

# Minds That Know: Seeking A New Music Literacy through Syntax, Prosody, and Community

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## Abstract

Teaching for musical meaning can be a multifaceted topic, since a universally accepted definition of musical meaning is elusive; yet musical meaning remains at the heart of music literacy. Music literacy is equally complex, as changes in technology constantly reorganize how musical sounds are produced, recorded, and transmitted. Today, musical texts are presented through increasingly diverse, multi-modal forms, and changes in media bring accompanying changes to how we construct musical meaning. In this article, I consider parallels between language and music as they are transmitted through evolving texts and interpreted by a reader to create syntactical, prosodic, and social meaning. These three meaning domains are examined within print and oral cultural ways of knowing since both are present in the current media landscape. Considering notation as a form of externalized cognition, I advance a new music literacy theory that reclaims orality as necessary for active participation in the various music discourses in contemporary society. In the proposed model, students discover musical meaning as they make decisions and formulate beliefs related to musical organization (syntax) and expression (prosody) in relation to a community.

## Keywords

Music literacy, music notation, oral music traditions, musical meaning, playing by ear

*Any time we act or speak, we must accomplish two things: We must make clear who we are, and we must make clear what we are doing. (Gee 2012, 157)*

In the United States, music literacy is often assumed to be the pitch and rhythm decoding of the five-line staff that is central to the performance of Western Art music (McPherson and Gabrielsson 2002). Unfortunately, this limiting generalization fails to define any purpose for literacy beyond servicing the few musical cultures that rely upon this one system of notation. Just as recitation with correct diction from a narrow scope of texts would fall far short of our consideration of genuine literacy in a modern language arts classroom (Cooper and Kiger 2003), such an approach similarly falls short of teaching for music literacy in a diverse, 21st century music classroom. True literacy implies personal meaning-making, not just reproduction of another's written thoughts. A pedagogy comprised of decoding alone is not only insufficient but produces functionally illiterate, culturally myopic musicians—people who can recite, but who can neither negotiate nor create independently within the many musical discourses common to modern life. A contemporary music literacy pedagogy must engage with a variety of text modalities: print, audio, video, gesture, and environment (Broomhead 2021; Kivijärvi and Väkevä 2020). In this article, I argue for a literacy by which the musician negotiates multimodal texts and creates meaning within three domains: syntax, prosody, and community. By framing literacy within these three domains in school music classes, students may be better equipped to contribute to the diverse musical discourses present in the digital media landscape as well as their own local communities.

## A New Music Literacy

As language literacy pedagogy has required a re-examination of its methods and purposes within a changing society (The New London Group 1996), music literacy similarly requires a re-examination to account for changes in music production, distribution, and usage. The speed and accessibility of the internet has transformed how language-based texts are generated and used; the internet has brought similar change to musical texts. Increasingly, published scores and physical recordings are bypassed for on-demand streaming or user-generated content open for others' collaboration, sharing, and manipulation. Technology has indeed

changed the who, how, when, where, what, and why of creating, performing, and responding. Past assumptions regarding authority and authorship are challenged, as digital technology has enabled the amateur to create, distribute, and monetize their own music to a global audience. In a media landscape increasingly dominated by user-generated content, the professional critic, producer, or performer may be in decline, while the amateur is ascendent (Gouzouasis and Bakan 2011). The trained critic has been undercut by the hive mind of chat rooms, comments, views, and “likes.” When any lived experience can be broadcast and accessed through the World Wide Web, the vast digital landscape decenters institutionally supported authorities while centering personal narratives (Goldman, Booker, and McDermott 2008). With increased freedom of choice, today’s audiences are attracted to artists who have learned to negotiate and create personal musical meanings understood by their community, communicating their approval through “likes” or by becoming “followers.”

While the printed and published text is not yet a relic, the current media landscape continues to become more multi-modal, interactive, and free. Students may be more accustomed to accessing the texts they want through music sharing platforms that provide recordings, MIDI files, royalty free samples, video, lead sheets, staff notation, or tablature rather than paying more, waiting longer, and ultimately having less freedom to make creative alterations through older forms of published and copyright protected media (Lessig 2008). Given these changes to production, distribution, and use, music literacy may no longer just be the ability to negotiate the approved texts produced and distributed by the assumed authorities of the 20th century—publisher, conductor, composer, and teacher. Samuel Leong (2012) has pointed out that music literacy education for a world flattened by digital technology may require “developing learners’ digital literacies, analytical and critical thinking, and the other twenty-first-century skills with reference to the realities of the cultural and creative industries” (240). Indeed, a new music literacy must embrace the agency of a spectrum of content negotiators in order to break free from a producer/consumer duality that privileges the cultural bias of the producer class.<sup>1</sup>

Negotiating the varied musical texts of today requires an examination of content, delivery, and social context. Understanding content requires knowledge of syntax. Interpreting delivery requires an awareness of prosody. Navigating social

context requires knowledge of the practicing community. These are central skills in a new music literacy.

In today's democratized, pancultural, and digital media landscape, creating and responding are commonplace. "Audience" no longer assumes passivity. Developing agency is a necessity for participation in interactive media forms. Thus, teaching music students to comprehend without also teaching them to exercise agency renders them unprepared to self-advocate in today's highly interactive marketplace of ideas.

In 1994, a group of literacy scholars from around the world called The New London Group met to discuss the literacy pedagogy they termed multiliteracy.<sup>2</sup> Conceived during the early years of the internet, their framework has continued to drive dialogues about contemporary media literacy. In their view, a multiliterate individual is able to "synaesthetically" interpret and communicate meaning through multiple modalities (written and oral language, visual representation, audio representation, tactile representation, gestural representation, spatial representation) to diverse communities and affinity groups (Cope and Kalantzis 2009, 179). Thus, teachers must prepare students to engage with texts that are more varied in both form and function than the texts from the pre-digital world. Musical text changes related to multimodality (video, shareable audio files, MIDI) and the corresponding changes to social context (physical vs. virtual space, entertainment media, social media) have changed our relationship to musical meaning.

Roni Jo Draper and Daniel Siebert's definition of literacy as "the ability to negotiate (e.g., read, view, listen, taste, smell, critique) and create (e.g., write, produce, sing, act, speak) texts in discipline-appropriate ways or in ways that other members of a discipline (e.g., mathematicians, historians, artists) would recognize as 'correct' or 'viable'" (Draper and Siebert 2010) suggests a comprehensive literacy that includes the ability to both interpret (negotiate) and produce (create) texts in a way that will be understood by a targeted community.<sup>3</sup> These competencies both require agency in a way where mere decoding of one culturally specific notation system falls short. Participation in the contemporary musical landscape requires an ability to negotiate multi-modal texts from content creators around the world, to respond with comprehension, and to contribute a viable perspective to a discursive community.

Paul Broomhead (2021) has proposed that a new music literacy should explore tactile, visual, and aural texts through the actions of creating, performing, responding, and connecting. Such a categorization aligns with the 2014 US National Core Standards for education, which the National Association for Music Education describes as being “all about music literacy” (NAfME 2014 Music Standards). As a creator, one makes decisions regarding grammar and syntax. As a performer, one considers how prosody may be perceived as viable or authentic within a community. As a responder, one considers how a performance connects to a social group, functions in a particular space, or appeals to a particular identity. All of these roles bear implications for connecting, as the domain of each is highly contextualized by one’s lived experience and the discursive community within which an idea is expressed. For example: a seventh chord bears different meaning and function in jazz vs. classical music (syntactical meaning), vibrato is used differently between popular and operatic performance (prosodic meaning), and a Hank Williams cover carries different messages in a recital hall, a coffee shop, and a barbecue (social meaning). Discourse changes how an audience will connect to music.

Syntax relates to the grammatical organization of music, and prosody refers to the way music is expressed through dynamics, intonation, tempo, timbre, articulation, and gesture. One’s ability to be understood within a community is determined in part by the ability to adjust one’s syntax and prosody to the discursive patterns that mark an affinity group. The patterns of discourse shared among the members of an affinity group have many influences, such as environment, class, education, culture, age, and power dynamics. Through discourse, we both share our identity and express our beliefs (Gee 2012, 157). Individual and social identities are developed in a dance between self and society through a discursive medium such as language or, in the present case, music. In music, as with language, we may be most comfortable communicating through our primary discourse, but we often find ourselves communicating in various secondary discourses as soon as we step out of our home. Thus, in a diverse society, a useful musical literacy must be flexible enough to allow for code-switching between primary and secondary discourses (Isbell and Stanley 2018).

*Primary discourse* is the ability to dialogue within one’s native community, and *secondary discourse* is the ability to dialogue with people outside of one’s native community (Gee 2012, 147-175). Socio-linguist James Paul Gee (2012) writes:

“Discourses are not units or tight boxes with neat boundaries. Rather they are ways of recognizing and getting recognized as certain sorts of whos doing certain sorts of whats” (153). The projection of an individual identity to primary and secondary communities is central to our daily lives. This is of special importance as one considers a music literacy that liberates the individual to participate in a democratic society (Tan 2020). Gee suggests that learning secondary discourses not only expands understanding of language, but also confers values and beliefs about those who may be seen as culturally different. Gee (2012) writes, “Early borrowing [learning other discourses] functions not primarily to give children certain skills, but, rather, to give them certain values, attitudes, motivations, ways of interacting, and perspectives, all of which are more important than mere skills for successful later entry into specific secondary discourses” (153). The ultimate aim of literacy, suggests Broomhead, is to participate in both primary and secondary discourse (Broomhead 2019, 5–6). While musical skill may certainly develop from learning secondary musical discourses, developing discursive flexibility can also be a form of connection to people who may be culturally different. A new music literacy should thus facilitate greater connection across social barriers.

As music educators engage with diverse identities and discourses in their classrooms, some questions emerge: How can music teachers be musically and pedagogically prepared to meet the demands of reaching these diverse identities? How many music cultures can one person be equipped to teach? While expansion of curricular content and diversifying college preparation programs would certainly seem to be necessary for connecting with diverse identities (Campbell et al. 2014), educators would also be better prepared if they were equipped with a basic literacy taxonomy applicable to multiple forms of musicking.

New London Group members Bill Cope and Mary Kalantzis (2009) suggest that semiotic transfer among different musical traditions can be addressed through a taxonomy that includes the following categories: representational, social, structural, intertextual, and ideological (176). While these five categories can each be transferred to the domain of music meaning-making, they could also be reduced to three for current music classroom applications.<sup>4</sup> As guiding questions, these may be:

1. Syntax (structural): How does music’s organization communicate meaning?



2. Prosody (representational): How does music's expression communicate meaning?
3. Audience (social): How does music's social context contribute to meaning?

## An Example Illustrating Literacy and Agency

Consider a second-grade music lesson that takes into account these guiding questions. Students are presented with a picture of a leafless tree standing over a red and gold skirt of fallen leaves illustrating a poetic text about autumn. Students choose unpitched percussion to represent each line of the poem and then present their soundscape composition through creative movement. An observer would see students working in small groups, tinkering with possible sounds for various words, and making discriminations between instrument, technique, and gesture as they narrow down options to reach their final decisions. They would see students poring over the text for sound meanings yet untapped. Most importantly, they might see one second grader perform their tambourine part with arms fully expanded, reaching into the air as if sending a message back to the muse that inspired their creation. Instead of hearing tambourine sounds controlled by the authorities of either notation or teacher, they would see a seven-year-old making a tambourine communicate personally discovered meaning through a process negotiated through dialogue with fellow content creators.

The student agency embedded in the lesson empowers students to discover what musical sound means to them. This agency is central to a liberative literacy. Paulo Freire's (1970/2018) argument for literacy and liberation rests upon engaging with students' perspectives, rather than assuming that a teacher's work is to fill a student's deficits with the "funds" of content, worldview, and ways of knowing possessed by the teacher. For Freire, invention guided by one's community and one's lived experiences is the centerpiece of a liberative literacy.<sup>5</sup> In the example above, each student decides both what and how sounds are performed, exploring both syntax and prosody. The student develops beliefs about what makes their own answers valid, while also discovering that others have come to different conclusions. Sound is understood as having a purpose beyond just putting it where the directions say to put it; syntax is examined. Expression becomes a necessity of the soundscape invention, not just a technical direction given by an authority; prosody is examined. The final performance is presented for others who understand the

rules underlying the artistic expression; the musical meaning is thus situated in a community.

In this elementary lesson, students negotiate two pre-existing primary texts: a picture and a poem, and they create a new, third text—a sonic text—of their own. A similar multimodal approach emphasizing student agency over syntax, prosody, and audience could just as easily be found in secondary-level digital audio workstation (DAW) -based lessons, which may allow students to decide how to apply the elements of form, pitch, rhythm, harmony, balance, timbre, texture, or density to solve contemporary musical problems such as those posed in film scoring, song writing, beat-making, or podcasting (Pendergast 2021; Clauhs, Franco and Cremata 2019). As exploring multiple ways to organize and express sounded meanings may help musicians better understand how music “works” (Davidson and Scripp 1988; Gromko 1994), today’s various digital music production programs direct users to new conceptualizations of musical organization (Marrington 2017) and prosodic expression through multiple interfaces (D’Errico 2021). While classroom-based keyboard, sound production, or guitar classrooms are more natural environments for a music literacy centering the creator, ensemble-based instruction could also give rise to a collective view of musical literacy, which will be illustrated later.

Much of the practical pedagogy behind the proposed theory may already be found in culturally responsive classrooms rich with questioning, composition, choice, and collaboration, since these activities naturally invite examination of syntax, prosody, and audience. As student-generated texts become possible content for the classroom, we may imagine that Gloria Ladson-Billings’ (2014) vision for culturally responsive pedagogy will be realized: “[students] become subjects in the instructional process, not mere objects” (76). Such a dialogical practice addresses the problems inherent in the autocratic, or “banking” model of education by freeing students to use their own lived experiences and aural libraries to guide the meaning-making process. A form of liberation through literacy is achieved when students discover that *who they are* is enough to express their musical identity and be understood by their peers. Students need not pretend to possess a different set of lived experiences assumed by a mono-cultural curriculum.



## Technology Changes Epistemological Framework

Examining differences in structure, representation, and social context brought on by text multi-modality will no doubt spawn other forms of musical thinking. Music educators seeking to maintain cultural relevancy will be keen to pay attention to these changes as music education diversifies beyond the print-mediated practices dominant in the 20th century.<sup>6</sup> One hundred years ago, recordings began to surpass printed notation as the primary form of distributing music; this changed ideas about what it meant to do music (Turino 2008, 23–28). Our music media are in transition again through proliferation of music content via gaming, digital streaming, social media, and web-based collaboration. As a result, ways of knowing are changing, and this may create anxiety, especially within communities primarily accustomed to pre-digital musical literacies.

While new technologies make the creation and distribution of information more efficient, such changes may challenge beliefs about what it means to possess knowledge. Technology can unburden our minds from performing some forms of cognition seen as fundamental within a given discursive community. For example, some felt practicing with the mechanized beat of a metronome would be detrimental to the development of expression, as the internal pulse was transferred into an external click.<sup>7</sup> In the 21st century, as digital music technology redefines musical thinking, concerns relate to homogenization (Faure-Carvallo, Gustems-Carnicer, and Termens 2022), abandonment of performance (Thibeault 2018), loss of discipline (Crow 2006), technological determinism (Ruthmann, et al. 2015), and loss of community (Thibeault 2015). These responses to technological change present some of the anxieties of consciousness “extension” (McLuhan 1964) whereby certain musical activities move from an internal or socially situated process into an external or technologized process.

Such epistemological unease with technology is hardly new. While the technology of writing—or notation for music—is certainly helpful for the transmission of knowledge, it may hinder the syntactical and prosodic meaning-making that accompanies exercising one’s memory (a practice of syntax) through an expressive performance (a practice of prosody).<sup>8</sup> Plato once expressed concern over this same phenomenon.<sup>9</sup> Ong (1982) comments upon Plato’s thought, writing, “those who use writing will become forgetful, relying on an external resource for what they lack

in internal resources” (79). Writing may not just affect syntax; it may also alter our internal connection to prosody. When expressing personal beliefs, the speaker who can make eye contact, gesture with purpose, and do so without a script is generally viewed as possessing more understanding than one who relies on a page, groping about with practiced affectation, struggling to capture the emotion of the ideas they may have once thought for themselves, but now must perform from a script. Memorization practices among classical musicians are often grounded upon this very belief that performers are freer to express without a page and that audiences tend to prefer performances without a script (Williamon 1999). The interconnections between embodied competence in syntax, prosody, and effective communication are neither new nor unique to speech communication.

In contrast to the embodied and socially dynamic context of orality, writing creates “context-free” language (Hirsch 1977, 21–23) or “autonomous” discourse (Olson 1980), free of the immediate interpersonal influences of audience or author. Without a written text, one responds to the moment of experience in its social context; with a written text, one re-creates or re-members a moment of experience that has already passed. Knowing is complicated by the location of the answers—inside or outside the mind, in a person or on a paper.

As technology externalizes once internalized tasks, our epistemological framework is challenged. Our fears that technology may erase our hold on musical meaning may relate to how, over time, new technology carries more and more of the cognitive load for us, distancing us from embodied, socially situated performance. Just as we may doubt a child’s grasp of mathematics if they can perform basic tasks only with a calculator, so we may also doubt a musician’s grasp of musical elements if they practice only through mediated technologies of either the laptop or the score. The internalized, embodied expression of understanding is deeply seated in our beliefs about effective musical communication (Leman and Maes 2014).

To perform syntax without the need of any assistive technology would indeed seem to suggest a deep knowledge of the structural principles of music (Sloboda 1985, 246). In music, memorized or improvised performance demonstrates fluency with syntax (Lohmeyer 2022). In a language arts class, memory and improvised discussion are regularly exercised when students summarize or take a critical view of a text previously read through dialogue with a teacher or classmates. Language literacy is further developed through various forms of composition and

editing. While these activities may not be the exclusive ends of literacy education, they are time-tested methods for challenging a student's ability to think syntactically. In language literacy, those who can read a text, recall its meaning away from the page, summarize it in their own words, and express their own beliefs about it are demonstrating competency with the medium. However, applying this same standard of memory, dialogue, and composition to musical performance may challenge assumptions of what it means to be literate in a music classroom, which often stops at re-creation activities using the assistive technology of the page. A higher standard for music literacy would require a deeper knowledge of syntax to be demonstrated through memory, improvisation, or composition. In these cognitive tasks, musical structures are internalized enough to summarize and express without externalized scripts. A pedagogical shift toward the internalization of musical grammar using simple melodies or predictable harmonic sequences—practices more common to aural traditions<sup>10</sup>—would better equip students to apply their aural imaginations to the challenges of participation posed by a cultural shift towards content creation and collaboration (Hill 2018).

Like syntax, prosody has long been an informal measure of a speaker's fluency and comprehension (Wennerstrom 2001, 67). If a student reads aloud "The dragon ate the prince!" without any inflection, the teacher informally gains knowledge of a student's cognitive capabilities and/or understanding. In music, prosody may often be formally taught through decoding various externalized notations, though it may be through informal encoding experiences with their own aural library where the many diverse meanings conveyed through soft, loud, short, long, tapered, or abrupt sounds are internalized (Haston 2007). Rather than asking a student to create their own expressive interpretation, some formal approaches may too often only teach expression as obedience to a printed page or compliance with a director's interpretation. Teachers instructing students to decode the concepts of *crescendo*, *marcato*, and *ritardando* using only simplified reductions of "louder," "accented," or "slower," may similarly wonder, like Plato, whether students are drinking a similar "elixir of reminding,"<sup>11</sup> whereby they seem to understand only basic principles of musical expression, since their rehearsed expression only approximates the sound of genuine feeling. Tragically, the term "expression" is made into a performance of obedience rather than reflecting performance of one's aural muse. Sole reliance on notation for prosodic thinking may thus be seen as a

hindrance to developing an internalized understanding of musical prosody since students are denied opportunities to exercise expressive agency.<sup>12</sup>

A new music literacy might explore *encoding*, not just *decoding*, for prosody. In exploring the multimodal musical texts in today's media landscape, students may encode for prosodic meaning through various synaesthetic inputs: videography, social setting, performer gesture, and sound engineering to name a few. Our prosodic inputs today are far more modally diverse and informationally rich than the soundless abbreviations of print notation. Contemporary multi-modal musical texts already seem to encourage new ways of constructing musical meaning. For example, today many musicians watch and copy music videos as a form of practice. By listening, copying, or transcribing sections put on a loop with a slowing feature, prosody can be examined through an encoding process inextricably linked to the all the sensory elements of the video text. In a video text, a performer's gestures, identities, and expressive intentions combine to present prosody in far richer terms than shorthand articulation markings because the recorded expression remains fully embodied (LeMan and Maes 2014). Developing prosodic awareness through sound-first experiences using the multi-modal texts available today will expand students' expressive vocabulary as they hear and see how prosody is applied in both primary and secondary musical discourses.

## Mediated Music Cognition

Walter Ong's *Orality and Literacy* (1982) is an engaging book on the "technologizing of the word," in which Ong suggests oral and literate societies develop different psychological relationships to the word depending on the medium through which the word is communicated: text or voice. Largely using the earlier work of Milman Parry, Albert Lord, and Béla Bartók (1954) on Slavic oral poets, Ong advances Plato's general concern for how an excessive reliance on written text transmission may diminish the living, breathing meaning of language—the orality of language. The proliferation of digital media has possibly shifted the transmission of culture more towards features of orality (White 2009); to better understand this epistemological shift, Ong's work allows us to examine both orality and literacy—expression via internalized (oral) or externalized (written) texts—as two equally rigorous ways of knowing. As signifying forms through which musical meaning is

transmitted change from more print-based to more oral-based digital media, so does our psychological relationship to the signified.

Written text has allowed humans to expand their capacity for syntactical thought. Through writing, greater syntactical organization can blossom, as thoughts are placed outside the mind and they are transferred into a visually manipulable form.<sup>13</sup> In the Western Art Music tradition, the rapid development of formal, harmonic, and melodic complexity since the staff became the dominant mode of visual representation is evidence of the power of notation-mediated thought. However, there was also an accompanying loss to the regular practice of memory and dialogue when written text increasingly came to dominate communication (Ong 1982, 79). When syntactical thought is exclusively manifested in written text—rather than also requiring the performer to think syntactically through memory, improvisation, and composition—key elements of meaning making and meaning possession may be lost.<sup>14</sup> Ideas preserved in a written text do not contain the dynamic moment; instead, the text is an artifact of past thoughts. The alienation is all the more severe when such artifacts are always of *another's* past thoughts.

When syntactical thought is *always* externalized—as is the case in a literacy completely defined by re-creative performance from a script—personal agency in syntactical expression is abandoned. This is exemplified in the math student who is never asked to think without a calculator, for whom the meaning of the numerical output is utterly mysterious and distant.<sup>15</sup> When writing's power is rarely used to encode one's internally generated thoughts, the experience of reading text is oblivious to the “exquisitely intricate structures and references evolved in sound” (Ong 1982, 85). In a twist of devastating irony, the musician unable to internally assemble an original musical statement without notation may be recast as the pinnacle of “literacy” so long as they are decoding the texts of Western Art Music.<sup>16</sup>

Prosody can also be affected by technological change. When one mode of representation is privileged over another, the signified (i.e., the meaningful) may slowly transform itself to match the implied values of the signifier (i.e., the medium). Music cognition pioneer John Sloboda (1985, 245) suggests that because written text is considered the higher form of linguistic communication in print-based cultures, oral expression in such societies adapts to take on the characteristics of the written form. As a result, a print-dominated society may consider people

to be educated only when their “speech is grammatically correct, phonetically well-articulated, de-contextualized, unsupported by gesture, and smooth in pace and tone, compared to speech of the oral or the child” (Sloboda 1985, 245). That is, when a speaker can deliver information with the expressivity of a “scripted news anchor” (Sloboda 1985, 245), they are considered “literate” within a print culture value set. Drawing the parallel to music, this presents a concerning loss of agency and identity to prosodic expression. One can imagine how a society that has an exclusively text-based approach to music may produce musicians who focus on achieving a norm-referenced standard of expression, who actively work to take diverse cultural dialects out of music, who struggle to find the natural movement within music, or who fail to develop intuition for the various social discourses in which music communicates. These generalizations may not be evident in every musician educated through a notation-centric approach but taking Sloboda’s observations on text and the spoken word into the musical realm, they do seem recognizable (Woody 2000). If musical training is focused on the reading of disembodied, silent maps of pitches and rhythms, wherein dynamics, accents, and phrasing are applied as a series of navigational directives, it does not require a leap in logic to imagine that musicians trained in this way would struggle to discover their own expressive voice.

As musical meaning is disembodied through notation, the cognitive process of “map decoding” does not require the reader to create syntactically and prosodically for the purpose of interpersonal communication between musicians or to an audience. I believe decision-less learning through the performance of a scripted syntax and a historically validated prosody prevents musicians from discovering the musical link between their lived experience and their own culturally rich communities. While the written word may have expanded our capacity for abstraction and complexity, it may have also interfered with our personalization of the spontaneous, living word. By decreasing opportunities to practice memory, composition, and improvisation in interactive and participatory performance settings, we have further disembodied ourselves from the syntactical, prosodic, and communal meaning of our musical language.

While print allowed us to spend more time alone with the word, this time was also spent separate from our various communities—the word became “context-free” (Ong 1982, 79). With print, the word could now live without an audience.



Prior to print, language was limited to speaking to a person or community. Just as there would be no private study carrels without books, one wonders if notation similarly allows us to conceive of musical expression as something similarly asocial.<sup>17</sup>

In *The Musical Mind*, John Sloboda also observes a tension between printed text and socially situated meaning. Sloboda suggests that written musical notation may be helpful for dissemination, yet it may also diminish some of the potency of an original musical idea. Sloboda writes:

Written notation also encourages us to distance ourselves from our words and those of others. When they are captured in permanent form on paper, it is easier to analyze, dissect, and treat them as lifeless objects distinct from us and our thoughts. In this way, they lose some of their power and immediacy (Sloboda 1985, 244).

Live performance, in contrast to a preserved historical record, presents the social power and emotional immediacy of direct musical communication.<sup>18</sup> Nuances from the original embodied idea are lost as the idea is approximated by the rigid parameters available to staff notation: metrical division, twelve precise tones, dynamic labels, articulation markings, and rhythms of ratio. Indeed, musical staff notation is not transferring music to print, but rather, writing about some selected features of music (Dillon 2002). Some features of the original living idea cannot be re-constituted through print alone.

The argument above, concerning embodied vs. disembodied forms of thought, is not meant to suggest that printed staff notation should be considered a relic for the museum. Notation itself presents a cultural way of knowing music, and performance of notated music similarly transfers cultural values and beliefs. As such, performance from notation is itself a performance of identity (Schuiling 2019). More specifically, performance from various types of notation requires different types of musical cognition, assumes rules of authority, makes demands upon the body, privileges certain musical elements above others, assumes some level of shared musical background with other performers, narrows genre, and frames an understanding of the musical instrument itself.<sup>19</sup> The visual representation of music through notation leads the musician to accept the ways of knowing valued by the community. A popular musician may read a lyric sheet with only the words as notation; as a result, those words will be expressed melodically (syntactically) or

expressively (prosodically) different than the same song sung or played from staff notation. This interpretive freedom coinciding with song lyric notation may also reflect the music culture's value for personal expression. Conversely, the Western art tradition tends to place a great emphasis on composer intention, a value certainly inherent in staff notation that leaves less room for a performer's manipulation of syntax or prosody. In this way, the notational medium can direct the performer to create musical performances aligned with the sounds and values that mark the community of practice.

The notation an instrumentalist uses to learn music can similarly construct an understanding of how an instrument should be played. Guitarists may use tablature, chord grids, fretboard patterns, lead sheets, and staff notation to learn new music. Each notational form biases certain musical elements with the information it includes and excludes. For instance, tablature is a quick way to direct the fingers to the correct notes, but expressive and rhythmic directions are not included. This exclusion of important musical information leads the musician to either fill in the gaps with an audio recording or by improvising these features. While tablature may not be a very detailed map of musical syntax or prosody, the absence of details actually generates opportunities for ear training and creativity. Scale representations for many guitarists, often called shapes or fretboard diagrams, present pitch sets not as sequential melodies, but as clusters of dots representing string and fret designations. The "shape" itself is pretty useless as a tool for teaching a specific melody, but quite useful for quickly equipping a guitarist to improvise or compose with limited parameters. Notation then can powerfully formulate concepts of how an instrument is used.

Understanding staff notation as a tool useful for representing some elements of music and performing some cultural values may enable educators to teach through other notational systems, creating opportunities for students to explore other value systems and other elements of music (Wade 2004). As syntax and prosody are explored through more diverse texts, students could develop their understanding of how these domains of literacy function in our musically diverse world. Such a global approach to literacy could both deepen students' understanding of their own musical culture while also encouraging them to engage with other music cultures. As primary and secondary discourses are experienced, an awareness of self and other is awakened, as is one's agency within a democratic society.

A new music literacy should incorporate more oral and aural approaches to syntax, prosody, and community to bridge the gap between externalized and internalized expressions of meaning. Such an embrace of orality would also further align music education with digital media literacy as a type of secondary orality—oral ways of knowing that also assume a high degree of literacy (Werner 2011). Within music education, research initiatives in the field of popular, informal, or vernacular musical practices present many of these pedagogical adaptations to 21st century learners (Berliner 2009; Smith et al. 2018; Green 2002). In such practices, musicians may learn orally from a person, aurally from a recording, or collaboratively in small groups marked by shared interests. A new music literacy would adopt these practices not as a deviation from literacy, but rather as a key strategy for acquiring literacy.

## Ensemble Example of Syntax

Empirical research on memory has revealed recall to be a helpful measure of syntactical meaning comprehension in language as well as music (Sloboda 1985). Memorizing, improvising, composing, and learning melodies by ear are but a few methods by which students may internalize and apply the syntactical principles of music already common in dominant elementary music pedagogies (Lohmeyer 2023; McPherson 1995/1996). If creating music without notation exercises syntactical thinking, integrating practical theory with immediate performance application may be a necessary pedagogical update for a new music literacy.

For example, a high school band class might undertake a lesson in which students work together to create a head arrangement of the pop hit *Sunflower* by Post Malone. The lesson could draw upon students' aural libraries, using lyrics to aid recall, and using singing to facilitate transcription. Prior knowledge would include memorization of the pertinent major scale and familiarity with the popular song. In this lesson, students might receive a lyric sheet as they listen along to the recording. They could proceed by stopping and starting the recording as a class to transcribe small sections, singing and playing the vocal lines back through their instruments. The aural transcription would take very little time because the melody is so repetitive and mostly pentatonic. After each section of the melody is learned, the students could label the scale degree above the words on a lyric sheet

(thus practicing the original purpose of notation as a *reminding* technology). Through this process, students would discover a near perfect outlining of the pentatonic scale throughout the song and how the song's sectional form is marked by smaller pitch sets within the pentatonic scale. To play the melody, no staff notation would be used as there is little need to transcribe the rhythm, which is already known due to the song's popularity on radio, in stores, on film, and possibly even with friends. Instead, tonality would be labeled only as scale degrees written above the words of the lyrics. The result would be a notation that could be read and performed much in the same way as early chant was notated: pitch directions above text.

As with much pop music today, *Sunflower* is based on a harmonic loop. Once students aurally figure out its four-chord sequence, the class can stack thirds above the root pitches on a five-line staff ("build a snowman") to find the appropriate triads. These stacked triads allow the students to find their own guide tone melody through the chords by drawing lines connecting nearby chord tones through the harmonic loop. This process of "connecting the dots" creates more satisfying voice leading as the class plays the chords. Throughout this process, harmonic syntax is revealed, refined, and used in a manner consistent with playing a violin or trumpet with a rock, bluegrass, or contemporary worship band. In these contexts, basic chord theory is needed to create guide tone melodies on the spot with only a lead sheet as notation. Staff notation could be used as a tool to helpfully illustrate chords, but the notes themselves may not be melodically or rhythmically prescriptive in performance. Ultimately, once the triads are understood, the end goal would be to perform chordal outlines from lead sheet notation alone, without the aid of the staff. Responding to these different literacies demanded by contemporary musical practices, music publishers are already presenting both chord and melody notations across multiple styles, as contemporary musical settings often require players to create their own accompaniments and improvise.<sup>20</sup>

Finally, equipped with the melody as well as strategies to realize harmonic accompaniment, the class could generate their own unique arrangement. With the lyric sheet in view, students could decide which instruments should play roots, a guide-tone accompaniment,<sup>21</sup> or melody. The class might create contrast by deciding which instruments should perform the verse, chorus, bridge, or improvised solo sections. By the end of the lesson unit, the class would be able to demonstrate

an internalization of melodic, harmonic, and formal syntax to perform a popular song without the need of the lyric sheet or staff notation. Theory concepts would be internalized and integrated through memory, ear-playing, and improvisation. Throughout this lesson, notation would be used as a means of discovering, not merely reproducing. By using harmonically less complex popular music, students would explore harmonic concepts mentally, away from the page. Perhaps this lesson sequence would not need to be repeated with the same high frequency of reading staff notated repertoire common to concert band classrooms, but it could still be a valuable activity to expand the process and content of students' musicking beyond the Western art tradition while simultaneously suggesting possible musical futures without a traditional score or conductor.

## Ensemble Example of Prosody

Language literacy starts with spoken communication. Watch someone struggling with a new language in a foreign country and you see that communication is inseparable from prosody, gesture, and relationship. Written communication transfers these infinitely dynamic and interpersonal sound meanings into impersonal and fixed graphemes. The process of pairing relational and experience-based spoken language to grapheme is extraordinarily complex, and successful literacy methods are in constant flux. However, one principle that seems to unite the myriad methods is the importance of a variety of experiences: we assemble our understanding through a diversity of encoding and decoding practices. Roughly speaking, encoding is moving sound to symbol and decoding is moving symbol to sound.

When encoding for musical concepts, students may hear something and attach various prosodic elements to their own perception of the sound—dynamics, articulation, tempo, vibrato, envelope, etc. This contrasts with a decoding approach, wherein a command for some expressive mark is made and it is the performer's task to realize it. Decoding alone limits prosody to what students already know as a given command; for example, "forte" is defined by their existing understanding of the concept. Encoding, however, presents the concept *in situ* and asks musicians to make sense of it. Encoding expands the interpretive options available for the decoding task. Experience of prosodic nuance is expanded by presenting more diverse approaches to expression than their own limited existing mental constructs

of the concept. As many improvising musicians will attest, the encoding process of aural transcription aids in both syntactical and prosodic concept expansion.

A simple illustration of prosody for students may be to take a single sentence and challenge the class to say it many ways, much as an actor might. Asking the class to do this all at once is one way to provide a safe environment for the students to experiment trying a variety of interpretations. Once attempted a few times under cover of cacophony, individual students may perform their interpretation for the class while the teacher keeps challenging other students to change its meaning with a different spoken interpretation. Very quickly, students realize that a basic line like “I can’t believe our football team won on Friday” can express excitement, sarcasm, dread, ridicule, or any number of other meanings. This is prosody.

One basic transfer of this task to the music room might be to teach a melody with its accompanying text, then allow students to explore different placements of accents, dynamics, vibrato, or a fermata to relay the text with various interpretations. Examining differences in cover songs is another great way to teach the impact of prosody; a personal favorite is to consider how Taylor Swift’s peppy original and Ryan Adams’ sulky cover of *Shake It Off* each suggest very different perspectives on the same text.

Teaching a recognizable folk melody or patriotic song to the class by ear in a variety of keys is a great way to explore both musical syntax and prosody through encoding. A personal favorite for this is the American patriotic song, “My Country ‘Tis of Thee,” because the melody is largely stepwise and already known by the students in my own teaching situation. Once the class has learned the melody by ear and performed it in a few different keys to discover traits of scale degree function (syntax), the teacher may model some different interpretations of each phrase for the students to copy by ear as means of exploring various prosodic choices from the sensible to the absurd. Such contrasts awaken a sense for the discourse in which patriotic music operates, while perhaps bringing attention to the relationship between lyric and expression. Similar to the acting exercise described above, the class may then experiment with performing their own personal interpretations. After a few repetitions of the whole class simultaneously experimenting with prosodic interpretation, students may be willing to share their ideas in small groups and eventually for the class. Without passing value judgements, the teacher transcribes the expressive decisions made by the performer on the board with a quick



outline of dynamic, articulation, vibrato, rubato, or other notations above the lyrics. This can be done with either conventional performance directions (dynamic and articulation markings) or something more abstract (e.g., scribbles showing intensity, vibrato, or rubato). In this encoding activity, students see expressive notation *recording* musical thought, not *determining* it. Repeating this exercise with the teacher and student roles reversed—the students notating what the teacher plays—further explores prosody through a process wherein their perception of sound is converted to symbols.

The lessons described above demonstrate the learning of the syntactical and prosodic meanings preserved by notation before exploring how staff notation reflects them. Meaning is encoded through live musical performance before being recorded for later recall and identification. Such an approach does not abandon notation, but rather illustrates that notation is secondary and subservient to an initially discovered muse-ical thought. Possible lessons aligned with a similar sound-before-symbol approach are myriad, and many current practitioners seeking greater equity in the music classroom are already increasing opportunities for student agency while presenting more diverse ways of knowing (Mellizo 2020; Schmidt 2021; Yoo 2021).

## Audience as Literacy Practice

Insofar as music requires a hearer, musical meaning is socially constructed. While there may be some objective, stable meanings that can be identified through music theory analysis, music's emotional content is as subjective and variable as our lived experiences. Language, too, has both objective and subjective meaning. Meanings are continuously negotiated in society. Gee (2012) explains:

Meaning is not a thing that sits fixed in the mind (as a “concept” with fixed boundaries, for example). It is not something that sits in dictionaries. Nor does it reside in the minds of experts and “well-educated” people to the exclusion of others. Rather, meaning is primarily the result of social interactions, negotiations, contestations, and agreements among people. It is inherently variable and social. (21)

Social context is inseparable from a fully realized musical literacy. Mozart's music means something different today than it did 50, 150, or 250 years ago. Similarly, in 2023, Mozart's music means something different in a concert hall than it does in a coffee shop, in a flash mob, in a racially segregated school, as a sample to

manipulate in a DAW, or as a vegetable orchestra performance posted to YouTube (Long Island Vegetable Orchestra 2018). Social context changes the meaning of the music.

Even so, some may undervalue the role of an audience in negotiating musical meaning. Perhaps the apotheosis of this ethic is found in Milton Babbitt's (1958) essay, "Who Cares if You Listen?" In this essay, relational performance is devalued for the purpose of elevating individual invention. This view may represent the ontological conclusion of musical expression in print culture. If print culture elevates the individual above the collective by disregarding the input of the reader,<sup>22</sup> then the logical end of this ethos would be expression without the need of a receiver, the individual without the collective. However, as music performance adapts to the digital media landscape of today, and "followers" increasingly contribute to the formation, dissemination, and interpretation of content, beliefs about art music as a form of context-free discourse are challenged. Audience is a necessary component of the digital concert hall.

Marshall McLuhan, a media theory pioneer, suggested that there would come an end to print culture's elevation of the individual over the collective. McLuhan and Powers (1992) believed a "global village" would usher in a return to a more collectivist mentality in which one's thinking would once again become more dependent on one's chosen community. When today's audiences reassert their voices in collectivist content creation through sharing and collaborating across cultural divides in digital spaces, new communities are generated. Indeed, within the field of media studies, digital culture may be understood as a blend between collectivist and individualist mindsets.<sup>23</sup> Consider how people "discover" new music in the digital space. Algorithms delivering content to our screens calculate our preferences by aligning us with an affinity group: I now find myself listening to the music that makes me, and other people like me, click. Understanding audience in relation to text is central to developing both a critical media literacy (Robertson and Scheidler-Benns 2016) and a 21st century music literacy.<sup>24</sup>

Babbitt's conception of art as primarily the invention of an individual denies the community's role in negotiating musical meaning. He presents a view of musical innovation more resembling scientific innovation than social communication.<sup>25</sup> Setting aside the discussion of aesthetics, the present moment in music education encourages an examination of teachers' practices as they encourage agency,

Lohmeyer, Aaron. 2013. Minds that know: Seeking A new music literacy through syntax, prosody, and community. *Action, Criticism, and Theory for Music Education* 22 (3): 144–78.  
<https://doi.org/10.22176/act22.3.144>

cultural responsiveness, and liberation (Lind and McCoy 2016; Regelski and Gates 2009). A response to these varied calls for reform may invite a re-examination of practices, which has led many to “trade in the authentic for the authoritative” (Allsup 2016, 24), the expressive for the obedient. Syntax and prosody have limited meaning without a performer communicating to an audience who does, in fact, *care*.<sup>26</sup> In so caring, an audience responds to a performer’s message and constructs socially situated musical meaning. This is not to suggest that musical quality is determined by an audience alone; rather, I suggest that understanding audience matters to music literacy—who attends, why they attend, how they respond, how the performance affects them. Posing such inquiries to any performance promises to reveal biases that deserve notice at the very least, and reform if necessary. Creating opportunities for students to engage with a wide range of audiences also presents opportunities for personal liberation.

Jabari Evans’ (2020) case study on using hip hop in Chicago elementary schools illustrates how syntax, prosody and audience may promise a kind of liberation through literacy. In the study, Black youth were given the opportunity to express their own lived experiences through a musical medium carrying social capital in their own community. The violent stories the elementary children shared about their home and neighborhood are difficult to fathom, but as Evans points out, telling these stories through music also connected the students to a political consciousness as they wrestled with systemic injustices. Furthermore, Evans found students developed their own identity, engaged in critical dialogue, and connected to community-based narratives. While such direct engagement with community and current events may make some teachers uncomfortable, Ladson-Billings (2014) suggests that exploring self and community identities is central to culturally responsive teaching (75). Through applying syntactical principles of hip hop to create an original work, exploring prosodic interpretations of their own lyrics, and sharing their work with others in their community, students develop their social consciousness as a pathway to liberation.

Musical practices emphasizing obedience, isolation, and reverence toward traditions intertwined with historically oppressive structures may prevent the acquisition of a socially intelligent<sup>27</sup> liberative music literacy in a world asking us to create, comment, collaborate, and share. However, to change the practices of the past would require a more accepting view of the many musical discourses today’s

diverse students navigate. Such a consideration of expanding presentation-oriented curricula that tend to serve economically dominant groups (Bates 2017) to more participation-oriented experiences is not new to the field, yet in the United States, this shift in practice remains difficult to implement. Changing the focus of music education away from the rehearsal of culturally biased aesthetics to a broader view of the various ways people find meaning through music participation certainly promises to bring us closer to wielding the power of music to construct a more democratic society.<sup>28</sup>

## Conclusion

Music carries social meanings, and all of society plays a role in constructing these meanings. The multimodal musical texts of the global media landscape increasingly require that music educators teach a new literacy. The Create, Perform, Respond processes that frame current music teaching standards in the United States may be three components of literacy: syntax, prosody, and audience. As creators, we assemble texts using our knowledge of syntax. As performers, we interpret texts through our own prosodic expression. Through examining various musical communities, we understand music as a social phenomenon. Finally, to connect students' identities to any of the above components, agency must be integrated through all three domains.

In a passive, decoding-centric approach to music literacy, students learn to communicate only their deference to an authority that is separate from their own lived experience. Identity is left unexamined so long as choice is prohibited. The democratic is thwarted by the autocratic. Literacy connects the signified with the signifier through lived experiences and varied applications of concepts, wherein learners see themselves as agents of their own expression. There is no bridge between technology and a human without a decision, no authenticity without personal engagement, and no text without an author. A music literacy that prioritizes the agency and authorship of student musicians reconnects the musicking to the muse and empowers students to experience a deeper connection to their world.

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## Notes

<sup>1</sup> “Societies have often been set up to ensure that only elites and more privileged people produce ideas and knowledge (including products that come out of business and industry), while the masses are supposed to primarily follow, work, and consume. This is why, across history and even today, reading (a form of

consumption) is far more prevalent than is writing (a form of production). However, things are changing today” (Gee 2012, 8).

<sup>2</sup> “Of all the changes currently underway in the environment of meaning-design, one of the most significant challenges to the old literacy teaching is the increasing multimodality of meaning. Traditionally, literacy teaching has confined itself to the forms of written language. The new media mix modes more powerfully than was culturally the norm and even technically possible in the earlier modernity that was dominated by the book and the printed page” (Cope and Kalantzis 2009, 178).

<sup>3</sup> Draper and Siebert’s (2010) vision prioritizing content creation would further align music with other areas of contemporary literacy. Media literacy scholar David Buckingham (2007) presents four key concepts that he believes can be applied to a range of contemporary media: Production, Language, Representation, and Audience.

<sup>4</sup> While *intertextual* and *ideological* considerations are applicable to music, I believe they fall outside the daily work of most music teachers and may come to have more application as music literacy education becomes more blended with media literacy education.

<sup>5</sup> “For apart from inquiry, apart from the praxis, individuals cannot be truly human. Knowledge emerges only through invention and re-invention, through the restless, impatient, continuing, hopeful inquiry humans pursue in the world, with the world, and with each other” (Freire 1970/2018, 72).

<sup>6</sup> Marshall McLuhan’s (1964/1994) idea of “the medium is the message” may similarly apply to musical media. With this view, information media serve as an extension of human consciousness. McLuhan’s idea of medium as consciousness extension has also been separately noted in music cognition studies: “For many people, notation is so important that reality becomes, in many ways, mediated *by* their notations” (Sloboda 1985, 243).

<sup>7</sup> Karl Gehrken warned against use of the metronome: “In my long experience as a teacher, an observer, and a listener, I have found that the more the individual depends on external stimuli, the weaker he is apt to be in playing and singing with real rhythmic flexibility and feeling” (Gehrken 1949, 299).

<sup>8</sup> See Chapter 3, “Some Psychodynamics of Orality” in Ong 1982, 31-77). See also Chapter 7, “The Musical Mind in Context: Culture and Biology,” in Sloboda 1985, 239-268.



<sup>9</sup> “For this invention [written communication] will produce forgetfulness in the minds of those who learn to use it, because they will not practice their memory. Their trust in writing, produced by external characters which are no part of themselves, will discourage the use of their own memory within them. You have invented an elixir not of memory, but of reminding; and you offer your pupils the appearance of wisdom, not true wisdom, for they will read many things without instruction and will therefore seem to know many things, when they are for the most part ignorant and hard to get along with, since they are not wise, but only appear wise” (Plato 1925, 275a-b).

<sup>10</sup> For a comparison of transmission strategies between aural and Western classical traditions and their corresponding prioritizations of theory application and creativity, see Schippers (2010), 61-88.

<sup>11</sup> Also explored as “pharmakon” (Waller 2010).

<sup>12</sup> David Waller also found musicians of more oral or hybrid traditions to similarly believe that notation inhibited personal expression (Waller 2010, 28).

<sup>13</sup> “With writing or script in this full sense, encoded visible markings engage words fully so that the exquisitely intricate structures and references evolved in sound can be visibly recorded exactly in their specific complexity and, because visibly recorded, can implement production of still more exquisite structures and references, far surpassing the potentials of oral utterance. Writing, in this ordinary sense, was and is the most momentous of all human technological inventions” (Ong 1982, 85).

<sup>14</sup> “Written notation also encourages us to distance ourselves from our words and those of others ... But it also encourages the formation of an image of ourselves as *separate* from our words and actions” (Sloboda 1985, 244).

<sup>15</sup> Math education practices have shifted towards recognizing the value of mental math beyond the elementary school. Mental math is thought to sharpen and secure models of mathematical organization (Rubinstein 2001).

<sup>16</sup> Roland Barthes’ discussion of myth reveals how such linguistic contortions in which the absurd is recast as the best of all solutions invariably supports bourgeois interests. In the above case, historically Western views of music “literacy” prioritizing the re-creation of historical Western court music over contemporary creative activities bridging a diverse swath of society may provide one such example. “For the very end of myths is to immobilize the world: they must suggest and

mimic a universal order which has fixated once and for all the hierarchy of possessions” (Barthes 2013, 155).

<sup>17</sup> Ong writes, “Writing, Plato has Socrates say in the Phaedrus, is inhuman, pretending to establish outside the mind what in reality can be only in the mind. It is a thing, a manufactured product ... real speech and thought always exist essentially in a context of give-and-take between real persons” (Ong 1982, 79).

<sup>18</sup> This loss of immediacy, authority, and authenticity with mass reproduction has been examined elsewhere in media theory. Walter Benjamin’s theory of auras offers many insights ripe for consideration in music (Benjamin 1935).

Thirty years later, Sloboda and others explored this idea in an experimental study. They found audiences preferred performances of classical music wherein the prosodic interpretation was spontaneously improvised rather than rehearsed. The audience in the study seemed to intuit a qualitative difference between the scripted interpretation and interpretations characterized by an authentic and immediate response to the moment (Dolan, et al. 2013).

<sup>19</sup> “The display of music in notation may not simply be a recording of sound, but itself a performance of that music. Various early-music scholars have addressed how the visualization and *mise-en-page* of music in manuscripts served not only to construct knowledge about the music itself, but also to relate this knowledge to ontological or religious beliefs, moral education, political discourse or processes of social distinction” (Schuling 2019, 436).

<sup>20</sup> The following books all present both melody and chords for non-chording instruments across a variety of styles. Hal Leonard Corporation (2014), *Easy Pop Melodies for Trumpet*; Newman (2013), *Fifty Famous Classical Themes for Violin: Easy and Intermediate Solos for the Advancing Violin Player*; McCaskill and Gilliam (2012), *Celtic Flute Made Easy*.

<sup>21</sup> A guide tone melody is a common practice in jazz education to develop reflexes for smooth voice leading. A player chooses just one note to sustain over an entire chord and selects a nearby note to resolve to for each successive chord. The practice speeds the process of chord identification, focuses on quality resolution, and provides slow practice for memorizing the changes.

<sup>22</sup> Print may create an “autonomous discourse” or “context-free language,” a conversation for which the listener or reader must stay silent before the printed authority of the page (Ong 1982, 79).

<sup>23</sup> Sterne summarizes this common view within communication studies: “Electronic culture depends on the powers of externalization first developed in literature culture, but it returns to a kind of oral mindset of an expansive present and universal interconnectedness” (2011, 208).

<sup>24</sup> Randall Everett Allsup, in *Remixing the Classroom*, asks if the authoritarian, positivist ideas within music education co-opt the more social, dialogical model of musicking, which would seem to be a better fit for our modern digital world (2016, 88-93).

<sup>25</sup> In the chapter, “The Scientific Worldview,” Small presents a similar perspective on how European Art Music came to be seen as science (1996, 80-96).

<sup>26</sup> This may be an unfair use Milton Babbitt’s text, as he did not title his essay “Who Cares?” Rather, a controversy-seeking editor changed the title unbeknownst to him. Nevertheless, this is the unfortunate name the essay has lived with, and so I poke at its published title as discourse no longer in the hands of its author.

<sup>27</sup> Paul Woodford describes John Dewey’s “socialized intelligence” as actively challenging elitist cultural values that diminish or disregard the lived experiences and expressions of the diverse communities of democratic society. Indeed, provision for all to express their lived experience is central to Dewey’s conception of democratic society: “It was not for the privileged, or an elite, to decide what was of social value. No one had a monopoly on truth or value, and autocratic and elite regimes and entrenched, taken-for-granted traditions only discouraged individuals from engaging in the kinds of reflection and moral decision making that were the foundation for personal responsibility and creativity” (Woodford 2005, 4). See also the “Socialized intelligence” discussion in Dewey, 1932, 7:350.

<sup>28</sup> Woodford argues that using music education to support the aesthetic bias of the ruling or elite class is fundamentally undemocratic. Instead, he proposes music be taught in a way that will enable students to come to know music’s role in civilization rather than simply rehearsing the aesthetic biases of one affinity group (2005, 5-12).