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# **The Science-Music Borderlands**

## **Reckoning with the Past and Imagining the Future**

**Edited by: Elizabeth H. Margulis, Psyche Loui, Deirdre Loughridge**

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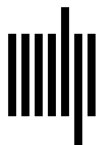
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## 9 The Science of Music Is about Relations

Jim Sykes

### An Ethnomusicologist in the Science-Music Borderlands

How should we conceptualize the perceived border between the science of music (in psychology, biology, neuroscience, and so on) and music's place in the humanities and social sciences (ethnomusicology, musicology, music theory)? Is it a sharp dividing line between distinct cultures or modes of inquiry? Based on the evidence in this volume, I think the answer is no. But if we speak of Science-Music Borderlandia not as a sharp partition but as a region that encompasses the science-humanities border, what kind of place is it? It will be useful to consider Alex Chavez's point that "although the scholarly field of border studies and the metaphorical use of the borderlands are often conflated, they are distinct" (2017, p. 11). Border studies tend to explore the material conditions of physical spaces, while the use of borderlands as a metaphor typically "speak[s] of a liminal state of in-betweenness in work in the humanities, largely cultural studies" (ibid.). In this volume, liminality bespeaks "the emotional residue of an unnatural boundary" or borderland between the music-sciences and music-humanities (Anzaldúa, quoted in ibid.).<sup>1</sup>

With this in mind, let us say that Science-Music Borderlandia (SMB) contains "districts" (subfields) that straddle the oft-politicized music-science and music-humanities borders. To those who immigrate to SMB, its outsider status lends it the romance of the underdog. There is also a culture of access in SMB that allows its residents to travel fairly easily across its own internal science-humanities border. But those who spend a long time in SMB feel the frustrations of a rural province neglected by the metropolises—with a concomitant lack of funding. SMB's underdog status, however, looks radically different as one moves farther away from it. The boundary between SMB and several regions of the music-humanities remains heavily policed: SMBers are usually happy to let outsiders in, but many in the music-humanities metropolises don't want SMBers

visiting them. Ethnomusicologists, in particular, have long viewed SMB with suspicion: the specter of comparative musicology, its imposition of European musical values and conceptions of the human under the rubric of science, and the concomitant history of racism lurking in discussions of music as a biological phenomenon loom large. Ethnomusicologists fought their own border war with SMB a few generations back, and this remains a national trauma in Ethnomusicology-land.

In this chapter, my goal is to show how my own broader engagement with anthropology (not anthropological studies of music) helped me resolve problems in my own research that I now attribute to the tenacity of a certain musicological vocabulary that is widely shared across the music-humanities and music-sciences (and is, in fact, generative of them). In what follows, I explore the potential—for all of us—of perspectives that have been brewing for a long time in anthropology but recently gained steam in ethnomusicology as part and parcel of the “nonhuman turn” in the humanities. I will touch on a few other anthropological ideas along the way that are underused by music scholars of all stripes: the distributed person, the gift, sound-as-medium, and art-as-agency.<sup>2</sup> In this, my aim is to push forward vocabularies that can be useful across the music-humanities and music-sciences, regardless of whether these areas are brought into dialogue. In doing so, I strive to move beyond the typical references to ethnomusicology made within music science literature, which tend to hinge on old writings (Nettl, Blacking) and two major but well-worn ideas: that not every society has a word for music and that, in some places, everyone’s a musician.

My starting point is the idea that loosening our attachment to music will allow researchers to place more attention on sound as a medium and agent, situating relations as central to music studies. This will require a rethinking of scale: for ethnomusicologists, this means stepping outside our area studies paradigm and reconceptualizing the global; for SMBers, it means better recognizing sound as a form of exchange in which the relations among sound, self, Others, place, and time may be normatively construed over the *longue durée* quite differently from how the history of scholarship in all disciplines of music studies normatively suggests. For ethnomusicologists, such turns should result in geographic innovations as a result of ontological innovations; for SMBers, the opposite. My aim is to do more than simply advocate for a “relational musicology” (Born, 2010); I suggest that turning to sound-as-medium and sound-as-agent, in tandem with attention to the porosity of human beings, will allow us to see *similarities* between the West and the rest, a division that is still common in the music-sciences and music-humanities, even when scholars attempt to overcome it. This means that ethnomusicology should *not* be positioned as relevant for scientific studies of music simply by virtue of its ability to provide examples of difference that

can help refine scientists' notion of musical universals.<sup>3</sup> Nor do I think ethnomusicologists should set out simply to disprove scientists' arguments by providing evidence of musical differences from our own fieldwork—what Steven Feld (see chapter 19 of this volume) calls the “not among the bongo bongo” syndrome.<sup>4</sup> Rather, I suggest that a science of sound-as-relations will generate a perspective on the universal that presumes its radical diversity: “The single world is precisely the place where an unlimited set of differences exist . . . far from casting doubt on the unity of the world, these differences are its principle of existence” (Badiou, 2008, p. 39).<sup>5</sup> My broader claim—which I can only hint at here—is that the categories “music” and “musician” have been overdetermined in *both* the music-sciences and the music-humanities by *capitalism*. The perspective I build here is intended to demonstrate that displacing categories generated by capital (and Christianity, on which capitalist framings and uses of music initially drew) can allow a different understanding of how sound-as-relations functions broadly across human and nonhuman species.

### What You Might Have Expected

Initially, I went to the field to study a drumming tradition performed by Sri Lanka's Sinhala Buddhist ethnic majority. I had a rather traditional ethnomusicological interest: I had heard a recording of a drumming genre and could not count its rhythms, which sounded wildly sentence-like and uncountable in duple or triple meter, even though the drummers played in unison and started and stopped at the same time. I wondered how the drumming was structured. What I was hearing was the “low-country drum” (*pahata rata beraya*), referred to in certain rituals as the “demon drum” (*yak beraya*), an instrument used in all-night rituals where offerings are made to the Buddha and deities to ask for protection from natural calamities or (in another set of rituals) to stave off illnesses caused by beings of low karmic standing (*yakku*). Though I didn't realize it initially, the genre has long been performed by a caste of ritualists called the Beravā (a word that means “drummer”—*bera* is the plural of *beraya*, or “drum”), a name that is quite stigmatized in Sri Lanka due to the historically downtrodden nature of this community. Some drummers call themselves *nāketi* (astrologer), and most are also dancers, Ayurvedic medicinal specialists, ritualists who know the required mantras, singers, and builders of complex and voluminous ritual objects and backdrops made largely out of bamboo (Kapferer, 1983). In precapitalist times, this community received agricultural land in exchange for services at Buddhist temples (a caste duty called *rajakariya*). Now, many have given up their ritual duties, or they perform in rituals all night long and then hop on a bus in the morning to arrive bleary-eyed at their nine-to five jobs.

Everything I've described so far probably resonates with many readers as typical ethnomusicology. It surely fits squarely with an image of ethnomusicology that many (including myself) decry as the study of "the music of the Other" (see Feld, chapter 19). As a white, male, cisgendered ethnomusicologist with a grant in hand and attached to a PhD program at a North American university, I traveled to a distant place and "discovered" musical difference. I set out to learn the low-country drum. I attended rituals with my *gurunnanse* (teacher), Herbert Dayasheela. Eventually, I "uncovered" the Beravā worldview about this ritual drumming. Let me continue in this vein before I unpack some of the roadblocks I faced and consider certain anthropological perspectives that helped me move beyond them.

First, as many ethnomusicologists discover during their field research (Wong, 2014), I learned that Sinhala Buddhist ritual drumming is not considered music. It is sacred speech. According to the standard tenets of Theravada Buddhism (the dominant type of Buddhism in Sri Lanka and Southeast Asia), serious practicing Buddhists should not revel sensuously in music and dance—one should never see a Buddhist monk dancing, for example. All Buddhists accept the Five Precepts (a list that includes dicta such as thou shall not steal, murder, or commit adultery), but a longer list taken up by monks and the laity on full-moon (*poya*) days and other important events includes refraining from dance and music. All beings are ordered cosmically according to their karma, with humans occupying a middle ground between deities, on the one hand, and ghosts and demons (*yakku*), on the other—the latter having low karma on account of deeds in past lives (Holt, 2004). The Buddha has left the realm of rebirth but has delegated authority to the "four warrant gods" (*hatara varam deviyo*). Although he is given offerings at rituals, these are generally considered symbolic. Two of the warrant gods (Natha or Maitreya, the next Buddha; and Vishnu, the protector of the island) receive offerings but are so karmically high that rituals are not typically oriented toward them—they are too removed from human affairs. Major rituals center on offerings to deities a bit lower on the karmic scale, particularly the two warrant gods Kataragama and Pattini (the latter being the sole goddess of the four; Obeyesekere, 1984). Because these gods are also Buddhist—that is, they are karmically high beings farther ahead on the journey to Buddhahood than you or I—it is inappropriate to offer them music. What the drummers offer is sacred speech. Even the pitches of the singing in the rituals are heavily constrained—which is to say, they do not have a large pitch range, perhaps to avoid sounding musical (a technique used also by Buddhist monks for chant or *pirith*—though singers do not consciously make this connection). To foreign ears, the singing sounds a bit like chanting, but Sinhala sung poetry is different from chanting and quite complex, as there are numerous variations that emerge at different points in the rituals.

Finally, in a set of rituals to ward off illnesses caused by beings of low karmic standing, demons (a term criticized for its Christian baggage; Scott, 1994) or *yakku* are celebrated as though they were gods. They are drawn to the ritual space, whereupon a ritualist utters mantras to get them to stop harming the patient. Drumming for *yakku* is not metered either; it sounds speech-like to foreign ears, but the patterns are shorter and more repetitive than the drum stanzas (*padas*) offered to deities.

The immediate question I faced in my research was how to situate this drumming in its social context. The drumming, which is almost always performed with dancers (traditionally, only men dance in rituals, although women commonly dance outside of ritual contexts), has played a role in Sinhala Buddhist nationalism, a movement that has tended to alienate minorities, sometimes violently. It seemed wrong to say that the tradition I was studying was a reflection or production of Sinhala identity, for the drum stanzas traditionally belong to the Beravā, not the entire Sinhala ethnic group. Buddhists don't conceive of the self as a stable, eternal, and unchanging soul; it is always in flux and ultimately a fiction. What actually exists, the Theravada scriptures (*Tipitaka*) state, is a not-self (*anatta*; Collins, 1982). Although the Beravā have a complex and sometimes ambiguous relationship to doctrinal Buddhism, I realized that I needed to ask how Beravā drum speech relates to a not-self. Ultimately, through discussions with drummers and explorations of the vocabulary surrounding the drumming, I discovered that drumming functions as a gift that emerged in a noncapitalist environment but now overlaps with it. Several occasions when drumming is performed are classified as "sound offerings" (*sabda pujava*); in all ritual contexts I studied, drumming was an offering to a nonhuman being, except when performed for visiting dignitaries or to support monks in procession. Gifts in Theravada Buddhism must be "disinterested," which means that gift giving is typically not recognized as such (Kapferer, 1983). So the idea of drumming as a gift was underrecognized by the drummers, but once I began to politely probe into it and examine the Beravā vocabulary, it became a core concept for me—in fact, the word *gift* appears in the title of my book about Sri Lankan musics (Sykes, 2018a). It bears emphasizing, too, that the drummers don't believe they composed this sacred speech—it was handed down to them. One ritual I studied (Sykes, 2018b), for example, consists of the drum speech uttered by the gods when they celebrated the Buddha's Awakening (what is traditionally referred to in Western scholarship as his Enlightenment).

To sum up: The music I studied is not music but speech; it is not reflective of a stable interior soul and isn't "expressive" in the normative Western sense; and it is the caste's duty to hoard and protect these gifts, with the Beravā traditionally hiding their knowledge from the broader Sinhala ethnic group. Much of the drumming was composed

by the gods, not by people, and the entire tradition is passed down through the generations. My teacher believes this tradition is dying in part because it was situated in schools for the arts rather than in schools for Ayurvedic medicine—delegitimizing the efficacy of the rituals, transforming them into culture, and eliminating people's need for the rituals as medicine. I feared that describing the drumming as music and situating it as a Sinhala genre would continue the process of killing his tradition and play into the ethnicization process that has long been part of Sri Lanka's communal conflicts.

This is the point where readers, particularly the SMB community, might expect me to lean into my research as an example of “musical difference” with which I can chastise scientists' universal conceptions of music in which the Beravā don't fit. But that's not my intention. First, remember that the Beravā *do* have a conception of music—and Beravā drumming is structured to avoid being that. This notion of music historically came from neighboring communities, particularly the Tamil minority, so this notion of music is not equivalent to the normative Western version. What I suggest is that music and speech in and across diverse global contexts can likewise be conceived as a gift that connects (and alienates) people to (and from) Others, so long as we recognize that definitions of sound and its function and notions of personhood, community, space, and time might radically diverge. One problem, though, is that our normative language in the academy for discussing music undercuts this perspective at every turn: music is not a caste duty but reflects a broader communal identity (race, class, gender, nation); music says something about a self or soul, rather than being a tool that connects with Others or that protects or heals. It does not take much effort to see that this perceived relationship between music and the self (and, by extension, our standard framings of the relationship between traditional music genres and their communities) is—if not overtly Judeo-Christian in origin—certainly un-Buddhist. From here, we can grasp that our normative language for representing the music-self relation positions numerous Others, not just Buddhists, as though they are simply wrong about what a person is, what music is, and how they relate. But what if we should be viewing things the other way around? What if (for example) Buddhists are right in believing that the self is unstable and inherently changing, that sounds can have some efficacious power separate from us and affecting us, that sound is fundamentally a thing to be offered, and that sound acts as an agent in its own right? I'm issuing a reverse universalism here, so to speak, which I (playfully? I'm not sure) want to probe further. It is here that recent developments in anthropology—drawing on numerous older intellectual genealogies—can help situate my work and conjure possible avenues for research in SMB that might make a broader rapprochement between ethnomusicology and SMB possible.

## Capitalism and Christianity

The category WEIRD (white, educated, industrialized, rich, and democratic; Henrich, 2019) is often used as shorthand for a type of society that is taken to be self-evident. This concept has been discussed and critiqued elsewhere in this volume, so here, I merely posit WIRED societies instead (white-dominated, [historically] imperialistic, rich, [former or current] empires [that] don't always export democracy).<sup>6</sup> The Western classical tradition, including certain perspectives on tonality, developed in WIRED societies, spread through the mass media, and were transformed by musicians in genres such as jazz, gospel, rock, and hip-hop. If we are to recognize such broad influences, though, we need to move beyond formalism and acknowledge that such musical concepts were diffused through musical labor, which includes selling concert tickets, performing onstage, and making recordings featuring certain normative technologies (from jazz horn sections to guitars, drum sets, and laptops). But now we're talking about capitalism, a phenomenon that is hardly reducible to WIRED societies, even if key aspects of music-in-capitalism (e.g., the first record labels) germinated from them. Put another way, when Beravā drum speech finds its way onto a recording, the ontology of the gift and its godly authorship is easily obscured by a cover (or thumbnail) depicting the name of a human who now appears as the artist. Rather than alienate workers from their product, the musical commodity circulates (even digitally) with their names on it. (By contrast, as agricultural laborers, the Beravā were experts in "keeping-while-giving" [Weiner, 1992]: they offered sounds to deities while retaining the ritual knowledge.) It is easy to show that the "proper object" of music in capitalism played a larger transformative role than any part of the WEIRD acronym—and this capitalist framing of musical labor now far transcends such WEIRD societies (which is a misnomer anyway).

I suggest that rather than focus on how music is transformed by capitalism, we need to attend to the conditions in which contexts for sonic exchange and notions of the music-person relation were transformed, promoting an ontology of music in which it is intimately related to a stable self or identity and expressive of it, a concept of musical personhood that became globally, historically normative ("in nature"). How often are precapitalist forms of musical labor (of which music-as-caste is just one example) and the relationships to land tenure that such forms imply taken as globally normative for what musical labor is or was? If one's answer is that such forms of life no longer exist, it would be easy to point to a small library's worth of books to show that this is not true—and the past few hundred years are a small sliver of human existence. But what I really mean to ask is, has capitalism (rather than Western classical music or WIRED



epistemologies per se) overdetermined the musical object and person-music relations as these are explored experimentally in laboratory contexts and ethnography?

The typical narrative of transformation in Western music history has long been attributed in large part to Romantic notions of musical transcendence, an attitude that has been deemed uniquely Western (another surfacing of the WEIRD concept). But musical transcendence is not what makes the West unique—many societies conceptualize their music as transcendent, albeit in different ways. Consider that some Beravā drum stanzas come from the gods, have existed unchanged over the *longue durée*, and are conceived as being separate from society and unaffected by it. Elsewhere, I note that even a casual perusal of the textbook *Excursions in World Music* generates eight easy-to-find examples—from indigenous communities in the Americas to numerous communities in disparate parts of Asia—in which music is conceived as a gift from gods or spirits (Sykes, 2020a, p. 3). It is important to state that I am not trying to surface some notion of premodern or precolonial authenticity—which is the stuff that drives ethnonationalist movements—but rather noting similarities among myriad diverse traditions around the globe in which humans are not considered the composers of music and music is fundamentally about an exchange with nonhumans. The West was not the first to invent musical transcendence, but it did invest heavily in a Judeo-Christian notion of the soul that achieved broad political power in tandem with the decimation of “pagan” musical ontologies in which musical offerings to gods were fundamental—and I think this is what undergirds the capitalist ontology of music that spread globally. Its global reach—through colonialism, missionization, and the recording industry—influences researchers to accept the Judeo-Christian notion of the music-self relation as natural, since they see it reflected in the musical practices they study, which have been shaped by capitalism and its Christian ontology of music and personhood (elsewhere, I term this feedback loop “secular resonance”; Sykes, 2020b).

### Scaling Up, Down, and Sideways

In a book about the continued relevance of anthropology in today’s world, Anand Pandian (2019) explores at length how early-twentieth-century anthropologists argued for “the psychic unity of mankind” while issuing warnings about the relationship between “description” and “explanation.” Malinowski emphasized “the unity between European habits of thought and the thinking of Trobriand Islanders,” stating that “the native mind works according to the same rules as ours” (quoted in Pandian, 2019, p. 5). Margaret Mead noted that Franz Boas “saw the scientific task as one of progressive probing into a problem now of language, now of physical type, now of art style,” but Boas also told

his students that “no probe must go too far lest it lead to premature generalization—a development which he feared like the plague and against which he continually warned us” (quoted in *ibid.*, p. 23). Participant observation, James Clifford wrote many years later, “serves as shorthand for a continuous tacking between the ‘inside’ and ‘outside’ of events: on the one hand grasping the sense of specific occurrences and gestures empathetically, on the other stepping back to situate these meanings in wider contexts” (quoted in *ibid.*, p. 26). Pandian describes participant observation as

the idea that the significance of things depends on the local contexts that give rise to them, that there is little value to work that does not enter into these local situations. At the same time, however, there is also the idea that this significance can only be grasped ultimately by stepping away from these particular contexts, by recasting them in relation to an analytical framework of greater scale. (2019, p. 26)

This is far different from the mere documentation of cultural difference. It’s an emphasis on taking interlocutors’ conceptual frameworks seriously as a base from which to ask broader questions, rather than developing the questions first and testing them out among various peoples. I’m sure many scientists have moved beyond this latter framing and might view my description as caricature, but it bears emphasizing that this is a significant reason why ethnomusicologists became distrustful of the “science of music.” Why not, we ask, find some aspect of music or sound among specific peoples and then use that to ask broader questions that might have greater significance?

Interrogating the relationship between description and explanation remains important for anthropologists today. Tim Ingold (2019), for example, argues that art and anthropology are alike, in that they are both “future-oriented disciplines, united in the common task of fashioning a world fit for coming generations to inhabit.” He believes that research is an “open-ended search for truth and a practice of correspondence” that “necessarily overflows the boundaries of objectivity” and is thus “a form of experience”:

In experience, things are with us in our thoughts, dreams, and imaginings, and we with them. It is here, I believe, that we can begin to see where science can align with art, and indeed with anthropology. It means calling into question the division between fact and fantasy, truth and illusion, which has underpinned the development of science ever since the days of Francis Bacon and Galileo Galilei. (Ingold, 2019, pp. 613–614)

My point here is not to advocate for Ingold’s position *per se* but to provide a glimpse of an anthropological trend in which the turn toward subjectivity and flux has been removed from the Kantian-derived correlationism that dominated postmodern and poststructuralist thinking, where the dominant idea was that “we only ever have access to the correlation between thinking and being, and never to either term considered

apart from the other” (Meillassoux, 2006, p. 5). Note that Ingold openly endorses the terms *truth* and *correspondence*, while also emphasizing the impossibility of complete objectivity. I’m not making this statement because I think it will be revelatory for scientists; rather, I’m showing that some points of convergence likely exist between scientists of music and anthropologists.<sup>7</sup>

Sticking with Ingold a bit longer, elsewhere he argues for understanding sound as a medium rather than a context in which sonic objects might be akin to images in a landscape: “When we look around on a fine day, we see a landscape bathed in sunlight, not a lightscape. Likewise, listening to our surroundings, we do not hear a soundscape. For sound, I would argue, is not the object but the medium of our perception. It is what we hear in. Similarly, we do not see light but see in it.” He goes on to compare sound with wind, noting, “After all, the wind whistles, and people hum or murmur as they breathe. Sound, like breath, is experienced as a movement of coming and going, inspiration and expiration. If that is so, then we should say of the body, as it sings, hums, whistles or speaks, that it is *ensounded*” (Ingold, 2007, p. 12).

Sound has agency on human bodies, as anyone who has heard a loud fire alarm knows; but Ingold’s point is revelatory for my purposes for pointing out not the agency of sound but the porosity of human beings (see also Kapchan, 2015). There is a long history of anthropological studies documenting the porous nature of humans, most famously writings on the “partible person” by Marilyn Strathern, Nancy Munn, and Annette Weiner. Strathern claims that for Melanesians, humans are “frequently construed as the plural and composite site of the relationships that produce them,” and “it is at the point of interaction that a singular identity is established” (1988, pp. 13, 128). “From this perspective,” Roger Sansi notes, “people are constantly being made and re-made through relations, and things are constantly being created not in contradistinction to persons but ‘out of persons’ (Strathern 1988: 172)” (2015, p. 11). Similarly, researchers have noticed in sub-Saharan Africa that “folk ideologies of the person” tend to “stipulate ontological interdependencies between persons and the material and spiritual domains” (McIntosh, 2009, p. 17; Comaroff, 1991). South Indianists, too, have noticed an “ontological consubstantiality” between humans and “the communities, places, and objects with which the person interacts” among Tamil people (McIntosh, 2009, p. 17). Many other examples could be given from across the globe.

Barad (2003) notes that “the belief that nature is mute and immutable and that all prospects for significance and change reside in culture is a reinscription of the nature/culture dualism that feminists have actively contested. Nor, similarly, can a human/nonhuman distinction be hardwired into any theory that claims to take account of matter in the fullness of its historicity” (quoted in Kapchan, 2015, p. 42).<sup>8</sup> Viveiros de

Castro (1998) notes that different animals understand the relations between nature and culture, including that between human and nonhuman animals, in different ways and proposes *multinaturalism*—many natures, many cultures. Similarly, the new materialist trend, drawing on now-classic works by Latour (2005), Deleuze and Guattari (1987), Bennett (2010), and others, aims to “foster an approach that operates in terms of human-nonhuman assemblages, tangles of heterogeneous things, and hybrid formations beyond the nature-culture divide” (Bräunlein, 2016, p. 378). As Bräunlein puts it, “Despite the divergent aims and ambitions of theorists of New Materialism, one assumption shared by all is that the ‘fall of man’ began with the erroneous anthropocentric logic of binaries, mainly the opposition between subject and object” (2016, p. 378).

Alfred Gell’s (1998) work on the agency of the art object is famous in anthropology and art scholarship but has received surprisingly little attention in music studies (Born, 2010). I cite Sansi’s summary of Gell’s work at length:

Gell proposed to look at works of art as indexes of agency. Indexes of agency are the result of intentions: “Whenever an event is believed to happen because of an ‘intention’ lodged in the person or thing which initiates the causal sequence, that is an instance of ‘agency’” (Gell 1998: 17). To have intentions means to have a mind. The “life” we attribute to things, and works of art in particular, would be the result of a process of abduction or indirect inference of a “mind” in a thing. Artworks don’t just index the agency of the artist, but of all the agents that have been “entrapped” by the artwork: they contain their distributed person, or distributed mind, which for Gell were the same thing. Gell argued that works of art can be seen as persons “because as social persons, we are present not just in our singular bodies, but in everything in our surroundings which bears witness to our existence, our attributes, and our agency” (1998: 103). For Gell this is not an exotic belief but on the contrary, he affirms that works of art are some of the more accomplished objectifications of human agency. Artworks can contain several different agencies from the artist, to the person represented or the person who commissioned it, to the person who bought it, to the curator that displays it. An artwork can be a “trap of agencies” sometimes contradictory, sometimes complementary (Gell 1998). (Sansi & Strathern, 2016, p. 427)

Sansi notes the similarity between anthropology and the art world, exploring the latter through one of anthropology’s core concepts—the gift—but shifting the emphasis away from agency and toward a broader notion of art-as-relationality: “The form of the artwork is in the relations it establishes: to produce a form is to create the conditions for an exchange.” Describing the artist as a mediator, he notes that contemporary artworks are often conceived as gifts that are “free, spontaneous, personal, and disinterested events,” as opposed “to commodification and mass consumption” (Sansi & Strathern, 2016, p. 426). This conception moves past Mauss’s famous definition of the gift as “*On se donne en donnant*” (Mauss, 2003, p. 227)—one gives oneself while giving—which hinges on a notion of the gift as obligation and necessitating reciprocity.

This latter perspective could make the relationality, processes of exchange, and distributed person in artworks seem to be a kind of false consciousness. As Steingo (2016) notes, since the advent of the New Musicology, the job of the critical music scholar has often seemed to require unmasking the social conditions behind the production of music. Steingo asks us to take his South African interlocutors' position toward their music seriously, which one of them describes as "the positive side of escapism." Though his interlocutors, who perform the electronic music genre Kwaito, do not engage social conditions directly, Steingo argues that they double reality to generate "a new sensory reality." More strongly, he argues that "there is nothing in 'music' that magically separates it from life. On the contrary, *music is the very name of this separation*—a separation that requires a very particular sensory apparatus and a very particular set of operations carried out through that apparatus" (Steingo, 2016, pp. 6, 9; emphasis in original). This relationality is not binary *in nature* but rather a psychological condition akin to the production of identity and commonly mistaken for it by the types of music scholars Steingo criticizes, in which the relational conditions of identity disappear. Consider Lacan's mirror stage—the proposition that one gains an awareness of self when one distinguishes oneself from the Other—which has been taken up in anthropology to explain what Willford calls the "ethnic fetish": "postcolonial demarcations of ethnic boundaries, and with them hierarchical assertions of an ethnosymbolic hierarchy . . . can produce uncanny doubles . . . [W]e might ask whether the disavowal or surmounting of the Other can produce uncanny doublings which, in turn, fuel overidentification with the ego ideal, or in Heidegger's words, 'ensnare' the subject" (2006, p. 2). The point is not to debunk the idea of musical traditions linked to ethnic heritage but to note that they emerge in dialogic or dialectical fashion—relationally—with what they are not. Music, the creation of a new sensory reality through processes of gift giving and exchange that ensounds bodies, is easily posited as the natural reflection of a stable self or community divorced from the relations that produced it. And it is precisely this notion, I suggest, that the music-humanities and music-sciences have tended to treat as what music just naturally is.

## Conclusion

In sum, I suggest that studying canonical SMB concepts such as the musical mind and the musician-nonmusician dichotomy requires understanding how decisions about and experiences of ensoundment occur through social conditions that produce (and are produced by) relations of relations—such as between differently construed (and differently valued) humans in a sociopolitical context and between social constructions

of musical labor that generate understandings of sonic labor in relation to other forms of labor. A science of music is a science of relations in which partible and distributed persons emerge in sounds that, while doubling reality and existing as “trapped agencies,” act to ensound bodies. To my ears, such studies must take seriously non-Western sciences of music, not through the guise of a medical anthropology or an anthropological “music therapy” where difference from science is presumed and kept separate, but as a core part of a global “history of science” approach to music. Ayurvedic medicine, of which Beravā sonic exchange with nonhuman beings is a component, is one example. The point is not to substantiate their particular beliefs about what music does or what a person is but to better recognize the global ubiquity of sonic exchange and the partible person that has been obscured by the influence of Western rationalism, the Western concept of the individual, and the Romantic notion of music as expressive of an interior, enclosed self, all of which have come to seem natural and universal through their embedding in the commodification of music in capitalism.

In turn, I ask my fellow ethnomusicologists whether we might allow scientific studies that explore topics such as music perception and the evolution of music from a variety of perspectives that provincialize European-derived conceptions of sound, music, the human, and social relations. Clearly, what we have long resisted is the presumption by some scientists that European-derived notions of music and the human have some sort of global ubiquity (or, to put it another way: we cringe when such perspectives are unwittingly adopted to shape research questions and methods, as though they are naturally what music *is*). But what if twenty-first-century scientists are different? If we are, on principle, against all scientific studies of music, we need to ask why. If the answer is the legacy of a racist past or the hegemony of European-derived perspectives, we need to support a science of music that moves past these problems. If the response has to do with the impossibility of finding universal perspectives on music, this book shows that many scientists are not concerned with universals at all (and it bears emphasizing that my goal is not to argue in favor of musical universals but to offer new ways to generate questions of broad significance by taking seriously the world’s many epistemologies). I have suggested that an array of underresearched vocabularies about music—pertaining to the distributed person, art-as-agency, sound-as-medium, and sound-as-gift—are historically and globally significant, even when (or perhaps *because*) they emerge through radical diversity. My hope is that recognizing and working with such concepts will generate new conversations about the perceived border between the scientific and humanistic studies of music.

## Notes

1. It is also important to recognize the lack of *physical* engagement between music departments and those who study music in the “hard” sciences, as we are typically housed in separate buildings. However, this border is crossed surprisingly frequently in fleeting public events at universities (often well publicized) that purport to bring together the sciences, arts, and humanities.
2. Bear in mind that this chapter is not a review of this literature, which would require a very long essay.
3. Tim Ingold describes anthropologists in terms that also fit ethnomusicologists: “Anthropologists do their thinking, talking and writing in and with the world . . . we do our philosophy out of doors” (2011, pp. 241–242). I suggest that ethnomusicology should be viewed as a broad domain of contrasting opinions in which critical thinking about music and sound has developed “out of doors” through dialogic, embodied, engaged encounters with communities.
4. It’s worth emphasizing to scientists that ethnomusicologists typically define their field by method rather than region—from this perspective, ethnomusicology involves conducting ethnography (fieldwork) and is not the study of non-Western musics (as it is characterized even at times in this volume). It is not by definition the study of “the music of the Other.” One could do an ethnomusicological study of scientists in a lab at a North American university conducting experiments on music, so long as the anthropologist stuck around long enough to do participant observation. This definition of ethnomusicology-as-ethnography has its own problems, of course. For example, since ethnomusicologists are often positioned as the people who study non-Western musics, the latter are still routinely accessed through ethnography in music scholarship rather than history, generating a presentist view of the past.
5. See also Sykes (2020a). I recognize Feld’s classic concept of “acoustemology,” and while I feel it is essential, it is far better publicized than the perspectives I draw on here. Readers should think of my argument as being in dialogue with acoustemology (e.g., Feld, 2015, 2017), not challenging or supplanting it.
6. There are two main reasons (among many) why I do not support the use of WEIRD for understanding music (in history and in the present day): first, Western classical music emerged mainly in non-English-speaking countries and today is performed by diverse peoples (such as East Asians); and second, certain countries assumed to export Western classical music, such as Britain in the nineteenth century, were not democratic.
7. In a much earlier article, Ingold advocates for an “alternative biology” that “comprehends the social life of persons as an aspect of organic life in general,” such that “an anthropology of persons” would be “encompassed within a biology of organisms whose focus is on processes rather than events, replacing the ‘population thinking’ of Darwinian evolutionary biology with a logic of relationships” (1990, p. 208). I don’t pretend to know where biology is regarding this subject matter since Ingold published this essay in 1990.
8. Ana Maria Ochoa Gautier (2016) has criticized ecomusicology for reproducing the nature-culture distinction through studies that demarcate nature sounds and soundscapes as set apart from the human and culture.

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