"Sound is the Blood between Me and You": Toward a Theology of Animal Musics

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Every night before we go to sleep, my wife Susan sings an old gospel song or a hymn in a voice that she shares with her Aunt Kathryn of blessed memory. Sometimes within a couple of notes or within a couple of verses, but always without fail, our cat Neko will come running and jump up on the bed, issue forth a couple of percussive improvisations on the theme and demand some petting. On the evenings that Susan chooses "May God Grant You Blessing" it seems clear that Neko is also demanding a blessing, in the way that a cat will do. This ritual is my main experience of interspecies musical appreciation, and it is admittedly a simple, highly personal interaction. However, because this ritual is personal, because I know Susan and Neko, and because I have observed and participated in it countless times, I submit that my narrative is trustworthy. The individual cat Neko will indeed reliably perform this way in response to the music that the individual human Susan creates.

In this paper, I engage in a speculation about the meaning of interspecies musical appreciation beyond this particular interaction. This speculation will involve a number of stories of humans and animals, and the attention that each brings to the creation and appreciation of music. My claim is that interspecies musical appreciation holds great promise for furthering attention to, connection between, and, ultimately, understanding of different species. Our grasp of how animals hear and receive music augurs a new reality of harmony between species because of the way that music, appreciated, equalizes and grounds communication between humans and other species.

A great deal of brush clearing could be done at this point. What is music? Is any sound music once it is appreciated as such? Who can make music? How much training does one need in order to make music? How much practice is required? What does it mean to appreciate music? To hear it? To pay attention to it? To understand it? To be moved by it? Additional

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questions quickly arise: What are the connections between music and language? Did human speech originate in music? Is music evolutionarily superfluous? Are signal response systems in animals similar to birds' music, to human language, or are they something other? These are interesting and important questions. I hope by the end of this paper to have brushed up against some of them, but they will not occupy the center of attention. There are, however, two questions that should not be avoided—questions of theology and of anthropomorphism.

What follows is a kind of theology of the natural world. Theology in its most basic definition is "God-talk"; natural theology is a type of theology that looks for the ways that God has revealed Godself in the natural world. All theology is highly speculative; evidence is found in the structure of faith, the structure of the believing community, and the ways in which the discussion builds up an understanding of how God works in our midst. Theology is a meaning-making discipline. It is scientifically responsible, but good theology is not necessarily dependent on any other discipline.

The best example of the kind of theology practiced in this paper is the bestiary tradition, which extends across the entire history of Christianity. In this tradition, Christian thinkers have reflected on the lives of animals in order to understand how God's will for human life has been revealed through those lives. What matters most, then, in terms of theological method is that the speculation in this paper reveals something about God in its attention to interspecies musical appreciation. In method, the approach taken here is more medieval than modern, although I am not pretending to have found a way to escape modernism.

Anthropomorphism is the application of properly human characteristics to non-human animals. The claim that a dog is loyal is anthropomorphic, because loyalty is a human characteristic. For many years anthropomorphic claims, including the possibility of animals thinking and possessing emotion, were anathema in science. Philosopher and bioethicist Bernard Rollin offers a convincing argument that the anti-anthropomorphic bias in science has the characteristics of an ideology, and that animal mentation and arguments from anecdote and individual animals have a place in science.[1] The work

[1] See Bernard E. Rollin, "Scientific Ideology, Anthropomorphism, Anecdote, and Ethics," in *The Animal Ethics Reader,* ed. Susan J. Armstrong and Richard G. Botzler (London: Routledge, 2003) for an early expression of this sentiment.

of Jane Goodall, Dian Fossey, and Biruté Galdikas established important similarities between human experience and the experience of other animals, particularly in terms of shared emotions. While the anthropomorphic description of animal experience and the reliability of anecdote as scientifically relevant have become generally more accepted, the debate is still active in popular and scientific contexts. The present paper is written inside a particular framework of Christian theology that suggests God creates human and non-human animals with much in common, possibly including emotion, mentation, and an appreciation for music.

One example of my type of approach is provided by a cockatoo named Snowball. Cockatoos, like several other similar species of birds and only a few other animal species including our own, are capable of mimicry. They also live very long lives. As often happens to these birds, Snowball outlived his desirability as a pet in several households before ending up with a family in Indiana. He bonded with a girl in the family, but when she left for college Snowball wasn't receiving the attention he needed and was given to a rescue shelter. At some point the bird figured out that he loved to dance, as can be seen on YouTube. His favorite song is the Backstreet Boys' "Everybody 'backstreets back'".[2] He bobs his head and moves around, and it looks on the screen like a cockatoo dancing.

In a recent study, psychologist Aniruddh Patel and colleagues produced versions of Snowball's favorite song that were both slower and faster than the original. In each case, the cockatoo was able to find the beat and dance to it with a reliability exceeding statistical probability.[3] Snowball can't be hitting the beat by chance; he is synchronizing his movements to the music. In ordinary language, he is dancing. Adam Loberstein, writing in the *San Diego Union-Tribune*, summarizes the context for these findings: "'Moving rhythmically to a musical beat is a behavior found in every human culture, but it is not commonly seen in other animals,' according to Patel. 'It is a remarkable fact that despite decades of research in psychology and

[2] Available at www.youtube.com/watch?v=N7IZmRnAo6s, accessed February 9, 2015.

[3] Aniruddh D. Patel, John R. Iversen, Micah R. Bregman, Irena Schulz, and Charles Schulz, "Investigating the Human-specificity of Synchronization to Music," in ed. M. Adachi et al., *Proceedings of the 10th International Conference on Music Perception and Cognition, August 2008, Sapporo, Japan* (Adelaide, Australia: Causal Productions, 2008), 1-5.

neuroscience in which animals have been trained to do elaborate tasks, there is not a single report of an animal that was trained to tap, peck or move in synchronicity with an auditory beat,' he [Patel] wrote in a 2006 journal article."[4]

Dancing is an important way that music is appreciated. Snowball often attempts to hit the beat but misses. Generally, his dancing becomes more accurate the faster the music goes. Before Snowball, no one thought that beings other than human animals could dance. Granted, stories and accounts of medieval fairs, carnivals, and even current circuses have dancing bears, monkeys, elephants, and other animals, but the animals' training is not about synchronizing to a beat. The ability to do what Snowball does is tied to the evolution of complex vocal learning,[5] and the kind of mimicry that cockatoos and similar birds are capable of is a key form of that learning.

There are many other stories of animals appreciating human music. One recent research study by clinical scientist Lori Kogan and colleagues at Colorado State University investigated what kind of music shelter dogs prefer: classical (Bach, Beethoven, or Johann Strauss), heavy metal (Motorhead, Slayer, or Judas Priest), or a control (that is, no music at all). Many animal studies are required by ethical research boards to include environmental enhancements for their captive animals, and music is a typical choice. In this particular study, the dogs liked classical music[6]—or at least they became less stressed when listening to it. However, psychologist Charles Snowdon and composer David Teie think that this type of research goes about examining appreciation in the wrong way. Snowdon and Teie found that a group of Tamarin monkeys were agitated by human music but calmed by species-specific music that Teie created for them based on biological cues, specifically heart rate.[7] Consequently, Teie has correlated the tempo of species-specific

[4] Adam Loberstein, "Snowball's Chance," *San Diego Union-Tribune*, August 14, 2008, www.utsandiego.com/uniontrib/20080814/news_1c14bird.html.

[5] Victoria Williamson, "Why Don't Dogs Dance?" *Music Psychology*, May 1, 2014, musicpsychology.co.uk/why-dont-dogs-dance, accessed February 19, 2015.

[6] Lori R. Kogan, Regina Schoenfeld-Tacher, and Allen A. Simon, "Behavioral Effects of Auditory Stimulation on Kenneled Dogs," *Journal of Veterinary Behavior: Clinical Applications and Research* 7, no. 5 (2012): 268-75.

[7] C.T. Snowdon and D. Teie, "Affective Responses in Tamarins Elicited by Species-specific Music," *Biology Letters* 6, no. 1 (2010): 30-32.

music with the heart rate of certain species, and now sells such music for cats.[8]

Of the many possible questions here, I will try to address a few. The classical and heavy metal music used in the first study was said to have been chosen based on its "popularity," a term not well defined within the study. Many humans who appreciate music would eschew popularity as a first and only metric for a particular music's desirability. The use of no music as an experimental control is also interesting from a musical perspective, as is the idea that biology should have a connection to music appreciation. The study provides many details about the volume, equipment, and context into which the music was played. However, few details are given about how the music was chosen. Beyond questions of study design, we could ask what counts as appreciation. Why is calmness rather than agitation desirable? For whom is it desirable? The song "Romance," by Carrie Brownstein and her band Wild Flag, comes to mind here:

> You watch us dance, we dance 'til we're dying
> We dance to free ourselves from the room
> We love the sound, the sound is what found us
> Sound is the blood between me and you.[9]

Like the dogs and Tamarin monkeys in these studies, I respond differently to different genres of music at different times. Sometimes I want to feel calm, so I listen to early Bruce Cockburn, Bon Iver, or Sufjan Stevens. But often I want music to agitate me, so I appreciate sound that finds me and frees me from the room: this is when I listen to Wild Flag, Sleater-Kinney, or some other band in which Carrie Brownstein plays. There is a good chance that dogs and humans may appreciate music differently, but in thinking about interspecies music appreciation, questions of what truly shows appreciation should be carefully considered.

Humans like various kinds of music, and they like music in differing ways. They appreciate music not just in degree but also by genre and while listening, playing, creating, or dancing. They may even argue about music although they are all members of the same species. Such obvious differences

[8] See musicforcats.com.
[9] Wild Flag, *Wild Flag* (Merge Records, 2011) [CD MRG 411 Advance].

among humans suggest a need to consider the differences between individual animals and among species in animal musical appreciation. In addition to exploring the appreciation of human-created music by non-human animals, we can also consider the appreciation of animal songs by humans. I will leave it to others to make the case that animals are indeed music makers, but it is clear that humans do appreciate music of animals. Recordings of whale song, natural soundscapes, and especially bird song create a small but vibrant market in their corner of iTunes, Amazon, and brick-and-mortar stores. I personally appreciate the white noise app, which helps me fall asleep to several animal song settings, including a cat purring.

With respect to human appreciation of animal music, one story is quite remarkable. In 1984 bioacoustics researcher Katy Payne was observing elephants housed in the Oregon Zoo in Portland. She had often accompanied her then husband Roger Payne, a prominent whale researcher, on boating trips following whales. (Whale song, as has been widely documented,[10] extends beyond the range of human hearing. Much of it is below our sonic register and must be shifted up several octaves for us to hear.) While visiting the elephants, Payne noticed sensations in her body that she typically felt around whales. She had microphones and recording equipment brought in, and over several days recorded the elephants. When the recordings were analyzed and sped up by a factor of three, a whole new register of elephant song was revealed. Payne had discovered, by bodily appreciation, a song inaudible to humans. In 1999 she would establish the Elephant Listening Project at Cornell University to study these songs.[11]

The discovery and appreciation of infrasonic elephant song reveals the importance of attending to our bodies when we think about the connections between humans and animals. There are both commonalities and differences in how humans and animals experience the world. There are also commonalities in how they connect to the world and to each other through their bodies. Humans and animals are listening to each other and

[10] D.A. Helweg, A.S. Frankel, J.R. Mobley, Jr., and L.M. Herman, "Humpback Whale Song: Our Current Understanding," in *Marine Mammal Sensory Systems*, ed. J.A. Thomas et al. (New York: Plenum Press, 1992), 459-83.

[11] *About The Elephant Listening Project* (Cornell University), www.birds.cornell.edu/brp/elephant/about/about.html, accessed February 8, 2015.

are paying attention to the possibility that the sounds they make are good to listen to; they are engaged in appreciating each other's music.

I will now offer two arguments that outline the potential of creating meaning within interspecies music appreciation. These arguments are based on the shared reality of human and non-human animal bodies and language. Philosopher of religion Edith Wyschogrod could be speaking about Katy Payne in suggesting that "the body acts as a signifier, as a carnal general that condenses and channels meaning, a signifier that expresses extremes of love, compassion and generosity. In their disclosure of what is morally possible, saintly bodies 'fill' the discursive plane of ethics."[12] Our bodies are capable of engaging our environments beyond our ability to see, to say, or even—if our attention and imagination are big enough—to hear. The disposition of our bodies has no need of language in order to signify meaning. A body can connect to, draw attention to, and signify meaning to another body. Payne could appreciate the music of infrasonic elephant song by trusting her body to be open to the possibility of a song that she could not hear with her ears.

How does this claim of shared reality relate to other animals? The domestic cat has evolved an incredibly large hearing range with strengths in both low and high frequency sound. Given the size of my cat Neko's ears, it is surprising that she can hear my voice at all. We are accustomed to the excellent hearing of dogs, but cats, possessing one of the broadest hearing ranges in mammals, can hear both below and above the hearing of dogs.[13] These examples do not reveal musical appreciation per se, but they do imply an openness to sound that extends beyond our expectation of what is possible. In theology, the capacity to experience is an important precursor to the assignment of meaning. Humans and animals are surprisingly open to each other's voices.

Snowball's reception of the Backstreet Boys is certainly appreciation. The band may have made music to gain money, fame, and adoration, but just as certainly to make one move, as the bird moves when hearing it. While the cultural value of the Backstreet Boys' oeuvre may not be musically significant,

[12] Edith Wyschogrod, *Saints and Postmodernism: Revisioning Moral Philosophy* (Chicago: Univ. of Chicago Press, 1990), 52.

[13] Rickye S. Heffner and Henry E. Heffner, "Hearing Range of the Domestic Cat," *Hearing Research* 19, no. 1 (1985): 85-88.

Snowball's appreciation of it has reshaped the relationship between humans and cockatoos and other creatures capable of mimicry. Similarly, we do not know everything that is happening when elephants sing below our range of hearing, but when Katy Payne appreciated their music, it dramatically reshaped the contours of the elephant-human relationship.

What does it mean, finally, to imagine harmony between humans and animals? I suggest that music can be a fruitful training ground for both, a context for the development of peace and community, a way of offering ourselves to the other. We can already see this in domesticated environments and in the sharpened attention of humans to wild environments. A theology of interspecies musical appreciation sees this beginning as having potential for a greater harmony to follow.

An approach to the connection between sound and land need not be mediated solely by human language or consciousness. Music is communication, and the harmony that we find in it resonates while seeking the voice of the other. Music moves beyond language; thus, within music we need not resonate only with our own human language and categories, and we can move towards that which we successfully share. I do not intend here to contrast language with nature, the land, animals, or humans. Indeed, animals have highly sophisticated communication processes. However, human language has not necessarily been the most fruitful mode of engagement for animals and humans. Language is a politicized and partial approach to the world. Sound, by contrast, is "the blood between me and you." My hope is that in music we might find a new, many-parted harmony for attending to the other and for allowing the other to attend to us.

Granted, we can never access another creature's interiority. In regard to human music appreciation, if I ask you to listen to Wild Flag, you may choose to report appreciation to me in order to preserve our friendship rather than to express a genuine love for the band. In regard to interspecies music appreciation, I may never know whether Neko appreciates my wife's voice. However, everything about the personality of both my wife and my cat suggests that in their nightly ritual they do seek closer communion. The sonic harmony that they achieve by singing and mewing to each other can only be described as cataphonic (pun intended), but the personal harmony

that I see when Neko lies down on top of Susan and purrs at the volume of a small jet is undeniable.

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