In Gamelan You Have to Become One “Feeling”: Sensory Embodiment and Transfer of Musical Knowledge

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Abstract: The processes through which music can be learned are not only dependent upon the music itself, but are also shaped by multiple variables including the musical expert, the learner’s prior experiences, and the familiarity of both with the instruments. All of these act simultaneously as a package through which musical knowledge is acquired. Within the musical setting of an ensemble, in order to make sense of the sound and learn how to execute their part of the music correctly, students must understand exactly what the expert or teacher wants them to know and do. By examining the gamelan gong kebyar ensemble at the Eastman School of Music, Gamelan Lila Muni, and interviewing its Balinese instructor, Pak Nyoman Suadin, this paper will discuss the process through which learning music occurs by questioning: (1) how the learning of ‘bits’ of musical information occurs among new adult learners in the group who have extensive backgrounds in Western musical training, (2) what learning modes are used in this process, and (3) how they accommodate themselves to the new modes of learning needed for approaching gamelan music? Since there does not exist a universal formula for learning music, the acquisition of musical knowledge can be seen as a process of constant, in-real-time process involving both cognitive and sensory abilities.

I thought I knew a lot about music, but I did not know the first thing about Balinese gamelan music. So, like any new graduate student in ethnomusicology, it was the first course in which I enrolled. I was so excited to learn a new music—that was, until the second rehearsal. That first Saturday afternoon, we all went to meet the instruments and learn the basics: “Take off your shoes, walk around the instruments, hold the hammer this way, and stop the sound with your other hand.” But, then came Nyoman. At our second rehearsal, our Balinese instructor Pak Nyoman Suadin was there, demonstrating the most beautiful sounds, which we were to replicate. I held my breath, I watched his panggul (hammer), and when it was our turn to play we made a cacophonous, aural mess. Not only were these sounds new, but even to a bunch of highly trained music students this system made no sense.

Our ugal player (and wonderful teaching assistant) made a video of Nyoman playing each part, and posted it online. I went home, watched it for an hour or so, and transcribed it into a combination of Western notation and invented symbolic notation. Then I practiced. I went back the next Saturday hoping for the best, but Nyoman kept staring at me. His eyebrows were telling me in a not so subtle way that what I had played was not quite what he had in mind. I gave up on my “transcribe and practice” method, and decided to just watch. I tried very hard to do exactly what Nyoman was doing. If he sang, I tried to sing. If he moved, I moved that way. I still did not play any better, at first, but somehow the system started to make sense to my ears. I was hearing better, but I had never learned music in this way before.

What is Nyoman doing? This is not the way I have ever seen music teaching attempted. How is he going about transferring the musical knowledge to us, and what is his role as the transmitter within the setting of the Eastman School of Music’s gamelan ensemble?

In order to answer these questions, this paper will illustrate the multi-sensory process of transmitting musical knowledge in the gamelan ensemble rehearsals at Eastman, examine some concepts concerning sensory and non-language based instruction, and discuss how learning gamelan is a result of the process of “feeling,” in order to see how the term “feeling” can be seen as a synthesis of all these sensory learning modes.

Theoretical Underpinnings

World music ensembles at Western universities have been the sites of musical learning for more than sixty years. Such groups, whether viewed as performance ensembles, study groups, or “experience ensembles,” are often led by visiting artists, who represent the cultural tradition of the music being taught, presenting an example of the “teacher as text” (Marcus and Solís 2004:3), and providing a site in which the process of transmission of musical knowledge can be examined, divorced from the cultural norms which pervade Western, language-centered pedagogy. Privileging demonstration and repetition over questions and explanations (Trimillos 2004:36; Harnish et

al. 2004:61), such ensembles become a social space in which the expert, or teacher, uses primarily kinetic and aural modes to transmit musical knowledge to the learners (Trimillos 2004:39). In this way, teachers are guiding through demonstration, and a student gradually “absorbs” the music, until it becomes “part” of the learner (Harnish 2004:127). But, the actions and intentions of the teacher or expert are also sensorially reinforced by the space, physical artifacts, and social experiences of the ensemble setting in which the music is taught.

In order to make sense of the sound and learn how to execute their parts of the music correctly, students in an ensemble must understand exactly what the expert or teacher wants them to know and do. Sensory knowledge and perception in such scenarios enable students to not only listen to and interpret direct instructions, but more often to hear and see what the transmitter is doing, and then to mimic these sounds and movements with their own bodies. As such, not only sound, but also touch and the kinesthetic mode of learning play a pivotal role in the transfer of musical knowledge. Let us consider the *Gamelan Lila Muni* Balinese gamelan ensemble at Eastman in order to illustrate these concepts, keeping in mind the question of what Pak Nyoman Suadin, the instructor, is doing to transfer musical knowledge in the group’s rehearsals.

Visual

First, let us consider the visual sense, which is important in the gamelan ensemble. We watch the instructor’s gestures, and we watch his *panguul* (hammer or mallet) as it taps out the contour we are to play. We also watch one another, and try to “hammer together.” And, above all of this, Nyoman is watching us. As he stated in our interview on December 14, 2012: “Eye contact is helpful when you forget. Everyone forgets sometimes, and you have to look up and not just stare at the bars all the time. You should be looking at someone all the time.” Learning to read the teacher as a text who embodies the musical knowledge is one way in which gamelan students can receive musical knowledge from the transmitter, the one who knows and can “do.”

But students in Western universities like Eastman are used to looking at written musical notation; would that not make the transmission of knowledge easier, just to write it down? Visually notated parts are not a part of the gamelan tradition, and while the use of notation (Western, cypher, or invented) can seem to speed up learning at first, it can also later serve as a hurdle to musical fluency. Nyoman says that he *did* use notation in Bali (learned when he was a student at KOKAR, the national school for the arts), but he used it only for himself as the instructor, not for each player. At Eastman, he sometimes writes out a few parts “just to help people remember,” but he is opposed to using notation in performance.

Auditory

So, then, we must next consider the role of the auditory senses as a tool in the instructors’ bag for transmitting musical knowledge. This is music, after all, and it could be reasonably assumed that the auditory sense would be primary in its learning. But, the sounds and aural structure of gamelan music are not part of American students’ *a priori* knowledge, so for the teacher to transmit musical knowledge aurally takes more time here than it might in Bali, simply because learners there have heard this music in their daily lives, since birth. As Nyoman put it, the music is already “in their head, the system, and they just have to learn the song.” However, he stated, “At Eastman . . . it takes time. Remembering the basics about the tune and the bars [meaning the bronze bars on the instruments] comes eventually.” He believes that students at Eastman have a “good ear,” noting that *Lenker* (which the ensemble is playing this year) is a classic, and everyone knows it in Bali,” but the students at Eastman “get it” eventually not because it is easy, but “because Eastman’s group has more time.” Thus, he implies that aural transmission relies on repetition and, absent the ability to hear a piece over and over through exposure to it growing up in the culture which generated the music, the music can still be translated aurally, but will simply require more time and repetitions to become embodied.

Tactile

The gamelan instruments themselves—as artifacts of musical culture which entice not only the visual and auditory, but also the tactile senses—provide yet another medium for transmitting musical knowledge. And, just as Indonesians profess that *guru panggul*, the “hammer is the teacher,” the tactile stimulation of the instruments themselves, most importantly the *panggul*, and the cool, hard texture of the bronze bars as the fingers dampen them, cause the instruments of the gamelan to become teachers themselves. Each instrument is tuned differently

in relationship to its paired partner (the instruments exist in male-female pairs, with the female tuned slightly lower than its counterpart), creating *ombaks*, or waves of sound in the ensemble. This also means that each song learned and sung while sitting at a particular instrument teaches or transmits musical knowledge in a certain way. That piece of music will seem different if and when the player changes instruments, because the instrument itself becomes a transmitter of musical knowledge. Even more significantly, as the player holds the *panggul*, and the instructor plays the contour of the melody, either on his own instrument, or on the learner’s instrument while sitting face-to-face with them, the vibrations, the feel of the *panggul* in the hand, and the pressure created by playing loudly or softly in order to imitate the teacher, all become modes of transmission, or tactile learning. In fact, the vibrations of the *gamelan gong kebyar* instruments at Eastman can be felt in the body by the player, providing tactile information so that even one who cannot hear can feel the sound. Through the tactile senses, we not only perceive the objects around us, but also our environment, and our own bodies, including the pressure our muscles exert in the playing of the gamelan instruments.

Combining the Senses: Embodying

Now that we have seen some of what Nyoman is doing—that is, how he is transferring musical knowledge to the students in Eastman’s gamelan using a variety of sensory learning modes—I will now further examine the connection from the cognitive to the physical body, which Nyoman further explained by saying “if you have it in your head, your hands are automatic.” While sometimes he believes students here are still counting (thinking) by the concert, Nyoman himself is singing “in his head” (feeling the music) at the concert. He admonishes that by singing “your body is helping you.” He included in our interview some unsolicited personal pointers on my own playing in gamelan rehearsals, chastising me: “Once you get it you get it, but don’t think too much,” showing that to achieve transmission of this musical knowledge, the expert teacher perceives that somehow the brain has to get out of the way, and give in to the body. Nyoman says that at the first rehearsal, he can tell from starting with the first *gilak* (cycling), “who is counting and who is feeling.” This is what Nyoman spoke about the most during our interview, that he wanted his students to “feel” the music. But what does Nyoman mean by “feeling,” and what is the relationship of this term to his role as the transmitter of musical knowledge?

Discussion

The teacher’s role in transmission (and reception) of musical knowledge as embodied through the visual, aural, and tactile senses has been traditionally overshadowed by the inherited primacy of Western educational practices centered in the explicit dialogue of questions and answers. However, because language has limits, Mantle Hood saw the *making* of music to function in a university setting by adding the “music knowledge of music” to the “speech knowledge of music” (qtd. in Trimillos 2004:24). Charles Seeger asserted an even stronger argument against what he called “armchair study,” by placing learning and teaching through performance on par with (or preferable to) the “logocentric processes of conceptualization, reflection, and analysis” (qtd. in Trimillos 2004:24). But, the Western bias to use “nontraditional reflexive explanation which is conceptual rather than experiential” as a delivery medium for knowledge cannot always (or often) cross-culturally facilitate the transfer of musical knowledge and skills (Trimillos 2004:40-41), as it does not provide a complete package for the musical information being transmitted (Marcus and Solís 2004:162).

Teaching music through action involves transmitting knowledge of the music as a package of “details . . . including gestures and visual clues that would be lost on most observers” (Averill 2004: 96). As Tomie Hahn states, “transmission” is “executed via a variety of sensory modes” (Hahn 2007:78).

The roles of sensory learning and transmission in embodied knowledge form part of the learning process in other artistic disciplines, such as in the mastery of traditional, cultural, artisan craftworks. Such learning, which occurs through “sensory-somatic engagement” with material artifacts, is encouraged by teachers in many cultural artistic practices (Portisch 2010:S76). For example, among Slovak lace-makers, learning by novices depends on their ability to “commit a sequence of movements to bodily memory,” and, just as often occurs in musical instruction, Nicolette Mackovicky found that among lace-makers, master teachers “often find it challenging to adequately verbalize instructions to their novices” (2010:S87). The “flow of human movement” as described by Trevor Marchand in terms of teaching wood-working, “can be broken down into component actions, gestures, and postures that unfold dynamically in space and time.” In this way, the physical actions and practices of the teacher can be “parsed” through the observation of the learners, and “acquired as mental representations by his or her motor domains of cognition” (2010:S100).

Therefore, in order to transfer knowledge in gamelan rehearsals, expert teachers represent through actions that which becomes embodied by learners as a result of imitation and repetition. So visually, students watch the gamelan instructor’s gestures over and over and his *panguul* moving up and down as it hammers out the correct contour to play. Meanwhile, the auditory mode of learning allows students in the gamelan rehearsal to generatively gain additional pieces of the melodic line as they hear a piece over and over correctly played by the instructor or ugal player. Furthermore, the waves of sound as students’ fingers dampen the bronze *kantilan* bars, and the tactile feedback of the *panggul* serve as consistent sensory reinforcement of correct dynamic and melodic execution for each learner. However, in terms of transmitting musical knowledge in the gamelan ensemble, movement is perhaps the most valuable mode of learning (Hahn 2007:100).

Physical movement is affected by different materials and tools used during the learning process. In the case of gamelan, this makes the *pangguls* (hammers) of both of the teacher and the student instructive, through their effect on the body’s movement. This “guidance through kinesthetic memory” (Solís 2004:15), becomes acutely present when musical knowledge is transmitted to those who have no frame of cultural reference, and for whom these “physical movements are not the ones [they] grew up with” (Slobin in Sumarsam 2004:74). In gamelan rehearsals at Eastman, if the correct repetition of the instructor’s motion is not accomplished after one imitation, Nyoman repeats the motion. If the student still does not replicate the exact motion (resulting in the proper sound) then either another modeling occurs, or a rebuke is uttered (“too loud”), or most often a disapproving gaze is cast the student’s way. In any case, the motion is deemed acceptable when the music moves on. As Nyoman stated it, “If students don’t want me to stop, they should play it right.”

It is not only important to the transmission of musical knowledge that the teacher (and the students) move, but, on a detailed level, the speed, direction, and exact motion (Hahn 2007: 101) which is moved by the teacher must be matched by the student. These repetitive movements create a sense of time and cycle, enhanced by “the interaction of repeating and contrasting parts” (Wade 2004:74), which seems to be central to attaining the ‘feeling’ which is the instructive goal in the process of transmitting musical knowledge.

“Feeling” is spoken of by Nyoman in terms of cultural knowledge transmission, and he alternately uses it in terms of timing, overall structure, group togetherness, and even dynamic fluctuation within gamelan music. He noted, “If you cannot play both loud and quiet, it is not good, because that is not the ‘feeling’ of Balinese music,” eventually the whole group needs to “feel” the “same song,” and “twenty five of you have to become one *feeling*: play together.” In this light, it is through all of the senses that transmission of musical knowledge occurs. Perhaps the word “feeling” is also being used to express the synthesis of these sensorial modes of learning which defy lingual description. This concept of musical “feeling” cannot be simplified into any word or words, including motion, kinesthesia, or movement. However, it is closely tied to the idea of embodying the sensory knowledge of the music, or when (what the Balinese call *masuk*) the music enters you.

Conclusion

In conclusion—if music is more than “organized sound,” in order for Nyoman to transfer the musical knowledge of Balinese gamelan—it is imperative to find multiple ways to show how the sounds are organized and the process through which music is felt. What Nyoman is doing is transferring his musical knowledge to us, the Eastman students in *Gamelan Lila Muni*, by transmitting the “feeling” of the music which he embodies by employing a synthesis of many sensory learning modes. This is the reason that Nyoman puts so much emphasis on “feeling,” because it evokes not only the senses and sensory modes of learning, but ties in to culturally based understandings of how teaching and learning occur. Therefore, when musical knowledge is being transmitted and received through physical movement, the eye, the ear, and the hands simultaneously, the idea of “feeling” the music helps to negotiate and bridge the cross-cultural gap concerning how to think about and create music.

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