what’s singing out there. Through years of practice, he’s been able to compensate, to know what needs to be heard. A great composer of soundscape recordings listens to so much out there in the world, then has the ability to know what is worth bringing home.

“It’s one thing to recognize the beauty of the hermit thrush,” he explains. Flutelike, warbling, pentatonic or not pentatonic, no water and no rock, these are the kinds of the things writers have thought of about this wonderful bird. Most noticeable to me is that it is musical in a way that is not humanly musical, but musical all the same. We get it, in a way that much of the natural world we do not get.

Elliott doesn’t want to talk or wonder about the bird’s song, he wants to present it in as beautiful a way has he can. He needed to find in nature the right placement of the song, the instant composition. If the bird is the foreground, he needs a background. “It’s almost like in Zen meditation, when you let that journey be your story, let the stories draw you in. Some people think the more you know, the deeper the experience, but too much knowledge can take you away from the place.”

And a sound without a context is just a raw, technical example, a species name to file away on a list or a song to add to the names which you think you can pair with a sound. That’s no way to put forth beauty. A perfect image of a bird on a white background might be good for identification purposes, but not for any understand of what life really is:

I was going out, looking for the artful recordings that often just had a handful of elements. Not the dawn chorus, which often has too much going on. I started working on the hermit thrush. The strongest recording turned out to be one morning after it had rained, I recorded a hermit thrush at dawn along with the dripping water from the rain. I love it. There are two elements, two sound objects, but on the other hand there is one focus sound object, the thrush singing in place with the drips, thousands and thousands of sound objects. They are spread out in space, it creates a three-dimension seed that is in itself interesting. Every so often the sparkle is happening with that thrush. I found it, it’s the real thing. I wouldn’t be impressed if someone created or constructed this.

Figure 1. A binaural head recording system.
By EJ Posselius. Available at this link. Reproduced under CC BY-SA 2.0 via Wikimedia Commons.
So many of Lang’s most beautiful soundscape recordings make use of this simple aesthetic approach. Snowy tree crickets rhythms interplay above the gentle waves lapping the shores of Lake Ontario. Cricket frogs overlapping with pine sawyer beetles chewing rotting logs. So often there is an overlap of two main sounds in an Elliott recording, and even in his dawn chorus recordings, at these moments so often overwhelming with sounds in the height of spring, Elliott finds clarity and simplicity, a kind of chamber music dawn chorus in “Summer Frogs,” along with many of these other soundscape I am describing. These recordings are simply brilliant, clear, and present, and listen to the competition, of which there is many, and these really are different.

He never constructs these soundscapes in the studio. He is not a purist, for he does sometimes use noise reduction, equalization, and some of the subtle editing tools of the modern audio production world. Most important for him is to find real natural moment that have a kind of balance, harmony, and clarity, and isolate these from the rest of the many hours of field recording. Like finding the best shots out of thousands of photographs, and to present them as real moments from the natural world. There are thousands of beautiful and immersive natural soundscapes and traverses that move through the arc of every day and night. Most of them are of course not recorded or noticed like all those trees that fall in the forests of our unremembered and undocumented world. Have we not recorded enough hermit thrush songs and frog choruses to satisfy anyone’s curiosity? Of course not. There sure are many better photographers than sound recordists, and we still need to take more pictures because we always aim for a personal connection to the beauty and strangeness of the world (Figure 2).

Elliott is quite humble but does admit one thing: he has a knack for it. He somehow knows how to record beautiful sounds in nature and this led to his break from Cornell many years ago. They wanted quantity, he wanted quality. Hunting down quality without a big institution to back you up has been a difficult road to follow in terms of a career path, but there is no doubt to anyone who listens to them that Elliott is an artist in his chosen media of listening to world of environments as they present them to us.

In Elliott’s magnificent recording of the trumpeting of a herd of elk in autumn heat, amazingly from Pennsylvania where there is just one elk reserve, we hear soloists vying for attention in the mix, the mammal world’s possible answer to the parry of a park full of nightingales. The section in the sonogram in Figure 3 is about two minutes in:

The beautifully curved, lilting harmonics, the wavering long cries no tempered notation could easily grasp, these single cries overlapping with form beauty passion and depth, surely there is a beauty here that a mass of overlapping tiny creatures cannot approach?

Figure 2. Lang Elliott at Dai Bosatsu Zendo, Livingston Manor, NY.
Photo by David Rothenberg.
The comparison is nearly impossible of course. Though in Lang Elliott’s elk recording one immediately hears the brilliance of Elliott’s work, the careful quiet insect background, the perfect selection of a fragment of nature that is fabulously composed. As he describes it, he just has a knack, a talent further developed through decades of experience to simply pick out what moments of nature are most worth remembering.

The splendor of the singular, the allure of the whole. A soloist, a duet, a symphony or band. The magnificence of an individual or the convolution of the whole, these are different ways to form the musicality in a natural moment, something to seek out and then to capture in a recording to bring home so all of us can hear, and be transported, back to the source.

The transportation is the key for Elliott, the sound that makes us feel we are there. Not for any ethos, not for any comment on the state of the planet or a lament for human rapacity in the destruction and elimination of such moments, but the wondrous ability of sound to make us feel we are somewhere else, somewhere rare and beautiful, either far away or right around us but usually unnoticed:

There are different kinds of recordings. Close-up recordings of specific species, so loud and clean, these are impressive, but very quickly you tire of listening to it. There is not much that is healing here, you soon turn it down or turn it off, there are also recordings that are pitched as environmental that they have so much going on, they are a cacophonous barrage of too much, disturbing at some level, too much stuff going on. The kind I like is this third category where there are fewer elements, more tasteful, not cacophonous, that don’t wangle your ear. They are engaging at some level but not the normal way, they are something you can sink into. They are zenlike, somehow healing. My Zen practice has certainly informed my recording practice (Elliott, 2016).

You may know what it is or have no idea at all, but sound can pull you right into its shape and form.
Bernie Krause has also lamented this, and has offered up before and after examples of a forest before selective cutting, and after selective cutting when the place even looks pretty good, but Krause points out, the sound has been compromised (Krause, 2013). It lacks the purity and richness and what he and Almo Farina have called the complexity in a soundscape.

Perhaps Krause’s most poignant example is the lamenting cry of a beaver after his dam has been removed, a moan that touches us all deep inside once we hear the story behind it.

“Come on,” says Lang, “that’s a good story Bernie but that’s just what beavers sound like. You’re using their emotion to make us all feel guilty.”

Elliott, more interested in the perfect beauty of a recording that offers the balance between consistency and novelty that aesthetes have tried to pinpoint has the hallmark of great art, is less of an extremist.

“You may find the swish of cars in the rain to be a beautiful sound, or the deep thrum of ships passing in the night. Hell, right whales love that sound, that’s why they sometimes run into ships in the Boston Harbor. They seek out the noise.”

Gordon Hempton fears for no silence

Lang Elliott wants to transport us, Gordon Hempton wants fear... fear for the loss of the possibility of silence. His “One Square Inch of Silence” project is particularly poignant because of its locality. Hempton has lived on the Olympic Peninsula for years, and although he has traveled the world in search of the most beautiful and pristine soundscape, he takes pride in his local, one spot deep in the Ho Rainforest that he says is one of only 12 places in the entire continental United States where you could hear nature unmitigated for up to 15 minutes without hearing the intrusion of a human sound. That’s how prevalent our noise encroachments have become, there really is no escape from the human scene.

“I will never say that I’m a good listener,” said Gordon Hempton the Sound Tracker, another of the world’s greatest field recordists. “Thinking that I was a good listener was one thing that kept me from being a good listener (Hempton, 2016).” I am intrigued by his lifelong search for silence. He looks for inner silence, which he says is a reverence for life and the good that we carry wherever we go. But he also looks for outer silence, a naturally quiet place where human sounds do not intrude and this is something he can hardly find. Crisscrossing the whole United States, he has identified only twelve places where nature can resound without being interrupted by a human noise less than once every several minutes. When it comes to sound, there is no longer any nature that sings without us intruding on the mix.

John Muir a hundred and forty years ago listened everywhere he went in the mountains of the Sierras and beyond: “The profound bass of the naked branches and boles booming like waterfalls; the quick tense vibrations of the pine needles, now rising to a shrill, whistling hiss, now falling to a silky mutter, the rustling of laurel groves in the dells, and he keen metallic click of leaf and leaf... The air is music the wind forsakes. All things move in music and write it” (Hempton, 2009). Muir wrote all these lines in the age before sound could be recorded, we needed such words to believe that the Earth as a whole is at least a musical Being. Muir heard sound as one more piece of evidence of the beauty nature calls out if not for us then at least to us, ready for our attention and reverence. For Hempton more than a century later, silence is both a practical and a spiritual goal, it is the principle that guides all his work and his message.

By his two kinds of silences he never means no sound, just no unwanted sound, and no mindless machine-made human sound, the noise that we cannot escape. Yet more than his ethos his life journey and choices are what intrigues me most about Hempton. He was engaged for a deaf woman for several years—did he find in her someone who was at peace with silence? He has chosen to live as close as he can to the quietest of all American National Parks, the Olympic, with its Ho Rainforest where Hempton has identified his own personal shrine, the one square inch of silence where finally the encroachments of Noisy Man can be fought off. His recordings are astonishingly beautiful and precise, clearly composed and constructed, yet he claims he does not edit them. Why does he try to say that
when they are so clearly works of art and not documents of nature? I do not know—but it may be akin to those photographers who use Photoshop to correct color but would never move an object into an image that was never originally there.

I am wrenched by the tragedy that Hempton lost his hearing not once but twice, and am inspired by the fact that he is partially able to hear again but now cannot make such exemplary nature sound recordings without the help of someone whose ears are more clear. Seeking silence, he has been given silence, but will not rest because that silence does not really exist in the actual out there world. We still must reckon with the omnipresence of noise (Figure 4).

Hempton’s new book is a self-published pdf called *Earth Is a Solar-Powered Jukebox* (Hempton, 2016). I can see why Hempton elected to publish it himself, this way he could do everything exactly the way he wanted, color photos, links to online audio material, no publisher telling him what he could or could not do. Unlike his previous memoiristic *One Square Inch of Silence*, this recent tome is basically a how-to manual for working with environmental sound, aimed at acousmatic composers and especially professional sound designers for games, podcasts and films.

His most interesting chapter is one on how to record what Hempton calls *quietudes*: natural ambiences at the very lower limit of human hearing, soundscapes that are almost silent but not actually silent, the real, beautiful quiet that is so close to silence but not empty like an engineer’s anechoic chamber so immortalized by John Cage.

Hempton is famous for saying that there are really only 12 truly quiet places in America (and absolutely none in Europe), where one could go just 15 minutes without hearing a human interrupting sound. One is the bottom of the Haleakala Crater on the busy island of Maui. Go ten thousand feet up and then walk one thousand feet down, you are in the middle of a strange tropical desert. He calls it the quietest place on Earth, where the sound level “measures in negative decibels and feels absolutely silent at first listen, but when amplified just 20 dBA we can actually hear the mantra-like beating of Pacific sound waves lapping over the 10,000-foot high rim of the volcano.” Such barely vibrating soundscapes are quite tricky to capture:

> Once I’ve chosen a location I commonly experience the thought: “Nothing is happening.” I’ve learned that this once-disappointing observation is actually great news… Early one morning from where I sat, headphones on, the whole world was asleep. Listening to my recording now, my eyes have filled with tears as I recall that glorious morning and the revelation of how peaceful a natural place can sound in sustained anticipation of the rising sun. It is the presence of everything. Quiet is profoundly quieting (Knight, 2015).

Humanity may have no place in the Ho Rainforest, as any move we make threatens to turn the one square inch of silence down to a centimeter or less. Nature in its perfection certainly needs us not. And yet we are here, threatening to ruin everything. Instead I would like to find glimpses of hope where nature shines in the midst of human noises.

Listen to Gordon Hempton’s wonderful track composed out of sounds from his favorite soundscape in all the world, a piece that accompanies his book *One Square Inch of Silence*, which refers to an exact
place, which is a few miles off the trail in the Olympic National Park (Hempton, 2009). As I said above, it is clearly a composition, carefully assembled out of his favorite sounds in his realm. It begins with howling coyotes! Is that natural or artificial reverb surrounding those melismas? Certainly, sounds carefully crafted, something positive to me not something anti-original or pure. Then comes a beautiful rhythm of raindrops on leaves, coolly cyclical, an easy beat to sample and work with like those loops on repeat out of clicking whales and footsteps that always tempt us hunters for rhythm out there in the world. The piece is a series of solaces, silent spaces in between the offerings, like individual songs of nightingales with space or response or reflection in between.

Silences, inner or outer, what are they really? Certainly, not absences of sound but spaces in the mind, moments to reflect within. No one who has been inside anechoic chambers, artificial rooms that have absolutely no sound or resonance, is happy with the experience. John Cage spoke of the experience most positively, saying he heard the whirr of his brain and the beat of his heart, which has become the account of legend. Others feel queasiness, some sense of sonic space to be missing. For better or worse, we cannot stomach true silence. We are at home in noise, the booming, buzzing confusion that William James defined as the stream of consciousness that keeps us alive.

Can our sound ever possibly fit in?

We have all heard that human beings too are a part of nature. Then why do we make so much noise? Why does it seem so easy for us to ruin it all?

Attentiveness to the soundscape will make most people begin to investigate and to be annoyed by the noise. Hempton’s reverence for pure sound quickly makes the goal of his sonography to be something rare and wondrous. But once again it is like a fabulous nature photograph. We feel as if we are in the middle of nowhere but can never be sure.

A few years ago, I took a trip to the Arctic aboard a schooner packed with artists and scientist, and the captain told us, “you are all so fortunate, we are about to visit a situation that is extremely rare. A group of polar bears all eating the carcass of a dead whale, they’ve been picking it clean for months.” We were so excited. Everyone took photos, videos, notes, sketches, and started making plans to turn it into art. This is what I did with it (Rothenberg and Peerna, 2010).

We did kind of wonder... how did the captain know exactly where we would find this pungent, decomposing whale? Back in civilization, it was easy to find hundreds of pictures of this very same scene, snapped by every possible Svalbard tourist that season! In some of the pictures the polar bears were reaching up to the gunwales and sniffing the photographers! I even saw the same photo in National Geographic, with a gripping caption explaining how rare this situation was, how long and hard their photographer searched for the right place… Why must we lie about the common sights and sounds in nature and imagine they are rare and unusual?

I don’t want to trivialize this polar bear encounter by laughing at the kind of stories we tell. It was still so beautiful.

We are never quite comfortable claiming to rhapsodize or understanding nature. We still want nature to be more special than it ever can be—Nature, so impossible to represent in art. This is why Grizzly Man is my favorite nature film, where Werner Herzog admits that Timothy Treadwell, a man so obsessed with bears that he ends up letting himself be eaten by one, with his closeness to his subject, captured far better footage than Herzog, master filmmaker and philosopher of the abyss, could ever get with his probing, humorous, and obsessive demeanor and commitment (Herzog, 2005). Yet, the film Treadwell would have made, had he survived, would have been terrible. He had access to the best material, but he did not understand art, or the depths the human spirit is capable of. The world is lucky that Herzog got a hold of that material and decided to make the film. It shows the ultimate folly of humans claiming they can understand anything about the world of animals or the way they perceive the world. We are always only ourselves.
In the most moving scene in *Grizzly Man*, Werner Herzog listens to the final audio recording of the grizzly bear eating Timothy Treadwell alive. You see his solemn expression as he silently hears the terrible screams. “No one,” he announces to us from the screen, “should ever hear this tape. It must be destroyed.” If nature is as terrible and dangerous as we fear, this ultimate terror should never be repeated for our entertainment. It is a deeper truth than that.

You cannot forget all the art you have seen or have heard as you strive to make your own. Study the masters in all these media, try to learn their methods and retrace their steps. It is all right if many have traced these steps before. We are only as original as our history. Take everything in and you will learn how to fit in, as a human animal in nature, and as an artist in the world of art. It’s the same for image as it is for sound.

I wonder these things as I walk from my house down the steep autumn street to the river, this is far from the best time of year for bird song but still so much music is in the air. The mockingbird refuses to burst into song when the weather is this cold but he lets out a deep *shoomph* as I walk by, either a gruff “hey you” or a quick warning for me to watch out, that I’ll never know much about his music or that of any bird. Trees full of starlings alight into miasmic murmurations that swoop through the sky against the red golden trees. The final crickets of the year try their last fall singing before the first frost will kill them unless they sneak into our houses to serenade us and eke out a few more weeks of life. Dead leaves are whipped up by the wind into a percussive swish, like an exotic Zildjian still not designed in the family of cymbals. Nothing rare here, but it all can be beautiful if one wants it to and truly follows each emergent sonic form.

And these are just the inhuman sounds I have chosen to notice. The noises of our species can also transfix us, for technology has always been best if it too admits the possibility of beauty. The thrum of a braking midnight train vibrates the Earth like the crashing ninepins of Rip Van Winkle’s dream, that thundering trance that happened just up the river a few miles from here. Great oil barges humming up the Hudson, on their own or amazingly pushed by tiny powerful tugboats. The waves these vessels make can surprise you, mini-tsunamis on the beach that might wash all your clothes into the drink while you’re taking a swim.

These are the kind of sounds that truly grab our attention, whether or not, we admit them in as music. They are intractable mysteries, and we don’t forget them. The contemplation of beauty at the juncture of the natural and the human benefits from utter directness, and at the same time can be enhanced as data. We are constantly reminded that all our questions and our movements generate information, if we don’t attend to it some corporation or government will collect it all from us and draw their own conclusions. As go our own singular trajectories, so unique but maybe not all that different from everyone else’s, the slight deviations in information might just tell us what makes us who we are.

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