

| Narration | Interview, Music, Sound Clips |
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| <p>That’s a Song Sparrow, recorded at the Carman Valley in Sierra, California.</p> <p>Since the start of the twentieth century, there have been institutions devoted to the collection and study of birdsong, namely Cornell University’s Lab of Ornithology in Ithaca, New York. Their website features the following description of the Song Sparrow’s song:</p> <p>“A loud, clanking song of 2-6 phrases that typically starts with abrupt, well-spaced notes, and finishes with a trill. In between, the singer may add other trills with different tempo and quality.”</p> <p>Definitions are only useful if they can use familiar language to describe the unfamiliar.</p> <p>I can’t help but notice that the Cornell Lab often draws on vocabulary that is most familiar to musicians—for example, using a word like “tempo” instead of “speed.” In fact, there are other descriptors that are thrown around frequently—“glissandi,” “slur,” “virtuosic.”</p> <p>For instance, the Northern Cardinal: “A loud string of clear down-slurred or two-parted whistles, often speeding up and ending in a slow trill.”</p> <p>The Lark Sparrow: “A melodious jumble of clear notes and trills.”</p> <p>Now listen to this musical account of a Woodlark’s song, played at the piano, followed by a spoken description of the song: “slurred sequences of two- or three-note descents.”</p> | <p><i>Theme song plays, which layers birdsong</i></p> <p><i>Fade in recording of Song Sparrow</i></p> <p><i>Song Sparrow fade out</i></p> <p><i>Begin recording of Northern Cardinal birdsong</i></p> <p><i>Cross fade with recording of Lark Sparrow birdsong</i></p> <p><i>Fade out Lark Sparrow</i></p> <p><i>Begin recording of “L’Alouette Lulu” piano music</i></p> |

The Eurasian Curlew: “a flutish melody with repetitive tremolos and glissando calls.”

Both of these descriptions were written by French composer Olivier Messiaen before he wrote music derived from both the Woodlark’s and the Curlew’s respective birdsongs in the wild.

I can’t help but notice that the type of language used by Messiaen seems to match the type used by scientific institutions, like the Cornell Lab. There’s talk of phrases, of contours, of sound qualities.

With this in mind, I wonder if a birder needs knowledge of musical terminology to identify song with species? If musical words are effective at describing, perhaps the person best positioned for birdsong identification is the musician.

But my first guest is skeptical.

In his role as an ornithology professor, Berres designed and taught courses devoted to birds of Southern Wisconsin. In the past few years, he began developing a mobile app that allowed users to record live birdsong while the app created a visual representation of the sound called a spectrogram. Various problems arose during the design and rollout of the app, which caused Berres to shift his focus to a new project: a book devoted to a holistic understanding of birdsong production and identification. Whereas many books on the market now may feature brightly

Crossfade with recording of “Courlis Cendre” piano music

Curlew piano audio slowly fades out...

Interview footage – Mark Berres [MB]

MB: My name is Mark Berres. I, among other things, took over the ornithology courses and other avian physiology courses on campus and kind of kept in that capacity for about ten years.
Berres quickly fades out

colored pages and CD inserts that focus on rote memorization, Berres's explores the physiological elements of avian vocalizations. It also features detailed spectrograms to demonstrate how certain species achieve such characteristic sounds.

Since Berres has devoted so much time to the pedagogy of birdsong recognition, I spoke with him about the ways we describe birdsong—how both ornithological institutions and amateur birders so often resort to musical terms to describe many sonic characteristics. We also spoke about how Messiaen succeeds (or fails) at translating these descriptions to music.

MB: Birdsongs do not really conform to our understanding of human music. And the whole idea of notes and phrases, while you see that in avian literature, I just don't buy it. No, just no. Not at all.

KJ: But as a musician, I see a good way of describing bird sound as musical language, so you have words like "phrases" or "notes" or "trill" and "tempo," which I'm sure a lot of non-musicians could understand.

MB: I have spoken with musicians before and they invariably talk in terms of a scale, in terms of octaves, often. But I don't think that does much to help in terms of avian vocalization recognition. While English is a wonderful language, the words just don't exist to be able to capture the complexity of bird vocalizations. Avian vocalizations can be *so* complicated. Being able to get the precise descriptions I think would be a lifelong challenge that would probably be unattainable.

Brown Thrasher birdsong plays in background, slowly cross faded with Song Sparrow birdsong

There is too much variability in bird songs. The

Berres spoke a bit longer about the problems associated with attempting to describe bird song, in general. Since Messiaen, himself, resorted to words to describe every species found throughout the *Catalog of Birds*, how much of a parallel *is* there between his written language in the score versus the pitches and rhythms, the musical notation?

For much of music history, instructions in words usually only took the form of a tempo marking at the start of a piece. Composers didn't necessarily have to think about notating elements of style, or what musicians call 'performance practice,' because the people performing those pieces were either the composers themselves, *or* simply lived in the time of a common style, understood by most.

As a result, there has always been a discrepancy between the notated page and

example that you gave from Cornell on the Song Sparrow—that is a bird, a very common bird in Southern Wisconsin—that actually causes a tremendous amount of aural identification difficulties. That's because no two Song Sparrows sound the same.

So, while I enjoy Cornell's definition of this clankiness and then ending up with more of a trill...but then you saw in the middle there's this big aspect of "melodic embellishment" that they have. But, to an attuned ear, there're these six to seven notes that are like a preamble to that trill. But that space in between is highly variable.

Fade out Song Sparrow

So really when you think about Song Sparrows, there is room for embellishment in terms of the singer; but this whole idea of variation has got to be in terms of your understanding.

Berres quickly fades to background, then fades out completely

Play Chopin's "Nocturne in E-flat"

the performance. If computer software notated pitches and rhythms onto a staff while a great pianist played Chopin, certain understandings of style—little stretches of phrases or micro-fluctuations in pulse—would likely render a page of notation that would look completely different from Chopin’s actual score.

In the 20th century, however, there was a sense that composers tried to overcome the obstacle of notation. Some, like John Cage, began giving less instructions in their scores, which perhaps provided more freedom to the performer and also gave rise to the role of silence in a musical experience.

Another school did just the opposite. They began putting more and more instructions in their scores to the point where it almost seems there is more ink on the page than empty space.

So, how does Messiaen fit into these differing schools of thought? And where does that leave composers now?

After studying in Paris around the time Messiaen’s seven volumes of the *Catalog of Birds* were published, Steve Dembski served as Messiaen’s translator for a few days during the composer’s travels in America. On a subsequent trip to France in the 1980s, Dembski attended a performance—potentially the premiere production—of Messiaen’s opera entitled *St. Francis of Assisi*.

Chopin Nocturne suddenly stops

Fade in Xenakis “Dikhthas”

Xenakis slowly fades out

Interview footage – Steve Dembski [SD]

SD: My name is Steve Dembski and I’ve been composing music for public performance for about close to 50 years now. I taught at the University of Wisconsin for 34 years from 1982 until last spring, at which point I quit to get back to work; and I’ve been, since then, getting back to work in a wonderful way.

Dembski quickly fades out

Fittingly, the *St. Francis of Assisi* opera details the life of the legendary Catholic saint who communicated with birds. Throughout the four-hour work, Messiaen used a large number of percussionists and woodwind players to achieve the kind of birdsong cacophony effect that we're hearing now.

fade in audio of "St. Francis" (the bird scene from Act II); continues as background

KJ: So, as a composer, what do you notice about how he uses music to represent birds, both in *Saint Francis of Assisi* and also in the *Catalog of Birds*?

SD: With the birds in particular, he's made an attempt at transcribing these things. And of course, the attempt must fail.

(startlingly) foghorn effect in "Courlis Cendre". Should sound like a bomb going off, which cuts off "St. Francis" suddenly

It can't possibly succeed.

Birdsong within "Courlis Cendre" begins and fades out once Dembski begins speaking again

He takes birdsong and he tries to transcribe it in a specialist [species-ist], imperialist way. He takes something from another species and tries to translate it into not only the music of his species, but the music of his continent – you know, into a diatonic system, basically.

"Le Merle Noir" fades in, continues as background music once Dembski begins speaking again.

And then he uses these things, in a sense, very much in the same way the birds use them. The birds, they don't change them and he doesn't change them either. He keeps them the same. He occasionally truncates part of them or he adds the last two little *blublublup*. And they're not notes to the birds! You know, a bird doesn't have a notion

of notes. The bird's saying his stuff, but he [Messiaen] moves it into this intellectual conception of music made of notes.

Merle Noir ends

He drew or seemed to draw intuitively from the structure of birdsong which is that repetition of a little figure.

Woodlark birdsong begins

Slowly overlap piano music from "L'Alouette Lulu," then both fade out slowly

SD: Messiaen does it in a radically pure and consistent way, and that to me is really profound. It's much more profound than whatever the bird is. That way this phenomenon whether it's music or not—I don't know if birdsong is music or not, ok?—but it's a phenomenon that happens: audio that is produced by living things and it's used for a kind of communication and it has a certain kind of standardization.

"L'Alouette Lulu" begins, continues as background music

He really genuinely went as far as he could to transcribe these things – to represent them as closely as possible, given the means he had. They're audio artifacts of living beings that don't break down into notes. It makes it a project even more likely to fail, to have an ornithologist who hears a failed transcription through a failed cognitive model, that is notes; through media that are not designed to reproduce these things accurately, and employed for entirely different purposes, which are musical purposes.

MB: Where is there a measure of success?

That's ornithologist Mark Berres speaking again.

MB: So, I think the idea of success might be interpreted in a strict ornithological sense of recreation of this avian utterance, to be able to be

Well, I'd like to thank Micah Behr, who composed the theme song heard at the start of each episode. Thanks to Iva Ugric for collaborating on Messiaen's flute/piano-duo piece *Le Merle Noir*, and to Dave Alcorn for recording it for us. If you'd like to see a video of us playing *Le Merle Noir*, that's available on Youtube.

Additionally, thanks to Brian Grimm for doing all the audio editing of my own playing – essentially every Messiaen work that's heard throughout the podcast, with exception of *St. Francis of Assisi*. The Macaulay Library at the Cornell Lab of Ornithology provided all of the footage of birdsong audio. Specially, the recordists Randolph S. Little for the recording of the Song Sparrow; Julia Ferguson for the recording of the Northern Cardinal; Ed Pandolfino for the Lark Sparrow; Bob McGuire for the Brown Thrasher; and Linda Macaulay for the Wood Lark. I highly recommend

recognized and to be structurally similar or nearly identical to that which you would see in the environment. But, on a piano? Well, good luck with that! That's not going to happen.

But, if it is an interpretation...if art really is the attempt at translation, no it's not wrong. Absolutely not. But maybe as a really strict ornithologist who listens to this and goes, "No I don't buy it at all. That's not it." But was that really his intent?

If it *was* his intent to really capture a perfect translation, I would say, "Yeah, no, you kind of missed the boat on that." *But*, if the attempt was purely as an artistic interpretation of that translation of a very complicated, natural avian sound to an instrument made by humans, who is to say he didn't succeed?

Alouette Lulu continues to play (full performance)

exploring the Cornell Lab's website, where you can play audio footage of any North American bird you can possibly think of.

Most of all, I'd like to thank my guests who were featured on this episode: Steve Dembski and Mark Berres.

The music you're hearing now is from the *Catalog of Birds*, Book 3—"L'Alouette Lulu", or "Song of the Woodlark". I hope you'll enjoy listening to it, through the end.

"L'Alouette Lulu" ends

END OF EPISODE

Berres, Mark. Personal interview on 4 March 2017.

Chopin, Frederic. *Nocturne in E-flat Major, op. 9, no. 2*. Vincent Ip, piano. Used with permission. Mp3.

Dembski, Steven. Personal interview on 25 February 2017.

Macaulay Library at the Cornell Lab of Ornithology. The following recordings were used with permission: Song Sparrow (ML 222034), Northern Cardinal (ML 209312), Lark Sparrow (ML 197547), Brown Thrasher (ML 219704), Woodlark (ML 105026).

“Lark Sparrow Sound.” Accessed 1 October 2016.
https://www.allaboutbirds.org/guide/Lark_Sparrow/sounds

“Northern Cardinal Sound.” Accessed 1 October 2016.
https://www.allaboutbirds.org/guide/Northern_Cardinal/sounds.

“Song Sparrow Sound.” Accessed 1 October 2016.
https://www.allaboutbirds.org/guide/Song_Sparrow/sounds

Messiaen, Olivier. “L’Alouette Lulu”, from *Catalogue d’Oiseaux*. Kyle Johnson, piano. Recorded in February 2017 in Mills Concert Hall (Madison, WI) by Brian Grimm.

Catalogue d’Oiseaux. “L’Alouette Lulu” preface. Trans. Todd Welbourne. Paris: Leduc. 1964.

Catalogue d’Oiseaux. “Le Courlis Cendre” preface. Trans. Todd Welbourne. Paris: Leduc. 1964.

“Le Courlis Cendre”, from *Catalogue d’Oiseaux*. Kyle Johnson, piano. Recorded in February 2017 in Mills Concert Hall (Madison, WI) by Brian Grimm.

Le Merle Noir. Kyle Johnson (piano) and Iva Ugrcic (flute). Recorded by Dave Alcorn in Morphy Recital Hall (Madison, WI).

Saint François d’Assise, “Le Prêche aux Oiseaux: Un peu vif”. Hallé Orchestra, conducted by Kent Nagano. Deutsche Grammophon. 1999. Compact disc.

Xenakis, Iannis. *Dikthas*. Forrest Eimold (piano) and Sasha Yakub (violin). Used with permission. Mp3.