

Journal of Research in Music Education

<http://jrm.sagepub.com>

The Sonic Surrounds of an Elementary School

Chee-Hoo Lum and Patricia Shehan Campbell

Journal of Research in Music Education 2007; 55; 31

DOI: 10.1177/002242940705500104

The online version of this article can be found at:

<http://jrm.sagepub.com/cgi/content/abstract/55/1/31>

Published by:



<http://www.sagepublications.com>

On behalf of:



[MENC: The National Association for Music Education](http://www.menc.org)

Additional services and information for *Journal of Research in Music Education* can be found at:

Email Alerts: <http://jrm.sagepub.com/cgi/alerts>

Subscriptions: <http://jrm.sagepub.com/subscriptions>

Reprints: <http://www.sagepub.com/journalsReprints.nav>

Permissions: <http://www.sagepub.com/journalsPermissions.nav>

Citations <http://jrm.sagepub.com/cgi/content/refs/55/1/31>

In this ethnographic study, we examined the musicking behaviors of schoolchildren at one American elementary school. The aim was to gain an understanding of the nature and context of rhythmic and melodic expressions made and heard by children, emanating from other children, as well as adults within the school environment. Time, place, and function figured as contextual considerations in the investigation of the sonic surrounds of the school; knowing when, where, and why the music occurred added meaningful dimensions to the description of children's soundscapes. The open-ended sociability of music and its pervasiveness at play and in learning were reminders of music's role in serving human functions, finding its way into private spaces, and webbing within social interactions. Also intriguing were the variety of forms of children's expressions, ranging from rhythmic play and melodic utterances to familiar songs and their parodies, and the way teachers used music for social signaling and facilitating learning.

Chee-Hoo Lum, *National Institute of Education / Nanyang Technological University (Singapore)*

Patricia Shehan Campbell, *University of Washington*

The Sonic Surrounds of an Elementary School

Far beyond the four walls of a music classroom, the sonic surrounds of an elementary school encompass the musical expressions of children and the adults who work with them. These surrounds are as much rooted in social meaning and human relationships as they are in sonorous patterns, and music within the school can be viewed less as an object frozen in time and more as an unfolding expressive process. Children's chants, songs, and recurring rhythmic behaviors have been documented in a variety of locations where children gather, with particular attention to children's interactions on playgrounds and in after-school clubs (Campbell, 1998; Harwood, 1987; Marsh, 1995). As children engage in mindful learning and as their teachers

Chee-Hoo Lum is an assistant professor in the Music Unit of the Visual and Performing Arts Academic Group of the National Institute of Education / Nanyang Technological University, 1 Nanyang Walk, Singapore, 637615; e-mail: cheehoo.lum@nie.edu.sg. Patricia Shehan Campbell is the Donald E. Peterson Professor of Music in the School of Music, University of Washington, Box 34350, Seattle, WA 98195; e-mail: pcamp@u.washington.edu. Copyright © 2007 by MENC: The National Association for Music Education.

direct and facilitate this learning, music is made manifest—both as sonic expressions that are intended by them as music and as those that are human-made, with their regulated rhythm and/or placed pitch, but that may not necessarily be intended as music. Musically intended or not, children sing, chant, and move rhythmically at play in social interactions and collaborative learning projects with other children as well as in individual tasks set for them at school by their teachers. These actions are also part of the musical expressions of teachers and other adults with whom children interact during the school day.

A thorough knowledge of the nature and extent of children's natural musical behaviors, including their melodic and rhythmic-motor experiences, is useful in the design of relevant and meaningful curriculum in elementary schools. Spontaneous melodic motifs of children and teachers, the rhythm of their verbal interactions, the musical utterances of their play, and the rhythmic motor behaviors emitted all combine to create the wide range of sound experiences that are part of the world of school. Described by Appadurai (1990) and later by Shelemay (2001), there are soundscapes¹ that envelop people in their daily lives at home and in their various work and recreational contexts. Children's soundscapes should differ considerably from those of adults, just as school soundscapes can be distinguished from those of home, and one school's soundscape may not match another's. The core character of a school consists of both what it visually appears to be and what it sounds like. Thus, knowing the school and the children within the school may in no small measure be based on careful examination of its sonic fabric, this soundscape that is the result of the musical behaviors of children and teachers.

A variety of forms of musical and other sonic expression emerge in elementary school settings to suit individual children and the activities in which they are involved (Kubik, 1997). Some of the musical forms may be closed, as in the case of bona fide chants, songs, and singing games, while other expressions may be open-ended phrases, patterns, pulses, syncopations, and pitch-differentiated motifs. The sounds of children in individual assignments within their classrooms will vary from those made in collaborative projects in the hallways or that occur during their playground activities. Knowledge of the sonic expressions that children make, as well as contemplation of the social nature of these expressions, may lend itself well to the design of educational experiences that build on the known and bridge the gap to children's future musical understandings. Careful attention to the soundscape of a school's surroundings can reveal the repertoire of children, their preferred activities, and their meaning-making of music.

Musicking may be alive and very well within a school's interior as well as outdoors on the playground. Described by Christopher Small (1998), musicking is participation in a music-making activity in any capacity, for example, by performing, listening, practicing, composing, or dancing. Small clarified that "to musik is not concerned with

valuation. ... It covers all participation ... whether it takes place actively or passively, whether we like the way it happens or whether we do not" (p. 9). By extension, children and adults may be said to be musicking in various physical and social settings when a melodic or rhythmic expression of any sort takes place through the medium of sound. The meaning of the sonic expression—the music—is assigned by the nature of the event and the human behaviors that contribute to it and flow from it. The value of musicking is as much or more in the social process of making music happen as in the ultimate sound itself.

The vocalizations of children, teachers, and other staff contribute to children's musical socialization, which is described by Alan P. Merriam as "the process of social learning" in and through music (1964, p. 146). How children grow up within their culture often depends on what adults intend for them to learn, including not only explicit skills and knowledge but also what is acquired through modeling and verbally delivered ideas enfolded in the lore of song, chant, rhythmic play, and stories. Songs and rhythmic speech chants (with or without melodic content) form the fabric of children's play environment, as do the rhythmic sounds of their body percussion (including claps, pats, and stamps) and the timbres, tunings, and timing of their sound-making objects. Musical play, and play that is musically involved, are aligned with social relationships, and it is the social action and interaction that often colors the sound. There are songs by children, sometimes referred to as "traditional children's songs," as well as songs for children, including adult-perpetuated genres for entertainment, holiday celebrations, worship, and the communication of moral lessons and valued stories (Campbell 1991). The array of sonic possibilities within a school setting, particularly those with melodic and/or rhythmic features, offers children occasions for social acquisition of music that is culturally determined by the school community.

We examined the musicking behaviors as they are evident within the context of primary school children at one elementary school. An assumption of our investigation was that study of the sonic surrounds of an elementary school would be useful for giving focus to the musicking that occurs in the everyday life of children and their teachers in the niches, nooks, and crannies of schools. Our aim was to gain an understanding of the nature and context of rhythmic and melodic expressions made by children, and heard by children, too, as emanating from other children as well as adults within the school environment. We were interested in music as action and music as object (Small, 1998, p. 8), and in the meaning given to music by those who make it. Time, place, and function figured as contextual considerations in the investigation of the sonic surrounds of the school, such that knowing when, where, and why the music occurred, added meaningful dimensions to the description of children's soundscapes. Questions of the rhythmic and melodic components of the music made and heard by young schoolchildren shaped the course of a procedure that entailed selection, analysis and interpretation.

METHOD AND CONTEXT

To carefully gauge the musical fabric and various other sonic features of a constant setting in which children work and play, a single elementary school was selected as the site for fieldwork over a period of 6 months. Two observers, both music educators with long and varied experiences in elementary school teaching and supervising music teachers and student-teachers in elementary school settings, developed separate schedules of observations in a variety of postings throughout the school grounds, on various days of the week, and at assorted times of the day. As part of the agreement of the human subjects process of the sponsoring university, as well as a promise to the school's principal, the observations were intended to be unobtrusive and to avoid disruption to the flow of purposeful school activity. The fieldwork period of 6 months was deemed suitable to the project, as we began to draw information near the close of the project that was similar to earlier observations so that a point of data saturation seems to have occurred by that time. Themes were selected based on relevance to the purpose of the study. Illustrations were chosen as the best or most representative of the circumstances and situations that the researchers could succinctly describe.

The school, called by its pseudonym the Sam Johnson School, is one of 54 elementary schools in a large city on the West Coast of the United States. It is located in a residential sector but within easy reach of the city's major thoroughfare, and within a few blocks of a long streetside strip of shops and restaurants. At the 85th anniversary of the school building's erection, a sweeping renovation of it brought a fresh, contemporary, and clean look, while its brick and stone foundation was preserved. State-of-the-art technology, including personal computers, educational software, and cable TV, has shifted the school into the 21st century, while its architectural character was retained as part of a community that traces its history to the early 1920s.

With building renovation came the development of a new school curricular focus, where children as young as kindergarten age could learn Spanish or Japanese alongside English as well as develop cultural understanding and critical thinking. The school's vision is focused on the creation of a culturally diverse community of learners who demonstrate strong skills in communication, international languages, and the use of technology. As an urban school, it draws from a diverse local neighborhood but also allows children to be bused in from other parts of the city. The ethnic breakdown of the school is 41% White, 30% Latino, 21% Asian and Pacific Islander, 7% African-American, and 1% Native American. Regardless of their backgrounds, however, children see two primary teachers every day: their Spanish or Japanese language immersion teacher for study of math, science, and the language itself, and the second teacher who teaches language arts and social studies in English. Children are given instruction in music, physical education, and social skills by English-

speaking teachers. While various implications could be drawn about the music that comes from such a curricular vision and design, it will become apparent that the focus of this examination is given over to many of the musical activities that are disconnected from the actual content of the curriculum itself and are more greatly related to the typical activities that fill the school days of children in many locales.

For purposes of developing a thick description of the school community's sonic surrounds, an ethnographic approach was deemed appropriate. Research with young children demands careful attention focused on children's needs and their active interplay with each other, on adults who tend to them or guide them in their activity, and even on the objects to which they have access. This research is of the nature of a "locally grounded perspective" on the experiences of particular children (Graue & Walsh, 1998). The constant goal was to seek naturally occurring events in the life of the school as evidenced in children's (and several teachers') behaviors, and to seek the meaning of those events to the people involved (Bogdan & Biklen, 1998).

Fieldwork consisted of onsite observations of primary-level children in Grades 1–3, indoors and outside, in classroom settings, in the hallways, and on the playground. Observations were ongoing from September to April, when the investigators spent as little as an hour up to as much as a full morning or afternoon one or more days each week on the school premises to observe, take fieldnotes, and, when appropriate, audio-record children at work and play. Within a given field visit, observations were typically made in multiple locations so that as one activity formally ended or was informally dissolved by the children, the roving investigator then moved to another location where a new interaction might be studied. Only once were the investigators at the school site at the same time, and then in different locations, so that a broader sweep of the school's soundscape could be known. In all, 72 hours of observation time was clocked at a combined average of 3 hours per week, and 64 pages of fieldnotes were produced. We met frequently to discuss the project and to discern flawed or uncertain impressions we may have had that would require further focus by one of us while at the school.

In multiple return trips to the site, we engaged in a member-checking process in order to monitor our "outsider" perceptions, through interactions with children on the sources of songs and rhythms, the associated games and movements, and their meanings, uses, and functions. After on-site observations, fieldnotes were examined, organized, written up in expanded form, and fitted into preliminary categories of form and function. From these write-ups came the ethnographic unfolding of the report that follows, a reduction of the more expanded fieldwork files (Emerson, Fretz, & Shaw, 1995).

Rhythmic Play

Almost anywhere within sight of Sam Johnson School, children's activities could be decipherable as rhythmic in content. In fact, sight

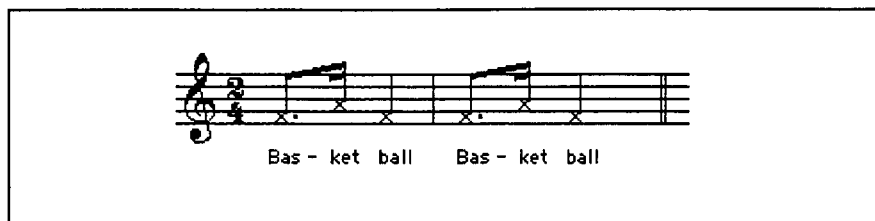


Figure 1.

and sound were often blended into a music-and-movement genre we refer to as “rhythmic play,” an activity of regular rhythmic movement frequently (but not always) accompanied by vocalization in the form of speech-inflected chant. This rhythmic play was apparent in numerous settings: three girls at a second-grade worktable bouncing in their seats as they pasted and cut construction paper, one boy tapping his newly sharpened pencil on his desk, a young girl patting out rhythms on her girlfriend’s back as they stood in line for water—both of them chanting the words to a Spanish-language poem—and two very small boys dragging a lost-and-found bucket of sweaters and jackets down the hall while baby-stepping to a steady pulse and murmuring “hea-vy, hea-vy” together in unison.

One common demonstration of rhythmic play was the manner in which groups of boys or girls (typically in same-gender play groups) counted numbers loudly in unison on the playground. They tended to enthusiastically shout out the numbers in increasing or decreasing order, always to a steady beat that gradually accelerated in speed. As they shouted, the children would flap their arms, pound fists in the palms of their hands, or hop in place. This rhythmic play functioned in a number of ways: to encourage friends to look forward to their “turn” while they waited in line for their opportunity to play tetherball, to follow their friends skipping across numbered blocks painted on the pavement, or to indicate to children the number of approximate “seconds” they had to run to hiding places during a game of hide-and-seek.

It was common to hear children chanting not only numbers but also words, sometimes with others but also to themselves, as they skipped, twirled, turned, leaped, and shuffled across large spaces on the playground or in gym. An incident of a young boy alone on the basketball court during recess was a fascinating rhythmic play of his imagination. As he conscientiously dribbled the ball in the direction of the hoop, he would chant a three-syllable phrase to the pulse of the dribbling ball (Figure 1). The downbeats, “Bas-” and “ball,” coincided with the boy’s knee-bends and the ball hitting the ground, providing him with a steady bounce and movement towards the hoop. As he moved closer, the intensity of his chant grew louder, culminating in his release of the ball overhead and up to the hoop, accompanied by the climactic cry, “And it’s a goal!” This sequence was repeated until the recess bell rang. The act of chanting to a steady beat seemed

to keep the little basketball player and many other children like him coordinated in their movements as they dribbled a ball, skipped rope, jumped from one point to another, or hopped in place in anticipation of their own involvement in a group game.

Rhythmic play appears to be vital to organized games as well as to free play, classroom work, and even "waiting activities." The larger the spaces, particularly in the outdoors, the larger the movements and the louder the chanting. Teachers and playground monitors seemed to be tolerant, accepting, and even encouraging of rhythmic play as part and parcel of who the children are. Bjørkvold (1992) described children's penchant for combining rhythmic movement and vocalization as "sikia: everything together in one unified whole, without division, where thought is physical perception and body is simultaneously mind" (p. 119). He further noted that through this sikia phenomenon, children develop a sensitivity of their physical selves and their relationships with others (p. 119). Harwood (1987) and Riddell (1990) emphasized the union of singing and moving in children's play behaviors, too, as nearly inseparable. At Sam Johnson School, rhythmic movement and its vocalizations seemed continuous.

Melodic Musical Utterances

Active children were frequently engaged at Sam Johnson School in spontaneous vocalizations that were characterized by their melodic content. Campbell (1998) defined the fleeting songs, chants, and melodic segments of children's musical play as "musical utterances," while Swanwick (1988) described these utterances as "compositions in progress." We differentiate "melodic musical utterances" from rhythmic play by the extent of pitch content in these expressions, which move past the speech inflections of rhythmic play to the presence of sustained, sung pitches that run the gamut from very few notes to a full diatonic spread of pitches. Rhythmic movement may be present in these melodic musical utterances, but is less of a defining point than it is in rhythmic play. The accent in melodic musical utterances is decidedly on pitch content and its development.

In the classroom, instances of individual children engaging in melodic musical utterances were plentiful. When children were playing solitary, or in duos, trios, and small groups, they sang. Whether during teacher-designated free time, in group projects, during transition periods between projects, or when they finished an individual writing task earlier than others, they melodically meandered across pitches, sometimes using words and other times on neutral syllables. These utterances seemed to be either spontaneously created from some internalized spark or were joined with the melodies children were hearing from other children. They were as basic as name-calling on the descending minor third (*sol-mi*), sometimes expanded to three pitches in the range of a fourth (*la-sol-mi*). In one first-grade classroom, a boy was singing the name of his friend "Ja-son" in a descending minor third as he pointed index fingers to him. Two girls

sat opposite each other on the floor, stretched to the middle, touching shoes to one another, singing a *sol-mi* pattern for no particular reason to the syllables “whee-oh” (Figure 2).

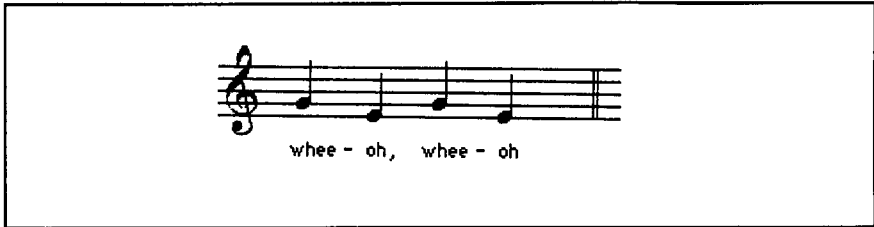


Figure 2.

One boy declared his math team the winners of an addition contest by singing *sol-mi* pitches back and forth to a syncopated rhythm, “Uh-huh, we did it, uh-huh, we did it” (Figure 3).

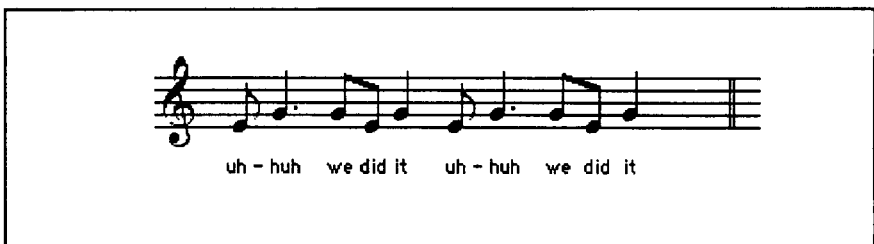


Figure 3.

In a group art project that featured four children intent on pasting yarn and buttons to a large felt mat, they passed around a spontaneously invented story about a boy and two dragons. Each child threw in an event, singing it in a recitative-like quality that used up to six pitches (*do-re-mi-fa-sol-la*), each idea spinning out from the next with immediacy.

Melodic musical utterances were used by children to heighten play activity. As several first-grade boys were intent at building forts and castles with their building blocks, they hummed or sang various segments from Beethoven’s 5th Symphony and the theme from Star Wars using “dees,” “loos,” “bahs,” and “nees.” The sound effects of machine guns, airplanes, and bombs were also common utterances among the boys as they engaged in combat play with their imaginary army, much of it on explosive syllables like “b” and “p,” and mixed between rhythm-only and melodic content. These utterances became a crucial part of the play, heightening the sense of excitement much

Children picked up tunes, texts, and rhythms from each other. As they played, or worked on a task, or even daydreamed in melody, some of the pitch and rhythm content of their melodies was similar. The small groups functioned as distinct social situations in which one group might delineate its own melodic framework and could be distinguished from the next group in this way. Still, within the classroom, there was a musical culture in which both solitary and group utterances were melodically linked. As Mans (2002) noted, "group play has an energy and life of its own" that, if controlled by outside forces (such as the teacher, or a constant outpouring of mediated music from a teacher's selected recording), "may be eroded by too much control" (p. 82). In numerous circumstances, we observed children interacting without the teacher's interference; they shaped each other's manner of discourse, including the spontaneous melodies that resulted.

In the case of one child at Sam Johnson School, the use of melodic musical utterances as an escape mechanism was noted. A 7-year-old boy was ostracized by his classmates, which appeared to propel him into his own little world. As he played by himself, and even as he watched others play, he sang spontaneously to himself. The boy sang melodies of his own, and songs from Broadway shows, in a clear and bright voice. The songs were not familiar to the other children, and perhaps purposefully this boy had selected these songs or created his own to continue his separation from the group. While music is essentially a social activity (Blacking, 1988), the classroom teacher confirmed to us that the boy may have used music to cushion his sense of social isolation and rejection. His utterances and choice of musically unfamiliar repertoire may have been his means of rebellion, as well as his way of raising a veil of protection for himself from the rejection he felt.

The children at Sam Johnson School sang their melodic musical utterances out loud and often in phrases that were sometimes brief and other times longer and progressive in form. Seldom did the melodies fall into binary or ternary form, or even into four-bar phrases. They tended at times to resemble exaggerated speech and *Sprechstimme* (speech-like song), and when children went merrily into pentatonic or even diatonic pitch content, these utterances were still running 9 beats here, 10 beats there, often the length of singing on a single breath. Melodic musical utterances were also occasionally a pastiche of the invented and the familiar (a phrase or two from seasonal songs such as Christmas carols, commercial jingles, or video soundtracks), and children could be heard mixing fixed song phrases with new melodic segments, or dissolving known phrases into a musical doodling (Kartomi, 1991) of their own extension. The children sang what they felt, what they consciously knew, and what they subconsciously internalized from longstanding experiences. Much of what the children uttered depended on cultural factors, which included the prominence of certain mediated popular songs in children's experience (Blacking, 1988).

Creations and Re-Creations of Familiar Songs

Singing full-voice songs was a constant behavior of children at Sam Johnson School, where children seemed to easily select those songs that, for them, had staying power. Even in kindergarten, they knew words and melodies to many songs, and their in-tune singing accuracy became more accurate with age (Welch, 1994). They seemed to enjoy songs they learned from teachers, parents, friends, and through the media. At Sam Johnson School, children were heard singing intact and from start-to-finish the following songs: "London Bridge" (two verses), "Teddy Bear" (two verses), "Santa Claus Is Comin' to Town" (one verse), "Zum Gali Gali" (one verse), "I've Been Working on the Railroad," "Oats, Peas, Beans" (one verse), and "A-Hunting We Will Go" (one verse).

Three second-grade girls sang several rounds of the chorus of "Mbube" ("Wimoweh" or "The Lion Sleeps Tonight"), following it together with the first verse, while high-stepping across the playground. A group of five first-grade girls hand-clapped to verses half-sung and half-spoken: "Down down baby, down by the roller coaster," "My Mama had a baby and named him Tiny Tim," and "Miss Sue from Alabama." As they threw a volleyball back and forth to one another, two first-grade boys repeatedly sang a four-tone melody to "We Will Rock You," a song by the 1970s rock group Queen that has become a standard song in the playground repertoire (Campbell, 1998). While the playground was the preferred place for song-singing, some of these songs were sung in part or in full in classrooms, hallways, and cafeterias, too.

One incident stood out as a tender and endearing moment that featured a child's newly found song, and her joy in singing it. During outdoor recess one Friday afternoon in February, a small girl from the kindergarten class tapped one of the investigators on his shoulder. As he turned to her, she smiled at him and immediately started to sing the opening two phrases of the song "We Wish You a Merry Christmas." The singing was in-tune and in time, and the significance of the event is that the girl, recently arrived with her family from Somalia, could not speak English. She had chosen instead to communicate through the English-language song she knew, and the message was clear: The song was a bridge for forging a friendship, and she beamed with pride in showing with her song that she was on the brink of learning his language. The song seemed to function as an invitation to a musical conversation.

The use by children of parody as a technique to re-create and personalize familiar songs is documented by Campbell (1998), Marsh (1995), and Minks (1999). The parodies of children at Sam Johnson School consisted largely of intact melodies where the original texts were replaced with a humorous, clever, or more relevant text. The text changes were as minimal as one word per phrase, or as much as whole sentences that had been revised. An unplanned occasion for tracing a parody's source and change came with the request by a first-grade classroom teacher to one investigator to teach a song. The chil-

dren commenced to learn orally the traditional children's song, "Charlie Over the Ocean." Like other songs taught in the oral tradition, this one was retained and recalled 2 weeks later by a boy who ran excitedly up to the investigator to share with him the intact melody and his own newly inserted words (Figure 4). The boy laughed hard as he finished singing. His classroom teacher walked by at that moment, and he began to sing the song to her all over again. The boy was obviously deeply amused at the funny words he had created for the song. From his antics, it appeared that the words were intended to poke fun at his teacher (who, despite the fact that she was not named "Charlie," had somehow taken on this persona in the course of the boy's performance of the parody in her presence).

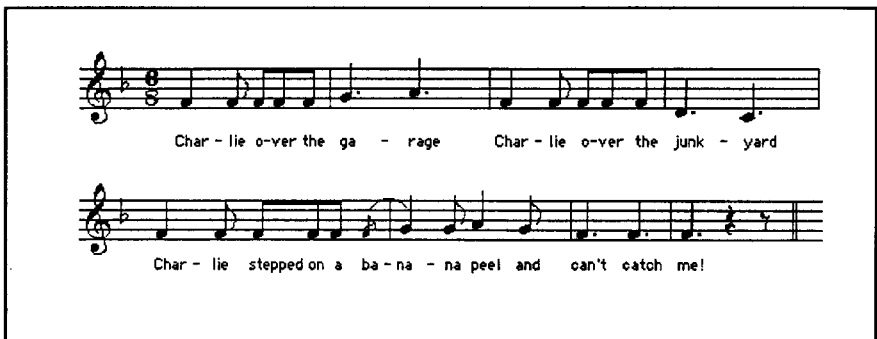


Figure 4.

Another case of a parody occurred as two girls and a boy sang the chorus of the Spanish-language song "Guantanamera," which they had learned in their language-immersion class from a recording the teacher had regularly played in class. They sang the word to the upward rise of the melody, but on the descending phrase, they substituted for "guajira, Gauntanamera" their own phrase, "You betcha don't zap your mama." As they sang this chorus like a continuing sound loop, the children hopped in dancelike fashion on one foot and then the other. If they knew the verses of the song, they had ignored them in their interest in fashioning a parody with a catchy syncopation that drove them to dance to it.

Music as Social Signaling

While children were musically varied in our observations of their wide repertoire and playful expressions at Sam Johnson School, teachers also contributed to the sonic fabric of the school. The soundscape of the school included their voices as they spoke to children, often in a vocal register that hovered just below middle C and with surprisingly little pitch modulation. In one investigator's field-

Teacher: Children:

Kye lye ku - le Kye lye ku - le

Teacher: Children:

Kye lye ko - fee - sah Kye lye ko - fee - sah

Teacher: Children:

Ko - fee - sah lang - a ko - fee - sah lang - a

Teacher: Children:

Kum a - den - de Kum a - den - de Yeah!

Figure 6.

dren to attention. From their seatwork and small-group projects, they responded to the first phrase in imitation of it, and rose to find their places in line as the song continued (Figure 6). Children knew the rules of this social-signaling song, such that they would need to move quickly as they sang their responses so that by the time the song ended they would be quietly lined up and ready for their next task or session. The song served the dual purpose of maintaining children's engagement mentally while physically moving them into their lines without other distractions. The teacher told us that she had become enamored of this song on first hearing it, but put it to unique use, and with great frequency and enthusiasm, in her classroom.

Music as a Learning-Facilitator

By integrating music into daily lessons and work patterns at Sam Johnson School, some educators are approaching their teaching as

do those in cultures where music and the arts are woven into daily life. Through courses that train teachers in the techniques of arts integration, these educators have learned to respect the power of the arts to enhance and facilitate children's learning. The southern African concept of *ngoma*, in which music and dance are combined into work, ritual, and play, is not so far afield from children's own natural propensity to live and learn in a world they fashion, full of singing and dancing (Bjørkvold, 1992). Teachers who seize upon children's preferred learning style have found ways to integrate the arts into their curricular lessons and have at the same time turned their classrooms into places that honor the *ngoma* principle.

In language classes at Sam Johnson School, rhythmic chant was used to develop linguistic skills. Words were read by teachers from lists on large laminated posterboards in rhythmic fashion, one word after another. In one classroom, the teacher tapped the beat with a ruler on the side of her desk as children chanted the words with her. Another teacher used a small hand drum to tap the beat, pronouncing each word in a pronounced and high-pitched manner, with the children following in unison with precisely the same expression and pitch. Some children, caught up in the rhythmic chanting and beat-keeping, bounced in their seats, flicked their fingers on their desks, and nodded rhythmically all the way through the word-list.

The teacher of a Japanese language class spent between 5 and 10 minutes each day in singing with the children. She taught the children action songs and songs with associated hand-clapping patterns. Familiar songs such as "Twinkle, Twinkle, Little Star" were heard regularly in Japanese as a means of enhancing children's pronunciation of already-learned and newly introduced words from the language list. Basic Japanese writing symbols were arranged in a sequential manner on individual charts so that children were able to point and match each word or character symbol while pronouncing it aloud through the singing of familiar melodies like "Frère Jacques" and "Row Your Boat." Children found the songs appealing, as they brought them into the playground to sing, act out, and hand-clap together.

A math lesson for first-grade children brought them an experience in rhythmic movement. The teacher showed shapes, and children were instructed to turn themselves into a circle, a square, or a triangle. She gave the students about 20 to 30 seconds for each shape, and when various contortions brought giggles and full-fledged bellylaughs, she would ring a bell to quiet the children down. Later, she played "follow the leader" with the children, directing them to follow her one by one across the room in imitation of straight, curved, and angular lines. They did this mostly in silence, and the task was to rhythmically walk (or hop or skip) the line precisely as she (and eventually other children who served as "line leaders") had done.

To these teachers, music and movement enriched the learning environment. Children acquired skills and knowledge through these strategies, and responded to them with enthusiasm. Efforts by teach-

ers to integrate the arts into the academic areas were beneficial, especially if these efforts allowed children to continue to be children. Since the students' spontaneous play was expressive, rhythmic, pitched, and kinesthetically driven, occasions in the classroom for featuring these qualities and capacities were typically successful. The children will have many years ahead for learning in a more academically staid manner, but in the primary grades, they seemed ripe for learning in artistic and playful ways.

SUMMARY

A study of the sonic surrounds of an elementary school is useful for giving focus to the musicking that occurs in the everyday life of children and their teachers. Rather than contributing to the demusicalization of children through prescribed lessons that bear little resemblance to the musical knowledge and skills they already possess (Small, 1998, p. 212), music teachers can work towards developing the musicality within every child—much of which emerges in ordinary places and at otherwise unremarkable times of work and play. The sonic environment of any school is a complex auditory ecosystem in need of a closer examination,² as are the social processes that inspire and result from it.

With an awareness of the soundscapes of school activity outside the music classroom, music educators can adjust their lessons to fit the musical knowledge and skills that are already prevalent among children, and between classroom teachers and children, in their daily instruction. The extent and type of syncopation in children's musicking may be reason to launch the study of ways to notate the uneven and dotted rhythms that arise in the syncopated expressions that are already familiar to them. The fact that children trade musical ideas with one another during classwork and pass rhythm and pitch content on through songs and musical utterances while at musical play might suggest to teachers that some of the musical grammar children may learn to read, write, and add into composition projects is already richly available to them outside of formal music instruction.

The open-ended sociability of music was at times startling, and its pervasiveness at play and in learning was a reminder of how music serves human functions and finds its way into private spaces and social interactions. Equally intriguing was the variety of forms of children's expressions, ranging from rhythmic play and melodic utterances to familiar songs and their parodies, and the way in which teachers used music for social signaling and the facilitation of learning. The use of music and movement in general classroom activities seems worthy of consideration for teachers of all subjects, some of whom we observed found it beneficial for supporting children's learning processes. For music teachers, the richness of children's musical utterances suggests the value of giving children time to create in the music classroom, allowing them to express and even expand on the rhythms and melodies they make spontaneously.

We found Sam Johnson School to be, despite its belief in itself as innovative in the extent of its technology and international language instruction, similar to many elementary schools in much of its curricular content, daily schedule of instruction and recess periods, and niches in classrooms, hallways, gymnasium, and playgrounds where children find themselves during the school day. Thus, our ethnographic study of the sonic surrounds of one school, with attention to music as action and as object, offered insight worthy of further thought. We need to consider the music children already know when designing and delivering instruction that takes them "from where they are" to new realms of musical experience. As we develop curricular content for both the music classroom and the general classroom, we would be wise to make use of material that caters to children's musical realities in their various expressive forms.

NOTES

1. Murray Schafer initiated the term soundscapes in *The Tuning of the World* (1977), to refer to the auditory terrain in its entirety of overlapping noises, sounds, and human melodies.
2. The authors wish to extend appreciation to Eugene Dairinathan for this summary comment.

REFERENCES

- Appadurai, A. (1990). Disjuncture and difference in the global cultural economy. *Public Culture*, 2 (2), 1–24.
- Bjørkvold, J. R. (1992). *The muse within* (W. H. Halverson, Trans.). New York: Harper Collins. (Original work published 1989)
- Blacking, J. (1988). Dance and music in Venda children's cognitive development, 1956-8. In G. Jahoda & I. M. Lewis (Eds.), *Acquiring culture: Cross cultural studies in child development* (pp. 91–112). London: Croom Helm.
- Bogdan, R. C., & Biklen, S. K. (1998). *Qualitative research for education: An introduction to theory and methods*. Boston: Allyn and Bacon.
- Campbell, P. S. (1991). *Lessons from the world: A cross-cultural guide to music teaching and learning*. New York: Schirmer Books.
- Campbell, P. S. (1998). *Songs in their heads*. New York: Oxford University Press.
- Emerson, R. M., Fretz, R. I., & Shaw, L. L. (1995). *Writing ethnographic field-notes*. Chicago: University of Chicago Press.
- Graue, M. E., & Walsh, D. J. (1998). *Studying children in context*. Thousand Oaks, CA: Sage Publications.
- Harwood, E. E. (1987). *The memorized song repertoire of children in grades four and five in Champaign, Illinois*. Unpublished doctoral dissertation, University of Illinois at Urbana-Champaign.
- Kartomi, M. (1991). Musical improvisations by children at play. *The World of Music*, 33 (3), 53–65.
- Kubik, G. (1987). Musical activities of children within Eastern Angolan culture areas. *The World of Music*, 29 (3), 5–27.

- Mans, M. (2002). Playing the music—Comparing performance of children's song and dance in traditional and contemporary Namibian education. In L. Bresler & C. M. Thompson (Eds.), *The arts in children's lives* (pp. 71–86). Dordrecht, The Netherlands: Kluwer Academic Publishers.
- Marsh, K. (1995). Children's singing games: Composition in the playground? *Research Studies in Music Education*, 4, 2–11.
- Merriam, A. P. (1964). *The anthropology of music*. Evanston, IL: Northwestern University Press.
- Minks, A. (1999). Growing and grooving to a steady beat: Pop music in fifth-graders' social lives. *Yearbook for Traditional Music*, 31, 77–101.
- Riddell, C. (1990). *Traditional singing games of elementary school children in Los Angeles*. Unpublished doctoral dissertation, University of California, Los Angeles.
- Schafer, M. (1977). *The tuning of the world*. New York: Knopf.
- Shelemay, K. K. (2001). *Soundscapes classical: Case studies from the Western classical repertory*. New York: Norton.
- Small, C. (1998). *Musicking: The meanings of performing and listening*. Hanover, NH: University Press of New England.
- Swanwick, K. (1988). *Music, mind and education*. London: Routledge.
- Welch, G. F. (1994). The assessment of singing. *Psychology of Music*, 22, 3–19.

Submitted February 23, 2006; accepted January 4, 2007.