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Hearing Hoofbeats: Interdisciplinary Approaches to Interspecies Musical Encounters

A Thesis submitted in partial satisfaction of the
requirements for the degree Master of Arts
in Music

by

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December 2019

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December 2019

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by

Lauren Olivia Vanderlinden

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This thesis is dedicated to the memory of my grandfather, Terry Russ, for always reminding me that a good horse can solve most of life's problems. He would say that the only good horse is a Quarter Horse, but we always agreed to disagree on that point.

ABSTRACT

Hearing Hoofbeats: Interdisciplinary Approaches to Interspecies Musical Encounters

by

Lauren Olivia Vanderlinden

In this thesis, I explore the sonic interactions between humans and horses that take place in the many sporting and leisure events that rely on the presence of music and media as part of the web of connection between actors. To accomplish this, I bring together literature from a wide variety of fields to argue that analyzing and understanding interspecies musical encounters requires a flexible, interdisciplinary approach to theory and methodology that more deeply accounts for animal agency, sentience, and individuality. Many scholars have suggested that music is not a solely human endeavor, but rather one that has tangible, felt effects on many life forms beyond the human. Despite this acknowledgement, there is a dearth of studies that deal in the specifics of human-animal interactions within musical contexts. This is partially because no single discipline's methods can successfully encompass what it is like to live as a member of another species, rendering non-human existence fundamentally unknowable and therefore difficult to engage with analytically. However, this thesis attempts to offer a solution to this problem by arguing that using the shared, embodied, thinking activity of music as a starting point for case-specific interdisciplinary combinations of methods and theories can allow scholars to more rigorously, ethically, and comprehensively engage with non-human agents in interspecies encounters. Ethnomusicology in particular offers an excellent starting point for this

engagement because of the field's emphasis on music as a social practice situated in specific contexts and relationships.

Analysis of literature stemming from anthropology, sociology, sports studies, media studies, voice studies, biology, and cognitive science reveals three core themes that drive my research questions: first, the idea that interspecies research is fraught with a particular set of ethical dilemmas that emerge when non-human agents are involved. How might we conduct research that promises to do no harm when we cannot truly know what harm means to others? What are our ethical responsibilities to our animal interlocutors and partners, and how do we fulfill them? Second, closely tied to considerations of ethics is the profound impact that interspecies relationships and musical relationships have on the physical bodies of those who participate in them. This refers not only to the physical toll that research and fieldwork takes on the body of the researcher, but the physiological imprints that horseback riding in particular has on riders and horses alike. Music, too, is tied up in this idea of shared bodily impact; in sports like dressage, the rider disciplines the horse's body into synchronization with the music that undergirds their performance, creating the illusion of a fluid and collaborative dance. But do animals really understand and hear humanly-defined music as something different than speech or communication? If we cannot ever know for sure whether or not they do understand, how can we claim to undertake research that accounts for non-human cognition?

Third, the questions raised by considering cognition and the body lead us to trouble any clear division between music, sound, and language. Literature from anthropology, voice studies, and music cognition all complicate the idea that these categories are strictly bounded, and suggest that in the unknowability of non-human sentience our conceptions of music and language might even be moot when it comes to animal communication. Studies of

birds, dolphins, bats, and whales have pushed biologists and music scholars to radically reconsider what they believe music to be and do, and turning to less obviously musical animals like horses holds the potential to further complicate and break down these conventions. But what is the value of this kind of inquiry? If we broaden our definitions of music and musicking to account for non-human participation, what will become of music scholars?

These questions are addressed in this thesis through the convergence of disparate fields of literature. By bringing into conversation these disciplines that seldom meet, a more clear picture of what ethical, rigorous, musical interspecies research might look like begins to emerge.

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I. Introduction

Each year, Return to Freedom (RTF) Wild Horse Sanctuary holds many events geared towards educating the general public on the history and legislation surrounding wild horses in the United States today, as well as the crises surrounding their welfare and protected status. The first time I set foot on RTF's property was for one of these educational events, a Youth and Family Day held on a beautifully warm April afternoon in 2019. Rays of sun illuminated the yellow mustard plants that dusted the hills of the backcountry, painting the landscape with large swathes of golden softness. When the attendees trekked through that landscape, quietly excited, it wasn't long before several family bands of wild horses came into view. We'd spent several hours learning about wild horses—what they ate, where they lived, their behavioral characteristics—but to stand in their presence, nothing but open space between us, was something entirely different. They watched us, and we watched them. After RTF founder Neda Demayo told us a little bit about the small band of horses nearest to us, trainer Thomas Smittle shared his own take on wild horses' American history and their connection to Native American lifeways. He passed out drums and shakers to everyone present before setting us up in a large circle and leading us in a traditional song that highlighted the importance of the horse to his tribe, featuring a rhythmic structure that imitated the sounds of a galloping horse's hoofbeats.

As we played and sang, the horses that had initially kept their distance began to move closer to us. They seemed to be intrigued by the musical sounds, silently taking in the soundscape where before there had been snorting and whinnying. The song came to an end and the entire group fell into silence, basking in the interspecies connection that had been brought into being by shared musical experience. Some of the more curious mares met our eyes, tossing their heads with interest as they took a step or two closer. Many of us felt

profoundly moved by this, as evidenced by the glistening tears that rolled down the cheeks of a few attendees and the open-mouthed expressions of awe on the faces of young children who had never been in such close proximity to a wild animal before. No one wanted to be the first to speak and break that otherworldly connection, forged first through sound and then silence, that had ensnared us all in a delicate web of collective feeling, thinking, and hearing. Finally, the lead mare of the band seemed to have had enough of our staring and began to herd the others away from us, lifting the spell. We carried on with an exploration of RTF's sanctuary and met many other special horses that day, but that moment of communal musicking stayed with me long after the golden hills of Lompoc had faded in my rearview mirror on the drive home.

When I reflect on this experience, I find myself returning to the way those wild horses were listening to the music we were making; they seemed to understand it to be different than the way our chatty group conversed as we approached them, and they responded to it accordingly. Are horses, and animals more generally, not musical beings? Research and quotidian observations tell us that animals experience, respond to, and even create music of varying kinds every day that may or may not fall within the bounds of what we conventionally consider music to be. Recent scientific studies have shown that playing music for horses stalled in a barn engenders relaxed behavior, and that horses even seem to have genre preferences—classical and country music produced less active behavior than jazz or rock, though this might also be a result of horses' attunement to human responses to genre (Greening and Carter 2013, Kedzierski et al. 2017, Saslow 2002 and 2017, Stachurska et al. 2015 and 2017). This is not only a phenomenon that exists within scientific experimentation, however; scores of popular YouTube videos depict herds of cows being serenaded by jazz trombone and dogs playing the piano. Even my cat possesses what I would suggest is musical

taste—while she often meows and appears to pay close attention when the *Star Trek* theme song comes on and seems to enjoy a good Disney sing-along, she runs and hides when my partner plays his mandolin. The fields of ecomusicology and sound studies, among others, have asserted that music is not merely a human endeavor, but rather one that affects a multitude of life forms (Allen 2011). While this is an important truth for academics to grapple with, much of the emergent literature in recent years has explored musical connections to landscape and environment rather than specific human-animal relationships.

In considering the many situations in which humans and animals interact within musical contexts, and examining the variety of literature that considers human-animal interaction more broadly, I argue that greater flexibility in methods and approaches is necessary for deepening our intellectual engagement with animals and engendering more rigorous, ethical ways of “hearing” non-human actors in our histories, ethnographies, and analyses. This process raises important questions that can only begin to be answered by this thesis; if we understand that our actions as researchers, riders, and engagers in interspecies interactions have deeply-felt consequences on others, what are our ethical responsibilities to our non-human interlocutors and partners, and how do we fulfill them? Furthermore, do non-humans even hear and understand humanly-defined music as something different from speech or communication? If we cannot ever know this for sure, what does this call into question about our understanding of music and music scholarship? The value of this kind of inquiry comes in its ability to make us question and expand our conceptions of music, non-human sentience, and the agency of others, as well as how they have come to be constructed.

Humans and horses have come face-to-face all over the world for thousands of years, and our densely entangled histories have prompted a great deal of academic attention, particularly in recent years. The vast amount of literature surrounding human-horse

relationships makes this set of interactions exemplary for the exploration of applied methodologies, as do the large number of cultural events where humans, horses, and music come to occupy the same space. Throughout this thesis, I will explore the related literatures and methodologies produced by the fields of biology, cognitive science, sociology, anthropology, sports studies, history, media studies, voice studies, and ethnomusicology in order to argue for the necessity of their contextually-based combination when analyzing human-horse relationships. It is impossible to ever truly know the experience of another species, and no single disciplinary methodology can account for every element that comes into play when humans and non-human animals meet. However, I argue that the use of flexible combinations of the theories and methods presented here can perhaps get us a little bit closer. Music in particular offers a unique and insightful way to consider relationships between humans and non-humans, and raises myriad questions about the fluid natures of sentience, musicality, and agency that will be addressed throughout this thesis. As we move toward more rigorous engagement with interspecies interactions that occur within a musical context, then, beginning with ethnomusicology as a starting point allows for this analytical flexibility because of the field's roots in considering music as a social practice based in relationships and its openness to theoretical diversity and innovation. Even there, however, if we desire to engage with interspecies interactions in a meaningful, ethical way in the twenty-first century, our methods must draw from a wider variety of intellectual sources that suggest alternate ways of knowing and understanding non-humans.

From the social-scientific bodies of literature, specifically those emerging from anthropology, sociology, and sports studies, the many enculturated binaries that have shaped discourse on human-animal relationships (and the boundary between human and animal to begin with) are laid open and dissected. For scholarship in these fields to progress beyond a

mere rehashing of the innate nature of those dichotomies, the literature discussed in this paper argues that first they must be exposed as culturally constructed. This, they propose, can be addressed through careful attention to the underrepresented sides of those binaries, as well as to identities, bodies, and events where they overlap. These claims are bolstered and complicated by related literature from the fields of communication and sports studies; when binaries begin to come apart, their constructions revealed, more voices and bodies can find space to be heard and acknowledged within both popular and academic circles. And a focus on sporting culture, bodies, and constructions also bring to our attention the myriad ways that media and technology are implicated not just in the contemporary processes of identification and categorization, but in their histories as well.

Tied into these intellectual meetings must be awareness of the ethical implications of performing interspecies research, particularly because communication across species is difficult, and questions of consent and harm are murky at best. The literature emerging from voice studies allows for a more theoretical consideration of agency and power, and placing it in the context of new materialism suggests an approach to non-human agency that creates ample space for musical research while acknowledging the felt, material impacts that such research has on the bodies of not just research subjects but also the researchers themselves. In relation to this are the more scientific bodies of literature to be discussed in the following pages, particularly those that stem from animal cognition, ethology, and Animal-Computer Interaction. While the research methodologies undertaken in scientific fields are often quite different from the other social-scientific and humanities fields represented in this paper, the kinds of larger questions being asked by scientific studies are provocative, and the data being produced lends quantitative support to some of the qualitative arguments being undertaken by other areas of study.

Ethnomusicology, as I have already suggested, is a field well-equipped to begin combining these many and varied methodologies, and to ensure that music does not get lost in the shuffle. Throughout this thesis, I will point out the areas in each of the above bodies of literature where music-focused research stemming from an ethnomusicological grounding has the potential to add to, complicate, and combine existing theories and approaches in new, useful ways. In addition, I suggest that the American industry of rodeo provides one localized arena for the development of these interconnected methodologies because of both the complicated interspecies interactions that characterize its spectacle and the distinctive musical backdrop against which those interactions play out. By examining in greater detail the deeply nuanced places where humans, animals, and musical media intersect—like rodeo—we can question what we think we know about subjectivity, individuality, music, agency, and humanity while developing more ethical, rigorous ways of theorizing about the nonhuman experience.

II. Anthropology, Cultural Studies, and Equine Social Science

One of the most influential monographs that deals with the particularities of equestrian culture is Elizabeth Atwood Lawrence's 1982 *Rodeo: An Anthropologist Looks at the Wild and the Tame*. Lawrence, a veterinarian who also holds a Ph.D. in anthropology, utilizes her unique perspective as both an animal expert and a social scientist to examine rodeo as a ritual event where relationships between humans and nonhumans are performed, negotiated, and naturalized. Her book provided the first look at rodeo from a social-scientific point of view, and it set the stage for the many investigations of equestrian culture that have come in the nearly forty years after its publication. While rodeo as a sporting event offers a fascinating arena for examining the intersections of music, humans, and animals—a topic I

will return to throughout this paper—the most long-lasting impact of Lawrence’s publication comes from how it frames human-nonhuman relationships.

Drawing from anthropologist Sherry Ortner, Lawrence argues that the primary ritual being played out through rodeo events is the domination of culture over nature, the taming of the wild. Ortner has conceived of culture as being equated “with the notion of human consciousness (i.e., systems of thought and technology), by means of which humanity attempts to assert control over nature” (Ortner 1974: 72, in Lawrence 1982). There are a few drawbacks to using this definition, namely that consciousness is equated with culture and therefore with humanity; Lawrence also quotes Ortner’s argument that culture “at some level of awareness asserts itself to be not only distinct from but superior to nature, and that sense of distinctiveness and superiority rests precisely on the ability to transform—to ‘socialize’ and ‘culturize’ nature” (Ortner 1974: 73, in Lawrence 1982). And so humanity’s perceived superiority over other sentient life forms—including intelligent nonhuman animals—is cemented by the binary division of culture and nature. For Lawrence, rodeo is all about the opposition of these two categories, complicated though it may be, and the performance of ritual domination of culture over nature in perpetuity each time the rodeo takes place.

In recent scholarship, this binary has both been perpetuated and begun to be broken down as the terms in question have circulated with increasing contention. While some works lean heavily on the way the wild-tame dichotomy informs human-animal relationships today, others quietly incorporate horses into their analysis as actors. These works frame equines as agential figures who bring just as much of themselves to bear on relationships as the humans they interact with. One exemplary illustration of the latter trend comes in a 2002 monograph by Rebecca Cassidy entitled *The Sport of Kings: Kinship, Class, and Thoroughbred Breeding in Newmarket*. The book is in many ways a rather straightforward ethnography. Based on

extended fieldwork in the town of Newmarket, situated roughly twenty minutes outside of Cambridge, Cassidy looks at the British capital of horseracing from many different angles to examine the ways in which the structure of horse culture at Newmarket “is a reflection of broader dynamics within British society” (Cassidy 2002: 6). She does this by spending time alternately as a groom, a lad (exercise rider), a betting ring attendee, a stud hand (working at a breeding and foaling farm), a trainer’s assistant, and associating with higher-class racehorse owners. The classical anthropological theme of kinship (interpreted through the lens of pedigree and bloodstock) and a noteworthy ambivalence toward the collapsing divide between nature and culture when it comes to interspecies relationships at the racetrack characterize Cassidy’s analysis, and she calls upon many well-known anthropological and social theoretical figures like Levi-Strauss, Latour, Bourdieu, Geertz, Ortner, and Haraway to bolster her arguments.

As a result, this ethnography reads very much like a traditional anthropological kinship study in many ways. Lineages and relationships are thoroughly and expertly mapped out, and she utilizes the concept of “pedigree” to examine both horse and human webs of connection and kinship. Ideas of “nature” and the “natural” play into this side of her analysis very heavily, both in terms of equine breeding and in human families. She writes,

Nature, in this context, is perceived as a recalcitrant but talented child who refuses to fulfill its own potential and so must be strongly directed. However, the opposite notion, that animals, particularly horses and dogs, are fundamentally the same as humans, and that all are part of nature, is also present, facilitating an intersubjectivity between the thoroughbred and its human attendants (Ibid.: 9).

And so, while kinship is the organizing concept of Cassidy’s analysis, another (less conventional) theme also emerges: the racehorse as polysemic being. Her interlocutors will often refer to the horses in their care as possessing human attributes and quirks, and treat them like members of their own human families. At the same time, however, they are “man’s

greatest creation” and must be carefully controlled in all aspects in order to maintain their (hereditary) racing ability. There is a posthumanist element present here too in the way that Cassidy constructs humanity through relationships with the equine, but it is also intimately tied to a standard anthropocentric focus throughout Cassidy’s ethnography. Rather than trying to settle the two into one cohesive narrative, or reconciling the constructed version of nature that exists in these breeding programs, both are allowed to exist side by side without shying away from the rub.

Cassidy links this argument about the false (or, at least, complicated) dichotomy of nature and culture with her main point through the nexus of class. She writes, “Meanings of ‘nature’ in Newmarket are imbued with class, and offer a mechanism by which people and animals may be categorized according to ideas whereby some are innately superior to others by virtue of their breeding” (Ibid.: 171). Much like Lawrence’s analysis of rodeo, and the ritual domination of culture over nature that it enacts, Cassidy argues that Thoroughbred breeding practices cement not just the same species hierarchy but a classed one as well. In making this argument, the gap between equine and human is effectively closed, and the tangled webs of relationships that have built Newmarket into the horseracing mecca it is today are made visible. Conceptions of breeding and pedigree are central to daily life in Newmarket, and Cassidy’s ability to draw out this feature lend credence to the idea that performing ethnography that includes animals isn’t necessarily all that different than performing ethnography that is exclusively human. While she may not make an obvious argument for the validity of interspecies ethnographic practice throughout this book, the traces of these ideas are there. Her analysis is anthropocentric, to be sure, but her discussion of the leveling of horse and human carries within it the potential to speak to something more experimental.

Another common manifestation of the nature-culture and wild-tame binaries can be found in the world of Natural Horsemanship (NH), a popular method of training that relies on the trainer interacting with the horse as if they were “in the wild.” Biologist and social scientist Lynda Birke has performed extensive fieldwork with Natural Horsemanship practitioners, producing a pair of articles that build on Lawrence’s work and place humans (culture) in a binary relationship with animals (nature) while incorporating a more fluid discussion of that binary to examine Natural Horsemanship and what its assumptions about horses might reveal. Natural Horsemanship as a practice relies very heavily on this binary, but interprets it more as a continuum: the assumption is that through kindness, communication, and empowerment both humans and horses can move themselves further towards a more “natural” existence. Birke writes that practitioners of Natural Horsemanship methods generally “desire to understand horses and interact with them in natural ways; that is, draw on what is seen to be the animal’s instinctive behavior patterns and on what people perceive as equine behavior in the wild” (Birke 2007: 220).

Building on both this idea of an evolution towards a practice based in nature and the theme of human/cultural interference is Birke’s discussion of technology and gadgetry in the discipline of Natural Horsemanship. Birke describes practitioners as having often “reject[ed] cultural values seen to be associated with mainstream equestrian training” (Ibid.: 220) through the creation of an oppositional discourse that places Natural Horsemanship on the ethical, natural, and empathetic side of a divide between cruelty and kindness in training practices. The crux of this opposition is often the use of technology in the training process, most often referring to both the way horses are kept (i.e. a lack of technology in Natural Horsemanship: leaving horses barefoot, out to pasture, not blanketed in the winter, etc.) and to the tools used during training sessions (bridles, whips, spurs, etc.). Birke carefully points

out that Natural Horsemanship practitioners *do* use technology in the training process, but through a careful process of a re-inscribing of those gadgets' actions and purposes have managed to re-brand them in such a way that they fall within the lines of Natural Horsemanship's ethical praxis.

Birke sees the emergence of Natural Horsemanship as a significant cultural shift, particularly in the UK where she conducted her research for this article, because of its romanticizing of the natural, much like Lawrence's 1982 discussion of the romanticizing of the rural American West at the rodeo. And Birke makes it clear, too, that Natural Horsemanship has its roots in cowboy culture and the same nostalgia for a relationship with nature that many perceive as no longer existing. In following a roadmap for training that emphasizes connecting with the natural world and opening yourself up to it, many practitioners found themselves changing as a result. She writes, "What [Natural Horsemanship advocates] sought was an individuality; doing Natural Horsemanship, they said repeatedly, was different—a journey of discovery and empowerment for both them and their horses" (Ibid.: 235). This is a trend mirrored in the United States, where Natural Horsemanship still enjoys a degree of popularity and prestige that other training methods do not. An intense nostalgic desire for an America that no longer exists becomes manifest in the longing for a relationship with a horse that is somehow more natural, instinctive, and fulfilling and explains NH's long-lasting popularity.

Birke's 2008 article focuses more specifically on the discourse attached to these idealized human-horse relationships. Here, this complication of the nature-culture binary is manifest in discussions of control versus freedom, again not unlike the wild-tame dichotomy Lawrence brought to our attention in 1982. After interviewing over forty NH practitioners, Birke concluded that there are two distinct types of discourse commonly used by NH

aficionados to talk about horses: the horse as animal (natural, Other, scientific, possessing wild heritage, instinctive) and the horse as partner (sentient, near-human, companion, communicative, almost cultured). When referring to the horse as animal, more scientific, detached, and general modes of conversation are used; when referring to the horse as a partner, emotion and feeling become very present in the conversation, and the horse becomes an individual thinking, feeling subject. These two distinct threads of narrative come into productive conflict with each other throughout Birke's analysis, particularly in the context of instincts and liberty.

Birke, again utilizing Lawrence's wild/tame dichotomy, writes, "the imagery of the wild horse [in NH] is furthered by popular tales of horse whisperers who catch and ride wild Mustangs, so that what emerges is a belief that relating to horses as wild—even in the process of taming—is the only way to develop a relationship" (Birke 2008: 119). Not only is the concept of wildness manifest in the language surrounding the training process of NH, it is also used to separate NH from more traditional forms of training and interacting with horses, in which horses "must be (and must be seen to be) controlled, docile, and tamed" (Latimer and Birke 2007, in Birke 2008: 119). However, for all this discourse surrounding the concepts of freedom and liberty, Birke contends that the goal of NH is still control, as it is in all forms of horsemanship. Borrowing from K.J. Brandt, Birke points out that the image of the "gentle cowboy" is the guiding one in NH, and so the discourse of tameness and control—the domination of culture over nature, even if it's supposedly in the animal's best interest to be dominated—is inseparable from the relationship of horses and humans.

This all seems to be a rather pessimistic way of looking at the horse-human relationship, particularly when Birke begins to discuss more institutional and cultural systems of control that appear very much like the discussion of penitentiaries' mechanisms of control

in Jessica Adams' and Melissa Schrifft's articles on prison rodeo (Adams 2001, Schrifft 2004). However, Birke believes that this tension between discourses of control and freedom is not the only end result. She argues that NH practitioners do indeed seek ways out of the bounded world of dichotomy by “stress[ing] ‘learning to speak horse’ and building a partnership” (Birke 2008: 121). By creating a sort of language that both horse and human can understand, they are building a new kind of discourse “performed through the bodies of both human and horse” (Ibid.: 121). All of this conversation leads to a rather heartfelt plea to readers to make room in horse culture again for “the sheer emotionality of being with horses, [which] epitomizes a central paradox for many horse people— the horse symbolizes freedom,... yet, while we seek to tame and control them, we try to understand horses through the objectifying language of science” (Ibid.: 122). Underneath all of this is the emotional desire to connect with a horse on an intimate level, to “fall in love” with a horse, where the strength of the conflict between concepts of control and freedom might meet in a relationship that feels a little better and a little more equal.

Notably, the nature-culture and wild-tame binaries are not the only ones that stand to be questioned by social-scientific investigations of equestrian culture, though they might be the most pertinent for developing multispecies avenues of inquiry. As recent work has both noted and interrogated, equestrianism is a sport where men and women appear to compete against each other on a theoretically even playing field (Adelman and Knijnik 2013, Butler 2013, Dashper 2012 and 2015, Dashper and St. John 2016, Davis, Maurstad, and Dean 2016, Stoeltje 1998). Of course, much like music, this only appears to be true on the surface. It is no coincidence that while “horse girl” culture is prolific in the United States—illustrated by the hundreds of book series about girls and their horses, marketed for a very specific (female) audience—it is also infantilized, and while the number of young girls and amateur riders

vastly outweigh the number of boys and men who participate, the demographic at the professional level is much more male-dominated (Birke and Brandt 2009).

A 2012 article by Katherine Dashper points this out; while her study leaves out the horses altogether, it instead examines masculinity, homosexuality, and male identity in dressage through the lens of inclusive masculinity theory, taken from E. Anderson. Dashper argues that “the presence of men and women in the same competitive context is important for beginning to break down the persistent homophobia of sport that contributes to the ongoing sporting subordination of both women and gay men,” but at the same time “masculinity (gay or straight) continues to be constructed in opposition to a devalued feminine Other” (2012: 1110-1111). Dashper suggests that even though women and gay men are present in large numbers at all levels of equestrianism—and more and more forms of masculinity are becoming acceptable and common among all participants—men that participate in equestrian sport still feel the need to purchase “masculine identity... at the expense of a subordinated Other: femininity,” (Ibid.: 1119) which allows them to maintain a certain level of dominance in the sport.

In a later article, Dashper explicitly notes that despite equestrian sport’s potential for challenging gender norms through its feminization of a masculine, military tradition, “gender remains a salient feature of the organization and experience of horse-riding social worlds, both in relation to competitive sport and leisure-riding practices” (Dashper 2015: 351). Horseback riding is a physically demanding sport, one rooted in the traditionally masculine spaces of military history, the countryside, and sporting activities, and the interaction of women’s bodies with sporting competition is still a highly regulated, highly surveilled one (Ibid.: 354). Despite this, the intensive level of physical fitness required to not just ride but also care for horses has resulted in a culture of fit, powerful women who often subvert the

expectations of what a woman's fit body should look like. During her fieldwork, Dashper discovered that "women in the horse world revel in their physical capabilities and opportunities to demonstrate that they have strong, powerful bodies... [they exemplify] the contradictory ways in which many women in the horse world 'do looks'—embodying feminine gender norms through things like hairstyles and clothes while simultaneously challenging feminine beauty norms through the physicality of their bodies" (Ibid.: 358). This causes the concept of gender in the equestrian world to fret the borders of neatly-packaged binaries of masculine and feminine, particularly when considered in the context of the traditionally male-dominated and realm of control over the land. Women who ride, care for, and are knowledgeable about horses and equestrianism represent a noteworthy change to rural gender norms and duties, even in the twenty-first century.

Incorporating these lines of inquiry, Miriam Adelman and Jorge Knijnik's 2017 edited volume, *Gender and Equestrian Sport: Riding Around the World*, begins to deconstruct the many reductive ways gender has been portrayed in equestrianism from a variety of perspectives and fields. The book's epilogue, co-written by Kirrilly Thompson and Miriam Adelman, points out in a way very similar to Dashper's work that "within the context of equestrian sport, women and men find and deliberately locate themselves in positions from which gender stereotypes are renegotiable and renegotiated" (Adelman and Thompson 2017: 195). While the book's chapters focus almost exclusively on Western, white, Euro-American forms of equestrianism, where gender norms carry different connotations and possibilities for negotiation, they bring up an important point: in analyzing the processes of constructing gendered and sexed identities among equestrians, the "binary prison" of identity more generally begins to be broken down (Ibid.: 196). By opening up social-scientific investigation

of equestrianism to considering gender, sex, ethnicity, generation, class, and localization, among other things, binaries turn into continuums that offer possibility.

A second edited volume in this series, this time spearheaded by Miriam Adelman and Kirrilly Thompson and also released in 2017, deals in greater detail with the global-local relationship between equestrian cultures and the horse world at large while accounting more consciously for the issues of class and financial elitism that act as gate-keeping mechanisms for the industry. Much like the first volume, this one's authors come from a variety of different fields, including anthropology, sociology, cultural studies, economics, tourism studies, and history. Unlike many of the previously discussed sources, which only gesture toward the equestrian industry's ties to class, this volume's secondary focus on the global horse industry allows the authors to more deeply engage with the financial barriers to involvement in equestrianism. Historically, horse ownership and riding has not just been a masculine opportunity as already discussed, but one restricted to the wealthier echelons of society all over the world (Swart 2008). This is largely still true, and a large component of this volume focuses on how those economic concerns are tied up in issues of both local and global histories, the money-driven circulation of animals across borders, and the many kinds of gendered, raced, and classed labor involved in the care and keeping of horses (see: Forrest, Schuurman, Kozak, Gilbert, Adelman, and Talley in this volume).

In their conclusion, Adelman and Thompson propose developing an interdisciplinary field of "equine social science" to both validate and extend inquiry into the role of horses in the human world that goes beyond simple history or economic analysis, offering the chapters of their edited volume as starting points. They also suggest several possible directions for future research in this field, ranging from equine-assisted therapy to sustainable equestrian cultures, as well as more scholarship focused on horse subjectivity and sentience. While

music and sound do not play a substantial part in any of these analyses, aesthetics, communication, and sentience are all lurking on the periphery, suggesting possible theoretical and methodological directions for future study in equestrian social science.

III. Equestrian Sports, Sports Studies, and Music and Sports

Another social-scientific framework that has been applied to the world of equestrianism is that of sports studies. Literature from this field is wide-ranging, incorporating methodologies drawn from psychology, sociology, and history, among others with the goal of investigating sports as an important form of cultural performance. More specifically, interspecies sports like equestrian sports or canine agility involve active participation from both humans and nonhumans, and therefore reflect complicated cultural relationships that cross species lines. While sports studies literature that explicitly focuses on equestrianism is sparse, there is work that is attentive to the reductive binaries that are often found in the world of sports; while the nature-culture binary makes few appearances here, dichotomies surrounding race, sex, gender, and nationality are rife within sports culture, particularly in its present highly-mediatised form. When music is added to the analytical frame, even more assumptions about identity come with it. For example, Donna Buchanan's seminal work on Bulgarian soccer and music illustrated how closely identity on many levels can be tied into the fantasies produced by sporting culture, arguing that "both music and sport are powerful forms of cultural performance that possess the ability to generate national sentiment, and even to transform that sentiment into prescriptions for nationalist action... In short, through their engagement with the soccer craze [and its music], many Bulgarians experienced the nation in their very bodies" (Buchanan 2002: 24). Sports, and the music that

accompanies them, have profound psychological, historical, and cultural effects on individuals, both human and non-human.

One example of the effectiveness of sports comes from considering identity. In particular, the social arena of sports is one that both historically and culturally is often highly and visibly gendered, but the ideologies of gendered and sexed identity at play in those sporting situations are more complicated than initially meet the eye. Addressing several texts that consider the construction of these issues on a theoretical level and placing them in the context of equestrian-specific literature shines a light onto how gender, sex, and identity play vital roles in considering equestrian sport. Belinda Wheaton's 2013 *The Cultural Politics of Lifestyle Sports* is a broad examination of a category she terms lifestyle sports, particularly their political potential to challenge hegemonic views of sporting culture. She sets out to "explore what is *cultural* about politics and what is *political* about culture" (Wheaton 2013: 7), and utilizes both dense theoretical exploration and a deeper analysis of case studies like parkour, surfing, and skateboarding to advocate for rectifying the problem she sees in academia, where "most academic studies of lifestyle sports have persistently neglected to consider race or ethnicity in the analysis" (Ibid.: 64).

This book in particular also has started to address another area of literature that has not received the attention it deserves: sporting culture outside of the West. While the majority of the book focuses sports populated by white, Western, male, etc. constituents, she also complicates those sports by entangling them with her analysis of South African surfing and skateboarding, globalization, and racial identity. It's a single chapter, but it scrambles any assumptions the reader might have had about the whiteness of sports, particularly in congress with Wheaton's earlier, more theoretical chapters on the politics of difference and challenges to dominant discourses through the realm of sport. This is a noteworthy

intervention because it highlights similar tendencies in other strains of sports-related study. Both literature on and popular conceptions of rodeo, for example, have tended to whitewash rodeo's complex multi-ethnic history in favor of elevating the white, heterosexual, all-American cowboy. Some recent publications have made efforts to address this egregious error, but there is still much work to be done in bringing non-white voices back to rodeo's sporting and musical history (Barraclough 2019, Chavis 1993, Davis 2005, Keillor 2002, Kelm 2011, Patton and Schedlock 2011, Penrose 2003, Somerville 2010).

The most exciting component of Wheaton's book, however, does not come from any one specific case study or theoretical point of view, but rather comes from her writing technique. In attempting to show that other voices exist in sport aside from the dominant, hegemonic voices of white men, instead of purporting to "give voice to" marginalized identities, a trope I have found in many pieces of literature that is not only tired but problematic, she creates space in her writing to let other voices seep into her analysis. The questions she asks, the intellectual routes she chooses to take, are affected and influenced by non-majority constituents of the sporting worlds she temporarily inhabits, and her text is affective and engaging as a result. Her writing embodies her call to other researchers to include a broader range of subjects, both "old and young, able-bodied and not, different genders, ethnicities and sexualities, both in 'the West', and in previously peripheral, but increasingly important spaces like South America, Africa, and Asia" (Ibid.: 186). In considering how her writing and analytical frameworks might be applied to interspecies sports like horseback riding or bullfighting, Wheaton's book offers an inspiring method that maintains its academic rigor while making space for a plenitude of voices.

In a similar vein, Toby Miller's 2001 *Sportsex* is another striking book that emphasizes the body, modernity, and mediation while also containing an extensive

discussion of sexuality and gender as it pertains to the body in sports. Most interesting here is the fact that Miller does not only examine the (important) representation of women and queer individuals and their bodies in sports, but also engages with the visibility and optics of men's bodies and sexualities in mainstream sport. Discrimination, exploitation, and objectification are perhaps expected by women who engage with sports, but Miller argues here that men, too, are subjected to the same violence of hegemonic masculinity, though to a different degree. He writes, "beauty is as much a part of male sports discourse today as toughness, while grace is the avowed compatriot of violence" (Miller 2001: 9), and indeed his writing points out the ways in which sporting culture has challenged these traditional conceptions of masculinity.

In particular, his discussion of masculinity in sport is useful in terms of thinking about rodeo, where masculinity is placed front and center and women seem to operate peripherally in smaller events like barrel racing or the rodeo queen contest if they participate at all. Throughout *Sportsex*, it becomes clear that masculinity and male athletes' representation in media plays a large role in the ways that gender roles are upheld, challenged, and nuanced in the world of sports. Miller writes,

Commercial sports today are a site for activating the female gaze and even empowering it, part of a momentum that is putting the public presentation of men under scrutiny in the same way as women. Men, too, are becoming dependent on the gaze directed at them. Sports have always licensed men to watch and dissect other men's bodies in fetishistic detail, a legitimate space for men to gaze on the male form... So sports are both a regulatory space for investigating the foibles of men and a privileged space for the legitimate gaze of male upon male. (Ibid.: 40)

Miller goes on to discuss female and queer viewership of both male and female sporting bodies, and also devotes significant time and space to the inequalities of representation and media coverage of men's and women's sports, but this idea of men's increasing dependence on the media's/other men's gaze(s) is of particular interest. For example, for my

consideration of the way that cowboy masculinity in rodeo is portrayed in media, and the types of coverage it receives as well as the language used by competitors, announcers, and spectators alike, Miller's nuanced discussion of the erotics of sporting media and homosexuality provide enticing possibilities for exploration.

Publications that link sports specifically with music are fewer in number, but within the subfield of sports studies, there have been several books recently that consider different approaches to analyzing sport as a realm of cultural performance akin to music (Bateman and Bale 2009, Gaunt 2006, McLeod 2011). While these authors examine this topic in different ways, the thread of gender and sexuality as they relate to the mediatized body is one that runs through both. This is perhaps not a surprise, due to the foregrounding of the body that occurs both in sport and in the media surrounding sporting events, but it certainly has interesting implications for how we think about the intersection between music and sport. Sport has ways of regulating and disciplining both body and mind, as does music, and considering the two together can offer insight into the ways that media and sporting events are imbricated in the process of producing acceptable athletic bodies and identities. Placing the few existing texts on sport and music in the context of the previously discussed monographs allows us to look more closely at the different approaches to considering music, sport, and gender offered by these authors, as well as note the themes of commercialism and consumption that they also have in common.

Bateman and Bale's edited volume, *Sporting Sounds: Relationships Between Sport and Music*, is the most broad of these texts that keeps music as its central organizing principle. Topics range from pre-game musical priming to figure skating to cricket, and approaches taken by different authors come from psychology, cultural studies, sociology, musicology, and more. Importantly, in this volume the authors don't just look at the in-game

action of sporting events, but rather look at the event as a whole, including the audience, the awards ceremonies, practices, and more. As a result, not only do the sports in question and the approaches taken vary widely, but the aspect of the sporting event being discussed can vary widely as well. This, I think, is a strength of the book. It emphasizes the integral role that music plays in every angle of sports, and drives home the ubiquity of music's presence both inside and outside the sport arena from multiple disciplinary perspectives, which gives the topic of music and sports a sense of academic validity and gravitas.

A few chapters specifically look at the intertwined issues of sport, music, and masculinity, most prominently "'This thing goes beyond the boundary: Cricket, calypso, the Caribbean and their heroes" by Claire Westall, and "Bouts of Kiwi loyalty: Musical frames and televised sport" by Malcolm MacLean. Westall's chapter begins by arguing that "Sport and music are both examples of popular culture and mass entertainment often performed by skilled practitioners exhibiting modes of aesthetic physicality" (Westall 2009: 222). Immediately, sport and music are linked through the body and its appearance, as well as through Adorno's "culture industry." Westall then proceeds to discuss the ways in which music has been used to appropriate Caribbean culture and sport and "package cricket as a global product for international consumption," (Ibid.: 224) particularly calypso music. In her estimation, calypso and cricket are "intersecting and overlapping practices used to articulate the complex socio-political tensions of the region, particularly its struggles with forms of colonialism, new and old. They also share styles of masculine performance that are bound to the search for, and investment in, an individual male hero" (Ibid.: 224). So, masculinity is tied to both music and sport through performance. To support this assertion, Westall looks at the historical development of calypso music in the context of practices, lyrics, and aesthetics of masculinity, using the lens of "play" to then tie her writing back to the sport of cricket and

its legacy of male heroes. Finally, she examines cricket music – music about cricket, by cricket-players, or played during televised or filmed cricket matches – to show the readers how dense these intersections between music, sport, and masculinity really are.

MacLean’s chapter, which immediately follows Westall’s, begins by commenting on the relationship between sport, media, and commercial industry (what he refers to as a “sport-media complex”), and introducing his case study: rugby union broadcasts, theme music, and the embedding of the media event into a specific socio-cultural context. Rather than examining a live event, MacLean examines mediated broadcasts to connect the musical framing of rugby programs with Jock Phillips’ “hard man” masculinity of New Zealand rugby culture. This connects intimately to the homosocial aspects of team interaction and status in rugby unions, which were “potently masculine space[s]” (MacLean 2009: 240) for much of their history. MacLean traces this history over the last fifty-odd years, noting changes in national and cultural status, gendered team make-ups, and the role of music (a genre called pub rock, specifically) in authenticating the overarching masculinity of the sport. One song in particular, “GEATOK,” is used as an example of the various levels of framing achieved by music’s application to broadcasts; the song “sets the mood for the programme that follows, and provides a leitmotif [of masculinity and authenticity]” (Ibid.: 245-246). Once again we see the way that music can tie sport and performances of masculinity together through the commercialization of sport in the twenty-first century, a theme that will continue its relevance when this paper returns to rodeo.

While masculinity is fairly present in Bateman and Bale’s edited volume, other considerations of the gendered, sexed, or raced body in sport do not appear in much fullness. In contrast, Ken McLeod’s 2011 *We Are the Champions: The Politics of Sports and Popular Music* eschews breadth in topic and methodology and instead looks much more closely at

issues of identity, particularly gender and ethnicity, in tandem with popular music in sport. In the introduction, McLeod writes,

The central thesis of this study is that sports and music are fundamentally connected, not only through cross-marketing tactics, metaphoric similarities of aesthetic and stylistic approaches, and issues of spectatorship, but also through their often active influence on each other's performative strategies and content and their action as synergistic agents in the construction of identity and community. (McLeod 2011: 1)

Here we can see the influence of the culture industry and the body underlying various components of McLeod's thesis (cross-marketing tactics, spectatorship, performative strategies, style) which are connected through discussions of gender and the athletic body.

McLeod's second chapter, "'Let's Get Physical': Female Identity, Music and the Fitness Industry," deals extensively with the construction of an ideal female body and identity through the phenomenon of exercise music and personal fitness. He brings up many recent arguments made by scholars who believe that the body is being excised from or marginalized by the encroachment of technology on the music industry, then proceeds to argue that the existence of an entire world of music intended for exercise activities that exclusively center the body. "Rather than marginalizing the body, exercise music directly invokes bodily participation; indeed it is valued precisely because it stimulates and encourages bodily response" (Ibid.: 49). It can be extrapolated, then, that if exercise music encourages the body to move, it can begin to discipline our minds and bodies into perceiving a fit body as the ideal body. McLeod analyzes music videos that foreground this athletic, physicalized female body, like Olivia Newton-John's "Let's Get Physical," to expose the ways that music and physicality are overlaid to produce and market an ideal body image to women across the country. It feels a bit derivative to only investigate constructions of femininity in the context of music and sport through hypersexualized pop stars, rather than through any number of professional sports that involve popular music and female athletes,

but the exercise industry is huge in the United States and is an important facet of music and sport's connection to gender identity.

Another noteworthy portion of this book is the fifth chapter, entitled “‘It’s a Man’s Man’s Man’s World:’ Constructing Male Identity in African American Music and Sports.” This is the only chapter of *We Are the Champions* that deals directly with ethnicity, using performance as the lens to do so. McLeod writes, “By looking at the synergies of the performative traditions of music and athletics, a more nuanced understanding of African American male identity emerges, one that is essentially self-created through conscious and unconscious strategies of performance common to both athletics and music” (Ibid.: 133). McLeod moves from a general analysis of the links between music, sports, and masculinity with an emphasis on competitiveness, dominance, and rhythm to a more specific focus on the African American sporting community. He writes of the relationship between jazz and boxing, basketball, and baseball, arguing that “both music and sports allowed individuals to assert their improvisatory excellence as soloists while simultaneously collaborating as part of a cohesive ensemble, thereby allowing the formation of a powerful social community without diluting individual expression” (Ibid.: 149). Finally, he uses this idea of improvisation in performance to make explicit the link between music and athleticism in relation to African American ideas of masculinity. He argues that “both sports and music... offer a highly visible challenge to stereotypes of male bodily repression,” (Ibid.: 151) promoting hypermasculine, aggressive displays to resist cultural repression and silencing of black male bodies. The media industry is again tied in here, with McLeod’s discussion of the fetishization of images of violent gansta rap and threatening sport behavior, promotion and marketing of both sports and music, and the exploitation of professional athletes and rappers.

This mediatized aggression and a musical history of improvisation, he argues, “combine in ways that generate constant creative evolution in style and technique” (Ibid.: 154).

McLeod’s arguments call attention to different aspects of the nexus of sport and music that have been neglected by other scholarship. He deals to some degree with femininity, homoeroticism, and African American masculinity in sport, but also his (self-acknowledged) emphasis is primarily on North American and European sport, as was Bateman and Bale’s. In contrast, Kyra Gaunt’s 2006 *The Games Black Girls Play* explicitly connects the “unique repertoire of chants and embodied rhythms in [black girls’] play” (Gaunt 2006: 1) to black popular music and popular music-making. Once again, the body plays a large role in the consideration of double-dutch as a cultural performance on many levels. One of the book’s most important accomplishments comes in its legitimation of girls’ play and games as an important, worthwhile object of study and as a basis for cultural practices. Too often music popular with young girls is dismissed by academics and the broader population for being inconsequential or silly, and Gaunt’s work here validates black girls’ games as holding just as much value as anything else might – perhaps even more. This is in keeping with earlier discussions of the infantilization of “horse girls” in popular culture, where the interests of young girls are looked down on as simple or silly despite actually holding great meaning and importance.

She discusses how this cultural hierarchization happens and is subverted in her sixth chapter, entitled “Double Forces Has Got the Beat: Reclaiming Girls’ Music in the Sport of Double-Dutch.” The chapter introduces “the musical performance of double-dutch and discusses its transition from public street play to the ‘privatized’ institution of a sport where gender norms, musical performance, and the freedom of youthful expression are policed and scrutinized” (Ibid.: 133). When double-dutch moves from the street into the realm of

competition and institutionalization, the presence of the ever-watchful male gaze causes musical and social practices to be read differently. In this chapter, Gaunt pairs a well-written description of the rules and embodied practices of double-dutch, including a few transcriptions and maps, to argue that “double-dutch represents a way of experiencing ‘black-femaleness’ as being connected to a *black* sense of musical time” (Ibid.: 134). This sense of time then becomes tied to the performance of identity in other ways. Performing ethnicity in the context of prejudice and individuation, performing under the gaze of the police, and performing outside the sphere of masculinity.

Gaunt ties these different situational performances back to the transformation of double-dutch into a competitive sport that wraps all of these issues of identity up into one athletic event. She asks provocative questions about aesthetics, the disappearance of rhymes, and the sexualization of black female bodies that are difficult to answer (her interviews with double-dutch officials attest to this), and brings up issues of bodily control and regulation that abound in other texts on the sporting body referenced in this thesis. And still, despite all of this legislation of black femininity, Gaunt argues that “black girls find ways to reclaim their hidden double-dutch voices, reinserting the rhyming and body-music-making aspects of their street game-songs into the marginal spaces of the institutionalized competition, as well as the free time between the judged rounds of competition” (Ibid.: 149). She then continues to tie these double-dutch practices back to larger points about blackness and femaleness as they apply to conceptions about music, gender, and ethnicity in order to assert that

when we allow a fuller understanding of the musical behaviors operating in girls’ play from street to sport, black women’s presence in secular music-making and public performance whether in sport, popular music, or ordinary play, can be viewed in more complex and authoritative ways, and women’s agency as performers and artists becomes visible as well as audible beyond children’s musical play. (Ibid.: 156)

Gaunt proves in this book that attending to the experiences of girls and women in sports (and music) in this way can open up new spaces for ethnographic inquiry that are quite revealing.

This chapter also brought up something of great pertinence to my own project: the task of writing histories that complement, confuse, or complicate ethnographic case studies and research. Many seminal texts in sport studies and ethnomusicology alike, for example Timothy Cooley's 2014 *Surfing About Music* and Amanda Weidman's 2006 *Singing the Classical, Voicing the Modern*, spend a notable amount of space digging into many years of history, perhaps more than I might have expected from fields whose methodologies involve primarily the living. In ethnomusicology, texts commonly devote a single chapter to historical situating, and weave smaller bits of history through contemporary analysis to provide greater context to issues; strikingly, both Cooley and Weidman have veered from this practice and devoted a large amount of their books to detailed, rigorous writing about history. Returning to Gaunt, her extensive discussion and integration of history into her work is generative for the same reason: including so much history allows her to tie double-dutch's institutionalization to the larger cultural practices at work under the surface. Both McLeod's and Bateman and Bale's monographs follow suit, proving that history can provide vital insight into the ways that contemporary iterations of sport and identity have been constructed in conjunction with music. Some of the most productive avenues for my own research have come from considering the traces of music to be found in histories of equestrian sports like rodeo (and rodeo's particular links to other histories of the singing cowboy and Western films).

The books discussed above all try to subvert our preconceived notions about how the various intersections of sport, music, and identity should be approached by scholarship and instead offer new ways of thinking about these topics that create more space for marginalized

voices, bodies, and political or historical situations to contribute to the discussion. These ideas, and the connections between music and sport that become clear through their juxtaposition, are very useful in framing research into equestrian practice as sport that relies on music. In particular, thinking about the ways that sport and music—as performative, improvisational, and embodied realms—are both individual and communal guides my inquiry into the ways that cultural and industrial expectation has worked on the bodies and minds of equestrians (and equines) and cultivated practices of existing, competing, and relating that are mediated by music and sound.

IV. Speaking (and Listening) to Horses: Communication, Vibration, and Voice Studies Approaches

Moving away from the orientation of sports studies and into more general social scientific approaches, one of the more popular methods of inquiry into human-animal relationships that might offer a way to incorporate sound into interspecies scholarship has come in recent years from communication studies. In the context of equestrian culture, these scholars largely focus on how riders, trainers, and horses connect across language and species boundaries. This literature broadly emphasizes both verbal and non-verbal or embodied forms of communication, and varies in approach from utilizing and analyzing more conventional behaviorist approaches like those employed by riders and trainers to the more abstract and theoretical world of voice studies. While the former has offered some useful insights into the nuances of varied training protocols and the day-to-day interactions of horses and their people, the latter's less concrete perspective has begun to open up space for scholars to question the presumed human nature of the voice more broadly. However, voice studies as a field has not yet done more than gesture toward its usefulness in considering the nonhuman voice, whereas anthropology and human-animal studies have been keen on

studying communication in all of its embodied and non-verbal forms, often to the exclusion of the voice. Putting the two perspectives together suggests that voice studies' frameworks for analysis do in fact have strong potential for application in the realm of cross-species communication, and might offer us a more nuanced evaluation of how voice, subjectivity, and agency are entangled with both human and nonhuman animals.

A. Non-Verbal Communication and Embodiment

In the sport of horseback riding, communication is key in achieving the mythical partnership that all riders seek with their horses. For the most part, this communication happens silently, through physical contact as subtle as the shifting of weight, a subtle squeeze of the calves, or the tightening of fingers on the reins. On occasion, a rider or trainer might be heard clucking, kissing, or saying specific words to their equine partners in the hopes of getting a specific response—a change in gait, collection or extension, or a complete stop. But at the highest levels of competitive horseback riding, particularly in disciplines like dressage, silence is the expectation. Many scholars of both anthropology and communications have picked up on this trend, and a surprisingly large amount of work has been devoted to better understanding the unspoken tendrils of communication that runs between horse and human during the act of partnership.

A 2017 article by Katherine Dashper digs right into these issues while functioning primarily as a multispecies ethnographic study of amateur riders in the United Kingdom. Her work “consider[s] some ways in which human participants try to develop attentive relationships with their equine partners,” (Dashper 2017: 207) particularly based on an “ethical praxis of paying attention to horses as individual, sentient beings with intrinsic value beyond their relation to human activities” (Ibid.: 207). Dashper focuses on examining the

wordless interactions between horse and human, which participants hope eventually become mutually rewarding, but approaches it from a sports studies perspective; her primary topics of interest are based in ethical questions and include treatment of others, relationships, and sporting competitiveness as driving forces for her investigation. From this she hopes to extrapolate outward and critically examine current practices of interspecies relationships and scholarship, and consider “the implications [attentive interspecies relationships within sport have] for how we think about, organize, and practice sport” (Ibid.: 209).

One of the key points Dashper makes here is that of the constant (re)negotiation and (re)performance of the power relationships surrounding horse-human interaction (Ibid.: 211). She argues that horses have a “relational agency” (Ibid.: 210) that allows them to exert some power within their generally subordinated status, and that the desired harmony and pleasure of a successful horse-rider relationship can only come about by a successful and mutual negotiation by both parties. This is closely tied to the unfortunate practice of exploitation and violent domination within the world of horse ownership, especially visible in events like horse racing and the rodeo, but Dashper pursues here “alternative manifestations of horse-human relationships” (Ibid.: 211) that might instead invite humans to participate in an ethical praxis of paying attention to animals “whereby human actors think carefully about their own embodied position in relation to the embodied position of the animal” (Ibid.: 212). Instead of a one-way relationship of pain, domination, and commodity value, Dashper proposes that by increasing our awareness of horses as sentient beings we can invite a more equal partnership that can challenge commonly-held perceptions of ethics in sports.

In her last paragraph she writes, “human-animal interaction through sport and leisure might become not only morally defensible but desirable: an opportunity to transcend everyday human-centric ways of being and experiencing physical culture and social

relationships” (Ibid.: 222). Thus, by listening to horses we have the opportunity to become something more than our human selves, to reconstitute our being in conjunction with theirs in order to bring to life a more ethical sports practice that is less exploitative to humans and equines. Dashper is not the only person to engage with the ethical issues that become apparent when we move past simply considering horses, or other animals, as secondary partners to recognizing them as bodied, sentient creatures. A triple-authored 2013 article by Anita Maurstad, Dona Davis, and Sarah Cowles relies on a multi-species ethnographic methodology to shed light on the complex nature of human-horse relationships and the quandries that come up when scholars begin to think of animals as individuals.

Maurstad, Davis, and Cowles have attempted to explore the central theme of “co-being” in their article, arguing that “horses are soul mates, but also body mates to many humans, and the relationship is one that affects and defines both parties” (Maurstad, Davis, and Cowles 2013: 322). They also propose a closing of the gap between the categories of nature and culture, one of anthropology’s oldest binaries, through the idea of intra-acting, defined as “how parties meet and change as a result from their meeting” (Ibid.: 323). Calling on posthumanist scholars like Donna Haraway, the authors choose to see nature and culture as mutually interactive, coming together in “naturalcultural practice” (Ibid.: 323) where through intra-acting “companion species are becoming together, and riders, as partners to the horse and vice versa, are relational categories arising from engagements in a range of intra-acting practices that form both riders and their horses” (Ibid.: 323). Thereby horses and riders construct and are constructed by each other, constantly involved in a tandem process of becoming that accounts for the possession of some kind of sentient agency on both sides.

Also prominent in their study are the inherent issues of multispecies ethnography, which become closely tied to ethics when performing work with animals. Representation and

dialogue are profound problems with this type of research, for as the authors point out, “no horses were interviewed in our study; it is their humans that speak on their behalf” (Ibid.: 324). But by using performativity as a focusing lens for their questions, observations, and analysis, this problem becomes less a question of methodology and more a choice of interpretation; they argue that this multi-species ethnography pushes the boundaries of the ethnography itself by “eliciting taken-for-granted notions of both the nature and the sociality of human and horse, as well as exploring, articulating, and challenging taken-for-granted categories that inform who we are and how we perform across the nature-culture divide” (Ibid.: 324). In other words, things are not always as they seem!

Swedish authors Mari Zetterqvist Blokhuis and Charlotte Lundgren focus on the sport of dressage in their 2017 article, outlining an interesting approach that utilizes both the fields they refer to as Human-Animal Studies (HAS, which tends toward cultural analysis) and Equitation Science (ES, which errs on the side of biology and ethology). Their focus here is, like Dashper, on the nonverbal interspecies communication that occurs during riding, specifically within the realm of dressage, and the way that riders’ discussion of this practice brings into conversation issues of learning theory, human dominance, and equine agency and sociability. The two disciplinary approaches that they utilize in their research are often kept separate; HAS research often comes from an anthropological perspective where “communication is understood as meaning making rather than signal transmission” (Blokhuis and Lundgren 2017: 576) and ES utilizes a framework based on “a behavioristic understanding of learning [which] thus favors the signal-transmission metaphor for communication” (Ibid.: 576). However, the authors of this article place these contrasting perspectives together to analyze the results of their interviews with amateur Swedish dressage riders, to interesting conclusions. The importance of timing, balance, rhythm, and

space were again discussed, both in quantitative and qualitative terms, but perhaps most interesting was the discussion of a concept known as “equestrian feel.”

The authors write, “it seems as if the riders’ perception of the boundary between their own bodies and the body of the horse is somewhat fuzzy. The changes in the horse’s body can be perceived both *through* one’s own body and *in* one’s own body” (Ibid.: 585). The complex, ambiguous nature of this feeling speaks to the multifaceted nature of horse-human communication in the context of riding; legs, seat, hands, intention, balance, rhythm, feeling all have their place in the repertoire of signals and gestures that riders can use to communicate with their horses, and it is difficult to correctly identify what is ultimately responsible for the process of communicating and understanding. Blokhuis and Lundgren utilize this ambiguity to argue that dressage riders see their horses both as submissive respondents, dependent on their guidance and dominance for cues and direction, and as subjective, self-aware agents capable of their own kind of sentience and decision-making.

All three of these articles, though drawing on a wide variety of fields and methodological approaches, focus their attention on the body and processes of embodiment. This serves to further their exploration of embodied, felt sensations of mutuality as key components of co-being, and the human-centric conceptions of individuality and subjectivity that go hand-in-hand with talk about the body. Not only are our ways of being and existing in the world shaped and changed by interspecies encounters, but our physical, individual bodies often are as well, a topic I will return to later on in this paper. It follows, too, that our emotions and subconscious sensations become involved in the process, and so “human and horse attune to each other, add new definitions to what being is” (Maurstad, Davis, and Cowles 2013: 333) through a mutual process of domestication.

B. Voice Studies and Interspecies Listening

The inclination to conceptualize voice as indicative of personal agency or selfhood is reflected in much of the scholarship surrounding the voice, both within and without the nascent field of voice studies. By virtue of popular conceptions of subjectivity, it follows that this scholarship is then largely anthropocentric. The human voice occupies the territory of voice studies almost without exception, holding our attention with important questions that have real political and personal stakes. However, if we turn our ears to other registers of vocalization, non-human voices and bodies lie in wait. Exploring animality and the possibility of animal voice through engagement with interspecies communicative practices alongside media histories offer an intriguing way to respond to the call that encourages scholars to develop more nuanced ways of listening. From Nina Sun Eidsheim's call for us to "keep in sight, and in ear, the ethical dimensions of sound, music, singing, and listening" (Eidsheim 2015: 10) to Ana Maria Ochoa Gautier, who asks us to reconsider the relationship between "nature (as the given) and culture (as the made) [that is] implicit in the distinction between music and sound" (Ochoa Gautier 2014: 21), many scholars are already working at the boundaries of the human voice in order to expose its cultural construction and the histories of power, domination, and ethics that bound it.

Norie Neumark's 2017 book *Voicetracks: Attuning to Voice in Media and Arts* is a recent publication that delves into the complex intersection of new materialism and voice studies in order to raise questions about the more-than-human; what might animal subjects look like, sound like? How do they voice subjectivity, if they do at all? And can we ever understand them? To begin suggesting answers to these questions, Neumark dives headfirst into the theoretical framework of new materialism, which was largely born in the early 2000s as a concerted attempt to bring materiality back to the forefront of scholarly inquiry in media

studies and related fields. New materialists argue in favor of the “vibrancy” of all matter, be it object, animal, human, or technology. If we are able to see and understand the potential inherent in every atom of every being, its vibrational energy and capacity for action, then we can argue for some kind of agential quality to be assigned to both objects and non-human animals. One of the more prominent scholars at the forefront of this orientation is Jane Bennet, whose text *Vibrant Matter: A Political Ecology of Things* (2009) makes a case for the improvisational potentialities of human-non-human assemblages based on the unpredictability of all matter. This orientation towards potential can be extended to suggest that non-humans are in possession of subjectivities that are in fact guaranteed by their possibilities of agency; we often define agency loosely as the capacity to act upon one’s own world and make decisions, and the ability to do this relies on being cognizant of the self. It follows, then, that in the footsteps of this subjectivity comes the voice.

The general outlines of this framework are utilized to great effect in Neumark’s book, where they are placed in the context of other theories relevant to voice studies. While the focus of the book is on performance art and aesthetics, resulting in examples and implications that largely operate outside of the realm of the everyday, her theoretical explorations have great potential and power. She argues that in order to appreciate non-human voices we must “move beyond the human voice and... engage in a conversation with new materialism – opening materially to voices beyond the human, to voices of the world... And, just as materiality is crucial in the human voice, it also takes us beyond the human voice” (Neumark 2017: 12). For Neumark to advance her conceptualization of the non-human voice as a guaranteed presence, considering materiality becomes vital. This is where new materialism more broadly has much to offer voice studies, particularly when considered in tandem with posthumanism and its work on nonhuman subjectivity (Haraway 2003 and

2008, Weil 2012, and Taylor and Signal 2011). Neumark continues to write of how “the self opens outward, interconnecting with others, human and nonhuman... and it is voice, I would suggest, that can act to produce—to evoke—these interconnections” (Ibid.: 13). If we, in light of new materialist theory, consider the vibrant, unpredictable, material nature of the nonhuman body, then we can see the potential for the nonhuman voice which exists beyond conventions of human subjectivity and language. But, I contend, this voice does not sound, resound, or come to be received like a human voice; instead it requires us to open our ears to other ways of voicing from more-than-human bodies.

Neumark picks up on this theme, arguing that “for Bennett and other new materialist thinkers (and practitioners), listening is attending to a thing – not to its experience from *its* point of view, which we cannot penetrate though we can sense it..., but to its performativity in an assemblage” (Ibid.: 15). It initially seems that one answer to the question of “can we ever understand animal voices?” might be no; however, Neumark suggests here that we can begin to create space within our own ontologies for listening to the more-than-human voice by paying precise attention to the performative nature of subjectivity, particularly when that performance is a relational one. By attuning to the particular situatedness of animals in the world, where voice always exists in relation to an originating body (seen or unseen) and is shaped by the potential for conversation with someone or something else, I believe we can take Neumark’s argument a step further in considering the other worlds of knowledge and being that non-human subjects might inhabit. In carefully considering the role of the non-human as an actor in an interspecies assemblage made up of humans, non-humans, and objects, Neumark’s proposal of an adjustment to current practices of listening takes on a greater depth.

By turning our ears to the performed category of non-human, we are attending to the ephemeral and material thing that is animal vocality, allowing us to remember the wonder of the body in the voice and consider ethical alternatives to engage with those bodies and voices, particularly when they form interspecies assemblages and conversations with our own. Drawing again from Jane Bennett, Neumark describes a possible framework for this kind of listening based not in discernment and analysis but in enchantment and wonder, one that “tune[s] us up and into the world and make[s] audible the voices of nonhumans and things, and their relations with each other and with humans” (Ibid.: 17). Elsewhere Bennett describes this mode of enchantment as “a state of openness to the disturbing-captivating elements in everyday experience... a window onto the virtual secreted within the actual” (Bennett 2001: 131); in other words, moments of enchantment are moments that we encounter through an openness to experiencing the emotional and material affects that everyday objects (or, in this case, animals) can engender in our bodies and minds. We must learn to perceive the non-human voice through this lens of enchanted listening, which is a thorny task that Neumark argues becomes possible through wrestling with new materialist theory. In particular, “theoretically and ethically, new materialism helps us attend to animals’ voices, opening us to a recognition of their own specificity, singularity, and *entanglements* with others” (Neumark 2017: 31, author’s emphasis). Animals’ voices are always situated, subjective, and in conversation with our own even if they are operating in incomprehensible registers.

Rachel Mundy’s 2018 monograph *Animal Musicalities: Birds, Beasts, and Evolutionary Listening* asks important questions about how the difference between humans and animals has been historically constructed through sound technology, recordings, and scientific research. Individual stories of song collectors like Laura Boulton are paired with

institutional histories of natural history museums, physiology labs, and recording technology to take a closer look at how relationships of difference – grounded in animals’ bodies and voices – have been naturalized over time. In concluding, she calls for the invention of a field she christens as the “animanities,” presenting this field as an “intervention in the postwar, postmodern, posthuman condition of present-day humanism” where “the central gesture [of the field]... is to reach with a laugh toward a revision of the way that notions of difference define the humanities against this limiting benchmark of human singularity” (Ibid.: 169). More than anything, I interpret this – and her book as a whole – as a call for readers to listen more carefully and with greater wonder and awe, to imagine what it is like to be someone or something else, and to push at the cracks that border the notion of what it is to be alive, to be human, to be sentient in order to explore a more ethical way of being in the world. Mundy is opening up a conversation here with the materiality of the animal voice and body in a way that resonates with our everyday encounters with media, an idea tied closely to Neumark’s work. Considering animals’ situatedness within, among, and after media technologies writes animal voices and subjectivities into her text, even if these animals are long dead, sacrificed for the sake of technological advancement. Animal voices, too, can echo in the resonant tomb of media.

The link between voice studies and more general studies on human-nonhuman communication is also entangled with media studies, as Mundy’s book shows. Each of her seven chapters correlates to one of the interventions in scholarship she believes the proposed animanities can make, including “interrogat[ing] the values that have developed around the concept of personhood,” (Ibid.: 172) “ask[ing] how concepts of identity have institutionalized notions of difference within the humanities and the sciences,” (Ibid.: 173) “reimagining how to recognize and navigate the unequal relationships of contemporary life,”

(Ibid.: 175) and “rais[ing] questions about how we are supposed to know things about ourselves and others when we live in the shadow of this tradition [of objectivity], in which the tools for knowledge have developed amid oppositional ways of valuing emotion, constructing evidence, and evaluating life in the sciences and humanities” (Ibid.: 179). These are big, broad questions, but what Mundy so eloquently illustrates in the detail of her chapters is that they are played out in and over human and animal bodies, subjectivities, relationships, and voices. These are interventions, too, that could be applied equally to highly theoretical work like Neumark’s, which I have already argued takes as its prime examples extraordinary situations that are far beyond the pale of most people’s experience or interest. By grounding her assertions in a tangible, popular history of science, technology, and media, Mundy’s work illustrates the fertile ground of animality for discussion of the voice even if it does not expressly engage with much theoretical literature.

In Mundy’s text, animal vocality rises most clearly to the surface when considering the relationship of voice to identity. In particular, birds play a large role in the historical consideration of song and difference, which Mundy links to issues of alterity; “to talk about birds is to talk about race, gender, sexuality, or class; and to talk about gender, race, or class is to talk about species” (Ibid.: 8). Mundy most directly addresses this in her first and last chapters; the former deals with historical heavyweights like Darwin, Spencer, and Tyler and their perspectives on the emerging science of music in tandem with social evolutionism, while the latter is focused on postmodern identity, soundscapes, and acoustic ecology surrounding birds. I find her last chapter the most poignant, and the most relevant to the issues that I see the intersection of voice studies, media studies, and human-animal studies being equipped to tackle.

This chapter, titled “The Rose Garden,” deals with three different case studies that Mundy describes as “imagined spaces” that “model important relationships between human listeners, singing birds, and imagined spaces of nature,” in particular how those imagined spaces provoke a kind of listening that models “interspecies ethics in a postwar, postmodern, posthuman world” (Ibid.: 146). Her examples – Oliver Messiaen’s *Catalogue d’oiseaux* (a composition for piano), Steven Feld’s *Rainforest Soundwalks* (a recording), and Miyoko Chu’s *Birdscapes* (a book) – are all very different, but all function similarly in Mundy’s analysis, as soundscapes that merge components of audio field guides for bird enthusiasts with the aesthetics of art. For Mundy, these soundscapes and the bird voices that they contain encourage us to reconsider the role of the listener in defining species boundaries. To this end, she asks “how our capacity for imagination – for identifying *with* others, instead of identifying them – offers alternative spaces for ethics and new ways to imagine paradise” (Ibid.: 148). As we enter an era fraught with ecological catastrophe, marked in part by the disappearance of entire species and ecosystems from our world, the “structured fantasy of habitat” offered by postmodern soundscapes like the ones listed above “raise[s] the possibility of escape from the unsustainable dichotomy between culture and objective reality that has constrained representations of birdsong to be only art objects, or only isolated and disembodied voices of species” (Ibid.: 166). Considering the way that voice is present and presented in these soundscapes, and how we listen to those voices, questions the very way we construct our reality as bounded species.

I will point out here that new materialism is never mentioned in Mundy’s book, nor does she cite any theorists affiliated with these theories in her bibliography; however, just as voice connects images together in her text, I argue that new materialist thinking lies beneath the surface of her analysis. It is also a key tendril of theory connecting Mundy’s book to

Neumark's, and I find it to be vital in considering the contribution both books are poised to make to interdisciplinary studies. Mundy argues that "the way sound is evaluated is related to the way animals are valued, and that sonic culture as we know it is unthinkable without animal lives" (Mundy 2018a: 168). In positing this, Mundy has lent her argument to two twin possibilities; first, it sets the stage for a more nuanced inclusion of animals within new materialist theory, which tends to conflate animals and other non-human (but still living) entities with non-living or inanimate objects. Particularly those theories that emphasize object-oriented ontology might lump dogs in with rocks and mushrooms in with paperclips, but all of these things move through and act upon the world in very different ways, and their possibilities of voicing are vastly different. Second, in equating the evaluation of sound with the valuation of animals, Mundy opens up a pathway to a reevaluation of other forms of more conventional alterity within music, sound, and conversations on animality (i.e. ethnic, rational, national, and gendered forms of alterity). This is perhaps the more exciting point for scholars of voice, particularly those interested in expanding definitions of voice and musicality. In a recent post to the American Musicological Society's *Musicology Now* blog, Mundy notes that "listening [to animals] reveals the spectacle of the nonhuman as a ground for comparison, an evaluation of ability, and an assessment of rights that extends from the animal to those deemed less than fully human. At stake are issues of power and representation that extend from animals to all the other Others" (Mundy 2018b).

Neumark echoes Mundy, pointing out that "once animals' voices enter the scene, the relationship between language and knowledge and voice becomes even more complicated. And the literal and metaphoric find new points of intertwining" (Neumark 2017: 43). When the binaries wrapped up in voice that we have only recently begun to trouble start to break down (material/ephemeral, presence/absence, subjectivity/objectivity, inside/outside, etc.),

we must meet that disorienting voicing with open ears. Might enchanted listening provide us with a whimsical way to reevaluate our place in the assemblage of human-animal-sound-media, to reencounter meaning and voice while attending to their more-than-human aspects? Neither Neumark nor Mundy offers us a straightforward answer to the problem of receiving a non-human voice, but instead suggest interventions into posthumanism that might allow us to think, dream, and imagine “lost Edens” through “different ways of hearing identity in sound” (Mundy 2018a: 166).

Here we might expand the boundaries of what we consider sound, voice, identity, and agency through creative application of this literature, which ultimately helps us to reconsider the ways we conceive of difference on a more-than-human level. This is a framework exemplified by scholarship like Ana María Ochoa Gautier’s; her 2014 monograph *Aurality: Listening and Knowledge in Nineteenth-Century Colombia* takes on historical constructions of listening, sound, and animality to resituate our historical ears toward how alterity was constructed in Colombia during the nineteenth-century. Much like the earlier discussion of history in sports studies, listening and its construction also have complicated histories that are intertwined with non-humans from the very beginning. As an example of this, her first chapter, “On Howls and Pitches,” explicitly deals with the attribution of animality to indigenous peoples through the identification of their voices. Voice, too, is tied up in the debate over nature versus culture, which Ochoa Gautier points out and complicates. She writes, “Nature is not that upon which culture builds, but rather both terms, nature and culture, are mutually constituted through the politics of life” (Ochoa Gautier 2014: 9). Considering this “zoopolitics of the voice” as it has been constructed throughout history engenders critique of the parallel constructions of modernity, individuality, and subjectivity (Ibid.). From a different perspective, Joseph Auner’s 2003 article on posthuman

ventriloquism in popular music also provides an example of the ways in which voice studies is expanding our conceptualization of these ideas through analysis of non-human voices, building on Donna Haraway's theorization of the cyborg to interrogate the border between human and machine. In an age of frighteningly advanced technology, "the borders between an authentic human presence and the machine are becoming increasingly permeable and unstable" (Auner 2003: 98-99), gesturing toward the instability of other boundaries that have previously helped to contain and protect human exceptionalism. As they are being pushed and strained by a multiplicity of increasingly variable voices, our methodologies and questions must begin to change as well.

However, in reflecting on a few of the woefully small number of recent texts added to academic work on the non-human within the context of music, I wonder if taking up Mundy's call to imagine "lost Edens" can truly be a productive way of deconstructing contemporary articulations of difference. If we consider the story of Adam and Eve in light of the many issues entangled with animality, we might remember that Eden was intended as a place where humans and animals would live in harmony. However, when the Serpent tempted Eve with not just an apple, but also with its voice, it set in motion a series of events that caused humanity's downfall. What did Eve hear in the Serpent's voice that caused her to falter? What promises of alien knowledge did that voice contain that she could not resist attempting to possess? This old story contains a framework of interspecies relations that persists into the present day and critically reflects the constructed importance of the anthropocentric project of the voice; it reveals a deep-seated fear of animality that is tied to the suggestive power of non-human vocality (both animal and divine, biological and machinated), which is accompanied by a colonial need to possess, control, and dominate both knowledge and the Other. Since we have failed to understand, we close our ears to the

voicings of non-humans, shutting ourselves off from other registers of communication in order to maintain the illusion of our own uniqueness and superiority.

I am left wondering: is it enough to simply imagine an alternative to this when it is so deeply ingrained in our cultural history? And how might it be possible to demonstrably move beyond enchantment and into a new way of listening to the world? This is one arena where voice studies has much work left to do, and while I find work like Neumark's and Mundy's to be exciting and provocative, especially in dialogue with each other, there is more work to be done. Attending to the role of media in a more material way, combining Neumark's focus on new materialism with Mundy's careful attention to the history of science and technology, might offer a new and different way to consider the mediated relationship of the human to the non-human. Media studies and voice studies already have a great deal of overlap, particularly when considering the history of recording technologies and the cinema, and there is great potential in the combination of the two to more fully implicate technology, globalization, and media practices in the de-colonization of the ear as suggested by Mundy and Neumark.

V. Media, Music, and Animal Histories

In taking a closer look at the literature that accounts for the history of animality in and through media and technology, particularly sound recording, some of the ways in which the categories of animality, media, and subjectivity have been constructed over time become clear, as does how this literature has begun to take them apart. Akira Mizuta Lippit's *Electric Animal: Toward a Rhetoric of Wildlife* (2000) looks at the cultural status of animals in the modern period, beginning in the late nineteenth century and continuing into the twentieth century. He focuses on the peculiar existence of animals between the two extremes of humanity and nature, technology and being; animals, viewed this way, form their own

epistemological category, and due to their close proximity to the human world (particularly in interspecies activities that have persisted to present day, like equine sport and companion animal ownership) have continued to trouble the boundary of humanness and its definition.

Lippit deals primarily with cinema and literature, drawing on the works of famed authors like Lewis Carroll and Kafka to consider the role of music, media, and listening in the epistemological problems of language, comprehensibility, and difference between humans and animals that are manifest in the processes and products of technological innovation. Lippit argues that

... although human beings can readily ‘perceive’ the existence of animals, they are not always able to translate that perception into the linguistic registers that constitute human understanding. Animals seem to necessitate some form of mediation or allegorization – some initial transposition to language – before they can be absorbed into and dispersed throughout the flow of everyday psychology. (Lippit 2000: 7-8)

Lippit’s discussion of animal mediation throughout this book is manifest in analysis of ecological cinema, pointing out the uncanny re-appearance of animal bodies on screen and in photographs after their extinction in the wild in order to interrogate the divide between human and non-human, arguing that this extinguishing of animal presence is integral to the project of human uniqueness. While their material bodies disappear from the earth through their unremarkable deaths, they are immortalized in media and technology, becoming technological animals.

Lippit does briefly widen his discussion of media to explicitly include music and sound, although he restricts his investigation of animal aurality to the imagined world of literature, another useful method for exploring humanity’s construction of animal sentience. His deep dive into the stories of Kafka and Carroll are particularly interesting for the struggles of audible animal identity that are embedded in his interpretations; when discussing Kafka’s “Josephine the Singer, or the Mouse Folk,” Lippit writes of how Kafka’s creatures

seem to be developing new forms of signifying meaning and knowledge in their absence of conventional language, which is tied closely to the development of an identity that we can understand. He writes,

The audible spectrum between language and music, words and noise, determine for Kafka the space and process of the metamorphosis [from human to animal]. In Josephine's world, music cannot be fully differentiated from natural sounds. Somewhere between human and animal being, Kafka searches for another aurality. It is this in-between of transformation that occupies Kafka's animal stories – the moment at which identity floats in transit. (Ibid.: 148)

There is a process of negotiation implied in Lippit's writing, one that forces both humans and animals to search for ways to navigate the gap between their species. This gap is traversable, but requires a certain kind of letting-go as these entities wander through metaphorical space as transitory beings, not-quite-human and not-quite-animal. Lippit here relies on the work of Deleuze and Guattari, who have noted that "music always seems caught up in an indivisible... becoming-animal," (1986: 5) in order to argue that in Kafka's texts music appears as an "ambiguous representation – somewhere between technique and noise – that marks the shift from words to sounds, intellect to affect, and human to animal being" as well as indicating "a place of communication beyond the limits of language" (Lippit 2000: 149).

This work also points out through Kafka's literature what is at stake for animals when considering audibility; taking the ape character from Kafka's "A Report to an Academy" as an example, Lippit undermines the unquestioning anthropomorphism we might otherwise assign to an animal that comes to occupy a human position in a story. The ape, over the course of the tale, becomes humanoid; he bites his (animal) tongue, learns to speak (in a human voice), and drinks ale with his captors, who are represented as not so different from the ape with their spitting, laughing, and drinking. The processes of becoming that create the spaces between human and animal are thus complicated, overlapping, and tied to vocalization

and audibility. Lippit writes, “By suppressing the expressions of its animal noise, the ape risks its animal life. By taking the risk, however, it increases its chances of becoming human, of being trained to be human” (Ibid.: 149). Kafka’s ape here comes to exist in between human and animal, and its identity is in flux, placing it in material danger. For if animals are perceived to be, as Deleuze and Guattari argue, multivocal beings that are defined by their lack of discursive subjectivity (Deleuze and Guattari 1986), then when there comes to be confusion between animals and humans surrounding language and intelligibility, the animals must be incorporated into society where they cannot cause such a chain of reactions. Animals’ audibility can result in material consequences.

Jussi Parikka’s 2010 monograph *Insect Media: An Archaeology of Animals and Technology* builds on some of the ideas proposed in Lippit’s *Electric Animal*, and relies on many of the same theorists in order to propose what he calls “bestial media archaeology,” which allows us to:

... question the supposed coupling of (seemingly) simple animal behavior with media technologies; to look for a longer duration of this phenomenon; ... [and] to present important case studies of this history of insect media that do not merely represent the past of this specific ‘idea’ but offer important philosophical interventions into how we habitually think about media, technology, and the conjoining and differences of animal and nonorganic life. (Parikka 2010: xv)

In order to accomplish this, Parikka relies on Lippit to link the fundamentally inhuman nature of media with the suggestion that a mode of communication in and through media exists beyond the realm of human language, one that is embodied in animals. While the media archaeological examples Parikka deals with are not necessarily as relevant to my own research interests, his theorizing around animals’ interactions with and history in media is useful to consider.

Parikka draws from Deleuze and Guattari, as does Lippit, to discuss assemblages, both of the animal (singular) and consisting of multiple organisms. He writes, “Assemblages are compositions, affects, and passages in a state of becoming and a relationality that is the stuff of experience. An assemblage... is a product of the connecting relations... [that are] enabled by a pre-individual reality of potentials and virtuality [which] affords collective assemblings as well” (Ibid.: xxv). This idea of an assemblage, or a meeting of multiple beings in one web of connected potential, is essential when considering most activities that include animals, particularly sports like horseback riding and rodeo where humans, animals, and other assorted factors are not only in circumstantial, proximal relation but also often physically imbricated with each other through intimate touch. Straddling a horse or bull, relying on individual muscle groups in the rider’s inner thighs or the horse’s ribcage for communication, is in itself a form of mediation, a meeting and translation of multiple kinds of expression and signs that are incomprehensible to each other. Parikka picks up on this, arguing that rather than worrying about how best to apply conventions of language to animal communication “we should map the differing modalities of expression of animal bodies that point forward asignifying semiotics,” allowing animal studies to “join forces with media theory of a nonhuman kind”(Ibid.: xxv-xxvi).

In attuning to the expressions of animal bodies through a media studies approach, then, Parikka suggests that we might be able to listen differently to the communication of non-humans. And, if media can be defined as “assembled of various bodies interacting, of intensive relations,” then it can be seen as “an assemblage of various forces, from human potential to technological interactions and powers to economic forces at play, experimental aesthetic forces, conceptual philosophical modulations” (Ibid.: xxvi). Animals and media are far from discretely bounded epistemological categories, separated by definition and only

interacting on a surface level. Rather, they are deeply engaged with each other in the processes of co-becoming, and in that co-becoming they create the potential for new frameworks of examining knowledge, language, and subjectivity. This idea is in keeping with much of the existing literature on horse-human relationships, which emphasize the co-constitutive processes of becoming that human and horse engage in during the multisensory interspecies encounter of riding. The inclusion of media and processes of interspecies entanglement through assemblages provides a more nuanced approach to a trope in this literature that has become a bit stagnant.

VI. New Materialism and Animality

When considering the relatively recent theoretical intervention of new materialism, discussed earlier in the context of voice studies and media studies, Diana Coole's and Samantha Frost's co-authored introduction to *New Materialisms: Ontology, Agency, and Politics* shifts our thinking toward a greater focus on the body and its instability. While their overview is broad and well-written, I am particularly interested in their claim that "foregrounding material factors... [is a] prerequisite for any plausible account of coexistence and its conditions in the twenty-first century" (Coole and Frost 2010: 2). Materiality, then, is a vital component of the co-becoming discussed earlier in this paper. This becomes clearer when we consider that Coole and Frost refer to as the unstable nature of matter, referencing Jane Bennett's "vibrancy." Recognizing the possibility that there might be "an excess, force, vitality, relationality, or difference that renders matter active, self-creative, productive, unpredictable" compels us to "think of causation in far more complex terms; to recognize that phenomena are caught in a multitude of interlocking systems and forces and to consider

anew the location and nature of capacities for agency” (Ibid.: 9). And so animals, again through their material, unpredictable bodies, are agential beings.

Coole and Frost also suggest that materiality’s implications for agency are well and truly situated in the body’s relational potential with other bodies and subjectivities, another topic that voice studies has engaged with through discussions of hailing, listening, and communication. The idea of “becoming” in this case remains key in the questions of power, privilege, and ethics that come along with encounters between humans and non-humans, too, and contributes to the authors’ call to a more phenomenological approach to the issues of new materialism. They write,

In addition to focusing on the way power constitutes and is reproduced by bodies, phenomenological studies emphasize the active, self-transformative, practical aspects of corporeality as it participates in relationships of power. [These approaches] find bodies exhibiting agentic capacities in the way they structure or stylize their perceptual milieu, where they discover, organize, and respond to patterns that are corporeally significant... In other words, [these theories] complement ontologies of immanently productive matter by describing how living matter structures natural and social worlds before (and while) they are encountered by rational actors. (Ibid.: 19-20)

One of the more important implications of this phenomenological approach is the dislocation of agency as the defining factor of subjectivity. While Coole and Frost extend this idea to argue for reconceptualized notions of social justice, human (and non-human) rights, and the definitions of humanity, nature, life, and selfhood, it can also be used in conjunction with literature on media and animality to consider the relationships between components of assemblages in interspecies encounters.

Returning to Jane Bennett, her discussions of materiality, unpredictability, and agency in non-humans continue to be vital to this line of inquiry, but her focus on assemblages is more relevant here. In her 2009 book *Vibrant Matter: A Political Ecology of Things*, she “tries to give voice to a vitality intrinsic to materiality” (Bennett 2009: 3) found

in humans and non-humans alike and intimately tied to the unpredictability of living matter. While this text deals primarily with relations between human and things or objects, leaving animals somewhere in the middle and largely undiscussed, her theorization of the assemblage in particular has applications to human-animal interactions as well. When describing the situation of entities in assemblages, she writes,

While the smallest or simplest body or bit may indeed express a vital impetus, conatus, or *clinamen*, an actant never really acts alone. Its efficacy or agency always depends on the collaboration, cooperation, or interactive interference of many bodies and forces. A lot happens to the concept of agency once nonhuman things are figured less as social constructions and more as actors, and once humans themselves are assessed not as autonyms but as vital materialities... What it means to be a 'mode,' then, is to form alliances and enter assemblages: it is to mod(e)ify and be modified by others. (Ibid.: 21-22)

By this definition, when considering any sporting event where humans and animals meet, not only does the animal enter a new realm of agential status alongside the human, but the music, the horse's tack, the bull rope, the crowd, all of these individual things take up residence and importance within the assemblage. Using, as Parikka suggests, an assemblage approach to interspecies encounters opens the ethnographic moment up in myriad ways and allows us to more fully consider the role played by non-living or non-human beings.

To return to work that deals specifically with horses, Lynda Birke and Kirrilly Thompson's 2018 monograph *(Un)Stable Relations: Horses, Humans, and Social Agency* focuses on an issue that is at the center of my interest in human-animal interaction: the agency, subjectivity, and identity of horses, brought into being because of their fundamental material instability. The authors pay careful attention to the importance of non-verbal, embodied language and communication, the structural, human-centered hierarchies of power that restrict animals' agential opportunity, and the constructions of animality and naturalness. The idea of instability, and of "becoming" (a theme that is common among authors writing of human-horse relationships), underscores their approach to all of these issues, and

results in a text that emphasizes the constructed, performed relationship of humans to nonhumans across the board. They write, “we must be aware of our role as script writers for horses and take responsibility for how the way we ‘see a horse’ impacts what horses do, what opportunities they have to cooperate or not, and how they will be assessed, as useful/viable or valuable” (Birke and Thompson 2018: 134). This is the central focus of their argument: not only are they unveiling the many relationships and structures of power, agency, and representation that undergird human-animal interaction, they are also driving home the need for both scholarship and non-academic equestrian practice to more deeply consider the ethical ramifications of those relationships: how can we increase our accountability to and responsibility for equine agency?

One of the most striking arguments made in this book is for a re-focusing on the realities of the body as a way forward in creating more ethical relationships with horses and other animals more broadly. This is the portion of the monograph where Birke’s biological knowledge and Thompson’s anthropological approach meet most productively; they move gracefully from a discussion of ethologists’ and biologists’ focus on species-specific adaptations to their environments and ways of life to a more subjective discussion of what it is to *experience* that life. They argue that while “humans might not know how horses experience their lives, ... we can draw on ethological and ethnographic research, as well as personal experience, in efforts to include horses’ point of view and come closer to understanding what that means for them” (Ibid.: 28). Multispecies ethnography as a meeting place of ethnographic and scientific methodology prompts them to suggest the body as an “in” for studying the ways that non-human animals move (both literally and figuratively) through the world. They suggest utilizing a framework of *kinaesthetic empathy* to accomplish this, defined in their text as

... begin[ning] from the premise that both human and animal exist in the same world and experience this world through bodies, enabling us to communicate with and understand one another. That is, kinaesthetic empathy enables access to another's experience of the world. Horse and human may perceive the world differently, but '[f]or both species, the body is a tool through which they can communicate a wide range of emotions and desires' (Brandt 2004: 304): there is, in short, common ground. (Ibid.: 30)

This entails, then, not just attending to the biological realities of horse and human bodies, and the different kinds of non-verbal communication and language that are involved in those bodies, but also “to popular and scientific constructions of horse and horse-human relations, as well as to individual histories” (Ibid.: 31). In more fully considering the bodied situation of horses, their agency as material, minded individuals comes to the fore through a consideration of their instability, their ability to (literally) buck the system and insert their own choice into our interactions with them.

Not only is this text written from a place of deep love and empathy for horses – both authors are self-described “galloping academics” (Ibid.: 4) and share their lives with one or more equine partners – but it also springs from a deeply theoretical orientation that models the kind of approach I am advocating for throughout this paper. They pull from literature in human-animal studies, equine science, history, and anthropology, citing authors like Foucault (to consider body-object articulation), Haraway (in a discussion of the proximity of companion species), Durkheim (to incorporate possibilities of social action and free choice), and Latour (relying heavily on Actor-Network Theory to make their arguments about agency). Clearly, these authors have been rigorous in their theorizing in order to lend some gravitas to their argument. This, too, is part of their larger intention of changing the ways that we interact with horses on a quotidian level; they hope that “‘thinking horses’ helps to provide a foundation for meeting them” (Ibid.: 44). Theory, in this case, provides a way in for conceptualizing human-horse relationships in a more ethical, detailed way.

This book offers much to interdisciplinary discussions of animality and multispecies ethnographic work. By putting the instability of horse-human relationships, their constructed nature, and the possibilities of representation at the center of their argument, I argue that Birke and Thompson have left space for a discussion of music and media as contributing to those relationships and expectations. Their theoretical orientations suggest the possibility of space for music and sound to assist in constructing, representing, and performing those same relationships, subjectivities, and potentials that the lenses of new materialism, voice studies, and media studies help us to see more clearly. These connections across disciplines suggest to me that just as what people think about horses has a material impact on those horses' realities (Ibid.: 48), music and our perception of it can impact our relationships with those around us, including the non-human. Those relationships, both musical and non-musical, are constantly in flux; in other words, "[horse-human relationships] are always unstable and the centaur is always becoming" (Ibid.: 8).

VII. The Material Body: Interspecies Ethics and Harm/Care

The ethical considerations of doing research with animals are many and varied, and are intimately tied not just to questions of subjectivity and agency but also to bodily welfare and physical health. This is not just true of the animal partners who find themselves entangled with humans, but also of the human instigators who choose to, again and again, place their bodies in contact with animals' bodies. Horseback riding is a sport that physiologically affects both horse and rider, a truth that often leads to heated debates about ethics on behalf of the animals involved. Whether it's the issue of forcing two-year-old Thoroughbreds with unfused, still-growing bones to race competitively and bear the weight of humans before their skeletal structures are ready, questions about long-term effects of the

way gaited breeds are shown (historically involving inhuman methods to enhance the horses' gaits and riders' comfort), or wondering whether riding a horse can ever truly be an ethical practice, the subject of equestrian sport and leisure carries significant ethical baggage. Many of the authors whose work appears throughout this paper don't address these bigger issues explicitly, but examining literature that does account for the physiological effects of riding on horse and human alike suggests how music might begin to fit into ethical interspecies research.

A. The Riding Body

The material impacts on human bodies of the constant contact of horseback riding can be both positive and negative, depending on a number of factors. These include how often and how hard riders fall off, the kind of equestrian sport being done, the type of horse being ridden, or even the tack being used during riding. All of these factors, after enough exposure to them, have differing impacts on the physical bodies of riders and horses alike. This idea is in accordance with earlier discussions of the mutually embodied "co-being" that is enacted when humans and horses ride together, and a small amount of interesting work has been done recently on both the anatomical effects of horseback riding on the human body and the more individual, psychological effects that people perceive a lifetime of riding to have had on their bodies (Kim and Lee 2015, Lee et al. 2014, Liptak 2005, Murphy et al. 2008, Sherrington et al. 2004, Sung et al. 2015, Westerling 1983).

For example, a 2016 article by Dona Davis, Anita Maurstad, and Sarah Dean discusses what they refer to as the "autobiologies" of ageing equestrians, meaning "(a) how the techniques or use of the body and regimes of training that centre on riding as horse-human partnerships inscribe themselves on the body, and (b) how our informants create their

own particular body aesthetics and realities” (Davis, Maurstad, and Dean 2016: 335). In their estimation, the performance of equestrianism also impacts the ways that individuals consider both their specific bodies and more general conceptions of gendered and athletic ageing (Ibid.). This is in keeping with many of the sports studies approaches to bodies and identity discussed earlier in this paper, where the way that bodies are shaped by participation in sporting events and reflections in sport media has a profound impact on the identity formation of those participants. In the case of these ageing female riders, the way their bodies have “worn out” rather than “rusted out” through the process of continued athleticism and activity is a source of pride for them, reflected in the way they often feel younger on the inside, regardless of whether their bodies look significantly more youthful than they are (Ibid.: 342). This is an excellent example of the positive embodied effects of horseback riding on individuals, but there are darker sides to participating in equestrian sport as well that often are swept under the rug.

Returning to Rebecca Cassidy’s outstanding 2002 monograph *The Sport of Kings*, her writing on fieldwork practices while working with animals offers not just a fascinating look into the world of Newmarket, but also at what it takes to perform an ethnography of an equestrian culture. Cassidy spent a great deal of time getting her hands dirty, that much is apparent. Most thought-provoking are her descriptions of time spent as a “lad,” a British term for a rider who exercises racehorses but does not ride them during their races. They are also responsible for a good amount of the horses’ care and keeping during the day, and for working with trainers and owners to keep horses in tip-top shape for the racing season. One of the most interesting moments in Cassidy’s analysis comes when she discusses the importance of appearance in the racing world, particularly weight. Jockeys have long been infamous for their many and cruel methods of losing weight, a necessity when riding a horse

in a handicapped race where bars of iron or lead are added to a horse's saddle pad in order to theoretically even the playing field between horses. Most jockeys therefore weigh around 110-115 pounds, often a good bit less. Cassidy describes the difficult process of losing weight during her time as a Newmarket rider, but still being made fun of by other riders for her "backside eclips[ing] the sun" (Cassidy 2002: 29) during their rides together. She also writes of how "it was only when I began to accumulate scars [from the hard labor] that I realized the extent to which my own body was implicated in this process [of fieldwork]" (Ibid.: 114). Her body's disappearance, too, is implicated.

Only by completely connecting her body to the production of ethnographic knowledge during her fieldwork was Cassidy finally able to feel like she was making progress. The day she rode her first racehorse on the Heath, a long stretch of land where the lads exercised their charges, she "felt a part of Newmarket in a new and exciting way, and yet... totally invisible, as if I had finally blended in with part of the way of life I was seeking to understand. Unfortunately, these feelings were soon overtaken by more pressing concerns of self-preservation" (Ibid.: 115). This excerpt brings up another important component of participant observation that is addressed in this monograph: physical danger. Riding and working around horses is not always safe, and in the case of racehorses (and rodeo livestock) is often dangerous. Many people have died riding racehorses, to the point where Cassidy even describes Newmarket as being "riddled with the ghosts of trainers and jockeys" (Ibid.: 40). There are multiple occasions in this book where Cassidy describes being in harm's way, and it is a reality of working with horses in this kind of sport that she is forced to repeatedly contend with during the course of her fieldwork. Not only is animal welfare something that needs to be taken under consideration, but human safety is as well. Particularly in sports like rodeo, where the deaths of animals and humans alike are inseparable from the sport's history,

considering the bodily welfare of all involved is vital to the process of ethnographic research within these interspecies communities.

B. The Equine Body

Taking a more animal-centered approach to the issues of harm and care raised by considering bodies, Dona Davis and Anita Maurstad's 2016 edited volume, *The Meaning of Horses*, on the whole is a fascinating compendium of ethnographic work surrounding equestrian culture around the world. From Scandinavia to the Middle East to Latin America to Mongolia, the authors included in this book all take approaches to performing equestrian ethnography that include what the editors refer to as "biosocial encounters," which "propose... new ways of thinking about creatures as individual, biological and social beings that, through interspecies practices and interactions..., mutually create their selves" (Davis and Maurstad 2016: 1). Davis and Maurstad further argue in their concluding chapter that this book presents the first-ever multispecies ethnographic monograph about humans and horses, and each chapter engages with the mutually constitutive processes of intra-action, co-being, and becoming that occur when humans and horses interact.

Throughout this monograph, great attention is paid to the ethics of human-animal relationships, the empathy that can arise when humans and horses respond to each other, and nonverbal modes of communication between humans and horses as subjective agents in the process of interaction. The editors' goal in emphasizing these aspects of ethnography involving horses is to "argue the need for research that focuses on practices, relations, and processes in order to increase understanding about how humans and horses grow as biosocial becomings" (Ibid.: 191). And in terms of these biosocial becomings, the authors collectively point to "how, as mutuality or affinity develops, biology and sociality is one and the same

domain” (Ingold 2013, in Davis and Maurstad 2016.: 196). Multispecies ethnography as a way into this mode of thinking and being seems to be most ethical, careful approach, according to Davis and Maurstad, who also argue that “scientific as well as cultural ideas about animals often have a direct effect on their reality. Scientific research on human animal intra-actions may reveal such processes through which ideas shape ontologies” (Davis and Maurstad 2016: 201) while still being attentive to the power dynamics that structure human-animal inter- and intra-actions.

This is a productive approach to human-animal relations; the focus on biology in tandem with sociality brings scientific analysis back within the pale of multispecies ethnography, much like Davis, Maurstad, and Cowles’ article on the integration of Human-Animal Science and Equitation Science discussed earlier. This way of thinking about multispecies ethnography provides a potential opportunity for working with preexisting projects and conferences that are scientific in nature, like the International Society for Equitation Science’s conference or the Swedish-Norwegian Foundation for Equine Research, which has a small social sciences division that focuses on quantitative research in equine-assisted therapy and other topics like equine welfare, agriculture, and industry. While this suggestion was not necessarily the goal of Davis and Maurstad’s writing, in which the focus is largely on validating the study of equestrian culture and “bring[ing] other species back into anthropology,” (Ibid.: 190) it is a contribution poised to reshape the way that we perform that anthropological research in the first place, taking into consideration ethics of harm and care that underlie our every interaction with animals. It is important for scholars who do this work to think about how “multispecies ethnography and biosocial theory bring animals, literally, together with humans in ways that open up new frameworks for anthropological analysis and

understanding that move beyond reductionist or essentialist dichotomies of nature and culture and human and animal” (Ibid.: 202).

C. The Vibrating Body

I propose that, in addition to more careful consideration of harm and care, music has an important role to play in developing ethical and rigorous multispecies ethnographic practices as well. *Tuning Your Horse*, a 2007 book by Sara Wyche, is an extremely interesting exploration of the relationship between music, riding, and resulting equine injuries that supports this idea. A veterinary surgeon by trade, Wyche also practices holistic medicine and healing, and is herself an amateur dressage rider. She has published several other books on equine rehabilitation and muscle therapy, but this is the first book of hers that delves into the world of music. In Wyche’s opinion, our post-modern world is plagued by noise, mis-matched rhythm, and sonic chaos and overlap that prevent us from being able to properly, deeply hear the rhythmic inconsistencies that signal subtle lameness in horses. In a vein not unlike Ochoa Gautier’s *Aurality*, Wyche has picked up on a change in our cultural listening practices that she perceives to be at the root of our enculturated deafness towards the sounds of equine injury. She utilizes a metaphor of the Rider-Conductor to discuss the bodied impacts of this communicative breakdown, arguing that the rider’s lower back is equivalent to the role of an orchestral conductor; it functions to control rhythm and exist as a meeting place for the “driving force of the rider and the rhythms at his disposal in the muscles of the horse” (Wyche 2007: 16). If horse and rider are not working together in mutually compatible, balanced rhythm, we have the potential to do great harm because of our lack of awareness of subtle changes (Alworth and Buerkle 2013). To a certain extent, then, we must rely as riders on being able to feel the rhythm of a horse’s gait and any changes or

problems, but Wyche also argues that more than anything else we must be able to *hear* those irregularities in order to respond to them appropriately.

For Wyche, the best way to hone our listening skills on horseback is to ride with music. She argues that riding with the right kind of music “takes the rider into what sports psychologists call the ‘flow state,’” (Wyche 2007: 88) an application of the term, originally coined by psychologist Mihaly Csikszentmihalyi, similar to that of Thomas Turino in his 2008 *Music as Social Life*. Turino writes that while many activities encourage participants to reach the flow state (including sports), “certain music making contain the conditions for flow in unique and particularly pronounced ways,” particularly music-making that is participatory and offers increasingly difficult challenges along the way that require focal attention to synchronous performance (Turino 2008: 4, 32). All of those descriptors could be applied to describe the experience of horseback riding as well, drawing the two seemingly disparate activities closer together. While the rider is ultimately the one who Wyche believes enters this state of flow through the choice of appropriate music, she also allows that while horses may not necessarily have nuanced, developed musical tastes akin to those of the rider, “the horse is a living being, with a heartbeat, a breathing rate, a set of brain waves and a well-defined sense of rhythmical movement” (Ibid.: 97). Therefore, in choosing music that not only suits the rider but also the horse and the horse’s natural rhythm of going, performance, balance, and ultimately soundness are enhanced, as well as maintaining and enhancing the flow state of performance for both rider and horse.

A good portion of this book is intended for amateur riders like Wyche herself, particularly the chapters concerning the various types of music riders can choose from for different gaits, routines, and purposes and those covering a general history of riding and music. However, Wyche has also produced a line of thinking that is potentially very valuable

for the ongoing study of music and horses. In her final chapter, Wyche delves into alternative healing practices and spiritual belief systems surrounding vibration and energy. She discusses various kinds of alternative therapy that use vibration to target muscle tissue and ligaments in horses and humans, hinting at possible applications of the vibratory, energetic nature of sound and musical riding as a therapeutic, healing practice, ideas not too distantly related to earlier discussions of new materialism and the vibrancy of matter. Wyche writes, “The harmonious function of the body is a delicate balancing act, and it is particularly challenged by our environment, not least by the world of sound. We don’t just hear sound, we feel it, because all vibrations interact with the tissues of the body, and sound consists of vibrations” (Ibid.: 131). It follows for Wyche that if we can learn to use music and sound to become more in tune with our horses, both figuratively and literally, we can create an equestrian practice that is both more sustainable and more meaningful. These ideas are also closely tied to the work being done by scholars like Nina Sun Eidsheim, whose scholarship again both emphasizes “the ethical dimensions of sound, music, singing, and listening” (Eidsheim 2015: 10) and the necessity of breaking down our culturally-constructed ideas of what music is, where it comes from, and how it is received. When we can begin to accept sound as a multi-sensory practice (one I argue can be and is understood by nonhuman animals) we can accept that it works on our bodies and subjectivities in many ways, including through vibration (Cervellin and Lippi 2011, Eidsheim 2015). In other words, vibration matters, and not just to humans.

D. The Thinking Body

The kind of framework for ethical and inclusive musicking and listening suggested by Eidsheim becomes particularly useful when considering scientific research on animals’

musical cognition. People the world over play music for their animals believing that it calms them down, makes them less lonely, or makes them happy, and recent scientific studies have suggested that animals do, in fact, recognize music and possess the capacity to categorize sounds (Chase 2001, Hoeschele et al. 2015). In academic research, questions about animals' musical and cognitive abilities are often tied to bigger questions about how and why humans can perceive, understand, and be affected by music, as illustrated by the fair number of texts that purport to search for the origin of music within or without various species (Krause 2013, Mithen 2007, Wallin et al. 2001). These bigger issues are important, and a great deal of the value of investigating interspecies musicking comes in its contribution to those larger questions, but for the purposes of this paper emphasis is placed on the approaches used to investigate animal music cognition more specifically.

In keeping with earlier themes, much of the cognitive research involving animal musicality begins from a consideration of ethics, both of captivity/domestication and of scientific research involving nonhumans whose ability to give informed consent is questionable. A 2015 article investigating music's perceived "emotional" effect on racehorses—quantified by its influence on cardiac activity and performance—was partially motivated by an interest in increasing competitiveness, but also by a desire to enrich the horses' lives and improve their wellbeing (Stachurska et al. 2015). Results suggested that playing music in the barn did improve equine welfare and cardiac performance over a short period of time, proving that music has not only an emotional impact on animals' lives but a physiological one as well. Other recent studies have come from zoos where opportunities to participate in music-making have been offered to animals as enrichment experiences (French et al. 2018, Pons et al. 2016). These studies have shown several things: first, that the danger of anthropocentrism when it comes to theorizing other animals' lifeworlds is still present in

the often difficult-to-use musical technologies and instruments that animals are presented with. If we are to expand our definitions of music, musicking, and musical ability, exposing non-human animals to purely human music and instruments tells us little. The growing methodology of Animal-Computer Interaction, developed by Clara Mancini (Mancini 2011 and 2017) has touched on this problem, developing technology that is species-friendly for particular experiments while more holistically accounting for nonhuman animal wellness, consent, and accessibility.

These studies also point out a more obvious and less troubling truth: animals are musical, just like humans (Gupfinger and Kaltenbrunner 2018). They can hear, categorize, and respond to music, just as we can, though where the lines are drawn between music, sound, communication, noise, and silence might be different. Returning again specifically to equines, the issues of musical rhythm and beat synchronization have come to the fore largely due to the equestrian sport of dressage. Dressage involves musical freestyle tests, where horse and rider perform a variety of movements to a musical track of their choosing. YouTube videos of these tests abound, as do the inevitable re-mixed videos that remove the classical music of an original test and replace it with a particularly hard-hitting hip-hop track. Part of what makes these videos so popular among enthusiasts and jokesters alike is the appearance of being in-sync with the rhythm of the music, or of the horse “dancing.” Animal cognition researchers have begun to ask a wide variety of questions about the innateness of rhythm across species; in 1871, Darwin suggested that “the perception, if not the enjoyment, of musical cadences and of rhythm is probably common to all animals, and no doubt depends on the common physiological nature of their nervous systems” (Darwin 1871), but more recent research argues that this isn’t necessarily true, and that beat-based processing in nonhuman animals is not a universal (Bregman et al. 2012, Patel et al. 2009, Patel 2014).

However, because of the horse's close ties to musical events where synchronization to a beat is vital, further cognitive research on horses' ability to coordinate with music would provide a significant addition to literature on cross-species musical processing (Patel 2014). Greater understanding of equines' musical processing also stands to contribute to non-quantitative research on equestrian sport and interspecies musicking, as it allows scholars a glimpse of what life as a horse might be like.

VIII. Ethnomusicology and Zoomusicology

Ethnomusicology has historically been open to incorporating methods, research, and theories from other fields, and considering animals is no exception. While ethnomusicological accounts that focus specifically on animality and musical activities involving animal participants are a newer phenomenon, seminal studies of birds, whales, and bats have been embraced and expanded upon by ethnomusicologists for many years. Many of the best-known texts in ethnomusicology link music cultures with the natural and animal worlds, for example Steven Feld's famed 1982 *Sound and Sentiment: Birds, Weeping, Poetics, and Song in Kaluli Expression*. The more recent subfield of ecomusicology also often addresses animal participants, though the focus in these works tends more toward general environmental awareness and differing ecological ways of knowing than emphasizing specific interspecies musical activities or practices (Allen and Dawe 2016, Pedelty 2012 and 2016, Rehding 2002). Taking a slightly more scientific route, many recent ethnomusicological works have expanded biological research on bird song, bat calls, and whale compositions (Bruyninckx 2018, Graper 2019, Payne 2001, Rothenberg 2005, Taylor 2017). Even the areas of sound studies and soundscape ecology have long embraced the

noises of nonhumans as equally important components of our sound worlds (Farina 2014, Helmreich 2012, Schafer 1977).

In short, the field of ethnomusicology is primed to receive animal musicality and interspecies musicking as valid sites of inquiry. The Society of Ethnomusicology's most recent (2018) and upcoming (2019) conferences are illustrative of this; between the two conferences, no fewer than sixteen of the papers presented have centered on sounded human-nonhuman relationships, and three of those specifically deal with horses. In particular, a paper given by University of Toronto PhD student Jack Harrison in 2018 picks up on many of the ideas presented in this paper; namely, that considering equestrian sporting events allows us to explore how human relationships with nonhuman animals are shaped by music, interspecies interaction, and questions of identity (Harrison 2018). Harrison's paper examines a particular gold-medal-winning dressage performance given by British rider Charlotte Dujardin and her equine partner Valegro at the 2012 London Olympics. Harrison argues that "Valegro's potential to disrupt the smoothness of the music and choreography makes the boundary between humanity and animality, and therefore between nation-forming and nationless beings, necessary in the musical construction of ideal nationhood" (Ibid.:1). This assertion carries within it a hinting towards the new materialist vibrancy of matter, the unpredictability of the body, and equine subjectivity that have been discussed at length above, but also ties them back into issues of nationalism, human identity, and music's use as a tool for constructing both.

A. Zoomusicology

One particular subfield of ethnomusicology worth singling out is that of zoomusicology, which originated in 1983 when the concept was introduced by French

composer and scholar François-Bernard Mâche in his book *Music, Myth, and Nature, or The Dolphins of Arion*. While the book as a whole functions as an argument for the return of “mythic thought” to processes and products of composition, as well as the use of natural soundscapes in abstraction for different pieces of music, he includes a study of what he calls “ornitho-musicology.” The stated purpose of this study was to “begin to speak of animal musics other than with the quotation marks,” a quotation held up by zoomusicologist Dario Martinelli as the creation of the field (Mâche 1992: 114; Martinelli 2009: 4). Since Mâche’s book was translated into English in 1992, zoomusicology has slowly but steadily gained credence as an avenue of scholarly inquiry, though it still enjoys a fairly marginal position when compared to fields like anthropology, musicology, or even ethnomusicology. Martinelli, the first scholar to seriously pick up Mâche’s calls, has published extensively on the field, arguing for the importance of zoomusicology and its continued relevance for many reasons. For Martinelli and many others, studying the musics of all animals—including but not limited to the human animal—can suggest that “music is a zoological phenomenon, rather than a simply anthropological one. This raises the questions: what is music? Where does it come from? What are the behavioral processes implied in its production?” (Martinelli 2009: xii).

These are questions that ethnomusicology has long concerned itself with, though primarily bounded by the human species, and indeed Martinelli points out the many similarities between zoomusicological and ethnomusicological study. While advocating for an interdisciplinary, multi-faceted approach to investigating music and aesthetic sound beyond the boundaries of humanness, Martinelli suggests an analytical framework borrowed from ethnomusicology that focuses on structures (the musical traits themselves, i.e. sounds, intervals, timbres, etc.), processes (the acts or behavioral patterns related to those structures),

and experiences (“the investigation of music as an experience lived by a [subjective] individual”) of music (Ibid.: 10). The goal of using such a framework to organize analysis is to allow for a biosemiotic approach to animal musicking—by first acknowledging that animals do, in fact, have an aesthetic sense when it comes to acoustic sound, the door is opened for scholars to leave restrictive, anthropocentric terminology and conceptions aside and instead opt to search “for the signified, the *aesthetic use of sounds*, which by convention we call ‘music’” (Ibid.: 25, author’s emphasis). By suggesting the collaboration of disciplines like biosemiotics, ethology, and ethno/musicology, Martinelli and his peers too are suggesting that we expand our perception of what might be considered music altogether.

Animal *Umwelten*, a term coined by biologist Jacob von Uexküll meaning “environment” or “lifeworld,” are full of acoustic, aesthetic signals, and these semiotic worlds are difficult for humans to access. However, as Martinelli and his colleagues suggest to us, it is our duty to try and understand. After all, Martinelli points out, this task is not too different from the early days of ethnomusicology, when Western-trained ethnomusicologists inserted themselves into “unknown” cultures, often separated by language and cultural barriers that seemed nearly impossible to traverse. He also writes, “The problem which zoomusicology is supposed to solve in order to demonstrate that music is not exclusively human are in principle the same problems that music is not exclusively Western” (Ibid.: 9). It follows, then, that our debates about what should or should not be considered as “music” should expand accordingly with our expanding area of inquiry; where ethnomusicology emphasized cultural and anthropological musical traits, zoomusicology now lifts up zoological ones for analysis.

This is a thread picked up by Marcello Sorce Keller in a 2012 article published in the *Yearbook for Traditional Music*. In this piece, he complicates and questions the concept of

“music” as a concrete, definable, bounded thing. He argues that there are “no borderlines or sharp transition stages” (Keller 2012: 167) between what we might call music and non-music and language, but rather that sound exists on a more fluid spectrum that can be found in contexts beyond the human. Throughout this short article, he advocates for a comparative approach to sound and music studies in non-human animals much like the one hinted at in Marinelli’s 2009 book, arguing that “the study of animal sonic behavior would be tantamount to studying ‘cultures’ where participant observation is not possible, and where the comparative method (in some ways de-legitimized by the otherwise healthy heuristic attitude resting on cultural relativism) would need to be revised and practiced” (Ibid.: 171). This touches on the difficulty of performing interdisciplinary work that blends comparative approaches like those practiced in the sciences with generally relativist ones like ethnomusicology. Keller suggests that only an approach that returns to “the study of sound itself and its cultural-natural underpinnings” (Ibid.: 171) could grant ethnomusicology (or zoomusicology) a firm grasp on the topic. The validity of comparative studies within ethnomusicology has been hotly debated in recent years, most recently brought to a head in conversations regarding Harvard University’s Natural History of Song Project, but it is hard to deny their entanglement with the project of zoomusicology as it has been proposed thus far. Reconciling approaches from biology, ethology, anthropology, and semiotics is no simple feat, particularly when the nature of several of those fields supports and encourages comparative study and analysis where others push it away.

Keller continues past this with critiques of anthropocentric definitions of music, and advances a broader generalization of simply defining music as “organized sound,” (Ibid.: 172) a definition that, much like Martinelli’s “aesthetic use of sounds,” relies on intention, meaning, and subjectivity to identify it. His nonhuman case studies, most notably including

many preexisting studies of humpback whales, point to an increasingly hard-to-pin-down distinction between music and language that becomes even less clear when researchers begin to look outside of the human world. Who's to say that we cannot find music or language in the animal kingdom if we can barely even define and distinguish between the two amongst ourselves, he wonders? For Keller, all of this theorizing “challenge[s] the assumption that humankind is positioned at the highest level in the Great Chain of Being” (175) and opens up the possibility of a more inclusive, interspecies ethnomusicology.

The comparativist project being suggested by Keller—and, to some degree, by Martinelli—has value, certainly, and the bigger questions being asked here are important, but a missing component that might engender interesting studies comes from the meeting of humans and other animals in encounters that involve music. Interspecies communication has been a topic of interest in several fields, as discussed throughout this paper, but interspecies musical encounters have received relatively little attention aside from a few select publications (Graper 2019, Seeger 2016, Simonett 2016). While we are expanding our definitions of music, subjectivity, and meaning, it would prove worthwhile to explore what lies within those boundaries as well that might need uncovering. The combination of some of the many approaches referenced in this paper would provide a wide range of methodologies to assist researchers in doing just that.

IX. Conclusions

All of the fields, methodologies, and bodies of literature discussed in this thesis are bound together with the common threads of humans, horses, and musical encounters. While any one project would likely struggle to incorporate all of the approaches referenced here, a rigorous exploration of interspecies musical encounters—particularly ones that occur in sport

and leisure contexts—requires an equally robust interdisciplinary framework to account for the experiences of all involved. Comparing literature from a variety of related fields has brought into relief some central themes that should inform future interspecies research if it is to become a more established and thorough field of inquiry.

The literature that has emerged from anthropological study emphasizes the importance of dissecting and perhaps ultimately discarding the problematic dualities that still plague analysis of interspecies relationships. These include nature and culture, wild and tame, human and animal, even male and female. Paying closer attention to individual, lived experience as best we can shows the fluidity of those perceived binaries, as well as the way that they come to be constructed in everyday life. Communication studies, when used in congress with anthropological study, can add to the blurring of these lines as well; in complicating the division between music and language, human and nonhuman, the categories themselves become more inclusive and nuanced. If scholars aim to produce ethical, thoughtful, rigorous scholarship on interspecies musicking, this kind of work is a necessity.

The field of sports studies, while also offering a complication of existing dichotomies, points out the importance of considering media and the body when doing any sort of research on sporting events. The mediatized body (both human and non-human) is a marker of identity, and the myriad ways that bodies are raced, sexed, and nationalized through media representation have profound impacts on the way that identities around sports are formed. Media coverage of sports also provides insight into the ways that human-nonhuman relationships are popularly viewed and constructed, both in contemporary society and throughout history. In writing interspecies musical or sporting histories, media representation is key. Because the identified and categorized sporting body can so often be viewed as threatening, particularly when that categorization is not white, heteronormative masculinity,

paying attention to how music and media intersect with sporting identity provides a more cohesive picture of those larger societal structures and their influence on the construction of the body. When it comes to writing histories, then, creating spaces in historical accounts for underrepresented, unconventional, or villainized voices and bodies, both human and non-human, is an important task that sports studies, in conjunction with anthropology, communication studies, and media studies, is beginning to undertake.

Key to writing these more inclusive accounts of past and present is the issue of interspecies communicative practices. Both verbal and non-verbal forms of communication find equal importance in considering interaction across species boundaries, and putting anthropology—which often excludes significant theoretical exploration of the voice—together with voice studies—which needs to look beyond its anthropocentrism—suggests that the combined frameworks of these two disciplines have the potential to offer a more holistic way to think about and analyze communication. In particular, ethnomusicology is already attuned to the nonverbal, embodied elements of connection that occur during shared musical experience, so the call to take up these ideas would be well-met by the field.

Reflecting on non-verbal interaction and communication also leads to a more careful consideration of ethics, power, and agency; while several scholars from voice studies have called for greater attention to be paid to our cultural listening practices, I have extended this to include listening to non-humans as well. Listening to our equine, bovine, or canine partners with respect and acknowledgement of their individuality is fundamental to building both a more ethical research tradition and relationship with the non-humans we live with. I suggest one way to do this is beginning with the framework of new materialism, which has as its starting point the idea that agency is assured by the natural unpredictability of matter. New materialism accounts in many ways for the unpredictability and incomprehensibility of

animals, while also extending the idea of assemblages, wherein humans, animals, and technologies all play equal parts in performative relationships. Each component of an interspecies encounter shapes the other components and is deserving of our scholarly attention. Addressing the many varied participants in interspecies assemblages—for example, a single rodeo event might include at bare minimum humans, horses, rope, gate attendees, music, DJs, emcees, rodeo clowns, and the audience—requires an interdisciplinary approach that is flexible enough to account for this variety.

This kind of methodology also gestures to the complex relationship between animality, media, and subjectivity. These things are intimately connected through their joint construction across history, as many of the scholars discussed throughout this thesis have pointed out. This means both a linking of non-human communicative practices to technology—like how the study of bat echolocation has inspired innovation in sonar technology—but also a material history of animal death in order to produce technological advancement. Vivisection led to the phonograph, and animals died by the hundreds (Mundy 2018b). In the twenty-first century, it is important to remember those violent histories as we develop interspecies research methodologies that aim for ethical practice. This is particularly important when we consider that interaction between humans and animals often has material effects on the bodies of both species involved. Horses, for example, undergo physiological changes in response to being ridden, and horseback riders do the same. Danger is always a possibility, and wellness must be a top consideration when undergoing any kind of participatory research with equine sports.

Music has a role to play in the consideration of these material, ethical encounters as well; its use for vibrational therapy, environmental enrichment for domesticated animals, and enhancement of competitiveness have all been discussed in this thesis. More research on the

cognitive, physiological, and emotional effects of music on non-human bodies and brains is needed for scholars to fully understand this side of music's usefulness in interspecies relationships, and to bring us closer to getting a glimpse into what life is like for other species. While the onus for this type of study lies largely on cognitive scientists and ethologists who have the tools and the training to undertake quantitative research of this nature, ethnomusicology is also a promising field for combining some of the many methodologies suggested in the preceding pages. The field already incorporates a wide range of methodologies and theories, and recent professional proceedings in ethnomusicology have pointed toward an increasing willingness to engage with interspecies projects that extend beyond the more typical birds, bats, and whales.

Throughout the course of writing this thesis, I have been grappling with many questions that lay beneath the discussion here: How can we perform interspecies research if we can never truly understand what life is like for other species? How might we move past cross-species communication barriers? How can ethical research be undertaken if consent is not possible? What is the scholarly value of studying human-animal musical interaction? I have been driven to answer these questions by my own life-long status as a "galloping academic," and while this thesis doesn't offer precise answers to any of them, it does provide a starting point for my own larger research project while comparing disparate bodies of literature that often do not meet. There are a striking number of similarities that thread these works together: the importance of ethical work, the impact of interspecies encounters on material bodies and conditions, and the oft-indistinguishable differences between music, language, and sound. These threads and the questions they raise provide a rough, flexible outline of the kind of work that it would take to complete rigorous, interdisciplinary

theorizing of the sort that might offer us the chance to more fully understand other (non-human) ways of moving and musicking through the world with others.

A popular adage for medical students goes, “when you hear hoofbeats, think horses, not zebras.” This phrase is intended to advise young doctors not to seek out a unique, uncommon diagnosis (the “zebra”) when all the symptoms suggest the patient is merely afflicted with a cold (the “horse”). For music scholars interested in interspecies musicking, though, hearing hoofbeats provides a starting point for doing the opposite; if we can turn our attention to the individuality, subjectivity, and uniqueness of individuals of all species, our scholarship begins to account for nonhuman agents (the proverbial “zebras”) in a more ethical and rigorous way. Animal actors have an important role to play in the development of mindfully interspecies musical ethnography, but it’s up to us to open our ears and listen to them.

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