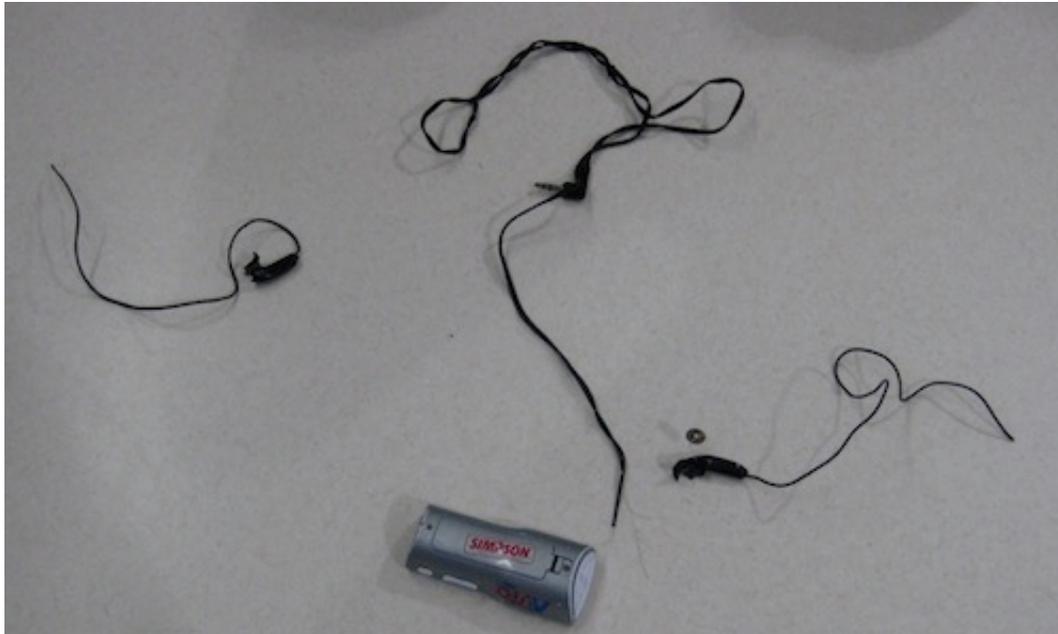# MP3 Players, Music, and Children's Material Culture

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[Tyler Bickford](#) *is a PhD candidate in Ethnomusicology at Columbia University. His dissertation research examines the media ecology of K–8 schoolchildren at a small, rural, public school in New England.*

Despite an [explosion](#) of [recent](#) [attention](#) to children and new media - and despite the iconic status of objects like the [iPod](#) - kids' uses of music devices haven't received the same sort of attention as mobile phones and video games. Especially from a material culture perspective, I think this is a key oversight. Like communications technologies, where the specter of disembodiment and virtual separation from a physical world looms large in popular discussions, sound, too, is understood as a uniquely immaterial medium - which makes it an especially rich subject for studying the (im)materiality of digital media. My research suggests that kids see both the interactive and the musical affordances of MP3 players not as ephemeral at all, but rather as particularly material, immediate, and embodied.

My dissertation research involves long-term ethnographic study of about eighty K-8 schoolchildren at the elementary school of a small town in southern Vermont, which I call Heartsboro. The first day of my fieldwork at Heartsboro Central School in September 2007, I noticed two eighth-grade girls, Amber and Daisy, sitting side-by-side on the swings, talking in a group of friends while listening to Amber's iPod, the earbud cables stretched across the eighteen inches between the swings. I was impressed that they so easily shared the earbuds even as they swayed back and forth, so I walked over and asked if they would ever listen together and swing at the same time. They took my

question as a challenge, and Daisy turned to Amber with a mischievous look as they began to pump their legs, almost hitting their friends who scrambled out of the way. They laughed and cheered each other on as they swung higher and higher, coordinating their leg pumps to stay connected by the precariously balanced iPod earbuds in their ears. They swung together like that until they couldn't go any higher, and the earbud only dropped out of Daisy's ear when they finally fell out of sync while slowing down from the peak of their swing. When they came to a stop Daisy looked at me, pleased and defiant, demanding acknowledgment of their physical accomplishment: "See?"

[Sharing earbuds](#) - one for me, one for you - was perhaps the most common way kids at HCS listened to music, and listening together like that presented everyday physical challenges less spectacular than Amber and Daisy on the swings. Walking together while sharing earbuds involved careful coordination of two bodies, and friends would even spend time practicing especially difficult tasks like walking through doors together. In groups pairs of friends would listen with one ear as they participated in the dense overlap of talk, touch, and gesture that characterized their unmonitored peer interactions. Wires literally tethered kids to one another, and headphone cables

suspended from ear to ear traced out the intersecting nodes of social networks stratified by overlapping hierarchies of age, gender, kinship and friendship, status, and taste. By sharing earbuds kids activated and delineated these relationships, excluding some children from listening even while expanding access for others who might be limited by parental resources or restrictions.

Compact little objects, MP3 players were ever-present throughout the school day, slipped into pockets, threaded under clothing, and handled until worn. MP3 players bundled with headphone cables circulated among lockers, desks, pockets, and backpacks. Wires threaded under clothing and tangled across crowded lunchroom tables. Hanging from a shoulder or shirt collar, maxed-out earbuds strained to liven up group spaces with portable, lo-fi background music. In class, students listened surreptitiously to earbuds concealed in sleeves and under the hoods of sweatshirts.

Kids tinkered constantly with their MP3 players, decorating them with decals, markers, tape, and nail polish, trading unsalvageable ones to save for spare parts, and seeking out charged batteries, in a never ending process of "enlivening" their fragile devices.

When they broke, as they often did, kids repaired them or lived with malfunctions. Stories about failed devices were told enthusiastically, and the reasons for their failure were often shrouded in mystery. In these ways, children's MP3 players were thoroughly domesticated within a "childish" material culture already characterized by playful physical interaction and portable objects such as

toys, trading cards, and dolls that can be shared, manipulated, and held close.

None of these practices is characteristically "digital." Discussions of MP3 players as new media tend to foreground connections to the Internet and users' practices of sorting, selecting, and sharing songs in playlists, emphasizing the intertextual, rather than interpersonal, affordances of portable music devices. Users of MP3 players can share playlists online, download cheap or pirated music easily, and transport large amounts of music with them on their devices. But that isn't what happens at HCS, where only occasionally downloaded songs from services such as iTunes or from questionably legal peer-to-peer networks using software like Limewire. In most cases their music was purchased on CDs at discount stores like Walmart. While their music devices could hold many songs (even relatively inexpensive devices had 512MB of storage, which would store about a hundred songs), with only a few exceptions kids' devices had songs numbering in the dozens rather than the hundreds. With so few songs, these kids did not construct playlists for themselves or for friends; they scrolled through their players' songlists to find one song after another in lists full of misspelled and incomplete metadata. The scale of these portable music practices was far from the vast Web 2.0 repositories of instantly accessible tagged and linked songs that commentators emphasize as characterizing music in a digital era. Rather, with the small number of songs, the relative portability, the importance of physical stores, and face-to-face sharing, HCS kids used MP3 players on a smaller scale, much the way they might use portable CD or cassette players. MP3 players were preferable to older technologies for immediate and practical reasons: they were smaller than CD players and, for the most part, hardier. They fit in pockets and would not skip when jarred - necessary traits for objects constantly handled, squeezed, tugged, and tangled in children's active and sociable school lives.

Kids' "file-sharing," especially, involved interesting deviations from normatively digital expectations. The kids at HCS did share music with one another, but this usually meant an older sibling creating a CD compilation or transferring songs to a younger sibling's MP3 player, or simply swapping music devices with one another when a friend would like to hear a certain song. Sometimes, to get new songs, they'd put the microphone up to their television or to computer speakers to record music from a music video, rather than searching for a song on the Internet, downloading it (possibly paying for it with a parent's credit card), and transferring it to their MP3 player. And frequently they'd place the earbud of one device up to the microphone of another, and transfer music to their friends that way.

In a digital media environment where infinite and perfect reproduction - media files can be transferred and copied without any loss of information, unlike analog recordings or film photographs - is central, the layers of infidelity to high quality digital reproduction involved in transferring music like this are stacked upon one another: MP3 encoding already represents concessions of quality to portability; cheap earbuds hardly produce decent playback, and with only one earbud transferring music to the microphone, half the original track is lost; the microphones on MP3 players and cell phones are barely suitable even for casual voice recording; and the audio from the microphone is then subjected to further degradation from another round of low bitrate MP3 encoding.

But maybe these practices were faithful, if not to a hi-fi vision of audio reproduction, then to the physical, spatial, and embodied world in which MP3 players and their earbud cables were already

so intimately embedded on and between kids' bodies. Just as they tethered one friend to another, kids connected one object to another with the umbilicus of their earbud cables, and from earbud to microphone, they transferred sound from one vibrating membrane to another, in real time. In a meaningful sense, the recordings they made were composed more of "actual" sounds and music than are digitally encoded representations. On the Internet songs would be found by searching for meta-data - titles, artist names, dates, etc. - but as several kids pointed out to me, they didn't know the names of many songs on their devices. They did, however, know very clearly how the songs sounded, and so, to move music from device to device, it made sense for the songs to resound in physical space.

(An extended discussion of this topic is forthcoming in a chapter called "Tinkering and Tethering: Children's MP3 Players as Material Culture," in the Handbook of Children's Musical Cultures, edited by Patricia Shehan Campbell and Trevor Wiggins, from Oxford University Press. An preprint version of that piece is available [here](.)

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