

<p>Throughout Western music history, there are numerous instances of composers who used representations of environmental sounds in their works.</p> <p>The piece we're hearing now is Beethoven's <i>Pastoral Symphony</i>.</p> <p>At the close of the second movement, Beethoven features three birds: the nightingale, which he writes for flute; the quail, which he writes for oboe; and the cuckoo, which is translated to the clarinet. These three birds have a brief dialogue before the close of the movement.</p> <p>A work many people remember from their childhood music classes, Prokofiev's <i>Peter and the Wolf</i>, also used animal sounds mimicked through Western instruments, which Prokofiev used to stylize each of the characters in the piece.</p> <p>It wasn't until the 20th century that composers were able to use <i>recordings</i> of natural sounds in their works. One of the first examples of this was Respighi's 1924 work entitled <i>The Pines of Rome</i>. As a transition to the last movement, his score indicates that a recording should be played of a choir of birds. It's an unexpected effect and acts to transport the listener to one of the vast forests that must have inspired Respighi.</p> <p>Flash to 1971, when the composer George Crumb used sonar recordings of humpback whale song—sounds he wouldn't otherwise</p>	<p><i>Begin theme music</i> <i>Fade in ending of the second movement of Beethoven's Pastoral Symphony</i>¹</p> <p><i>Pastoral Symphony ends</i></p> <p><i>Audio of the animated feature film Peter & The Wolf</i>²: "The bird, whose name is Sasha, by a flute, which plays very very high. Sonya, the duck, by an oboe, like this"</p> <p><i>Fade out</i></p> <p><i>Fade in The Pines of Rome</i>³ <i>audio (end of movement 3)</i></p> <p><i>Fade out</i></p>
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hear—to inspire his work *Vox Balaenae*, or “Voice of the Whale.” To recreate the sounds of the humpback whale songs, Crumb’s score instructs a flutist to hum into the instrument while blowing specific pitches.

Later in the piece, an evocative seagull effect is heard from a cellist.

The use of nature recordings was, and still is, quite widespread in music, not least for Olivier Messiaen. Scholars have analyzed each birdsong that he used in his music, in an attempt to explain where the actual birdsong came from—whether through recorded form or in the wild. Based on his own travel logs, we know that Messiaen traveled throughout France and heard each specific bird, in person, within the *Catalog of Birds*. But in other works, such as his *Exotic Birds* for piano and wind ensemble, he relied upon recordings of birdsongs, a fact he seldom disclosed publicly.

This came at a time when the mid-century recording industry became interested in recording the sounds of nature. To discuss this trend, I interviewed Craig Eley in early 2017. In addition to teaching classes on music and nature, Eley is currently Associate Director of Humanities Networks at the University of Wisconsin-Madison and has done extensive research on the relationship between recorded sound and the environment. Messiaen is a big name within the fields of sound studies and environmental music, which is why Eley is the perfect person to give us more context. We begin with a discussion about the similarities between Beethoven’s and Messiaen’s use of birdsong.

Fade in Vox Balaenae⁴ (movement 1)

Crossfade Vox Balaenae seagull effect

Fade out

Fade in Oiseaux exotiques⁵

Interview footage – Craig Eley (CE)⁶

KJ: You mention the *Pastoral Symphony*, and you know Beethoven obviously does things a lot different than Messiaen would in representing nature. I’m wondering if you can

talk to that idea a little bit more. Obviously we're dealing with a classical-romantic era view of nature and music, vs a contemporary view of nature and music. So, there's a difference in compositional language.

CE: For sure. There's also this broader experience of listening that is different too, in terms of how people would have experienced both of those pieces and what their expectations were. I mean, one of the things that I found fascinating that you pointed out to me about the Messiaen piece is this unbelievably detailed notetaking in the score.

KJ: The labeling.

CE: Yeah, the labeling, right. And actually, weirdly, the *Pastoral Symphony* does that in parts too—it actually identifies species or environmental things like “stream” or whatever he was going for. Something about that, too, also indicates (at a really basic level) the relationship between the score and the piece. There is this project at work, in addition to the music, supplementary to the music, or complementary to the music. I'm of the mind that it's key to understanding the piece. These really descriptive, poetic presentations of where we are in the land, in addition to the detailed marking-up of the score, says to me that this piece had a multi-sensory, multi-modal way of being in the world that it desired... where you were not only a listener, but you were also a reader, you were also a body in a physical space to absorb the sounds in a particular way.

KJ: I think that certainly corroborates what Messiaen said to people when they would ask, “How to interpret your music or how should I understand it?” and he would say, “Get out of the practice room and just go out into nature, and you'll have an idea.” On the other hand, there are stories that Messiaen would be a little upset with ornithologists when he would

play something on the piano and they couldn't recognize the bird that he was playing.

CE: Ornithologists also—not to criticize—have had a historically very really fickle relationship with music and sound art in a certain way.

KJ: How so?

CE: There was this guy, Jim Fassett. He was a producer at CBS radio; he was like the music director at CBS radio. He hosted a program called *Your Invitation to Music*, which was the weekly radio broadcast of the New York Philharmonic. This is the 1940s. He gets really into birdsong and at the same time he gets really into magnetic tape manipulation. So, he gets these recordings from the Cornell Ornithology Lab and does some of the stuff that the ornithologists themselves were already doing—slowing the tape way down, speeding the tape up, pitch shifting—just to try to get a deeper sense of the notes. Really, the sounds were a kind of data. Fassett gets it in his mind that he's going to make a tape composition. It's actually a kind of literal idea. He takes the notes and sort of manipulates them to match notes on a piano tuning. I mean, he tries to tune (basically) bird notes in a really particular way. And then when he gets these splices of notes, he assembles them into a sort of piece that he called *Symphony of the Birds*.

*Play audio of Symphony of the Birds*⁷

But what's fascinating about the piece isn't that he made it. It's actually that he then got into a really kind of protracted argument with Cornell about the rights to do it. Ultimately, I've seen these letters in the archives where they say, "At the end of the day, we're not going to allow you to use this material." They didn't like the contract with the record

company, that was part of it. But what they really said—I mean they said this explicitly,—“What you’re doing is not ornithology.” So, there’s this tension in the history, especially post-1930, when ornithology becomes this really specialized field that’s based on the study of *recordings* of bird songs, and not the kind of observational practice that we know Messiaen was doing. I think you start to see a little bit of boundary policing there, where there was a harder line in ornithologists’ minds between the science and the art of it than there was in almost anyone else. For very very long swaths of human history, people have talked about the relationship between birdsong and music, but there was a point where that crossover was literally possible. People like Messiaen doing it in a representational way, people bringing in tape... and that is when you see the ornithologists start to prickle a little bit at the idea that music can have a scientific function, I think.

KJ: You actually wrote a paper entitled “A Birdlike Act,” in which you use the term “performance whistling,” which I find kind of appropriate with Messiaen because when you think of imitating birdsong, you think of whistling. There are even videos of him talking about the quality of certain birds’ songs, using his voice to try to imitate that, and then his wife would translate that further onto the piano.

Play audio from “Messiaen on Birds”⁸

I wonder if you can tell us a bit more about the act of imitation of natural sounds and how that fits in to both recorded and live music?

CE: Absolutely. The desire to record the natural world or capture it into recording technology—that desire existed long before it was technically possible. What you find in the turn of the century—starting in the 1890s,

really—is a lot of animal imitation. And I was surprised and kind of delighted when I found a lot of this stuff. It started with whistling, which was used in a kind of sound effect way into the 1930s and 40s, especially in animated films. But, imitation was actually part of a vaudeville tradition, in many ways. There were people who were imitators who could imitate a variety of animals with their mouths. That was sort of a complementary technique to people who did imitations of voices the way we think of comedic imitation today. Whistling developed out of that. So, as these sort of vaudeville imitators faded from popularity in a certain way, a new kind of whistling emerged, which was this musical whistling and also whistling that specifically included bird-like trill and rolls and flourishes. And again, that sort of starts like ‘we’re all sort of having a laugh here’...it’s popular; it’s a novelty, actually, is the way to think about it. It’s novelty music. But then as that sort of creeps up into the 19-teens and 20s, there’s at least a handful of people—men and women—who really try to legitimize performance whistling as a naturalist practice, if not an explicitly ornithological one. So, there are people who go on the Chautauqua lecture circuit who will show you a picture of a bird and then do an imitation of it, there are women who would define the bird, say it by name, and then whistle it.

KJ: And they were doing this because it was before they had the ability to actually record and playback the birdsong instead?

CE: Yeah, exactly. I mean, this was the analog recording era. No recordings of wild birds were possible so this was one way that people thought, *we can bring some of this natural world into your living room*. That was literally how these things were marketed. ‘You live in a city? Bring the natural world home with these collections of birdlike whistles.’ Of course, the practice was

complex. Besides coming out of this vaudeville tradition, it was also associated with coon song, there were racialized components of whistling, there were critiques of female whistlers as being “unladylike” (so there were these gendered associations with whistling). And one of the ways that whistlers overcame that stigma was to say, “No no no no you think whistling is like this lower-class thing or a black thing or a gay thing or whatever.” There are literally tons of stereotypes associated with it. So, the way that performance whistlers overcame that was to say, “What we’re doing is science. This is natural observation, it has educational value, we can also make it aesthetic and beautiful.” Often, whistlers would do some “straight imitations.” So they said, “Hey, this is a real thing here, take it seriously.” And a lot of people did. There is at least one whistler who is accepted into the American Ornithologist’s Union and gets a medal for his skills. A guy called Charles Crawford Gorst.

Fade in audio footage of Gorst’s imitation demonstration⁹

Ornithologists didn’t disagree. Many ornithologists, themselves, at this time also did imitation. I have an example of taxidermists who did imitation. People whose professional work was part of the intellectual project of natural history at this time were often animal imitators. It was part of knowing their subject was the ability to mimic its own vocalizations. Which again, by the time Messiaen is doing this—to me, it almost harkens back to this earlier mimetic era of animal interpretation. So, in that way, it’s kind of a cool acknowledgment of these earlier embodied practices, which suggest an intimacy of knowledge that is in some ways lost, perhaps, by the purely visual readout of spectrographic data. I think I would say that.

KJ: So, in a way it used to be information of the people and for the people, rather than information of [for] scientists.

CE: Well, that's not wrong. Whistling is, some might argue, one of the more democratic musical forms. You don't even need an instrument, you don't need any specialized training. There are hilarious associations about this that you might have seen in the paper. This idea that some people "more primitive" at this time (like African Americans or children), sort of more naïve, or people who were believed in these racist formulations to be closer to nature in some way, were often believed to have an uncanny ability to whistle. Like it was part of their primitive nature, they had a deeper connection...they were mere conduits for this natural form of whistling to even emanate from their lips. So, obviously, we don't want to recreate that kind of native romanticism or something.

KJ: So just in the instance of imitation—these problems that come up of genderizing certain things or racializing: I'm wondering if somehow that could apply to the *Pastoral Symphony* of Beethoven?

CE: I mean, what's caught up in all of this, too, that we haven't mentioned yet, is the inherently sort of imperialist or colonialist project of categorization itself. Right? The work of natural history at this moment is very much a cataloging process. You've got this Linnaean desire to get everything under the sun into a workable taxonomy. That process is inherently fraught, even in something as simple, perhaps, as saying this is the sound of a bird by a stream. But it's especially fraught, I think, in the institutional ways that these activities were captured and promoted and promulgated. The work of capturing the sounds of birds was not unlike the work that was being done in ethnographic circles at that

time to capture the voices of languages, of peoples all over the country. Native Americans, of course, but also all over the world. The colonialist, racist legacy, basically, of that is absolutely part of this. There is language that is so similar as to be striking between capturing the voices of “dying peoples” and capturing the voices of “dying species.” The imperialist nostalgia, the fear that we’re losing this very thing that we’re destroying. That’s always, I think, lurking under the surface here, sometimes it’s right on the surface. Sometimes it is foregrounded as the straight-up project, of going out into a foreign space to mingle with foreign bodies and to somehow capture and document their knowledge in some way, bring it back into an institutionalist context.

KJ: It sounds kind of silly to say we’re appropriating birdsong, but I don’t really know of a better way to say it. And it sounds like that’s kind of what you’re alluding to, as well.

CE: Yeah, for lack of a better word, I think it is a kind of appropriation. To take this thing in the world that has its own culture and meaning that is independent of the meaning we associate with it. The work at Cornell and these early recordings are absolutely the starting point for things like proprietary sound effects libraries, for things like movies licensing sound effects. It creates a marketplace of environmental sounds. And it’s a marketplace that they, themselves, benefitted from. I mean, Cornell University Press, sometimes called Comstock publishing—they had a record label. They put this stuff out and sold it to Walt Disney. I have this great letter that I’ve seen of Paul Kellogg, one of the ornithologists, sort of bragging to a friend like, “Hey, I just did this recording of an alligator that I sold to Walt Disney for 500 bucks.”

There's this notion that you're doing this sort of documentary work by just placing a microphone, often an expensive array of microphones, in a sort exotic or otherwise sonically interesting locale and then sharing them with people on social networks. Is that inherently environmentalist? I have doubts about that. But at the same time, I do think that there is an ethics of listening. I think there can be an ethics of recording, I think there can be an ethics of music that is environmental. We still have an important ethical role to play in how we represent the natural world through sound or how we think about listening. Messiaen or someone like Aldo Leopold were sort of actually close to those things.

KJ: I want to ask you specifically about the travel log because I know that you've done a little bit of research about this. I'm wondering if you think that maybe the *Catalog of Birds* could be grouped in that category of a travel log; or maybe just explain what a travel log is in the arts or in recorded sound.

CE: I came to the travel log through my own ... I mean, also the way I came into thinking about the relationship between sound and technology was through film studies. And what I've learned from looking through this Messiaen stuff is this was very much a journey. This was a travel that he took that moved from place to place that had a real relationship to the country and the countryside. I mean, we can say it: he was a little bit of a tourist, but this was also his own land. He moved through it to tell a narrative; and I think, to me, if Messiaen failed as an ornithologist, he really succeeded as a narrative storyteller and he succeeded as an imitator. I think that is what I hear in the piano notes more than anything else is a very reflective, individual journey.

<p>To close out the episode, I'd like to feature some of Messiaen's <i>Le Merle Noir</i>, which uses the flute to imitate the birdcall and songs of a common blackbird. I included bits of this audio in previous episodes, but a video also exists on Youtube of Iva Ugric and myself performing the work. I'd like to thank Craig Eley again for his valuable insights on these expansive topics within Messiaen's musical output and legacy. Transcripts and citations to this and every episode can be found on my website, www.kyledjohnson.com. Thanks for listening.</p>	<p><i>The middle section of "Le Merle Noir"¹⁰ begins playing and continues to the end of the episode</i></p> <p>It fits in to this narrative of the travel film, the travel lecture...except he did it in sound.</p> <p>KJ: One of the larger movements in the set—I think there's a quote—he actually said is 'a photograph album of bygone days' (or something like that).</p> <p>CE: Yeah, it points to an observational moment. Maybe that connective tissue is part of the work that we have to do. But the idea of photographs is also so interesting and rich. What you're trying to do is capture a scene, and you move from scene to scene and sometimes that, alone, creates narrative. You can find examples of this in recordings of soundscapes that start to be made in the 1950s. Moe Ash, who runs the Folkways record label, does a lot of science recordings (he calls them) and he says, "What I imagine this to be is like a photobook for the ears." That is very much an idea that was in the world. It ties in capture, it ties in observation, and it ties in travel.</p> <p><i>"Le Merle Noir" continues to play; ends</i></p> <p>END OF EPISODE</p>
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- ¹ Beethoven, Ludwig van. *Symphony No. 6 in F, Op. 68*. Tbilisi Symphony Orchestra, conducted by Jansug Kakhidze. Refined Classical. 2008. CD.
- ² Prokofiev, Sergei. *Peter and the Wolf*. Narration by Sterling Holloway. Walt Disney Productions. 1946. Youtube recording accessed 1 October 2017. <https://youtu.be/Ot7m9i70JDg>.
- ³ Respighi, Ottorino. *Respighi*. Orchestre Symphonique de Montreal, conducted by Charles Dutoit. London B0000041OT. 1990. CD.
- ⁴ Crumb, George. *Vox Balaenae*. New Music Concerts Ensemble. Naxos B00PO51MWQ. CD.
- ⁵ Messiaen, Olivier. *Oiseaux Exotiques*. Daniel Kirk-Foster and the Manhattan School of Music Contemporary Ensemble, conducted by Claire Heldrich. 2013. Youtube recording accessed 1 October 2017. https://youtu.be/xCZSBU_uB6g.
- ⁶ Eley, Craig. Personal interview on 4 March 2017.
- ⁷ Fassett, Jim. *Symphony of the Birds*. Flicker Records. 1960. LP.
- ⁸ “Messiaen on Birds 1” Youtube recording. Accessed 1 October 2017. <https://youtu.be/9QdgUJss9BU>.
- ⁹ Gorst, Charles Crawford. “Bird Imitations.” Recorded on an Edison 4M Blue Amberol Cylinder 2674. 1915. Accessed 1 October 2017. https://archive.org/details/charles_gorst_birds.
- ¹⁰ Messiaen, Olivier. *Le Merle Noir*. Iva Ugric and Kyle Johnson. Recorded by Dave Alcorn in February 2017.