# BIMUSICALITY: PEDAGOGICAL INSIGHTS FOR MUSIC EDUCATORS FROM "SECOND-MUSIC" LEARNING EXPERIENCES

Ву

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Liberty University

# A MASTER'S THESIS PRESENTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF ARTS IN MUSIC EDUCATION

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#### Abstract

This study explores the development of "bimusicality" in adolescent and adult music learners to discover correlations between this experience and second language acquisition processes. North American music educators need to be equipped to help their students grow in their understanding of diverse musical styles, genres, and traditions, and the ethnomusicological concept of bimusicality, in connection with existing research on second-language acquisition as a sociocultural phenomenon, offers a new frame of reference for understanding how music learners may interact with distinct musical styles. Survey research with a group of 98 adult musicians, followed by ethnographic interviews of 16 of these survey respondents who developed music performance proficiency post-childhood in at least one "second music" style, focused on individual perspectives on developing bimusicality across a variety of musicalcultural settings. Findings suggest a set of nine guiding values that direct music students toward successful and lasting engagement with a new musical tradition, as well as specific pedagogical approaches for music educators seeking to help their students cultivate bimusicality. Finally, these learning values and teaching strategies are synthesized into sample resources for music educators seeking to prepare their music students for productive and satisfying second-music learning.

Keywords: bimusicality, multicultural music education, music pedagogy

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#### **Chapter 1: Introduction**

The goal of this study is to explore the development of bimusicality in adolescent and adult music learners, and to discover any correlations between this experience and the process of second language acquisition. Music learning takes place in a multicultural world, and equipping music students to navigate and appreciate this diversity is the responsibility of every music educator. Scholars have termed the emic understanding of multiple distinct music styles or traditions "bimusicality" (Hood, 1960; Nettl, 2005). However, although the discipline of music education has increasingly drawn on multicultural influences in recent years, instruction dedicated to understanding and participating in a new music culture – in other words, teaching towards bimusicality – is not readily accessible. Numerous researchers have observed cognitive connections between music and language learning, but it remains to be seen if strategies for second-language acquisition are relevant for students learning new musical styles. Surveys and ethnographic interviews of adult second-music learners, cross-referenced with findings on post-childhood second-language acquisition, suggest points of connection between the two useful for the development of music pedagogy informed by research on bimusicality.

#### **Background**

A great deal of study has already been carried out on the cognitive connections between music learning and language acquisition (Bidelman, Hutka, & Moreno, 2013; Cuddy & Upitis, 1992; Gruhn, 2011; Slevc & Okada, 2015), and on the potential for adolescent and adult language learners to successfully acquire a new language (Birdsong, 1999; Bongaerts, 1999; Moyer, 2013; Singleton & Ryan, 2004). Current scholarship has also explored bilinguality, and, to a somewhat lesser extent, bimusicality, as unique socio-cultural experiences shaping individual and community identity (Miller & Kubota, 2013; Nettl, 2015; Sachdev, Giles, &

Pauwels, 2013; Shelemay, 2012). However, relatively little research exists on the learning processes by which musicians with emic understanding of multiple musical styles acquire their bimusicality. The goal of this project is to discover what, if any, specific learning experiences and strategies bilinguals and "bimusicals" have in common, and how these practices may be useful for an approach to music pedagogy that encourages music students to celebrate and cultivate a multi-musical identity.

#### **Definition of Terms**

**Bimusicality.** This term is taken from Hood (1960), but has since been adopted by other scholars in the field of ethnomusicology. For the purposes of this study, bimusicality is an individual's understanding of multiple musical styles from an insider perspective. This understanding may comprise music performance ability in these styles, but performance skills are not required; rather, at the most fundamental level of bimusicality, the individual simply includes these distinct musical styles as part of his or her musical identity. What precisely constitutes a "distinct musical style," and what issues are at play in an individual's conception of his or her musical identity, are concepts that will be explored in this project. In this study, the term "second-music learner" will be used interchangeably with the term "bimusical" to denote an individual who fits the description given above.

**Distance.** This term as used in this study is taken from Singleton & Ryan (2004)'s research on second language learning, but is repurposed here to denote the relative degree of difference between one music learning experience and another as perceived first-hand by the learner. Although such distance cannot be measured in absolute terms, recognizing the various factors at play and considering how they may influence the learner's experience emerges as an important area of inquiry for this study.

Learning dimensions. As the above terms indicate, bimusicality is a complex and multifaceted phenomenon. The original research conducted in this study pointed to three overlapping areas of the bimusical experience, termed "dimensions" of second-music learning. These three dimensions, discussed from Chapter 4 onward, provide clarity for understanding the many factors at play in an individual's process of developing bimusicality.

Learning values. In addition to these three general dimensions of bimusicality, interview data collected during this study also suggested a series of nine personal qualities and practices developed over time by successful second-music learners. These, listed and explained in Chapter 4, are termed "values" of second-music learning.

#### **Research Questions**

The guiding research question for this thesis project is: What correlations, if any, exist between second language acquisition strategies and learning processes used by adolescent and adult bi-musicals to develop emic understanding of new musical styles? This research question is supported by four sub-questions. First, what philosophical, cognitive, socio-cultural, and pedagogical relationships exist between music and language learning? Second, what is bimusicality, and how do musicians experience it? Third, what learning strategies, if any, have benefited successful adult second-music learners, and do these show any connection to methods of second-language acquisition? Fourth and finally, what curricular materials can help adult music students grow in bimusicality as a means of cultivating stylistic diversity and cross-cultural musical engagement? Together, these questions will provide direction for the research project at hand.

#### Overview and Significance of the Study

The thesis project comprises ethnographic research, involving surveys and interviews, with participating musicians of various ages and ethnic backgrounds. It includes a review of existing literature on second-language acquisition in adolescent and adult learners intended to identify common themes in how these individuals have successfully acquired a new language. Original research was conducted in the form of ethnographic interviews of adult second-music learners, focusing on their music learning experiences and the advice they would give to other music students undergoing a similar experience. This interview data is supplemented by survey results on individuals' understanding of their musical identity and the influences that have shaped it. Coding and analysis of these interviews drew out three dimensions and nine values of the second music-learning experience, and correlations emerged between these findings and trends that appeared in the review of second-language acquisition literature. The project concludes by suggesting pedagogical approaches for second-music teaching and learning that emerge from these data, and presenting sample curricular materials for music students preparing to enter a second music-learning experience which apply these learning strategies.

This study meets contemporary needs in the field of music education. Today, music learners of all ages can access musics from across the globe nearly instantaneously, and forces of globalization will most likely continue to influence music students in the future. In addition, every individual music learner enters the educational setting with a unique musical background and past set of "enculturative" experiences. Music educators need to be able to help their students appreciate musical styles from around the world, to encourage them to value their own unique musical identity, and to give them concrete strategies for developing proficiency in the musical styles they choose to pursue. Considering scholarship on second-language acquisition, a

discipline wherein educators face many similar issues pertaining to diversity, identity, and cross-cultural learning, offers music educators new perspective that may help them meet these challenges. Although the pedagogical recommendations and sample curricular materials that are outcomes of this research project are simply suggestions pending further testing and study, it is hoped that this approach to understanding music learners' experiences and needs as they learn new musical styles will be of value to music educators in any setting.

#### **Chapter 2: Review of Literature**

The intersection of music and language is well-traveled territory, although scholarly ventures in this realm often end with at least as many questions about the relationship between the two as answers. It is the goal of the present study to provide new insight into this area through ethnographic research on the development of bimusicality in adolescent and adult music learners. Research questions to be addressed by this review of literature include: First, what philosophical, cognitive, socio-cultural, and pedagogical relationships exist between music and language learning? Second, what is bimusicality, and how do musicians experience it? Third, what learning strategies, if any, have benefited successful adult second-music learners, and do these show any connection to methods of second-language acquisition? This review of literature will be structured around the first question listed above, exploring current scholarship on the philosophical, cognitive, socio-cultural, and pedagogical connections between music and language learning. However, within the scope of music and language learning as socio-cultural phenomena, Question 2 on bimusicality will also be addressed; likewise, within the scope of music and language pedagogy, Question 3 on second-language learning strategies will also be discussed. While more complete answers to these latter questions require further investigation, findings available in extant scholarship will inform the original research on these topics documented in later chapters of this project.

#### Philosophical Connections between Music and Language

Any study of music and language must begin with care to clarify the relationship between them. Although much can be gained from investigating their connections, there is also much to lose if they are assumed to be synonymous (Lidov, 2005; Nettl, 2015). Therefore, establishing a philosophical definition of how music and language are alike and different is an essential first

step for this project. Music and language are both universal human behaviors (Lidov, 2005), given a sufficiently broad definition of music; although a listener accustomed to Beethoven or the Beatles might be inclined to term Balinese *gamelan* or Bosnian *ganga* 'noise' instead of music, it is undeniable that the vast majority of the world's peoples choose to organize sound over time into "musical utterances" that are for them expressive and meaningful (Nettl, 2015, p. 33). The same is true of spoken language as a human behavioral phenomenon, and much study has been devoted to the remarkable fact of humans' linguistic creativity and seemingly innate capacity for first language acquisition (Gardner, 2011; Gervain, 2015; Tomasello, 2009). While specific counterexamples to these "statistical universals" exist (Nettl, 2015, p. 36), such as the famous case of the severely abused and language-deprived Genie (Singleton & Ryan, 2004, p. 51), it is undeniable that language use and music-making are normative to the human condition.

However, while music and language are both universal human behaviors, the popular axiom that "music is a universal language" does not carry weight in the field of contemporary ethnomusicology. Nettl (2015) points out that although language is a universal human phenomenon, people choose to speak in a variety of ways; in his words, "to regard all languages as equally expressive is a valuable view... but it does not necessarily lead to the adoption of Esperanto" (2005, p. 26). Anyone who has ever been moved by a musical performance knows that music, like language, has power to express and communicate; however, combinations of sounds which are significant in one musical-cultural context do not necessarily retain the same meaning – or any meaning at all – when reproduced in another setting. For example, in one study, Western and Middle Eastern listeners were asked to describe their reactions to Middle Eastern songs composed in a variety of melodic modes. While the Middle Eastern listeners' responses corresponded to one another and to the emotional quality of each mode perceived in

Middle Eastern music culture, the Westerners' descriptions were inconsistent with one another and with the Middle Easterners' emotional responses (Touma, 1996). Also, perceptions of music change through time as well as across cultures. For example, in Western Europe during the Middle Ages, dissonant intervals were avoided in Christian worship because they were believed to have harmful spiritual effects (Mark & Gary, 2007), but the V7 chord with its inherent tritone later became a common feature of Protestant hymnody. Music, as humanly ordered sound-intime, is not inherently or absolutely meaningful to all people everywhere. Like language, it requires context and shared cultural understanding in order to hold communicative and expressive power.

If music is not a universal language, might language be a form of music? Lidov (2005) explores this relationship in great depth, but rapidly discredits the notion that a direct correspondence between the features of music and the elements of language exists; in fact, he contends, "to claim today that musicology should encompass linguistics rather than the reverse can only be a literary ploy" (p. 14). Instead, he turns to semiotic theory to shed light on how language and music make use of sound and silence to symbolically express meaning. In Lidov's view, both language and music are avenues for human beings to articulate signs that have significance for their hearers, but one mode of expression is not subordinate to another. It is worth noting that his analysis confines itself to Western classical, pop-folk, and post-tonal compositions, so the broader applicability of his semiotic theory to music as a universal human behavior is unclear. Gardner (2011), however, corroborates Lidov's general view, positing that music and language are distinct but interrelated forms of human intelligence. In Gardner's interpretation, music and language have in common "an existence that is not closely tied to the world of physical objects... and an essence that is equally remote from the world of other

persons" (p. 103), which gives them more in common with one another than with the other types of intelligence he defines. However, Gardner is also careful to clarify that music and language are processed differently in the brain – a key area of inquiry that will be considered more carefully in the following section of this paper. At present, it suffices to say that music and language share certain universal features, but, viewed globally, neither one is a subset of the other.

Although language and music are far from synonymous, particular musical traditions in context can function in ways similar to individual languages. The Middle Eastern modes previously referenced above consistently sounded joyful, or longing, or angry, or otherwise in the ears of Middle Eastern listeners (Touma, 1996), just as major modes sound cheerful and minor modes sound sad to listeners accustomed to Western tonality. Within its historical-cultural setting, a particular type of music may be laden with meaning for listeners who know how to interpret its features. Elliott (1995) recognizes these distinctions in his three-part definition of music, arguing that "MUSIC is a diverse human practice consisting in many different musical practices or Musics" (p. 44). Elliott's "MUSIC" is music as a universal human behavior, but his "Musics" are the particular, meaningful musical-cultural traditions that are the grounded realization of this global impulse. Nettl (2015) makes the same distinction between musicmaking as a universal human practice and particular musical traditions as expressions of specific socio-cultural settings in the comments on Esperanto previously quoted. Music and language exist in myriad forms because they are situated realizations of the innate human impulse to communicate ideas, express feelings, create, and experience life with others.

Scholars have noted important similarities between the properties of individual languages and particular musical systems. The disciplines of Western music theory and linguistics have

repeatedly crossed paths since the mid-1960s, when Babbitt (1965)'s observation that "the Schenkerian theory of tonal music... [is] strikingly similar to transformational grammars in linguistics" (p. 60) opened the door to a wave of "Schenker-inspired generative theories" that sought to explain structural principles underlying all Western tonal music by the use of analytical principles borrowed from Chomskian linguistics (Yust, 2015, para. 0.1.2). Lerdahl and Jackendorff (1996)'s work in this area is representative of the discoveries that have been made at this intersection; in fact, these writers contend that Western tonal theory belongs alongside "traditional areas of cognitive psychology such as theories of vision and language" (p. 2). Through their work, Lerdahl and Jackendorff (1996) point out that Western tonal music, like language, is expressive and meaningful via its employment of hierarchical, rule-based structural principles. Gordon (2012) likewise connects music theory and linguistics, albeit in a much more casual manner, when he writes of "musical syntax" (p. 6). Nettl (2015), considering characteristics representative of not just the Western tonal tradition all the world's musics, conjectures that all "musical utterances" have internal structural complexity in ways "comparable to phonemes and morphemes in language" (p. 34). Lidov (2005) rejects such a direct correspondence between such linguistic categories and the elements of music, but points out that both music and language symbolically convey meaning in rule-governed ways. Applying linguistic principles to music analysis has found some, if limited, traction in the musical scholarship of the past several decades; the implications for cognitive science of these avenues of inquiry will be further explored later in this paper.

However, as the above-mentioned researchers and many others acknowledge, music is also fundamentally unlike language in numerous respects. While music can function in culture in certain roles similar to language, and is internally organized via generative principles similar in

certain ways to those of language, it exists because it meets human needs for communication, expression, and aesthetic satisfaction in ways unique to itself. In fact, foundational to music's uniqueness is its non-verbal character. Reimer (2012) contends that "musical immanence, by its very nature, is unable to be attained directly by ordinary language... a language of instruction is a necessary adjunct, as a means to turn attention to what is beyond language" (p. 126). Elliott (1995) likewise holds that "musicianship... is a multipartite form of working understanding (or praxis) that is procedural and situated in essence" (p. 70); in other words, music must be experienced first-hand in a particular place and time, not simply described with words, in order to be fully understood. Lerdahl and Jackendorff (1996) recognize that Western tonal music is much less dependent on "grammaticality" than it is concerned with "preference among a considerable number of competing well-formed (grammatical) structures" (p. 308). This is to say that music remains meaningful while allowing much more structural variance than language can permit. Lidov (2005) arrives at a similar conclusion, albeit in another form, as shown below.

Table 1
Structural Differences between Music and Language

	Shortest elements	Extended units
Language	arbitrary	rule governed
Music	rule governed	unique, irreducible

Note. Adapted from Lidov, 2005, p. 11.

Nettl (2015) goes further, writing that although "music is not the universal language... musics are not as mutually unintelligible as languages" (p. 36). Lidov (2005) corroborates this, pointing out that in many cases a learner can acquire a new musical style faster than a second language. Music can transcend language, and it is precisely its non-linguistic qualities, such as its lack of semantics and its experiential, culturally situated character, that make this possible.

With all this in mind, the present study is founded on the following philosophical view of the relationship between music and language. First, music is not a universal language, although, like language, it is a universal human behavior; second, music shares some aspects of its functionality in cultural context with that of individual languages, which include expressive power and principles governing its internal structure, although musical and linguistic methods of analysis have limited cross-applicability outside their own domains; and, third, music exists to communicate meanings, express feelings, satisfy aesthetic values, and facilitate shared experiences in ways that are unique to itself and irreplaceable by language. The following table, expanding Lidov (2005)'s model referenced above, summarizes the conclusions of this section.

Table 2

Comparing Characteristics of Music and Language

	As a universal human behavior	Within a specific cultural context
	Learned during childhood via	Realized to satisfy cultural functions
	environmental exposure	(Elliott, 1995; Nettl, 2005)
	(enculturation)	
	Governed by principles of structure	Expressive / efficacious – does not
Music is	(music theory / cultural norms)	have semantics (Elliott, 1995;
	(Gordon, 2012; Lerdahl &	Riemer, 2012)
	Jackendorff, 1996; Nettl, 2015)	
	Experiential and embodied (Elliott,	More likely to be accessible to
	1995; Riemer, 2012)	outsiders, though it is easily
		misunderstood (Harris, 2013; Nettl,
		2015; Lidov, 1995)
	Irreducible: Large units are significant	Meaning emerges from a piece, work,
	(Lidov, 2005)	or performance as a whole
	Learned during childhood via	Fundamental to all conceivable
	environmental exposure (primary	cultural functions
	language acquisition) (Gardner, 2011;	
Spoken	Gervain, 2015; Tomasello, 2009).	
language is	Governed by principles of structure	Denotative / meaningful (semantics)
	(syntax)	
	Abstract and symbolic	Less likely to be accessible to
		outsiders (Nettl, 2015; Lidov, 1995)
	Generative: Small units are	Meaning is built from component
	meaningful (Lidov, 2005)	parts added together

An original model for the relationship between music and language, extrapolated from these sources and the findings of this thesis, will be proposed in Chapter 6.

#### **Cognitive Connections between Music and Language**

Music and language, of course, are not related to one another via philosophical definitions alone. They are both vital to the everyday human experience – and, despite the dazzling array of ways in which these universal behaviors are realized, all human beings share certain physiological and mental machinery that enables them to understand their musical and linguistic environment from the inside out. This section will examine various perspectives from contemporary research on the cognitive processes by which human beings acquire language and are enculturated into musical systems.

Music and language as types of knowledge. If, as the previous section of this paper suggests, music and language are distinct but interrelated domains of human knowledge and experience, then it can be expected that the ways in which human beings conceptualize and process musical and linguistic knowledge should also have connections to one another.

Extensive research has been devoted to uncovering and defining the relationship between music and language within the human brain. These findings acknowledge both significant similarities and important differences between the two in terms of their cognitive properties. Kempe, Bublitz, and Brooks (2015) recognize that while both music and spoken language require the brain to process aural stimuli, music requires "enhanced sensitivity" to more features of sound, including "such as harmony, timbre, loudness, duration, tempo, and melodic contour" (p. 351). On the other hand, language encodes semantic information to unambiguously communicate meaning, a process which finds no direct parallel in music (Tillmann, 2010; Perruchet & Poulin-Charronnat, 2012). Tillmann (2010) observes that both music and language processing require

that the brain engage in "cognitive sequencing" to organize musical and linguistic information in the brain's working memory (p. 569). Sleve and Okada (2014) add that both music and language require the brain to engage with ambiguous and/or unexpected input; the observer is constantly "overriding and updating an evolving representation of musical structure" or linguistic structure in response to his or her experiences (p. 641). Given the tremendous variety in the musics of the world – both in their sonic features, and, more significantly, in how their participants conceptualize the practice of music-making in their cultural setting (Feld & Fox, 1994; Nettl, 2015) – it may be impossible to define a single cognitive framework for all modes of musical knowledge and experience in the world.

However, research on the cognitive processing of spoken language and Western tonal music suggests certain points of connection between the two. Proposed explanations include Patel (2008)'s "shared syntactic resources integration hypothesis" (SSIRH), which suggests that while music and language draw on distinct mental representations which are conceptualized separately, the brain uses the same forms of syntactic processing to understand how both musical and linguistic units of meaning are assembled into more complex hierarchical structures. Various studies have tested and offered support for this hypothesis (Hoch, Poulin-Charronat, & Tillmann, 2011; Koelsch, Gunter, Wittfoth, & Sammler, 2005; Kunert, Willems, Casasanto, Patel, & Hagoort, 2015; Slevc, Rosenberg, & Patel, 2009), but criticism has also come from other researchers who point out that similar measurable effects on brain function were reproduced with semantic prompts rather than syntactic ones, suggesting that the SSIRH may not account for these observed patterns in cognitive processing of music and language (Perruchet & Poulin-Charronnat, 2012).

Other studies have focused on pitch processing as an essential feature of both musical and linguistic cognition. The OPERA hypothesis, also put forward by Patel (2011), proposes that overlapping cognitive processes between music and language allow musicians to process aural stimuli with increased precision. By means of the emotional engagement, repetition, and attention associated with musical practice and performance, these cognitive processes are regularly exercised and "the neural plasticity engendered from music training acts to benefit speech processing" (Bidelman, Hutka, & Moreno, 2013, p. 2). Various researchers have studied groups of musicians, or provided research participants with musical training prior to testing, in order to evaluate if music practice leads to greater acuity in processing speech sounds. Findings have shown that pitch processing in music and spoken language are connected (Perrachione. Fedorenko, Vinke, Gibson, & Dilley, 2013), and that musical ability and experience positively correlate with research participants' ability to perceive pitch changes in spoken language (Schön, Magne, & Besson, 2004) and to differentiate vowel sounds from an unfamiliar language (Kempe, Bublitz, and Brooks, 2014). At the intersection of music and language in cognitive science, syntactic processing and aural acuity remain areas of interest.

An additional hypothesis dealing with the relationship between cognitive processing methods in music and language has been put forward by Bidelman et al (2013). Reviewing Patel (2011)'s OPERA hypothesis, Bidelman et al. observe that "the OPERA framework makes no *a priori* assumption that music-language transfer should be exclusively unidirectional... the ingredients of the model (e.g. repetition, attention, increased sensory encoding precision) are also satisfied by forms of language expertise" (p. 2). The researchers therefore propose that musical and linguistic cognitive processing skills may be "bidirectional" (p. 2), and provide study findings that tone language speakers and musicians demonstrated increased and comparable

sensitivity to small pitch differences when compared with non-musicians. Based on the OPERA hypothesis, Bidelman et al. attribute this increased sensitivity to the consistent practice of relevant aural skills and cognitive habits involved in musical training, which results in "a series of enhancements to sensory and cognitive mechanisms" (p. 1). This concept of bidirectionality in musical and linguistic cognitive processing – that music learning is not exclusively beneficial to language skill development, but that language practice also may aid in the development of musical understanding –suggests that aspects of the second-language acquisition process may have relevance for "second-music" learning as well. The possible pedagogical consequences of this concept will be explored in greater detail in the following section of this paper.

In closing, it is necessary to acknowledge a caveat in all the above findings on music and language cognition – they rely exclusively on comparisons between spoken language and Western tonal music. As Slevc and Okada (2014) conclude, "a deeper understanding of the cognitive and neural basis of these domains is impossible without moving away from monolithic conceptions of 'music' and 'language'" (p. 648). Just as spoken language is not the only mode of human linguistic communication, Western tonal music is far from the only system of musical expression, and conclusions drawn from limited samples of human musical and linguistic creativity will also be limited in their scope.

As a counterpoint to this issue, ethnomusicologists have offered more diverse observations on the relationship between human understandings of music and language. Feld and Fox (1994) point out that while "music as language," encompassing all comparisons between linguistics and music (p. 27), is one avenue of inquiry, studying how societies use language within music or how they use language to describe and discuss music are equally significant. They are critical of both the aural-perception and syntactic-processing cognitive research

approaches discussed above, pointing out that these are biased toward Western hierarchical values and exclude or under-prioritize important aspects of the musical experience, including texture, timbre, and performance context. Feld and Fox (1994) further observe that in cultural context, speech and song exist on a multidimensional continuum, rather than as wholly separate domains, and reference the fieldwork findings of Kratz, Titon, Seeger, Feld, and others as examples (p. 38). Nettl (2015) concurs with these observations, noting that Western musical scholarship on the relationship between language and music is inextricably bound up in Western delineations between various "realms, domains, and categories" of artistic expression and scholarly discipline – divisions which other cultures may recognize in part or not at all (p. 29). Avoiding or rejecting Western musical-cultural thought on musical and linguistic cognition in pursuit of an idealized cultural neutrality would certainly be counterproductive and likely impossible; rather, the present research project is intended to be open to a broader array of influences, while drawing on the many significant insights relevant to this study that have come from Western scholarship.

Music and language acquisition in early childhood. Connections between the cognitive processes involved with both music and language begin to form in the human brain before birth. By the end of the 20<sup>th</sup> week of pregnancy, a fetus possesses both the physical inner and outer ear structures and the neural pathways required to detect and process sounds. Although the full range of sound frequencies perceptible to adult humans is not audible within the womb, as the fetus's ears are still developing (Gruhn, 2011), numerous studies have shown that both musical enculturation and language acquisition begin during this period in response to sonic stimuli. Not only do newborns prefer their mother's voice to the voices of other adults (Harris, 2009), but they also demonstrate familiarity with melodies they heard while in the womb, and are able to

differentiate linguistic elements of their mother's speech from other languages (Gruhn, 2011; Harris, 2009; Gervain, 2015). As Gordon explains, "a child will never have a higher level of music aptitude than at the moment of birth... Nature supplies the child with an abundance of neurons and synapses during gestation, again immediately after birth, and at critical periods hereafter" (2012, p. 44). A newborn is not a blank slate – his or her process of language acquisition and musical enculturation has already begun.

Moreover, the steps of musical enculturation in early childhood show similarities to the stages of first language acquisition. Studies that show infants as young as 3 to 6 months old can distinguish pitches, adjust to a tonal center, and bounce a song's metric structure (Gruhn, 2011; Heller & Athanasulis, 2002). Harris agrees that musical stimuli during the first eighteen months of a child's life are "crucial to providing children with the necessary preparation for future music learning" (2009, p. 4). Over the next few years, children learn to imitate and match pitches and rhythms, reproduce melodies, and internalize a tonal center, abilities that are acquired though the lateralization of brain function as well as increasing motor skills and vocal control (Gruhn, 2011; Harris, 2009). Concurrently, children around 18 months old begin combining words to experiment with morphology and syntax, a process which two- and three-year-old children continue as they attempt increasingly complex and abstract communications (Tomasello, 2009). By four or five years old, children have learned to generate original sentences following language-specific rules of grammar and pronunciation, and to correct their mistakes (Gardner, 2011). Successful language acquisition during early childhood represents such a complex feat of cognition that some linguists, including Noam Chomsky, have posited that the human brain has a unique mechanism for this purpose (Tomasello, 2009). Interactions with the world of sound early

in life allow children to develop the ability to understand the musical and linguistic stimuli present in their environment and respond to them in meaningful ways.

Finally, in keeping with the "bidirectionality" concept proposed by Bidelman et al. (2013), numerous research findings have suggested that integrating music and language instruction has positive effects on young students in both domains. Moreno, Lee, Janus, and Bialystok (2015) affirm "the powerful impact of music and second-language training on the developing brain" (p. 403) through a study of the effects of music and French classes on Englishspeaking kindergartners. One year after the initial study, post-testing indicated that students who had participated in either type of training continued to possess increased acuity to differences in both musical pitch and French vowel sounds. Heller and Athanasulis (2002) found that regular music instruction for first, third, and fifth graders led to increased ability to perceive expressiveness in both melodies and spoken language. Fisher (2001), in a two-year study of Spanish-speaking students in ESL classes, concluded that regularly using music to support classroom activities contributed both to improved test performance and a more positive and engaged rapport between the students and their instructor. Moreno, Marques, Santos, Santos, Castro, and Besson (2009) observed improvement in 8-year-olds' reading skills and ability to distinguish pitch changes in spoken language after 6 months of music instruction, while painting instruction over the same time period did not result in similar progress in these areas. These findings, and others like them, indicate that teaching methods and activities targeting the development of aural perceptiveness have benefited both the musical and linguistic faculties of young learners.

**Music and language acquisition post-childhood.** There are individuals among both language users and musicians who have emic understanding of more than one linguistic or

musical system. Bilinguality and bimusicality, the products of further music or language learning after the learner has already acquired primary musical or linguistic understanding, are unique considerations in the realm of cognitive science. While the former has been the subject of extensive study for decades (Butler, 2013; Edwards, 2013; Ellis, 1985), the latter has been much less thoroughly explored. The term "bimusicality" was first put forward by the mid-20<sup>th</sup> century ethnomusicologist Mantle Hood, in a brief but now well-known article (Mendonça, 2011; Nettl, 2015). Hood (1960) considers that musicianship skills must be developed via practice and performance before a student of music is ready to proceed to analysis, criticism, or other "professional activities" (p. 55). However, what sets this contention apart from the broader school of praxial music education philosophy announced decades later by Elliott (1995) is Hood's specific call for cross-cultural music performance as pre- and co-requisite to ethnomusicological study. Hood's study under ethnomusicologist Jaap Kunst, and his familiarity with the Javanese gamelan ensemble Kunst directed at UCLA, shaped his development of this concept (Mendoca, 2011), and the specific examples and recommendations Hood (1960) makes - to be discussed later in more detail - are drawn from the experiences of Western ethnomusicology students learning to perform in this and other East Asian musical traditions. However, as elaborated on by Nettl (2015) decades later, bimusicality is a useful concept of musical identity for more than students of ethnomusicology alone. Instead, it describes countless individuals and music cultures around the contemporary world as they constantly negotiate the boundaries between the different musical traditions within their understanding.

Language and music learning remain connected to one another in adolescents and adults as they are in children. In fact, the "bidirectionality" between musical and linguistic skill development hypothesized by Bidelman et al. (2013) which arises in studies on music and

language learning in children also appears in research findings on adult music and language learners. Schön et al. (2004) conducted a study of eighteen French-speaking adults, of whom nine had long-term musical experience and training, to measure their sensitivity to violations of expected pitch contour in both familiar melodies and spoken French. The researchers explain that "musicians were not only more accurate in detecting pitch violations in music... they were also more accurate in detecting pitch violations in language" (p. 347). Kempe et al. (2015) tested a group of 118 English-speaking adults on their ability to distinguish slight differences in pitch, overtones, and timing in sound and pitch contours and vowel sounds in Norwegian, finding that greater musical aptitude as measured by Gordon's Advanced Measures of Musical Audiation showed the strongest positive correlation to the ability to distinguish differences in sound and in unfamiliar spoken language. Finally, Bidelman et al. (2013) found in a study of adult Englishspeaking musicians and non-musician Cantonese speakers that both groups exhibited enhanced pitch sensitivity and recall in comparison to English-speaking non-musicians. Comparing tone language fluency with musical training, they conclude that "a background in either domain... might improve certain processing required by the other domain" (p. 6).

However, it is necessary to acknowledge that age is an important factor in the development and exercise of cognitive processes that connect, and facilitate the acquisition of, music and language. A debated "critical period" is thought to last from age two until puberty (Singleton & Ryan, 2004), although this timing may vary from one individual to the next (Birdsong, 1999). Biological and linguistic evidences for the existence of a critical period include decreases in neural plasticity after puberty, greater difficulty with age in accessing innate-language learning abilities or "universal grammar," and changes in methods of cognitive processing during adolescence (Birdsong, 1999; Singleton & Ryan, 2004). Studies have shown

that children who have not been exposed to primary language-learning stimuli during this critical period struggle to acquire and retain spoken and written language abilities (Singleton & Ryan, 2004). Although such terminology has not been applied to music enculturation, research demonstrates that a child's musical cognition likewise undergoes significant changes as he or she matures. By ten years old, children growing up in Western music culture consistently demonstrate preferences for tonality and consonance over atonality and dissonance, showing that they have internalized the musical values of their environment (Gruhn, 2011). Heller and Athanasulis (2002) cite numerous studies showing that music practice has the greatest effects on children's cognitive processes from pre-school through age 10, and Gordon (2012) contends that a child's potential music aptitude is greatest at birth and declines until age nine, after which it becomes fixed. Although scholarly consensus on the existence and effects of the critical period has not been reached (Butler, 2013; Singleton & Ryan, 2004), these findings do show that childhood offers unique opportunities for both language and music learning. The present study, however, deals with "second-music" learning, the study of which for this project was limited to post-childhood. Therefore, this time frame will now be addressed.

Neither musicians nor language learners have lost their chance to succeed if they begin learning a second language or second music during adolescence or as adults. Gaining such an understanding remains possible after the hypothesized critical period, although the challenges involved are different in many respects. Although the prevailing consensus remains that second language acquisition is easiest and most effective during childhood, findings also show that adults with a stable neural and linguistic framework in place from primary language learning can acquire a second language with lasting success (Eubank & Gregg, 1999; Birdsong, 1999; Singleton & Ryan, 2004). For example, Flege (1999) and Singleton & Ryan (2004) together cite

more than 12 independent studies demonstrating the second-language fluency of bilinguals who learned their new language after puberty. Likewise, after a series of three studies of advanced adult second-language learners, Bongaerts concluded that "claims concerning an absolute biological barrier to the attainment of a nativelike accent in a foreign language are too strong" (Bongaerts, 1999, p. 154). The bilinguals in these studies exhibited native or near-native command of grammar and accent in their second language, as well as the durability of their skills over time. Although scholars remarking on these phenomena call into question the existence of a single, impossible-to-reopen critical period, they do acknowledge that processes of language learning change around the age of puberty.

Amidst these ongoing questions in the field of second-language acquisition, Skill Acquisition Theory is one model put forward to provide a view of how adult learners uniquely go about the process of developing understanding and communication skills in a second language. As described by Speelman (2005) and Taie (2014), Skill Acquisition Theory (SAT) proposes that adult learners grow their ability to carry out new skills from explicit to implicit knowledge through practice. While an adult learner's early engagement with a new skill is mediated by description, explanation, and analysis, as he or she practices the skill, his or her knowledge of the skill becomes more instinctive and his or her ability to carry it out more automatic and habituated. As this process continues, the adult learner moves from "conscious knowledge of facts, concepts, or ideas" to "unconscious knowledge of how an activity is done" (Taie, 2014, p. 1972). Notably, although proposed within the field of second-language acquisition, SAT is not intended to be specific to second-language learning alone. Rather, SAT is a model for how adult learners go about developing their skills in any of a wide variety of domains – wherever "skilled behaviors can become routinized and even automatic" (Speelman,

2005, p. 28). Therefore, this theory may also have explanatory power for second-music learning. Further exploration of the relevance of SAT to second-music learning, as based on the findings of this research project, will be given in Chapter 5.

Other dimensions of the second-language or second-music learning experience are affected by the learner's age as well. While an individual's first language or "heart music" (Harris, 2013, p. 82) is likely to be acquired via processes of enculturation – that is, in the course of daily life and natural growth in a particular socio-cultural setting – a learner who is seeking to acquire a new language, or emic understanding of a new musical style, later in life is likely to do so via alternate means such as formal instruction or immersion in a new cultural setting where the language or music is used. Adult second-language and second-music learners typically require formal instruction in grammar and vocabulary (spoken and musical) to take the place of a child's natural acquisition process (Ellis, 1985; Singleton & Ryan, 2004). The manner in which music is taught to a learner lacking previous enculturative experience is likewise likely to be different from how a child would grow up into the same musical-cultural system. As one example, a collegiate-level piano student comfortable improvising chordal accompaniment in pop styles, but unfamiliar with classical piano literature, might receive historical and cultural background on his new repertoire via music history and theory classes while learning differences in technique in private studio lessons. As another, an ethnomusicologist seeking to become a participant-observer (LeCompte & Schensul, 2011; Mitchell, 2007) in an unfamiliar musical tradition might seek out instruction from locals familiar with that musical style (Nettl, 2015), which would likely circumvent norms of the traditional learning process because of the novelty of the situation or for the sake of the ethnomusicologist's timely progress. The apparent differences between learning a new musical style on the same instrument in a familiar cultural

setting, and learning a new genre on a new instrument in an unfamiliar environment and musical-cultural system, will be further explored later in this paper. For the purposes of the present study, recognizing that age is a significant factor in second-music learning informs the process of selecting study participants. Regardless of whether or not a "critical period" exists for second-music learning, learners who began to be exposed to their second music after childhood are most likely to be able to offer reflections on bimusicality as a contrast between enculturative, acculturative, and formal music-learning experiences.

#### Socio-Cultural Connections between Music and Language

As much as learning a second music or acquiring a second language shapes and is shaped by the learner's cognitive processes, the outcome has a great impact in turn on the learner's sense of identity and interactions with the surrounding world. Abundant research on bilingualism clearly signals that it is not a one-size-fits-all label (Butler, 2013; Miller & Kubota, 2013; Sachdev, Giles, & Pauwels, 2013). Instead, bilinguality encompasses infinite degrees of linguistic competence in both languages, countless informal and formal learning environments, various social and age-related factors, and diverse shades of cultural identity and experience; its implications are as varied as the billions of bilingual individuals in the world. Bimusicality, although less explored to date, appears to exhibit many of these same socio-cultural properties.

Bilingualism, bimusicality, and identity. Edwards (2013) and Miller and Kubota (2013) affirm that the languages a person speaks influence his or her sense of cultural identity, both as the bilingual individual is passively exposed to new influences and as he or she actively constructs a sense of self through them. Ellis (1985) explains acculturation and accommodation theories of second language acquisition, both of which recognize that language learning is shaped by the learner's experience crossing cultural and social boundaries. Sachdev, Giles, and

Pauwels (2013) investigate this process through the lens of communication accommodation theory, which explores how and why multilinguals choose to use the various modes of communication available to them. They contend that the multilingual experience is framed by constantly shifting factors, including "socio-historical context," "social category memberships," and "expectations regarding optimal levels of multilingual accommodation" (p. 393), which underlie the multilingual's every choice to use a certain language at a certain point in time.

Although music-making is many things in addition to a communicative act, related issues of identity present themselves where bimusicality is concerned. Students of music who embark on learning a new musical genre, style, or tradition face a "degree of distance" (Singleton & Ryan, 2004, p. 109) between the familiar and the unknown akin to that confronted by second language learners. As Singleton and Ryan (2004) and Bongaerts (1999) acknowledge with respect to second language acquisition, the extent to which the new system differs from what the learner already knows, and the level to which its surrounding cultural milieu is unlike the learner's native environment, can make the process of acquisition significantly more difficult and demanding. For example, Hood (1960) lays out the concept of bimusicality via the example of Western music students learning to perform East Asian musics; this constitutes a dramatic "degree of distance" (Singleton & Ryan, 2004, p. 109) compounded by differing aesthetic values, systems of musical notation, sociocultural contexts, and philosophical understandings of music between East and West.

This issue of distance in bimusicality emerges on both community and individual levels. In a study of Ethiopian musical communities in the greater Washington, D.C. area, Shelemay (2012) observes that perceptions of distance are altered by simultaneous processes of assimilation and identity preservation lived out by immigrant and urban populations. While

carving out "sociocommerscapes" (p. 219) brings members of the community together under the banner of their ethno-linguistic-cultural identity, the community is also constantly negotiating its relationship with the broader culture of its city and nation. Distance may be reduced by the community's efforts to assimilate to its context, but crossing the boundary into the music of this group remains an exercise in bimusicality for outsiders. Within a narrower frame, a single individual's performance ability in rock and jazz guitar styles – or even his or her passive enjoyment of Christian worship music by both Chris Tomlin and Israel Houghton – is bimusicality in a certain sense, if the person in question conceptualizes the two musical styles in question as meaningfully distinct. However, crossing from one genre to another when the two are linked by a common instrument, or shared socio-cultural function and stylistic features, does not pose the same level of cross-cultural challenge as acquiring bimusicality across a wider "degree of distance" (Singleton & Ryan, 2004, p. 109) – either in terms of musicianship, or of communication and relationship-building with cultural insiders who can teach the new tradition. This distance concept present in existing literature will be expanded further in Chapters 4 and 5, where it will prove to be a significant facet of the bimusical experience.

Bimusicality and bilinguality as liminal spaces. Implicit within the terms "bilinguality" and "bimusicality" is the idea that multiple distinct languages or musical traditions exist in the bilingual or bimusical individual's understanding. However, the boundary lines between musics, or between languages, can be challenging to define. It may not be difficult to agree that Caribbean *salsa* and North American jazz are distinct musical traditions, or even Latin jazz and big band swing – but are there meaningful differences between Cab Calloway's "The Congo-Conga" and Dizzy Gillespie and Chano Pozo's "Manteca"? The same issues emerge in the comparison of multiple languages; of course Spanish and English are different languages, but

what about Chicano English or AAVE? In his original exposition of bimusicality, Hood (1960) acknowledges that as individuals acquire performance ability in multiple new musical styles, his own terminology becomes problematic. "Are we to speak of 'tri-musicality' or 'quadri-musicality?" he asks (p. 59), before suggesting that perhaps "musicality" alone is the most useful label for all such phenomena. Butler (2013) similarly recognizes "trilinguals, quadrilinguals, and so forth" in a discussion of differences between bilinguality and multilinguality, before adopting the blanket term "multilanguage users" (p. 112). For an outside observer, dividing one form of musical or linguistic understanding from another is a difficult and delicate affair – and perhaps not even the most fruitful avenue of inquiry. As Edwards (2013) affirms, "it is the grayer areas between extremes that are at once more common and more interesting" (p. 5) Although "bilingual" and "bimusical" are useful terms, the reality of the bimusical or bilingual experience goes beyond either/or dichotomies.

If a more complete view of bimusicality and bilinguality is to be found within "gray areas," what is the nature of these in-between places? Nettl (2015) writes, with respect to both music and language, of "centers" and "boundaries" rather than of discrete musical or linguistic units (p. 69). In his view, those with emic understanding of two or more languages or musics find themselves negotiating a space between overlapping systems, rather than compartmentalizing them. In fact, he conjectures, the contemporary world is increasingly multimusical, with every cultural area and even every individual's musical understanding natively comprising a variety of musical traditions, genres, and styles. Edwards (2013) echoes this in a discussion of multilingualism and identity, contending that "each of us may carry the tribal markings of many groups... our 'group identity' is itself a mosaic rather than a monolith" (p. 20). Miller and Kubota (2013) similarly write of second language acquisition as "a continuous process of

creating something new, a *third space* or hybrid identity" (p. 232). And Ellis (1985) describes interlanguage theory, a conceptual model of second language acquisition which posits that learners acquire a second language via an ever-evolving "interlanguage system." By means of this system, the learner gradually adds the rules of the second language to his or her understanding of his or her first language, gradually replacing errors and conflicts for increasing accuracy in the new target language (p. 50). In this school of thought, bilinguals are not compartmentalizing their multiple languages, but instead creating and communicating via a simultaneous, liminal understanding of both. Understanding how bimusicals likewise experience the process of second-music learning is an object of the present study.

Conceptualizing language and music learning as in-between experiences also has further ramifications for bilingual and bimusical identity. Nettl (2015) puts forward the idea of "musical idiolect," explaining that although the musical understanding of a single individual should not be considered representative of a particular tradition or group as a whole, it can be considered "a music" in the sense that it combines disparate influences and experiences in a way unique to that person (p. 65). Such an individual musical identity may take the form of "concentric circles," he suggests (p. 66), radiating outward from the musics that the individual most identifies with to encompass others that he or she is familiar with, enjoys, performs, or experiences in any of countless other possible fashions. The series of interviews collected by Crafts, Cavicchi, and Keil (1993) form a mosaic of American musical identity in the early 1990s, and the researchers make no effort to force the interviewees' voices into an artificial unison – it is precisely the individuality and idiosyncrasy of the interview data from each respondent that is significant. The "hybrid identity" (Miller & Kubota, 2013, p. 232) that second-language and second-music learners create is not merely an amalgamation of its constituent parts, but something new and

unique in itself. Although the concept of musical idiolect does not invalidate grouping musics into genres and regional categories based on emic and etic identification, it helpfully balances top-down, categorical views of musical identity with a more organic perspective emerging from individual experience.

## Pedagogical Connections between Music and Language

The philosophical relationship between music and language, and the interrelated cognitive processes involved in how human beings understand and experience them, together suggest that there may be benefit for music educators in exploring pedagogical connections between the two as well. This section will cover factors in adolescent and adult music and language learning that music pedagogy should take into account, with focus on specific external and internal characteristics of the successful second-language learner that may prove helpful for music students seeking to grow in bimusicality.

Toward a pedagogy of bimusicality. Cognitive research on the effects of music and language instruction suggests that musical and linguistic processing overlap in some respects and have the potential to benefit learners in both domains. This "bidirectional" transference (Bidelman et al., 2013) has numerous ramifications for music pedagogy, particularly with regard to intentionally cultivating bimusicality in adolescent and adult music students. Contemporary currents in the discipline of music education have emphasized the importance of exposing students to diverse musics in the classroom; for example, Anderson & Campbell (2010) list among the benefits of multicultural music education that students cultivate "greater musical flexibility, termed by some as 'polymusicality'" (p. 3), as they grow in emic understanding of multiple musics. Teaching approaches targeting bimusicality have potential relevance to numerous areas of music education, as music students of all backgrounds may be encouraged to

value and cultivate the unique musical identity and experiences they individually possess, as well as to more confidently and productively engage with unfamiliar musical traditions.

While pedagogical suggestions specific to helping music educators integrate particular non-Western genres and music cultures into their teaching are not difficult to find in contemporary music education literature, research on teaching strategies with a broad view of bimusical learning is less common. Schippers (2005)'s seven-continuum transmission model (SCTM) is one exception, as this framework conceptualizes seven distinct dimensions of multicultural music learning experienced by students, teachers, and institutions in any cross-cultural setting. As the previous section of this review has shown, bilinguality and bimusicality as socio-cultural experiences share many characteristics, and existing research on the changing relationships of second-language learners to their community and their own identity may hold promise for music educators seeking ways to more holistically practice multicultural music education. However, approaches to multicultural music education as a "second-music" learning experience informed by research on second-language acquisition are difficult to find. An emerging pedagogy of bimusicality may benefit from being informed by commonalities in second-language and second-music instruction.

External factors: learning strategies. What should music educators do to encourage students to learn cross-culturally as effectively as possible? In his original exposition of bimusicality, Hood (1960) mentions several areas of difficulty specific to Western ethnomusicology students learning to perform in East Asian musical traditions. Of first concern is developing "an ability to hear" new shades of intonation and articulation that come across as insignificant or erroneous to a listener trained in Western tonal music (p. 56); this is then followed by learning new motor skills required for correct technique in these new performance

idioms. Hood (1960) exhorts beginning students to practice via "imitation and rote learning" (p. 56) rather than devoting excessive time to learning unfamiliar systems of notation, as this will allow them to start playing faster and may be more faithful to the learning methods native to the musical tradition in question.

Interestingly, contemporary research on the practices of highly successful adolescent and adult second-language learners brings up related themes. Bongaerts (1999), drawing conclusions from a series of studies on high-achieving adult second-language learners, observes that "the highly successful learners in our experiments had all received intensive perceptual training that focused their attention on subtle phonetic contrasts between the speech sounds of the target language and those of their L1... [and] intensive training in the production of L2 speech sounds aimed at developing the finely tuned motor control required for accurate pronunciation" (p. 155). Mover (2013), synthesizing the results of numerous recent studies, offers a broader list of practices that second-language learners successful in acquiring native-like accent have applied; these include "continuous self-monitoring of progress... practicing; analyzing; explicit attention to challenging segmental and suprasegmental features; asking for feedback; [and] imitating native speakers" (p. 81). Ellis (1985) echoes the necessity of "monitoring" (p. 179) as second language learners observe their own output and note and correct mistakes, and Singleton and Ryan (2004) point out the importance of "time spent in the target language community" and "naturalistic exposure to the target language" (p. 102). Although all these scholars and others (Birdsong, 1999; Dewaele, 2013) are quick to agree that quantifying one single recipe for second language acquisition success is impossible, these common learning practices are intriguing.

The philosophical, cognitive, and sociocultural connections between music and language learning previously examined in this review lead to the contention that learning strategies

practiced by successful adult second-language learners may also be conducive to developing bimusicality. Potential pedagogical emphases for bimusicality emerging from the above research on high-achieving bilinguals include the following: an initial focus on aural training to develop sensitivity to meaningful expressive details of a new musical style, particularly aspects of pitch, articulation, phrasing, and timbre; practicing technique exercises to help students acquire the motor skills needed to play a new instrument or sing a new vocal style in a healthy and safe manner; practicing active listening to one's own performance to note and correct mistakes, as well as seeking out prompt and specific feedback from musical-cultural "insiders"; and, finally, spending time immersed in the culture which the musical tradition is from and observing its use in context. It is a goal of the present study to find if these or related trends emerge from survey and interview data from bimusicals.

Intrinsic factors: psychology and motivation. Hood (1960)'s original article on bimusicality is less specific on the internal factors inherent to the cross-cultural music student, but, in writing on UCLA's East Asian performance ensembles, Hood alludes to students' profound engagement with East Asian music culture and their considerable time spent in community with one another via rehearsals and performances. Subsequent research on second language education has also repeatedly testified to the importance of the learner's personal disposition toward the subject material and the learning experience. Bongaerts (1999) affirms that the high-achieving learners in his studies all exhibited "high motivation" (p. 155), which Ellis (1985) affirms is a "powerful factor" in all second-language acquisition (p. 119), and Moyer (2013) agrees that second-language students with native-like accents exhibit "ongoing concern for pronunciation accuracy and/or desire to sound native" (p. 82). Defining precisely what constitutes effective motivation is much more difficult than establishing its importance for

successful cross-cultural learning. Ellis (1985) and Dewaele (2013) both acknowledge that second-language learners' motivations may comprise a vast range of influences perhaps not even fully understood by the learner him- or herself. Pinpointing the root causes of student motivation is beyond the scope of the present study, but common trends do emerge in how such motivation manifests itself in the behavior of the successful second-language leaner. Bongaerts (1999), Ioup et al. (1994), Moyer (1999), and Muñoz and Singleton (2007) all observe that exceptionally successful adult second-language learners profess high esteem for the new language and its parent culture, and exhibit long-term habits of profound immersion in and engagement with this language in its cultural setting. Moyer (2013) summarizes these behaviors as "a deep connection to the target language... [and] a conscious, reflective approach to the learning process" (p. 81).

Ellis (1985) and Dewaele (2013) further consider the psychological profile of the successful second-language learner. Dewaele (2013) uses the lens of the Big Five personality matrix, which measures test-takers on continuums of extraversion versus introversion, neuroticism versus emotional stability, conscientiousness versus lack of direction, agreeableness versus antagonism, and openness to new experience versus closedness; although many of his observations on these categories are inconclusive, Dewaele does conclude that higher emotional stability, conscientiousness, and openness to experience are conducive to success in second-language acquisition. Ellis (1985) is in agreement with Dewaele that extraversion and introversion each pose their own benefits and challenges for the second-language learner — neither is inherently superior. Both Ellis (1985) and Dewaele (2013) also affirm that a willingness to take appropriate risks is advantageous; as Ellis explains, the second-language learner should be "prepared to experiment... even if this makes the learner appear foolish" (p. 122). As with motivation, while defining one single psychological profile of the ideal second-

language learner is impossible, the above scholarship does provide interesting potential direction for bimusical pedagogy.

Because bimusicality is such a personal and subjective experience, a potential pedagogy of bimusicality must take into account the experience and disposition of the learner. Of course, it is outside of the music educator's control or responsibility to dictate the student's personality; however, all students can be encouraged in certain attitudes that may benefit their learning process. The above research on second language acquisition suggests that students of bimusicality may also be more likely to succeed when they are open to new ideas, committed to work diligently to improve their skills, and willing to put what they are learning into practice without undue fear of mistakes. Successful learners may also be those who esteem the music culture about which they are learning and who want it to be part of their lives, going out of their way to form long-term habits of engagement with the new culture and allowing their own sense of identity to be transformed by this experience. To confirm, deny, or qualify these additional potential links between second-language acquisition and second-music learning is another goal of the present thesis project.

### Conclusion: The Need for "Second-Music" Pedagogy

Any review of the philosophical, cognitive, and pedagogical connections between music and language must by necessity leave many stones unturned. Although the fact that these realms of human knowledge and experience are linked in a variety of ways is inescapable, exhaustively defining their relationship – given the vast diversity of human expression in both these domains – may be impossible. This survey of sources seeks only to touch on those issues most relevant to understanding bimusicality as a cognitive and cultural phenomenon with consequences for how a second music may be taught to post-childhood learners. Even from such a restricted viewpoint,

however, the unanswered questions and potential avenues for inquiry that present themselves are many. For example, although attempts to study music as a language, or language as a music, seem to have largely run themselves dry, conceptualizing the intersection of the two in culture as a multidimensional continuum (Feld & Fox, 1994) seems to hold greater explanatory power for the incredibly diverse ways in which human beings use and combine these modes of expression. A more thorough treatment of the relationship between music and language would benefit from exploring what this model means for the countless musics outside the Western tonal tradition that are not satisfactorily addressed by current scholarship. Cognitive research on the relationship between music and language has isolated syntactical processing and discernment of pitch differences as two points of connection between musical and linguistic cognition; extant findings have drawn on discrete populations of Western tonal musicians and speakers of tonal languages, but it would be fascinating to see what results might emerge from studies of musicians who have emic understanding of microtonal musical systems. Finally, although bimusicality and bilinguality appear to share some common ground both as cognitive phenomena and as sociocultural experiences, a pedagogical perspective on this relationship – that is, the usefulness of second-language learning strategies for the intentional cultivation of bimusicality – has not been directly explored. This is the need that the present thesis project is intended to address.

# **Chapter 3: Methodology**

The goal of the present study is to explore the development of bimusicality in adolescent and adult music learners, and to discover any correlations between this experience and second language acquisition processes. Although the outcome of the project is foremost meant to serve music educators as an avenue for understanding students' experiences and needs in this process, methodology from the fields of anthropology and ethnomusicology was chosen to best meet these ends. The following chapter will describe the research questions, methodological background, and research design applied in this study.

## **Research Questions**

This thesis project was designed to investigate the development of bimusicality in post-childhood music learners. The guiding research question for this thesis project is: What correlations, if any, exist between second language acquisition strategies and learning processes used by adolescent and adult bi-musicals to develop emic understanding of new musical styles? This research question is supported by four sub-questions. First, what philosophical, cognitive, socio-cultural, and pedagogical relationships exist between music and language learning? Second, what is bimusicality, and how do musicians experience it? Third, what learning strategies, if any, have benefited successful adult second-music learners, and do these show any connection to methods of second-language acquisition? While the review of literature presented in Chapter 2 focused on answering the first of these research questions, the following methodology was implemented to explore the answers to the remaining three questions.

## Methodological Background

Using a mixed methods approach, my research combined qualitative and quantitative methods through surveys and ethnographic interviews. As explored in the previous chapter,

bimusicality is a personal, subjective concept; boundaries between musical traditions are permeable, and every individual experiences and creates music from within a "third space" (Miller & Kubota, 2013, p. 232) negotiated between his or her musical influences (Nettl, 2015). Therefore, the methodology by which bimusicality is studied should foreground diverse participant perspectives, allowing as many of these streams of information as possible to inform and shape the direction of the investigation. The strengths of ethnographic research methods as a whole, and ethnographic interviewing in particular, suit these needs. Meanwhile, survey results provide a sample of information broader than the limited number of interviews feasible in this study, as well as quantitative data that can be used to corroborate qualitative observations that emerge from interviews.

Ethnographic research methods can help holistically document human experiences and interactions in their cultural context. Although the long-term "participant-observer" model is no longer considered the exclusive means of conducting ethnographic research (LeCompte & Schensul, 2010; Mitchell, 2007), and contemporary thought in the field prioritizes collaboration and openness with the people being documented (Lassiter, 2005), the values pioneered within this original model still shape the discipline today. Firstly, ethnography is emergent. Rather than expecting the researcher to test a predetermined hypothesis, ethnographic methods require the researcher to immerse himself or herself in a particular setting and continuously refine his or her study based on what he or she observes. Findings emerge as patterns and trends surfacing from the information gathered, organized, and analyzed by the researcher (Heyl, 2001; LeCompte & Schensul, 2010). Ethnography is also dialogical and interactive; exchanges between the researcher and the individuals or community being studied are a primary source of data, and the researcher, rather than attempting impartiality, must acknowledge the ways in which his or her

own identity shapes this learning process (Gottlieb, 2006). Finally, both the process and the products of ethnographic research are shared between the researcher and the community that is being studied. Successful ethnography requires a certain degree of trust between the researcher and those sharing their experiences with him or her, which is facilitated by the researcher's respecting informants' rights to understand and collaborate with the research process (LeCompte & Schensul, 2010). Moreover, the researcher carries responsibility to make sure that the fruits of this research ultimately benefit the community. Ethnographic research must serve and advocate for the needs of its participants, and its output must be accessible to them (Lassiter, 2005). These convictions were foundational to the design of the present study.

The open-ended and situated nature of ethnographic research methodology lends itself to numerous approaches. Among these, ethnographic interviews remain a key data collection method in many studies. Ethnographic interviews, as distinguished from focus groups or surveys, are one-on-one, face-to-face conversations between the researcher and an informant, intended to elicit information on a particular subject or range of subjects (LeCompte & Schensul, 2010). Crucial to the success of the interview process is the researcher's personal disposition; interviewers must be good listeners, willing to ask open-ended questions, sensitive to cultural issues and power imbalances at play, and open to complexity in the narratives and issues raised. Trust, openness, and mutual respect between interviewer and interviewee, built on a relationship between them that extends beyond the time period of the interview itself, are likewise of great importance (Heyl, 2001; LeCompte & Schensul, 2010). Ethnographic interviews may be completely unstructured, as in the case of an exploratory interview intended to suggest directions for future study, or semi-structured, as the interviewer seeks to guide the conversation to engage

the interviewee's perspective on a particular subject while remaining open to issues that the interviewee may bring up (Gottlieb, 2006; LeCompte & Schensul, 2010).

Time constraints impacted the ethnographic interview methodology used in this research. Gottlieb (2006) mentions that the "one-shot, quick-and-dirty, prescheduled, short interview" is the least preferable form of conducting ethnographic interview research (p. 55), because it eliminates the long-term process of cultural immersion and relationship-building that makes ethnographic research most insightful. However, because a single six-month period was available during which to conduct the original ethnographic research for this project, a plan for pre-scheduled interviews was adopted under the "compressed ethnographic designs" scheme set out by LeCompte and Schensul (2010, p. 122). For ethnographic research conducted on a relatively short timeframe to be successful, LeCompte and Schensul recommend the "triangulation of... multiple data sources," including short surveys given to representative populations and in-depth interviews with particular informants. The researcher working in this context should understand the local culture and be able to communicate in the local language, and should focus his or her investigation on a single aspect of culture, rather than attempting broad, exploratory research (2010, p. 122). As an English-speaking musician and music student active in the central Virginia area, I satisfy these personal requirements, and the present study focuses on bimusicality as a specific dimension of the music learning experience. Therefore, the research design detailed in the following section was developed to adhere to LeCompte and Schensul (2010)'s recommendations.

#### **Research Design**

With these research questions, methodological guidelines, and concerns in mind, I developed a research design combining ethnographic interviews on bimusicality with

background research on second language acquisition. The primary focus of this research project is on second-music learning rather than second-language acquisition, so the original ethnographic research conducted as part of this project was dedicated to exploring individuals' bimusical understanding rather than their second language-learning experiences. At the same time, awareness of current scholarship on second-language acquisition in adolescent and adult learners was essential for making any connections between second language acquisition strategies and trends in individuals' acquisition of bimusicality. Therefore, the review of literature appearing in Chapter 2 of this document formed an essential first step of the research process as a means to address research sub-questions 1 and 2 related to second-language acquisition. As I concluded this background study on theories of second language acquisition and bimusicality, I implemented the following methodology to explore individuals' personal experiences of bimusicality and address the remaining research questions.

Participant recruitment. This research began with defining and connecting with the individuals that would participate in the study. As Nettl (2015) explains, the vast majority of peoples and societies in the present day are multi-musical; therefore, the population studied in this project needed to be "artificially bounded" (LeCompte & Schensul, 2010, p. 162) by self-identification rather than by particular characteristics I selected. I sought to recruit a sample of interviewees with a variety of ages and racial/ethnic backgrounds. Because of this, in participant recruitment, I advertised the research project as having to do with "cross-cultural music learning," and provided further details on the term "bimusicality" only as requested. The goal was to reach as wide a sample of potential interviewees as possible based solely on their interest in the project, rather than on their views of themselves as musicians or second-language learners. I found quickly that potential participants were frequently inclined to police themselves out of

the study population because they did not consider themselves "bimusical" or were otherwise intimidated by the term. The screening survey subsequently administered to all willing study participants was the primary means of identifying candidates for the interview process.

Participant recruitment was conducted during March 2017 by a variety of means, including email, social media, and word of mouth. As a Graduate Student Assistant in the Liberty University School of Music, I had the opportunity to reach out to a student body of several hundred undergraduate music majors. I coordinated with individual School of Music professors to appear in their classes with their approval, present a 5-minute introduction to my project and explanation of the screening survey, and pass around a sign-up sheet to collect the names and email addresses of those interested in participating. Outside of class, I also spoke with a few students individually who I thought would be good candidates for involvement in the project. While advertising the study to Liberty University School of Music students, I made clear that their involvement or non-involvement would have no impact on their academic standing. A total of 194 undergraduate and graduate School of Music students provided their contact information and received the screening survey as a result of these recruitment efforts. I also submitted a post to the International Council of Ethnodoxologists forum, providing ICE members with a brief description of the study and a link to the screening survey. The design of the ICE forum does not allow participants to view the total number of post recipients, so the number of ICE members who received the survey link is unknown.

**Screening survey.** Collecting responses from the screening survey made up the next phase of the research project. The survey was relatively brief, as its main purpose was to provide information relevant to selecting candidates for the interview process; it was administered via the SurveyMonkey platform and designed to require no more than 20 minutes to complete. (The

complete screening survey is available in Appendix A.) Each respondent who clicked on the survey link was first directed to a web page containing the IRB-approved informed consent form for this project, and was required to confirm having read and agreed to this information before being able to access the survey itself. This also entailed consent to being audio-recorded in a follow-up interview, if requested and scheduled. Survey questions dealt with three major areas of content. First, respondents provided basic demographic information. Next, they answered questions about their attitudes about music and past musical influences. Finally, they indicated their level of cross-stylistic musical proficiency, and listed the instruments and types of music they practice and perform. Screening survey responses were collected from mid-March through mid-April 2017 via a password-protected account on the SurveyMonkey web site. A total of 105 survey respondents consented to participate in the research project, and of these 98 participants submitted a complete screening survey.

Ethnographic interviews. As screening survey responses arrived, I reviewed them to identify individuals who appeared to be good candidates for the interview process. Although nearly all survey respondents expressed some degree of bimusicality in differentiating between various types of music familiar to them, I sought to request interviews with individuals who described developing music performance abilities in notably different contexts, in order to be able to have interview conversations that were as fruitful as possible. At the same time, I intended to interview a diverse group of musicians, in terms of their both demographic characteristics and their types of bimusical experiences, so I purposely marked not only the most strikingly cross-cultural survey responses for follow-up but also those that described bimusicality being expressed within the general environment of Western music culture. This initial concern with varying degrees of musical difference would later crystallize into a concept central to my

analysis and findings, as can be seen in Chapters 4 and 5. Out of the 98 completed surveys received from study participants, I identified a pool of 35 potential interviewees to contact, and reached out to 22 of them individually beginning in early April 2017 to request an interview. Of these, 16 study participants confirmed their willingness to schedule and participate in an interview session.

Interviews were carried out over the last three weeks of April 2017. I conducted interview sessions in person if the interviewee was in the central Virginia area, and over Skype if the interviewee was elsewhere. However, interview procedure remained consistent for both inperson and long-distance interviews. In order to keep interview data confidential, I reserved a private, sound-proof study room in the Jerry Falwell Library on the Liberty University campus in which to conduct each interview session. On days with many interview sessions scheduled, time restrictions in the library prevented me from reserving a study room for all appointments, so I also made use of a sound-proof practice room in the School of Music building as a location for Skype interviews. All interviews were audio-recorded using a handheld recording device. I began each interview by giving the interviewee a brief synopsis of the project, answering any questions he or she had about it, showing him or her my recording advice, and receiving verbal confirmation of his or her previously given consent to be audio-recorded. My opening questions for each interview dealt with the interviewee's musical background and past music learning experiences; from this point, the interviews were semi-structured (LeCompte & Schensul, 2010), as I sought to have a conversation with the interviewee about bimusicality that elicited reflection on certain topics but was specific to his or her narrative. (A complete list of interview questions is available in Appendix B.) Most interview sessions lasted less than an hour; those that took longer did so because the interviewee expressed a wish to continue the conversation past the time

commitment I had asked of him or her, or because he or she wanted to ask me additional questions about the research project at the end of the interview.

I concluded each interview by thanking the interviewee for his or her time, asking if he or she wanted to receive a copy of the thesis document upon its completion, and requesting his or her consent for follow-up contact if I needed to clarify any details of information brought up during the interview. All interviewees gave their consent for follow-up questions, and asked to be given access to the final thesis document. Follow-up during the analysis process included checking details with individual interviewees as needed to clarify transcribed information, as well as asking all interviewees to respond to the "distance" rubric presented in Chapter 4 and confirm the distance labels applied to their bimusical experiences. At the conclusion of the thesis drafting and review process, all interviewees received a digital copy of the thesis document, with my thanks for their help in making this project possible.

Transcription, coding, and analysis. In keeping with ethnographic interview methodology and the norms of inductive research methods in general (Heyl, 2001; LeCompte & Schensul, 2010), I proceeded with the analysis of interview data from the ground up – allowing trends and commonalities to emerge through engagement with the data, rather than applying previously determined hypotheses to it. Analysis began with transcription of interview recordings; I completed this during May 2017 with the aid of Transcribe, a secure online platform for converting spoken audio to text. To keep interview data confidential, a pseudonym was applied to each interviewee, and the master list of interviewee names and pseudonyms stored separately from interview data. As I listened to each interview while I was transcribing it, I kept track of themes that appeared across multiple interviews. Once transcription was complete, I returned to the interview transcriptions to mark the occurrence of each theme or concept with

an associated coding tag. (A complete list of the coding tags used in this project, with their definitions, is available in Appendix C.) As is characteristic of inductive research methods, coding the interview transcriptions was a dynamic process; as I coded the interviews, I adjusted my definitions of certain tags, eliminated some, and created other new ones to better fit the data. I arrived at the final catalogue of 20 coding tags in this organic manner. During the coding stage, I did not wish to make any judgments about what factors positively or negatively impacted each interviewee's experience of acquiring a second musical style, so the coding tags were applied in neutral fashion. For example, I used the tag "HUM," standing for "humility/openness," to mark an interviewee expressing appreciation of a new musical style or culture, sharing his/her struggles to adjust to this setting, or rejecting some aspect of the new type of music.

As I concluded the coding process, I began to observe larger-scale trends and connections within the data that directed my continuing analysis. The 20 coding tags fell into three general categories, which I termed "dimensions" of bimusicality. Next, reviewing the tagged interview transcriptions with a view for the practices and qualities that aided second-music acquisition – both those explicitly recommended by interviewees and those implied by considering multiple interviews together – suggested 10 optimal practices, which I termed "values" of bimusicality. Mapping these dimensions and values together yielded the research findings that the following chapter will address. Finally, I compared these findings to existing research on second-language acquisition strategies, as summarized in Chapter 2, to provide the conclusions, recommendations, and suggestions for further research discussed in Chapter 5.

### **Concerns and Limitations**

Power dynamics and ethical issues required particular consideration in this study because of my position as a master's level music education student and Graduate Student Assistant in the

Liberty University School of Music at the time the project was conducted. In the setting of North American post-secondary music studies, a premium is often placed on formal musical training as an authenticator of an individual's identity as a musician (Nettl, 2015). As a graduate music education student, it was thus possible that I would be perceived in a position of power relative to individuals whose music learning experiences were more informal. Also, I recruited interviewees from the undergraduate student population of the Liberty University School of Music, which has employed me for two years as a Graduate Student Assistant in the music theory program. This also placed me in a position of power relative to students – encompassing authority to teach classes, give exams, grade students' work, and reprimand inappropriate student behavior. Clarifying for Liberty University School of Music students that their participation or non-participation in this project would have no impact on their academic standing was a key ethical concern in this research project. The approach used to disclose this information is described in the following section on research design.

Collaborative ethnographic methodology, as described by Lassiter (2005), sheds light on ways to deal with issues of power and representation inherent in ethnographic research.

Ethnographers must recognize that participants in their research have the right to direct and influence the research process, and that the fruits of this process should serve their own needs and desires before satisfying the wishes of an abstract, distant academic community. Lassiter (2005) quotes a participant in interview fieldwork on drug addiction recovery, who wanted the reflections he shared with Lassiter to be crafted into literature that would be helpful for others battling addiction as well. Explaining his desire for his recovery experience to benefit others, he explained, "we keep what we have by giving it away" (p. 19). This principle holds true for ethnographic findings in any setting, and resonates with my own Christian worldview as well.

Therefore, ensuring that the results of this research would be of concrete benefit for those involved was a significant concern for me throughout the development and implementation of the study.

In addition to power and ethics issues, further limitations encountered throughout the research process included the open-ended nature of ethnographic research and my personal background in second language learning. Because ethnographic research is "inductive... and recursive" (LeCompte & Schensul, 2010, p. 18), it serves best to elicit participants' perspectives and shape collaborative discovery rather than to confirm or deny a hypothesis generated by the researcher alone. I experienced this throughout the research process, as the preconceived ideas I brought into the study were challenged; I was continuously forced to refine and adjust my approach as my understanding of bimusicality changed. During the course of the study, I also found that my personal background as a second language learner was both a help and a hindrance. As a Spanish speaker who began learning the language at around 12 years old, I related to much of the literature I studied on second language acquisition in adolescents and adults at a personal level. However, I have little background in studying or conducting formal research on second language acquisition, and consistently had to be aware of my bent to substitute my individual experiences for academic research on second-language learning. All ethnographic research is shaped in part by the characteristics and experiences of the researcher (Gottlieb, 2006; Heyl, 2001), so such concerns are unavoidable, but they remain important to recognize as factors that influence the research process.

## **Chapter 4: Analysis and Findings**

This research project was designed to explore the potential connections between second-language acquisition and bimusicality. Previous chapters have described the state of existing research on second-language acquisition as related to the process of learning a new style of music, as well as the methodology used in the present study to further explore individuals' bimusical experiences. This chapter will address the second and third research sub-questions guiding this project: What is bimusicality, and how do musicians experience it? What learning strategies, if any, have benefited successful adult second-music learners, and do these show any connection to methods of second-language acquisition? Analysis of the data gathered in the process of answering these questions will proceed from small-scale to large-scale observations, in keeping with the inductive approach normative to ethnographic research (Heyl, 2001; LeCompte & Schensul, 2010). Research findings suggest nine values optimal for a second-music learner's effective acquisition of a new musical style, which may be grouped into three dimensions of the second-music learning experience.

# **Demographics of Study Participants**

The mixed-methods approach used in this study first implemented screening surveys as a means of identifying study participants who would be invited to give interviews on their music learning experiences. Although the main purpose of these surveys was to provide data for the selection of these interview candidates, the survey data also proved useful in their own right to inform the remaining research process. General characteristics of the screening survey responses are summarized below. (A complete list of survey questions is available in Appendix A.)

**Demographics of survey respondents.** From mid-March through mid-April 2017, study participants submitted a total of 98 completed screening surveys. The following charts summarize these survey respondents' demographic information,

Figure 1.

Gender of Screening Survey Respondents

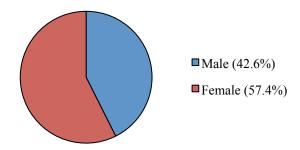


Figure 2.

Age of Screening Survey Respondents

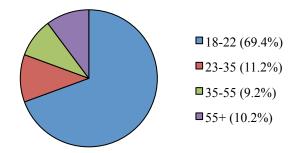
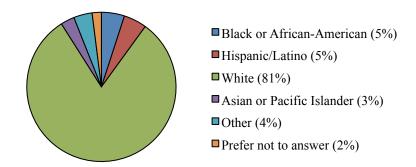


Figure 3.

Race and Ethnicity of Screening Survey Respondents



**Demographics of interviewees.** Sixteen interview sessions were carried out with study participants who completed the screening survey and agreed to participate in the interview process. Demographic information on this group is summarized below.

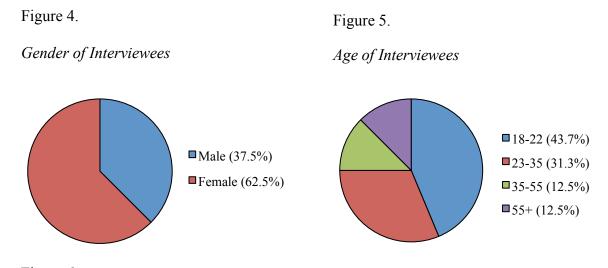


Figure 6.

Race and Ethnicity of Interviewees

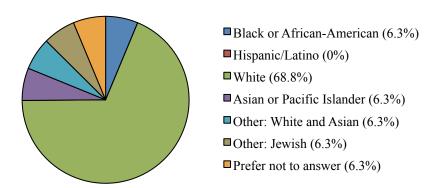
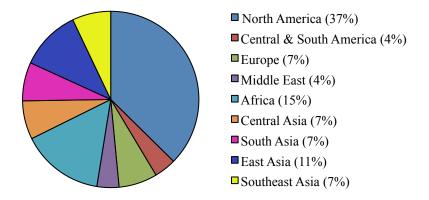


Figure 7. Cultural Context of Interviewees' Bimusical Experiences



**Discussion of demographics.** Figures 1-3 summarize salient characteristics of the group of 98 study participants who submitted complete screening surveys. Some of these features may have influenced the data that was gathered during the survey and interview process. Although participant recruitment took place both within the Liberty University School of Music and from the International Council of Ethnodoxologists, over two-thirds of survey respondents were college-aged, as Figure 2 shows. Also, more than four-fifths of survey respondents identified themselves as White, as can be seen in Figure 3. While the relative youth and racial/ethnic homogeneity of the group of study participants in no way invalidates the data gathered by means of the screening surveys, as I moved forward with the interview process I did attempt to bring together as diverse a group of interviewees as possible.

Although I could not determine in advance who would agree to participate in the interview process, I purposely sent interview requests to study participants of varied ages and ethnicities with diverse music learning backgrounds. Over half the group of interviewees was comprised of individuals over 22 years old, while this age bracket comprised only about one-third of survey respondents (see Figures 2 and 5). While the interviewee group, like the population of survey respondents, was more than two-thirds Caucasian (Figure 6), almost all non-Caucasian racial and ethnic groups who responded to the screening survey (Figure 3) were represented among the interviewees in greater proportion. Moreover, the interviewees' crosscultural experiences were global in scope, as Figure 7 shows. Concerns and limitations related to the makeup of the interviewee group will be discussed in greater detail in Chapter 5; however, the collection of study participants who agreed to be interviewed gave diverse reflections on bimusicality that provided substantial data for analysis.

**Survey analysis: Attitudes about musicianship and music learning.** In addition to the insight screening survey results provided in general for the interviewee selection process, survey questions 9 and 11, which dealt with respondents' attitudes about themselves as musicians, signaled some trends that would later reemerge in the analysis of interview data.

Figure 8.

Survey Respondents' Views of Themselves as Musicians

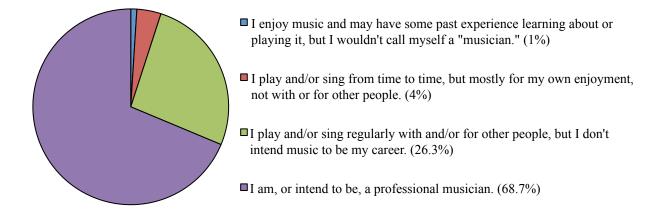
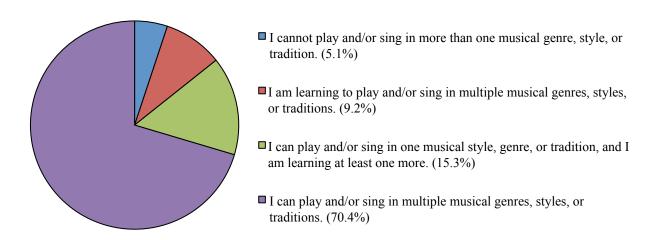


Figure 9.

Survey Respondents' Views of Their Second-Music Proficiency



These two survey questions were purposely worded to avoid forcing survey respondents into binary decisions about whether or not they identify themselves as "musicians" or

"bimusical," and this approach proved to be fruitful. While in both cases approximately twothirds of participants responded affirming that they see themselves as "musicians" and have performance proficiency across multiple musical styles, the remaining third chose to provide a more qualified response to these identifiers. In fact, adding the red and green sectors of Figure 9 together, approximately one out of four survey respondents answered that he or she is in the process of learning to perform in multiple distinct musical styles, rather than viewing him or herself as already proficient in more than one. Had these participants simply been asked to choose whether or not they are able to play and/or sing in multiple musical genres, styles, or traditions, it is possible that at least some of these would have responded negatively, and their experience of bimusicality would have been lost in the survey data. Likewise, as can be seen in Figure 8, slightly more than a quarter of survey respondents avoided identifying themselves as career musicians, but nonetheless affirmed that regular music-making in community is a significant part of their lifestyle. At this early stage of analyzing screening survey data, the theme of musical self-perception began to rise to the surface; this concept would later be fleshed out in various aspects of identity, humility, and motivation in the process of analyzing interview data.

### **Interview Analysis**

As described in Chapter 3, interview analysis proceeded from the minutiae of transcription and coding through increasingly broad layers of connection and comparison within and across interview transcripts. The following analysis will quote individual interviews as pertains to the discussion, while omitting details that would make the interviewee personally identifiable. Some interviewees requested not to be quoted directly at all; where their perspective is relevant to the topic at hand, their input is given in paraphrase. Progressively abstracting general trends and themes from these interview sessions for the sake of analysis runs the risk of

failing to convey the sense of immediacy and relational connection that grounds the experience of conducting ethnographic research (Heyl, 2001; Lassiter, 2005; LeCompte & Schensul, 2010), as well as the immense variety of ways in which bimusicality can be experienced. Therefore, this discussion of interview analysis will begin with five narratives excerpted from interview transcripts. Although each of these histories is specific to a particular interviewee, experiences similar to each one were related by other interviewees as well. These narratives are provided here, at the outset of interview data analysis, both to convey the personal, subjective, situated nature of the research data and to give a sense of the breadth and variety of interviewees' bimusical experiences.

"I started studying piano at five years old... There was a little bit of [learning] by ear, but for the most part it was like, 'We're reading music, I'm teaching you to read the notes on the page...' [I learned to improvise because] I was teaching myself guitar... and then from there applying that to piano, and then from there having the opportunity to put it into practice by using it on the praise team... I had some people who were really intentional about pouring into me during that time, because I wasn't the best keyboard player... I [had] never heard of a Gsus chord or a G2... but I had really kind people who would help me a lot... [My music learning experiences] have broken down some of the walls... of classical music. Each thing has its box, but here is where the two collide... It has allowed [me] an appreciation of different musical cultures, but also allowed [me] more freedom just overall as a musician."

"I was doing [my master's degree], and one of the classes is called a directed practicum, where you go explore another art form... So I found someone that I wanted to study with, arranged for lessons, actually did my lessons over Skype... Normally the way [my teacher] wanted me to start [each lesson] was to just perform for him... He would deconstruct what I had done... then he would give me new material... then I would try it again... We spent a lot of time, also, analyzing... I prepared a final performance and presentation for my class. And then it grew from there, I actually got invited by the [South Asian] community... I performed some of their tradition in front of them, and they absolutely loved it... There was definitely a heart connection from their side which was remarkable from my viewpoint because it still wasn't my heart music... It's confrontational, it's cool, it's very special, to be able to bless other people that way even though to you it's not your heart language."

"I started with music at a very young age... I'd try to play things by ear when I was really little, so it came naturally to me... Then I started playing with worship teams and songwriting and creating new music with siblings and friends around 10 or 11 years old, and that grew to writing music... I think being older [now] is helpful because I've heard so much [variety in styles of music]... I do a lot of copying, and sometimes just as an exercise, I'll try to copy a style

just to see that I understand it, because then in the future if I want to pull from that kind of mood, I can use elements of it and know what I'm doing... There are some friends [here in the music department] that are always exploring different kinds of music, so we'll go and be like, 'Hey, have you heard this? Try this!'... And it's a great way to build friendship over learning and expanding your musical mind."

"I was born in America, but we moved to [Western Europe] by the time I was one... Because of my upbringing as a missionary kid, I have been well-traveled, so I have been all across Europe. I don't have a set cultural identity... In [this Western European country] they've always been very proud of their [national] heritage... So, in the public school system, they'll have people come in and give us free [instrument] lessons... They had us all buy our own [instruments], and they'd give us basic sheet music with popular kids' tunes... [I took lessons] at least four or five years... I don't have [my instrument] with me. I do want to get back into it."

"We went out and lived [with a Central Asian ethnic group] for four years, and at that time I was a language student officially, and I was unofficially a music student. I took music classes – first it was in a class, then it was private lessons on a particular musical instrument – and I also went out into the community as much as I could to experience the music first-hand... [Learning in my music lessons] was all by rote. I did not write out any of the songs... [My teacher] would explain first what the song meant, and then he would play the whole song, and then he would divide it up into little pieces and we would practice each phrase of the song until I got it down, and then we would go to the next phrase. And then he would say, 'Go practice, and next week when we have lessons you have to play that for me...' I wanted to learn to play the [instrument] like a [member of the ethnic group], not like a foreigner would play it... I didn't want to get close, I wanted to be [a member of this group] when I played the [instrument]."

Some interviewees' stories followed the outlines of more than one of these sample narratives, and others differed from all of them, but these stories suggest the scope and diversity of the experiences that were shared during the interview process. These narratives only hint at the depth of the personal stories and reflections interviewees offered during our conversations, but they nonetheless signal one of the defining characteristics of bimusicality that emerged through this study – that it is bound up in each person's ideas about themselves, others, and music-making. The following analysis will look into each of these factors in detail.

**Distance.** As discussed in Chapter 2, the "degree of distance" between a learner's first and second languages is a significant factor in his or her second language acquisition process (Singleton & Ryan, 2004, p. 109), and the same issue presents itself in existing discussions of

bimusicality. Although to quantify in absolute terms the degree of "distance" between a student's first and second music learning experiences may not be possible, since how this distance is perceived by the student is subjective and affected by numerous factors, interviewees asked to differentiate in terms of distance between various cross-cultural experiences in their own narrative tended to respond positively. For example, interviewee Anna, reflecting on visits to extended family overseas during her teenage years, shared,

"So in Singapore, everyone speaks in an accent, but it's all American... there's no Chinese characters or anything like that. So Singapore was really fun for us because it was part of a really Asian culture, but at the same time we could relate because they were speaking in English. Malaysia was a lot different. Also Singapore is made more like America, it's just a busy city. A lot of Asians, but more Americanized, and Malaysia is just a lot different... It was very interesting, very different, but it was a really good different."

Such perceptions of distance extended to interviewees' descriptions of their music learning experiences as well. When asked how she would distinguish between her various bimusical experiences, Ellen explained,

"The CCM thing [learning to improvise chordal accompaniment on piano], the only thing was some technicalities. [Playing the organ in Europe], there was this whole cultural layer on top of it. And with the [Indian] vocal percussion, the culture didn't even play [a large role in my learning process], I was just struggling to figure out how this was music and to enjoy what I was doing, and not just feel like it was completely unattainable."

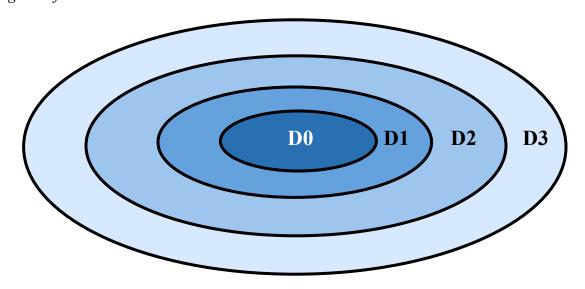
Nicholas, describing his past experiences learning various instruments in America and Central Asia, likewise said,

"I was a string player, and everything else [that I played] you can see, up to now, was string instruments... but [learning accordion] was way outside that. I took piano methods in the conservatory, but I was a violin player, so I did it because they made me. But this idea of having to open and close and push buttons on the left side and play a keyboard on this side – it's like patting your head and rubbing your stomach! It was something radically – I had to, neurologically, I'm sure lots of new pathways had to be created. But once those pathways were created, learning the first [type of accordion] and the next and the next became easier and easier... They snowballed, one really helped with the next."

To reflect these distinctions that interviewees made between multiple distinct music learning experiences in terms of the perceived degree of difference, or "distance" (Singleton & Ryan, 2004, p. 109), between them, I propose a four-point scale to categorize second-music learning experiences as interviewees described them. In keeping with Nettl (2015)'s suggestions as to the structure of multi-musical identity, the scale is visualized as a set of "concentric circles" (p. 66). This distance classification scheme is summarized in the figure below.

Degrees of Distance

Figure 10.



D0	Learner is equally comfortable with his/her previously learned music and a new musical style, instrument, and/or cultural setting.			
D1	New musical style	Same instrument	Same cultural setting	
D2	New musical style	New instrument	Same cultural setting	
		Same instrument	New cultural setting	
<b>D3</b>	New musical style	New instrument	New cultural setting	

To define the terms appearing above, "new style" refers to a musical genre, style, or tradition perceived by the learner to be in some way distinct from his/her previously acquired

musical knowledge. A "new instrument" may differ greatly or only slightly – in terms of its construction and the technique required to play it – from the instrument or instruments the learner already knows, so again the learner's perception of the likeness between them is the determining factor. Finally, "new cultural setting" refers to the learner's removal from what he or she would consider his or her home cultural environment while learning the new musical style. By definition, all bimusical learning requires some element of cross-cultural interaction; however, receiving second-music instruction in a college conservatory setting, or via Skype in one's home, is a markedly different experience from living in another country to learn the same style of music first-hand, as later analysis of interview data will further explore.

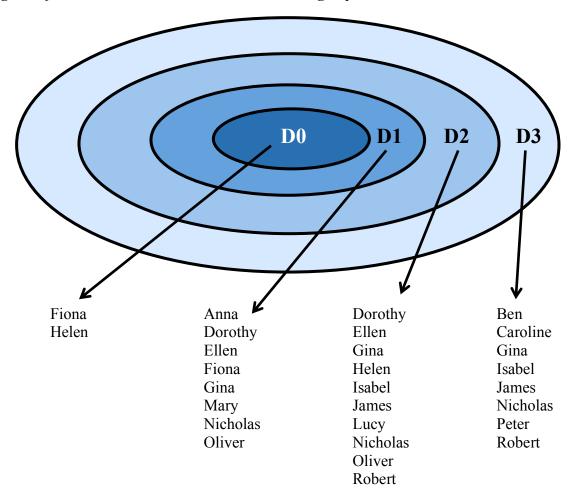
The degree of distance ascribed to a second-music learner's learning experience is determined by how many of these three factors differ between his or her previously learned music and the new style he or she is seeking to acquire. For example, a classification of "D2" indicates that two factors are different; the learner may be negotiating a new musical style on an unfamiliar instrument, or within a new musical-cultural context. The three factors identified here are intertwined in the learner's experience, and a second-music learner's perception of distance is both subjective and fluid, as will be later discussed in greater depth. So, these classifications are not intended to dictate to individuals how they should view and describe their own music learning experiences. Instead, this distance scale is meant to help an outside observer begin to differentiate between various bimusical experiences in a consistent and constructive fashion.

Although 16 individuals were interviewed for this study, many of these interviewees had more than one cross-stylistic music learning experience in their past or present to share. The following chart gives the degrees of distance ascribed to each learning experience that each interviewee shared during our conversation. During the analysis process, interviewees received a

copy of a previous draft of Figure 10 and its explanation, as well as the provisional degree-of-distance labels I applied to their narrative and a brief description of my reasoning, for their review. Eight interviewees responded, and I made any adjustments to my analysis of their experiences that they requested. The following table summarizes the results of analyzing interview data, with available participant feedback, through the lens of distance.

Figure 11.

Degrees of Distance in Interviewees' Music Learning Experiences



Interviewees whose names appear more than once in the lists above related multiple distinct second-music learning experiences that warranted different classifications. Also, interviewees who related a second-music experience labeled here as "D0" spoke from an emic

perspective of a particular musical style to reflect on, or to give advice to, other musicians learning the same style as a second music. Finally, during the process of checking and confirming their distance labels, interviewees brought up additional issues qualifying how they perceived distance. Further exploration of these factors and how they influence the usefulness of distance as a pedagogical concept will appear in Chapter 5.

Coding tags and learning dimensions. Analysis continued with the coding of interview data. I identified and adjusted coding tags throughout the coding process to reflect concepts that came up across multiple interview sessions. Although interviews were only semi-structured (Gottlieb, 2006; LeCompte & Schensul, 2010), and the flow of each conversation followed what the interviewee brought up for discussion, the applicability of the same coding tags to all 16 transcriptions was striking. The table below provides a list of the 20 coding tags used in interview analysis. (A complete list of coding tags and expanded definitions is available in Appendix C. See Chapter 3 for more details on the process of interview coding.)

Table 3.

List of Coding Tags

<b>Coding Tag</b>	Definition	Applied when interviewee discusses	
ANA	Analysis / theory	Learning about a music theory system and/or	
		analytical process	
CC	Cross-cultural experience	His/her cross-cultural experiences	
CMP	Composition	Composing original music	
COM	Community	His/her musical-cultural community	
CT	Classical training	Studying the Western classical canon	
ENC	Encouragement	Memories of encouragement while learning music	
ERR	Error correction	Recognizing and correcting mistakes in musical	
		practice and performance	
FH	Family history	His/her family history	
HUM	Humility	The role of humility in music learning	
ID	Identity	His/her view of himself/herself	
IMI	Imitation	Observing and imitating other musicians	
LE	Learning by ear	Learning music without written notation	
LIS	Listening	Listening to music	
LL	Language learning	Practicing communication skills in a new language	
MEN	Mentorship	His/her one-on-one relationship with a mentor	
MIS	Attitude about mistakes	His/her feelings about making mistakes in music practice and performance	
MOT	Motivation	His/her reasons for learning music	
SD	Self-discovery	Something he/she has learned about him/herself	
		through music	
TEA	Teacher relationship	His/her interactions with teachers	
TEC	Technique	Developing motor skills in music practice	

Proceeding inductively from coding to higher levels of analysis, it became apparent that the coding tags could be grouped into three categories expressing three distinct but overlapping dimensions of interviewees' music learning experiences. Some coding tags consistently appeared in conjunction with interviewees' reflections on their history, personality, and attitudes about music and music learning. I brought these together under the heading "Personal Attributes." A second group of tags dealt with specific ways interviewees learned a second music; I termed these "Learning Approaches." The remaining coding tags were all connected to the interviewees' descriptions of their relationships with others and with the surrounding music culture at large.

These tags I categorized as "Cultural/Interpersonal Factors." The following table illustrates the organization of all 20 coding tags into three color-coded learning dimensions.

Table 4.

Coding Tags Grouped by Learning Dimension

Personal Attributes	Learning Approaches	Cultural / Interpersonal Factors
ID – Identity	ANA – Analysis / Theory	ENC – Encouragement
FH – Family History	CMP – Composition	CC – Cross-Cultural Experience
HUM – Humility / Openness	CT – Classical Training	COM – Community
MIS – Attitude about Mistakes	ERR – Error Correction	LL – Language Learning
MOT – Motivation	IMI – Imitation	TEA – Teacher Relationship
SD – Self-Discovery	LE – Learning by Ear	
	LIS – Listening	
	MEN – Mentorship	
	TEC – Technique	

Learning values. During the course of each interview, I asked the interviewee to reflect on what helped him or her engage with a new musical style and learn productively, and to give advice to other music learners embarking on the same process. All interviewees offered thoughts on the specific attitudes and practices that benefited them, and most also provided concrete recommendations for other musicians seeking to develop bimusicality in circumstances similar to their own experiences. This feedback provided positive evidence for the identification of core values guiding the process of effectively developing bimusicality. In some cases, interviewees also expressed frustration or regret at their experience learning a second music, or explained that the learning process has had little lasting impact on their musical preferences and practices in the present. This feedback was taken as negative evidence signaling the absence of one or more of these guiding values in the learner's bimusical experience. Analysis of interview transcriptions yielded a list of 9 learning values. The following table summarizes these values as the outcome of multiple coding tags appearing in conjunction with one another.

Table 5.

Coding Tags and Learning Values

Learning Value	Associated Coding Tags
Learner is intrinsically motivated.	ID, MOT
Learner is not overly afraid of mistakes.	ERR, MIS, MOT
Learner is self-monitoring.	ERR, LIS, TEC
Learner understands the theoretical-analytical musical system.	ANA, CC, CT, ERR, LIS
Learner observes and imitates teacher's performance.	CC, IMI, LE, LIS, MEN, TEC
Learner has a positive relationship with a musical mentor.	ENC, MEN, TEA
Learner builds new relationships and engages the community.	CC, COM, LL, TEA
Learner is willing to accept discomfort and practice humility.	COM, HUM, ID, MIS
Learner allows his/her sense of identity to be transformed.	CC, HUM, ID, SD, MOT

Each of these learning values is described and explained in detail in the following sections, with support provided in interviewees' own words or in paraphrase as pertains to the discussion. Learning values are organized under the three learning dimensions previously defined; explanation and discussion of the relationship between these learning dimensions and learning values will follow at the end of this section.

Values related to the personal attributes of the learner. Illustration of these nine learning values with interview data will begin with those that show the strongest connection to the "Personal Attributes" dimension of bimusicality, including interviewees' reasons for studying a second music and their attitudes about making mistakes in music practice and performance.

Learner is intrinsically motivated. Interviewees described a variety of motivations for wanting to learn to perform in a new musical style, genre, or tradition. Several pointed to the requirements of a course of study as their initial impetus for engaging with a new type of music. For example, Gina, explaining how she began to learn African drumming as part of her undergraduate music studies, said,

"[I changed my major] with encouragement from some lovely people... saying 'Because you have a passion for missions and because you have a passion for music, you should consider [a degree in world music].' I did not have any clue what I was stepping into at all, whatsoever. I remember my first day in African drumming, actually the first semester, just being so stressed, it was such a stressful experience... it was my first step into world cultures, into ethnomusicology, and I was like, 'What am I getting myself into?""

Lucy shared on her experience singing in primary school choirs in Japan.

"In Japan – I lived there until middle school... music was still very important. Even if you weren't good at music, there was a big choral festival we did, so each class had their own one or two pieces... We did it every year, so even people who weren't musical had to participate, much to their dismay. But it was still very important, very much in our curriculum."

Ellen described a cross-cultural music learning opportunity that began as part of her graduate studies.

"One of the classes is called a directed practicum, where you go explore another art form. And I was very excited about that class... not so much that I cared about actually learning a new tradition, but I cared about the process of learning a new tradition – because I'm a teacher at heart, pedagogy is a big deal for me."

Many interviewees also described being personally invited by acquaintances, friends, or other musicians to begin to practice a new musical style. In most cases, this invitation was given to meet a need for more musicians proficient in this type of music in the interviewee's worship community. For example, Fiona described how she began playing Black Gospel-style piano after years of taking private music lessons.

"Honestly, I started pretty late, I was usually just in the audience and I was singing... but the first time I seriously got involved was around 16 [years old]. I sang and played at this event, and our minister of music came and asked me if I wanted to play in the band. And I was like, 'Yeah, sure, I don't really know what I'm doing, but yeah!' And so I started playing there."

Also, some interviewees were first introduced to a new musical style through a one-one-one friendship with another musician. For example, violinist Nicholas explained,

"Through high school I was totally classical, played by notes, memorized them, whatever. Then I went to the conservatory with a roommate that played guitar, and about my junior year... just wanted to play worship music, and didn't have notes written out. And so it was

a process of really stumbling and crawling first, my roommate going, 'Just play the melody, just try to play it!'"

As is apparent from these samples – and the many other similar stories interviewees shared that are not quoted here – a variety of circumstances moved interviewees to first begin learning a new musical style. However, in many of these narratives, interviewees also communicated an underlying sense of personal motivation distinct from the demands of their environment. For example, when asked how she has persevered through the challenges of learning new styles of music, Anna explained,

"Knowing that I'm called to this... is a big thing. Also knowing that worship comes in all forms, you know, there is worship where you sing, in that setting, but also everything I do is worship to God... I want people to see God in everything I do. And I think that's what pushes me a lot"

Oliver responded,

"Well, I guess part of my motivation is my personality... which is to want to explore everything. So I guess I can stay motivated to a certain extent with that, but that doesn't help me to really refine specific things... so I have to tell myself, against my nature, that this is what I want to do with my life. I want to be able to take every bit of my schooling and apply it... if that's my 'in' to a culture."

Mary, answering the same question about her experience learning classical voice under a new teacher, said,

"It was a little frustrating at first... I thought I was okay... and then [my teacher told me] 'There are a number of things you need to fix.' At first it was pretty frustrating, but then after the first month or two [I thought]... 'I want to improve and I really want to get better... I am making progress and I really want to see where I can go."

Dorothy described her response to critical feedback on her musical compositions.

"Even though I don't always feel good about it, at least I've been able to develop the reflex to say, 'Oh, okay, I'll work on it.' Because I'm passionate enough about it that I want to produce a good product. So if they have something to say that will make it better, then that's the same goal I have."

And Ellen explained her thinking in these terms:

"The major drive was that motivation to learn, and that motivation – I'm always hungry for new knowledge and new experiences and new skills. And so that, I think, is really what kept me going, was knowing that there was room to grow."

Interviewees' reasons for pursuing understanding of new musical styles frequently had to do with their relationships with their community as well as their own sense of musical identity, so this theme will be addressed again later in this section in conjunction with those topics. However, these quotes suggest that second-music learners can see opportunities to develop bimusicality as opportunities to realize their purpose, connect more deeply with other people, and reach more of their potential as musicians – and these internal motivations may sustain them through the frustrations and challenges of learning new musical styles.

Learner is not overly afraid of mistakes. Not least among these challenges is dealing with the fear of making mistakes in a new musical style. Although interviewees generally agreed that being able to recognize their own mistakes in music performance was significant, they also offered strong encouragement to other learners not to fear making such mistakes. For example, Gina offered her thoughts on learning and performing an East Asian chordophone.

"You get thrown into that stuff, and time after time, you're just like, 'Okay, I can do this, I've done it, I've performed it...' There is a freedom and a security, knowing that I've done this and I'm at least decent at it, I'm not going to completely walk up there and fail. And so you have freedom to experience and broaden [your] musical horizons as well as life horizons."

Ellen reflected on being critical of her own mistakes as she learned chordal improvisation on the piano.

"I tried to talk myself out of that – I was being a perfectionist and I wanted it to be perfect, but what I was doing was perfectly adequate, it wasn't amazing, but it was adequate."

Mary encouraged fellow musicians to consider mistakes as learning opportunities.

"Don't be afraid to make mistakes! Everybody is afraid to make mistakes. It still makes me nervous thinking about making a mistake in front of a ton of people. But when you make mistakes... recognize that you did it, and then know how you can go from it."

Nicholas's advice, to classical musicians learning to improvise, similarly encouraged them to relax.

"I had to have a high tolerance for ambiguity, and a high tolerance for failing, and a high tolerance for not knowing what's going to happen next... Give yourself a lot of space to have ambiguity."

Making mistakes in musical performance also affects the musician's relationship, or perceived relationship, with the musicians and community around him or her, so this topic will come up again in later discussions of discomfort and humility. However, it also appears that on an individual level music learners should be willing to accept and move on from their mistakes as they develop proficiency in a new musical style.

Values related to the learning approaches implemented by the learner. The following learning values express specific strategies second-music learners applied to grow in their bimusicality. These values are therefore grouped together under the dimension of "Learning Approaches," and encompass interviewees' experiences recognizing their own mistakes, studying new musical-theoretical systems, and developing their performance skills through observation and imitation.

Learner is self-monitoring. Although an undue fear of mistakes is debilitating, interviewees also suggested that being able to recognize their own musical mistakes accurately was helpful to their learning process. However, this process most commonly began with the interviewee realizing that he or she was not hearing his or her mistakes in the same way his or her teacher did. For example, James, who studied a Southeast Asian chordophone, explained some of the difficulty involved:

"They have a certain strumming pattern, I can't really describe it, but it's just a little bit different... they feel the rhythm in a different way than we do. And they also use all four of their fingers when they play, so that was weird... I just listened to the recordings [of my lessons] over and over, I tried to internalize just how it would sound, and I finally got it. To be honest, I don't

even know what I was doing differently. [My teacher] finally was like, 'Yeah, that's right..." It's really hard to describe what I was doing differently... I could hear the difference... which strums were emphasized, that kind of thing was the difference."

Peter, a guitarist who learned to play a Central Asian chordophone, shared similar thoughts.

"There are some skills that can kind of be rolled over from the guitar [to my new instrument], but don't transfer them directly or you will 'America-fy' them... I didn't want to play the [new instrument] with a guitar accent... I had developed some habits that were not good, that were crossovers. But then [my teacher and I] went into the private lesson setting. He immediately pointed out, 'No, that's not the way, that's not how you strum it.' And when he pointed that out in the very first few private lessons, I realized what had happened."

Gina, who studied an East Asian chordophone, said that attempting to identify her own mistakes was a frustrating process at times.

"[It had to do with] the way you hammered on the note... [My teacher] would shake her head, and I would say, 'No, but I know I played it right! I know I did!' She couldn't explain it, but I'd realize, technique-wise, what she was trying to get me to do... It's not because I'm playing the notes wrong, it's because I'm not playing it [with the right technique]."

Caroline, who studied a South Asian vocal style, explained a similar experience. While learning, she did not feel she could consistently hear what her teacher pointed out as mistakes that made her sound like a non-native musician, and this was frustrating at times. However, she explained that one day, her teacher declared that she sounded correct, and that now she is able hear the difference between her own singing and an Americanized performance in this style.

However, not all interviewees reported that they felt they were able to listen and identify their own mistakes reliably. Helen, who shared her experiences learning to play a Middle Eastern chordophone, reported that she did not feel she progressed far enough in her lessons to recognize mistakes before her teacher pointed them out. Although she described recognizing what her teacher heard as errors, Gina was also ambivalent about the process of learning to identify her own mistakes.

"I don't know if there was ever really a point [where I could identify my mistakes]... I think it was just the more I did it, the more comfortable I became with it, and the more I was able to be like, 'Okay, I'm beginning to understand... Every day I can get through a little bit more of that without making mistakes."

Isabel, learning a South Asian vocal style, explained that although she asked her teacher when she was making mistakes in her singing, he did not give direct answers. She suggested that this was due to the cultural setting – in which individuals would not confront one another directly about musical mistakes – as well as to members of the culture considering elements unrelated to the sonic features of the performance as the most serious musical errors. James likewise joked, in reference to when his teacher approved his strumming technique, "He finally was like, 'Yeah, that's right!' I don't know if he was just tired of teaching me, or what." Error recognition is connected to the cultural setting, the learner's relationship with his or her teacher, and the methods the instructor uses, which will be discussed in detail later.

Learner understands the underlying theoretical-analytical musical system. Developing the ability to identify errors in performance on his or her own requires the learner to have some understanding of the underlying analytical or theoretical system present in the new musical style. Contrasts and connections emerged during the interview process between methods of second-music learning based on explanation of the culture's musical system, and methods based on the learner imitating a teacher's performance. (These two approaches are not mutually exclusive, and interviewees expressed appreciation for aspects of both. However, at this stage they will be considered separately, and the relationship between the two will be explored in Chapter 5.) When learning new styles of music over a lesser degree of distance, interviewees explained that being able to apply their existing analytical knowledge was helpful. For example, Nicholas described a music theory-aided step in his process of learning to improvise on the violin.

"I remember, in a theory class we started to learn a blues scale, for example, and then... I had a sense of satisfaction, a sense of praise from people [when I improvised using that scale]. They were like, 'Oh, that was actually good!' And that helped."

Lucy reflected on her early experiences learning to improvise chordal accompaniment on piano, where she also found her music theory knowledge helpful.

"So I go [to band rehearsal], I've never seen a lead sheet in my life, so I'm like, 'Wait, what G chord? I guess that composes of a B...' I had to really think about it, because all I had known was reading notes on the page... At first, like I said, I'd never seen a lead sheet before, I was like, 'Build a chord, okay, G, B, and D. What do I do with the bass? You just play the root? Okay, that's fine."

Oliver explained that his understanding of music theory has aided him in playing guitar in a Black Gospel-influenced band, particularly in comparison with having to practice new guitar techniques in private lessons.

"It's been an introduction to a new style, but a new style that came a lot more naturally than guitar lessons, because – it's all the theory stuff... I understand [our band leader's] language, so it's different but it's also the same... The people that struggle with theory and knowing what 'sharp four' is or something, whenever [our leader] says 'sharp four' or to play a certain chord, I'm helping these people that are certainly better than me at playing guitar to find chords because that comes a whole lot more naturally."

Dorothy shared her approach to analyzing a new musical style in order to integrate it into her compositional palette.

"Sometimes, just as an exercise, I'll try to copy a style just to see that I understand it, because then in the future if I want to pull from that kind of mood, I can use elements of it and know what I'm doing... I was writing a heroic theme cue, which is supposed to be in the style of John Williams... I listened to the Indiana Jones theme, and was trying to listen to the orchestration. And then I had my own harmonies and melodies written for my cue, but I went through and tried to copy out what I was hearing for orchestration across my score, to copy John Williams' style to my cue."

And Gina spoke positively of her piano instructors giving her music theory instruction when she sought to move from classical repertoire into jazz.

"[We talked] about, 'What are some of the things that are different about this style that are not like what you've been studying?' So, with jazz, it's the chords you encounter, all of these crazy 13<sup>th</sup>, major 7<sup>th</sup> [chords], these things that I've never had all that much experience in before.

So, 'Okay then, let's talk about the theory of it.' That was involved as well, especially with jazz. [My teacher] had me walk through a little bit of a jazz theory book... She was just so patient, and she explained it in a way that made sense to me, in a way that it clicked where it hadn't before."

Some interviewees also expressed appreciation for receiving instruction in the music theory of a new musical style that was much more distant from their previous musical knowledge. Ellen, who learned to perform a type of South Asian vocal percussion, explained,

"[My teacher and I] spent a lot of time also analyzing. I think one of the big things for second-language or second-artistic-domain learners as adults, or as young adults, is being able to break apart the parts and understand how it's put together, and then you're able to figure out the large pieces, break that down, figure out what you have to learn at a smaller level, and start adding those back up... We were working with a very analytically cut-and-dried situation, I mean, it's rhythms... so it was very analysis-heavy. And so we spent a lot of time analyzing, understanding how things were put together."

Peter also mentioned that the teacher who instructed him in a Central Asian chordophone at times took a theoretical-analytical approach, and this, as well as his own previous education in music theory, was helpful to him.

"Having a background in music helped a lot, because I knew how music is put together. Not necessarily how [this style of] music is put together, but how music works in a kind of generic way. I didn't have to learn, 'Oh, what do you call that, that's a quarter note, and there's four of those?" Maybe a hundred years ago the [members of this ethnic group] wouldn't have explained their music in those terms... but they do now, at least the guy who was my teacher, who was a music major. Maybe that's why he was doing it, also, because he knew that I had been a music teacher, so he knew that I knew the terminology. I don't know that the traditional method would have used that terminology, but he was able to explain things knowing that I would understand that terminology."

Although instruction specific to the characteristics of the theoretical system underlying a new style of music appears to have been helpful to interviewees, particularly in aiding them to avoid frustration and discouragement with mistakes, a differing mode of instruction was much more prevalent.

Learner observes and imitates teacher's performance. Nearly every interviewee mentioned listening to and mimicking the musical performance of an instructor as part of his/her

process of acquiring bimusicality. This method of learning is, in many cultural contexts, more similar to the process that local musicians go through when learning the same music style, whether over a small or great degree of distance. In the former case, many interviewees who learned to improvise after receiving classical training in their childhood related that listening to and imitating examples was an important part of their learning process. For example, in conjunction with her recollections of theory instruction at the piano, Gina also mentioned her piano teachers taking a listening and imitation-based approach.

"It's been a lot of listening. There's been a lot of encouragement, 'Go listen to this person, this person." I remember when I was first starting jazz, [my teacher] made me listen to five or six jazz pianists, and said, "Just go listen... What are they doing that you like? What are they doing that you know?... Just talking through some of the fundamentals, like, "Okay, play this phrase by phrase, let me play it and then you mimic.' 'So let's play the first three measures of this, I'm just going to play the left hand and give you the beat and the feel, and from there you play it...' A lot of it is mimicking."

Lucy, reflecting on her experience learning to improvise chordal accompaniment on the piano, explained,

"The first few weeks... because I had never, ever seen this before in my life, I mainly watched [another piano player in the band], just to see how he did it. And then I saw, 'Oh, well, I guess it's not that hard, he's just playing one note in his left hand and playing a whole chord in his right hand. And then I would see how he would do the rhythm. Normally he would just kind of go off of what the drummer was doing. So I was like, 'Oh, that's easy, I can just listen to him.'"

This kind of narrative was common to all the interviewees who reported moving from classical training into a more improvisatory style on the same instrument and in the same cultural context. However, similar comments also emerged as interviewees discussed learning music styles farther removed from their previous experience. For example, Anna reflected on learning to play various types of world music in an international church.

"A lot of times, my teachers would be like, 'Listen to the song!' You can get a glimpse of what they're trying to do, or imitate that as well. And I think that imitation is something,

especially when you are learning another culture, that is easy to pick up, and then from there you can experiment around. Imitation is something that I do a lot, and that I did a lot."

James described his lessons on Southeast Asian percussion and string instruments.

"As far as learning the instruments, [my teacher] would just come over... every week or so, to my house, and teach me some more songs. And then I would record them and listen to them a lot, and then work on learning them."

Robert shared details about his instruction on an African chordophone.

"I have a private tutor who is a master [instrument] player. He learned to play the instrument as a child and is a free-lance player who offers his services to various groups... All my instruction is done master-teacher style without any form of notation. My teacher plays a musical line, and I repeat it until I get it down well. I record it to listen to it later and so I can remember how it's done."

Peter described a similar process in his lessons on a Central Asian chordophone.

"It was all by rote, I did not write out any of the songs. There wasn't any music that [my teacher] learned, it was all passed down from teacher to student, teacher to student. So, he would play... he would explain first what the song meant, and then he would play the whole song. And then he would divide it up into little pieces, and we would practice each phrase of the song until I got it down, and then we would go to the next phrase. And then he would say, 'Go practice, and next week, when we have lessons, you have to play that for me.' I recorded – I didn't write the song down, but I recorded him playing it, so that I would be able to listen to him over and over at home, or I would just forget. There's so many different phrases – there's a lot of repetition, but it was too much at the beginning."

Nicholas spoke in similar terms of his process learning to play a Central Asian style on violin, affirming the benefit to him of laying aside his Western classical background and immersing himself in the music.

"[My teacher] asked me to transcribe a violinist that was playing [something] very, very different than a Western style [song]... it's really very difficult, if not impossible to squish it into the Western notation system. So I remember a time that he told me – I would write, I would take lessons and I would write feverishly in the margins and everything, and he says – 'Nick, stop, put your pencil down, and learn it a different way. Just internalize it, just do it and listen to what I'm saying, make [the music] part of you.' I had a very old, scratchy cassette tape recording that I transcribed... but I would listen and imitate and get away from my analysis, away from left-braining it, and begin to get a more global concept of what's going on here... [I stopped] trying to describe my imitation, but actually [tried] to feel what I was imitating. Rather than describing and analyzing what I was doing, I was actually just trying to do it like the big guy did."

However, other interviewees who underwent this type of approach to learning over a greater degree of distance found the absence of analysis and explanation distinctly frustrating at times. In her South Asian vocal lessons, Caroline reported having trouble understanding the changes her teacher asked her to make to her vocal technique. A typical lesson involved her teacher singing and Caroline mimicking. To correct Caroline's mistakes, her teacher would then sing the song again without explaining specific changes to make. Caroline explained that not knowing precisely what to do to satisfy her teacher was difficult for her. Likewise, as Gina shared on her experience learning to play an East Asian chordophone,

"The process of learning [the instrument] was a lot of mimicking... One of our teachers, she was playing this extremely hard song... and she would play a phrase that's like 12 measures long and look at us and expect us to mimic. And I'm like, 'I can get maybe the first four measures of that...' She's doing that, so I'm mimicking, and it was a pretty stressful process, because I was like, 'I'm not getting a whole picture here...' There wasn't much understanding musically for me behind that... I'm sitting here trying to mimic, but I'm not doing it right. So she just shakes her head, 'No, no,' and does it again. But I'm like, 'Doing it again doesn't help me, because I know I got it wrong the first time, and I'm trying, but it's really going nowhere no matter how many times you play it. Can we stop and do it slower, do shorter phrases?' And, no, the same 12 bars."

Values related to the learner's cultural and interpersonal connections. A third category of learning values emerges from the second-music learner's new and changing relationships with individuals, groups, and music cultures. Within the learning dimension of "Cultural / Interpersonal Factors," interviewees discussed the role of mentorship in second-music learning, building new connections with members of the community, and being challenged to accept and embrace their own novice status in their new musical-cultural environment.

Learner has a positive relationship with a musical mentor. These stories of challenge and frustration in second-music learning bring up another important factor – the student's relationship with his or her teacher. One-on-one instruction with a trusted and respected musician – even a friend – proficient in the desired musical style emerged repeatedly as an element of

successful second-music learning, regardless of the degree of distance involved. Many interviewees spoke warmly of the teachers and mentors who helped introduce them to new musical styles. For example, Fiona described how the worship band musician who introduced her to Black Gospel-style piano playing taught her:

"I sat under this guy for so long, because he had taken jazz. He was a jazz player, [and] aside from that, he had grown up [in the] Church of God in Christ... so he had the Gospel and the jazz flair. And so, sitting under him, I learned how to play some of these more complex chords and everything, and then ended up getting to the point where I was good enough to play the songs we were doing on my own... In general, he would just give me these cool chords. I had no idea what they were called, but I knew how to play them, just because he had instructed, 'Here's the thing, and here's what [it] sounds like, here's alternates that you can do,' and everything like that."

Anna discussed the role of mentorship in her process learning to play various global music styles on piano as part of an international church.

"I was just afraid that I wouldn't be able to really gel, because on the team [of musicians from a particular area], they all knew what they were doing. They were all in sync, they knew when this part was supposed to get loud and that part was supposed to get soft, and I worried about being in sync with them and knowing what they were doing and how they were communicating... But I definitely had people on the team just sit by me and be like, 'Okay, here's how you play it.' Or they'd give me an example, and I'd play it back, and they'd be like, 'Yeah, that's good...' The more I practiced with someone that that was their culture... it is easier to pick up, when someone shows you."

Peter related his experience switching from group to private instruction on a central Asian chordophone.

"Another student who knew that I wanted to learn an instrument introduced me to this other student. He was a music major, and [he] asked if I could join the class. It was a class for students who wanted to learn to play the [instrument], so all of them were raw beginners... After one semester, he and I could both tell that I was getting bored in the class... I went really fast, and so sometimes he would ask me, 'Peter, can you make sure that [another student] is playing it right?' Weird. So, anyway, long story short, after one semester I went to private lessons because I was wasting half of class time because I had already done everything that he asked us... I was the only one that was holding myself back."

While sharing about her experience learning chordal improvisation on piano, Ellen reflected on the help that even incomplete mentorship brought her.

"I wish – well, I shouldn't say I wish, because I didn't have the opportunity and the time and it didn't work out – but what I could have done, that would have been more effective than what I did, was [to] actually go take some lessons and actually practice in the tradition under someone who's considered an acknowledged expert... I did ask questions of people I respected. So I heard a couple other people playing... and I would just ask, 'What are the techniques? What do you do?' And I would just pick up a little thing, here and there, and apply it."

The encouragement that a trusted musical mentor provides a learner developing bimusicality is a significant resource and motivating factor for continued learning. As Gina explained, as she was learning new styles on piano to use in a church setting,

"My minister of music [at the church] – his wife was my piano teacher – he was very intentional as well. He was the one that first asked me to do a solo at church. I was like, 'What are you talking about?' But he was really intentional about pouring into me and just encouraging musical exploration, really. He was like, 'How about you try this?'"

When asked what advice he would give to a cross-cultural music learner, James said,

"Basically, it's just about finding the right person to teach you... [My teacher] was a great teacher, and [in this cultural context] everything's about who you know. Relationships are super important."

On the other hand, a mentor relationship that is not marked by compatibility, trust, and honest but encouraging feedback may cause the learner's experience, and even his or her desire to retain the new musical style, to suffer. Lucy contrasted her experiences during middle and high school as she sought to learn to accompany student choirs in Japan and in America:

"[In Japan] there were students that were allowed to accompany... It was usually only the best two or three people who were allowed to accompany. So I'd be like, 'I'm learning piano, but that's fine...' Not competing, it's not an audition, you usually just got selected because the teacher knew... It kind of made me feel sad, [that] I didn't get to. [In America], once [the teachers] listened to me play piano one time, they were like, 'Do you want to accompany?' And I was like, 'That's been my dream, because nobody let me do that in Japan!""

As another example, conflicting expectations between student and teacher can overwhelm the student; both Caroline and Helen mentioned being taken aback at the large amount of time per week their instructors expected them to practice outside of their regular lessons, even as they upheld their responsibilities in other areas. Helen also brought up that a

significant concern of hers going into a future bimusical learning experience would be to have an "exit strategy" if she did not feel comfortable with the instructor. The rapport between a second-music learner and the mentor figure who introduces him or her to a new musical style colors how he or she perceives the learning process as a whole.

Learner builds new relationships and engages the community. The positive effects of a healthy learner-mentor relationship are further multiplied as the bimusical student builds new relationships with members of the community at large. These connections validate the learner's progress, provide an environment for performance and collaboration, and allow the learner's experience to transcend the purely academic or theoretical dimension of music study. For example, Ellen described her experience sharing what she had learned of South Asian vocal percussion, and the surprising impact it had:

"[Members of this ethnic group] started a society for... the exploration of bimusicality and fusion and the intersection of their tradition with other traditions... So they invited me for their opening night... They wanted me because I had just experienced this with their music... So I performed... these excerpts that I had mastered. That was humbling and also fascinating, just watching them. They were thrilled with what I did! Because I was speaking their musical language... It lent some authenticity to what I had done, and gave me the permission to be part of more things... They opened their hearts and their homes, in different ways, and they invited me to come make music with them if I wanted."

Anna echoed this, explaining how her attitude toward diverse ethnic groups has been changed through learning to play their music in an international church.

"I understand race a lot more. I understand ethnics a lot more... My friend group right now, we have someone from in India, someone in Colombia, someone in Brazil, someone in all these places around the world. And I can relate to them... I knew about all these [because] it was normal to have a bunch of nations in just one church service. So coming [to college] it was easier to relate to people."

Gina offered similar thoughts on learning multiple musical styles, giving examples from her experiences with African drumming.

"It opens your eyes to new worlds. It does. And it allows you to appreciate things in a different way as you study deeper into some of these cultures – the meaning behind some of the drum patterns and the calls and stuff. As you come to study the music, it opens your eyes to a new world. There's a people group associated with this, there's a part of the world where this is prominent. There is an appreciation [for that]."

James described the impact learning to play a local percussion instrument has had on his work in Southeast Asia.

"I think playing [the instrument] helps because that's... the most well-known instrument [from this area]. And so, I guess, it gives me a little bit more rapport in some ways. If I pick up [the instrument], and they're playing a song, and I play along with them, they're like, "Oh, yeah, that sounds like a beat [from this area]...' Maybe some people just think I'm more legit or something if I can play a little bit."

Peter described the importance of community to his compositional process as he created new songs in a Central Asian folk style.

"So then it was my turn to put [the text] to music, and it happened a lot faster than I ever thought it would... I was immersed in [local] culture at that time... The vast majority of my friends were [locals] and I was in [local] culture, except for when I was at home, all the rest was [local] culture. So I was immersed in it, and I thought I could really feel the heartbeat of [the] folk music."

And Nicholas offered a powerful testimony to the significance that community – and the absence thereof – continues to have for him as he performs on Central Asian instruments.

"I'm asked to play these instruments [in America], and, outside of their intended context, there's a lowered level of internal thrill about playing them when I'm more like a zoo animal. I don't have the joy of playing it as much when I'm playing it for somebody to take videos of me... It doesn't mean anything. [In comparison], where in language or in music I'm actually communicating meaning, belonging, all these other deep meanings that have deep emotions connected to their roots... therein I'm communicating with people, rather than them looking at something that doesn't have intrinsic meaning to them. And I think communicating meaning with music in a context that it has meaning to the other participants, that's a very highly stimulating environment to develop this particular musical language."

For those who pursue developing bimusicality, gaining access to previously inaccessible dimensions of another culture is an experience that also brings them profound and transformative human relationships. Interviewees expressed fascination with, and joy at, this process.

Learner is willing to accept discomfort and practice humility. However, it would be unfair to portray the experience of acquiring a second music as simply a bed of roses! Implicit in the concept of learning a second music is that the learner already has at least some proficiency in a "first music." Therefore, undergoing the process of learning to perform in a new musical style requires returning to a novice state that a musician who is already competent in another domain may find difficult to stomach. Interviewees described this experience in vivid terms. On learning new techniques for guitar in private lessons in college, Oliver said,

"Now that I think about it, I've said to a couple people that I really felt mostly confident as a guitarist who [had] played for five or six years whenever I got here [to college], and then whenever I started having to play with a pick I just felt like a monkey with a guitar in my hands. Which, I mean, it's not a different instrument, but it's a whole different style... I didn't delve into using a pick ever, using my thumb ever, and so my thumb – it's like a baby compared to the rest of my fingers, just kind of struggling along."

Ellen described her feelings during her time learning chordal improvisation on piano.

"I still don't consider myself an amazing CCM [Christian Contemporary Music] artist. I can keep up on a very basic level, whereas I have a master's degree in classical organ performance. I'm not a slouchy musician! But it's still a second language to me... I was used to being on top of the pile always and being the best at what I did. And suddenly I was completely competent technically, but not completely competent in the style... I had all the chops that I needed, finger-wise, but I didn't have the audio chops to do it. So, yes, it was highly frustrating, it was actually very stressful, always feeling, 'I'm not sure if I'm doing enough. I'm not sure if I'm doing it right.' It was putting myself in a very vulnerable position, over and over and over."

On learning orchestral percussion as a pianist, Dorothy said,

"It's definitely humbling. Because I'm working with these percussionists who are really talented and know what they're doing, and so I need to be willing to take whatever feedback they give me and try to do better. But I also have this feeling of, 'I'm really a good musician!' They don't know that because I'm doing these instruments that are so new to me. I have to push that aside a lot."

Nicholas shared his thoughts about his experience learning a Central Asian style on an unfamiliar instrument after receiving a conservatory education on violin in America.

"It took a bit of a return to being a musical child... better put, it has a negative sense to it, I returned to being a musical juvenile. I didn't like it. I didn't like being a musical juvenile.

There wasn't a sense of satisfaction in it like there was in being in something that I was already an adult in. In terms of violin, I was a string adult, I was a [new instrument] juvenile, and I didn't get compliments on it."

Peter described the attitude he sought to maintain as he learned to play a Central Asian chordophone.

"One thing that was really hard for me... I tried to keep in learner mode, because I had been a teacher for so long. And they all knew it, because of my attitude. I don't know, maybe it wasn't such a great attitude – 'I'm a teacher, so go ahead and teach me...' But I wanted to learn. I didn't want to say, 'But what about this?' I didn't want to do that – I did, sometimes, but I didn't want to. I wanted to be a learner, and I wanted them to know that I wanted to be a learner."

Speaking as an African-American Black Gospel keyboardist, Fiona offered this perspective to piano players seeking to grow in proficiency in Black Gospel style:

"Our music and our culture aren't mutually exclusive. It's one and the same... Slaves and former slaves expressing their pain and expressing how grateful they were where God had brought them, that's a big history behind Gospel music, and that knowledge is very important to us when forming this craft. And, at the same time, it's very enjoyable... [On campus] they had this Gospel Music Fest where people started 'shouting'... People did not know what to do! I saw some of my friends, and they were afraid. I said, 'For them, this is just as real as having a quiet, silent moment...' It's being willing to put aside something that might make you a little uncomfortable, or something that you're not initially used to being exposed to, to understand this is how people express themselves and express their worship."

And, finally, Ellen echoed these thoughts in connection to both music and language learning as she reflected on her own experiences.

"Having learned several languages in my life and having had several bimusical experiences – you go into this zone where you don't know what's going on. And you're submitting yourself to a mental posture of not knowing what's going on, and never knowing exactly when you've made it until you've gotten an affirmation from certain places... somehow, some kind of confirmation that what you're doing fits into the language or the artistic thing you're doing. So, [there is] this mental tension, and being willing to deal with that."

Learning a second music challenges convictions that learners have held about music, about others, and about themselves. This is a very difficult process to undergo. Not only is the student likely in an unfamiliar environment to some degree; he or she also is being forced to set

aside an inner sense of musical competency, as well as his or her desire to demonstrate this competency to his or her new musical community. However, if learners persist through these struggles and even embrace the opportunity to practice humility, the outcome of the journey may alter them within as well as without.

Coming full circle: Returning to the learner's personal attributes. A pattern begins to emerge as these learning values are considered in relationship to learning dimensions: their progression is circular, rather than linear. If the previous learning value, accepting discomfort and practicing humility, has as much to do with the learner's personal qualities as the cultural and interpersonal factors surrounding him or her, then the final learning value to be discussed continues this trend. This discussion, therefore, closes where it began — with a final learning value related to the "Personal Attributes" dimension of bimusicality.

Learner allows his/her sense of identity to be transformed. Interviewees' statements about the outcomes of their music learning experiences repeatedly transcended descriptions of performance proficiency, or even interpersonal connection, alone. In fact, many interviewees explained that they themselves and their view of the world had been changed in the process as well. For example, when asked if she heard international worship music differently after learning to play it, Anna replied,

"I think nothing really changed with my ear, but I think my love for the music changed, and I think that changed the way I heard [it]... Seeing the people worship made me have a different love for that type of music. And that made me hear more things – not that I wasn't hearing the things before, but I was paying more attention because I wanted to. It was out of love that I wanted to play these things, and not out of a duty that I had to do it. And I think that's the big thing that changed the way I heard things."

Discussing her experience performing South Asian vocal percussion for members of the community, Ellen explained,

"They just absolutely beamed, because I believe that by learning someone else's language or musical domain, you're also showing that you care about them, or that you love them. At least, you have the potential to be showing that... It's confrontational, it's cool, it's very special, to be able to bless other people that way even though to you it's not your heart language."

Gina explained that her growing appreciation for other musical cultures has helped her to grow in her own musicality out of her background as a classically-trained pianist.

"It has allowed me to become more free in my musical expression... It forced me to take a step back. I'm not looking at music. [That's a] huge step, not to be looking at music while you're playing!... I think that has broken down some of the walls of 'strict,' which were good—the boundaries, the walls of classical music, [where] this is the box of classical and each thing has its box. But here's where the two collide. And so I think it has allowed [me] an appreciation of different cultures and musical cultures, but also allowed [me] more freedom as a musician and as a person."

James explained that the strumming technique he learned on a Southeast Asian chordophone has affected his guitar playing.

"They feel the rhythm in a different way than we do, or than I do... And they also use all four of their fingers when they play, so that was weird. Actually, I do that now. I kind of adopted some things that I liked from that. And, actually, some of my more recent songs [that I have written] have more of that fingernail sound, which I kind of like."

Peter, also a guitarist, made a similar statement about the effect playing a Central Asian chordophone has had on him: "Now, some of the strumming techniques of the [instrument] I've transferred over to the guitar."

In addition to these types of comments, a few interviewees also reported a new sense of personal identification with a culture different from their own – gained through the process of learning its music and building relationships with its members. Nicholas offered an anecdote describing this.

"After I played a concert of [Central Asian folk music], I had an interview with the radio station... They had my teacher next to me, and they asked him, they said, 'Why can Nick play like an [ethnic group] person? What does he have?' And he says, 'Nick has the [ethnic group] spirit...' I was shocked when my professor said that, because I didn't know I'd grown that much."

Peter said of his Central Asian musical performance,

"I wanted to learn to play the [instrument] like a [local], not like a foreigner would play it... We bring things down to the common denominator. If there's something other [that's] similar, we adjust so that we get close, but we don't do it exactly. I didn't want to get close. I wanted to be [a member of this ethnic group] when I played the [instrument]."

Caroline related that in her experience learning South Asian singing and percussion, the most significant compliment she felt that she received from locals was being told she was "one of them" – because she dressed like them, spoke their language, and was able to perform their music. At the same time, she explained, she did not stop feeling like an American entirely; now, she sees herself in-between, as she values and identifies with aspects of multiple cultures. A final reflection on this issue of identity in relationship to music and language learning is taken from James' interview session.

"I think identity is huge... Different people are different, but I feel [local] when I speak [the local language]. I'm a little bit of a different person in some respects... I feel different... The longer you're here, the more you feel like the language seeps into you, and you feel more connected to it. And I felt that way about the music, actually, a lot. I feel more connected to [this area] when I play the music that's specifically from here, and I like it more here, actually... I think identity is a big part of language, and if you reject the identity, it's really hard to learn the language. And I think it's probably the same way with music. If you don't really want to be identified with it, it's really hard to learn that music."

Profound engagement with a new music culture leaves its mark on the learner, as these comments show. Such engagement reshapes the learner's motivations for wanting to continue to pursue development in a new music style and relationship with members of the community – which connects back to the first learning value discussed in this section.

## **Conclusion: Visualizing Relationships**

In order to proceed to making recommendations for music pedagogy based on the ethnographic interview data analyzed here, it is necessary to take the final analytical step of

condensing these observations into a cohesive whole. The following table summarizes the preceding discussion of learning values and their categorization by learning dimension.

Table 6.

Learning Values Grouped by Learning Dimension

<b>Personal Attributes</b>	Learning Approaches	Cultural / Interpersonal Factors
Learner allows his/her sense	Learner is self-monitoring.	Learner has a positive
of identity to be transformed.		relationship with a musical mentor.
Learner is intrinsically motivated.	Learner understands theoretical- analytical musical system.	Learner builds new relationships and engages the community.
Learner is not overly afraid of mistakes.	Learner observes and imitates teacher's performance.	Learner is willing to accept discomfort and practice humility.

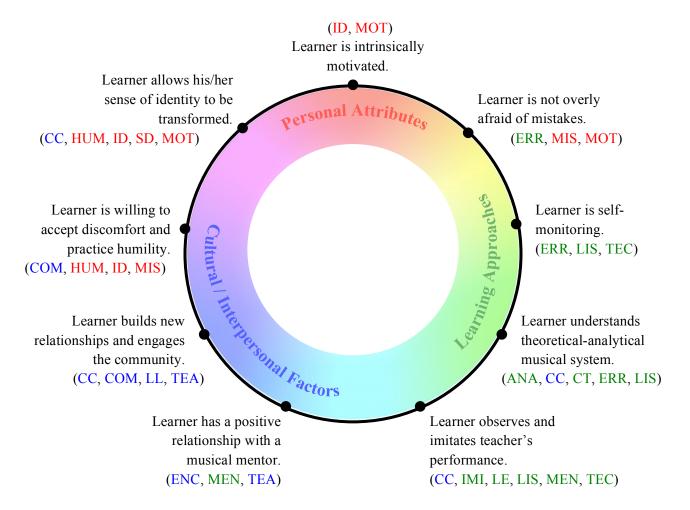
However, as became apparent during the previous discussion, the above model does not fully express the interconnectedness of these learning values. While being challenged to "accept discomfort and practice humility," for example, is a consequence of the learner's engagement with "Cultural / Interpersonal Factors" at play in an unfamiliar musical-cultural environment, how the learner responds will also have much to do with his or her "Personal Attributes."

Likewise, a learner who is "not overly afraid of mistakes" will be much more likely to "selfmonitor" practically and effectively – these "Personal Attributes" and "Learning Approaches" are interconnected. Finally, a second-music learner who intends to "observe and imitate a teacher's performance" benefits greatly from having a "positive relationship with a musical mentor"; here, as previously, "Cultural / Interpersonal Factors" are intertwined with "Learning Approaches." Carrying forward the color-coding applied to these learning dimensions, learning values, and coding tags, the following diagram visualizes the relationship between these aspects

of the second-music learning experience as a color wheel, with the previously used red, green, and blue color labels expanded into a full spectrum.

Figure 12.

Relationships between Learning Dimensions, Learning Values, and Coding Tags



The arrangement of these learning values into a circle is intended to communicate that they are a network, rather than a linear progression. Their development does not happen sequentially, but rather in concurrent, overlapping fashion throughout the student's second music-learning process. As interviewees' experiences show, growth in bimusicality is a process encompassing the learner's entire self. Although isolating specific facets of this process is useful

as a means of better understanding particular aspects of the whole, a complete view must acknowledge that bimusicality is irreducible to its component parts. The experience of learning a second music is not simply a process of acquiring puzzle pieces and fitting them together, but rather the fruit of complex interactions between the learner, his or her approach to learning, and his or her relational and musical-cultural environment. The nine learning values identified here are not items to be worked towards one by one on a checklist, but rather indications that the learner's holistic process of engagement with a second music is proceeding in a healthy, sustainable, and satisfying way.

Although this diagram summarizes interview data and analyses, more remains to be said about the ramifications these findings may have for methods of second-music instruction, as well as the connections these may bear to processes of second-language acquisition. Discussion of these issues will continue in the following chapter.

## **Chapter 5: Discussion**

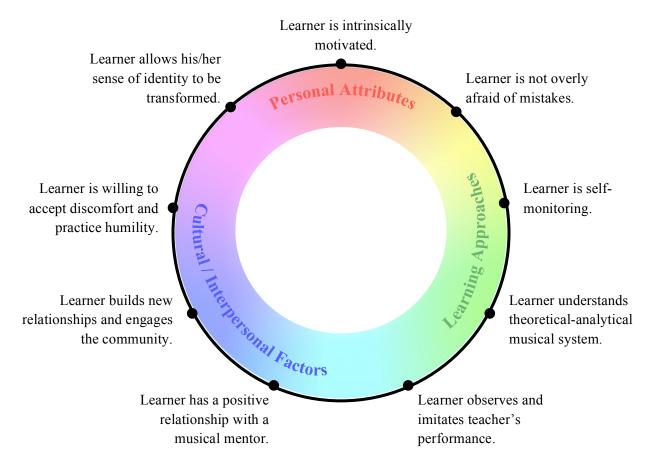
The goal of the present study is to explore the development of bimusicality in post-childhood music learners, and to uncover any potential connections between best practices in second-language and second-music learning. These findings yield implications for music learners who wish to develop understanding of a new musical style, and for music teachers who seek to encourage their students to celebrate their existing stylistic diversity and further develop cross-stylistic proficiency. This chapter addresses the third and fourth research questions guiding this study, namely: What learning strategies, if any, have benefited successful adult second-music learners, and do these show any connection to methods of second-language acquisition? What curricular materials can help adult music students grow in bimusicality as a means of cultivating stylistic diversity and cross-cultural musical engagement? The following discussion connects the learning values identified in Chapter 4 to pedagogical applications, with reference to extant research on second-language acquisition strategies discussed in Chapter 2.

## **Pedagogical Applications for Music Educators**

The analysis in the preceding chapter concluded with the identification of nine values that emerged as trends in interview data. The circular diagram summarizing the results of the analysis of this data is repeated below for reference, now including only learning dimensions and learning values for the sake of clarity. These nine learning values are the starting point for the applications to music education emerging from this research project.

Figure 13.

Relationships between Learning Dimensions and Learning Values



However, as explained at the conclusion of Chapter 4, these learning values are optimal outcomes of the second-music learning experience, rather than concrete action items for music teaching and learning as they are incipient or in progress. While the learning values may serve to clarify various aspects of a learner's past bimusical experiences, they do not in themselves constitute steps to take toward second-music learning in the present and future. So, what should students do to grow into these learning values as they develop their bimusicality, and how can teachers help them?

**Listening.** Although mentioned in conjunction with several of the learning values discussed in Chapter 4, listening was so fundamental to so many of them that it did not seem

appropriate to isolate it as a single value in that list. However, it may be connected in particular to the following learning values:

Learner is self-monitoring.

Learner understands the theoretical-analytical musical system.

Learner observes and imitates teacher's performance.

It is necessary to recognize that immersive, active listening to examples of the new musical style should take place early in, and throughout, the second-music learning process – a fact corroborated by interview data. When asked what advice they would give another second-music learner, interviewees consistently recommended listening. For example, Fiona, offering counsel to piano players seeking to learn Black Gospel style, said,

"Well one [piece of advice] is listening to a lot of Gospel music. You'd be surprised the things that you understand just by listening to it... Listening, you can pick up a lot, because, if you think about it, if you're listening to a song enough times... you know where the hits [are] and you have the drum sound and everything. Even unconsciously, you know how it's supposed to sound. You'd be surprised the things that you pick up on and remember after listening to it a bunch of times."

Anna gave similar advice to church musicians learning to play in international styles.

"A lot of times my teachers would be like, 'Listen to the song!'... You can get a glimpse of what they're trying to do, or imitate that as well... I think listening to a lot of music, listening to the different types of music, and trying to imitate that [is helpful]. And then you can implement that kind of way of playing into your other songs that you have to do."

When asked how someone might prepare to enter a new culture overseas, Ben said,

"I'd say, listen – listen to some older music, some newer music, just have an understanding of the breadth of what is there. Get a national in your area to explain some of the music of that culture, and then find one or two artists that you really like and learn a few of their songs so that there's something you can talk about when you go over there, when you start interacting with the locals."

James, answering the same question specifically for someone planning to enter his current setting in Southeast Asia, said,

"I don't really think there's much they could do beforehand unless they could get their hands on some recordings. If someone was going to come [here], I... could send them some recordings I've made, and they could just listen to it. I think a lot of it is just getting it into you."

At another point in the interview, he elaborated on the listening habits that were helpful to him learning to play a local chordophone – and linked this to his language learning process.

"It took me probably a month or two of really intense listening. My family was really tired of the songs. They were like, 'Okay, we want to listen to something else!' They knew all the songs too, it was really funny... It is like learning a language, and I think that's so true... A lot of what I did when I was learning language was the same thing. Just listening a lot. Actually, when I learned [a local language], a lot of what I did was listening. Because I like to listen to music, I would listen to songs [in this language]. They weren't traditional songs, more like pop or rock or whatever songs that kids were listening to in my neighborhood... I would get them and just listen to them, and I think that helped a lot... You kind of get a feeling for it. There are some things you can learn about the theory that help, but a lot of it is just getting it into your bones."

Immersive listening as an essential avenue for both second-music and second-language acquisition came up in other interviews as well. As Nicholas explained of learning to play violin in a Central Asian style,

"I listened a lot. I became a conscientious listener. I think I intentionally piqued my listening skills to imitate what [the violinist on my recordings] did.... I remember consciously trying to imitate, trying to imitate, trying to imitate... I had such a desire to be able to play like they did."

And on his language-learning experience in the same setting, he said,

"So many people said that I really learned [the language] well... I recorded all of the lessons in the book, all the stories, all the examples, everything, and I learned... listening to the cassettes... I heard that the people speak in proverbs... so I learned a lot of proverbs. And when I throw proverbs into conversations, people's eyes just light up. 'That's how we speak!"

Ellen connected immersive listening to successful imitation and growth in stylistic understanding in both music and language learning as well.

"When you're in a second language, you're also more cautious and you're maybe building more consciously, but I would argue that every musician, whether they've learned by imitation or by analysis, and every speaker takes things from other people in chunks. Tons of people who improvise are still incorporating licks you've heard here or there."

Interviewees' observations on the role of listening in second-language acquisition are corroborated by existing research in the field. Bongaerts (1999), writing on high-achieving second-language learners, reports that "intensive perceptual training that focused their attention on subtle phonetic contrasts between the speech sounds of the target language and those of their L1" (p. 155) – in other words, rigorous listening – was a common practice in the population of native-like second-language speakers studied. Singleton and Ryan (2004) recommend "naturalistic exposure to the target language" (p. 102), which comprises immersive listening in context, as an important aid to second-language learning, and Moyer (2013) likewise points out "imitating native speakers" through observation of what they say and how they say it (p. 81). It is hardly surprising that listening should be an essential element of second-language acquisition, but its importance cannot be overstated.

The salient recommendation for second-music learners is to listen. In the present day and age, it is more possible than ever before to find examples of countless musics from around the world with a quick Internet search. Simply building a catalogue of samples of the desired musical style and consistently listening to them provides an invaluable foundation for later practice of the tradition under a musical mentor. Moreover, seeking out recommendations of songs and artists to listen to from a local representative of the musical-cultural community is an excellent opportunity to begin to build relationships and engagement with this group. For their part, music educators should make their students aware of the vast array of music libraries available to them over the Internet; in addition to the videos available on Youtube, which may hail from even the remotest parts of the world but be difficult to reliably attribute to a particular context, databases like Alexander Street's *Music Online* and *Smithsonian Global Sound for Libraries* provide curated collections of field recordings both historical and contemporary. There

is no substitute for simply listening – and with so many resources and connections available, no excuse for not doing so. The additional effects of intensive, immersive listening on a learner's performance technique will be explored in a later section of this discussion.

**Dynamic distance as a guide for teaching approaches.** As explained in Chapter 4, the concept of distance in second-music acquisition, which emerged during the interview process, became a key means of recognizing similarities and differences between different individuals' bimusical experiences. When considered in relationship to the two primary modes of second-music learning that interviewees described – explanation and analysis versus observation and imitation – this distance concept provided additional insight.

Before proceeding, it is necessary to clarify that interviewees rarely described experiencing either an explanation-analysis or observation-imitation teaching approach in isolation. Instead, it was most common that they recalled both receiving theoretical explanation of the new musical system from their teacher, to some extent, as well as being encouraged to listen to many examples of the new musical style and imitate them bit-by-bit in their own practice. However, while no examples were reported of second-music instruction that focused exclusively on explanation and analysis, cases did appear of lessons that consisted entirely or almost entirely of listening and repetition – and, in teaching approaches that included both, listening and imitation were typically given priority. Moreover, the latter model presented itself most frequently in situations where the instructor belonged to, and/or the learner was immersed in, a non-Western music culture. The following learning values pertain to this area of discussion:

Learner understands theoretical-analytical musical system. Learner observes and imitates teacher's performance. Learner has a positive relationship with a musical mentor. Learner allows his/her sense of identity to be transformed.

If frustration and discouragement expressed by interviewees are taken as a signal of a disconnect in effective teaching-learning practices, then it is evident from interview data that in situations where the student is attempting to learn a new style of music at a high degree of distance from his or her previous musical experience, pure observation and imitation can prove problematic. For example, as documented in Chapter 4, Gina relayed some difficulty she had in the process of learning to play an East Asian chordophone – an experience marked "D3" in the distance classification system proposed in this paper.

"Our friend... was the first person to begin to teach us, and she was able to explain some of the things in it. But then when we [got a different teacher]... it was a different experience. There wasn't much – it was really just the mimicking, and less, 'Let's talk about it, let's understand...' Listening was non-existent. I mean, we listened a little bit, but for the most part, it was like, 'Okay, we're going to learn [the instrument] today...' That process [of explanation] was pretty non-existent, and that was why it was so much harder for me, at least, because I don't pick it up as easily... That was a pretty stressful process, because I was like, 'I'm not getting a whole picture here, I'm just mimicking.'"

Several other interviewees, among them Caroline, Helen, and Isabel, related parallel learning experiences in which their instructors did not explain the technique or conceptual system underlying the new styles of music they were learning. They also reported, to varying degrees, that this experience was sometimes confusing for them. However, all these interviewees did report growing in proficiency in the new type of music they were learning, and most of them acknowledged ultimately being pleased with their progress; in fact, some interviewees were even appreciative of their teachers forcing them to stop thinking analytically about the music. For example, Nicholas explained of his "D2" experience in Central Asia,

"I would listen and imitate and get away from my analysis, away from left-braining it, and begin to get a more global concept of what's going on... I think [my teacher] showed me what the [ethnic group's] spirit was, and it was that I learned it the way they learned it. Not just what they learned, but... this completely aural transmission of music... They had learned it that way as well."

So, before drawing conclusions from these data, it is necessary to acknowledge that many additional factors are at play beyond the scope of the present study. It is to be expected that in cross-cultural learning situations, how a music teacher instructs a student is subject to countless influences, including that culture's musical and social values, the power dynamics between instructor and learner, the presence of a language barrier complicating communication, and the instructor's motivations for providing an education in the musical style to someone perceived as an "outsider." These factors are all situation-specific, and generalizing from the example of one or even several learning experiences in different music-culture contexts to all possible situations is risky. At the same time, how the student deals with the idiosyncrasies and stressors of his or her particular learning environment has to do with his or her own personality, motivations for learning, background in music learning, preferred learning approaches, and degree of acclimation to the unfamiliar setting – to name just a few of the many elements involved. Therefore, the following observations are made based on the interview data gathered in this project, but with the understanding that each music learner's recognition of and adaptation to the demands of his or her own musical-cultural environment is paramount.

All of this notwithstanding, some suggestions can be made about the optimal use of different teaching approaches in the development of bimusicality from the present data and analysis. Doing so requires first recognizing that although the distance scale set forth in Chapter 4 is used in this analysis as a fixed frame of reference for interviewees who narrated their past experiences, the lived experience of developing bimusicality is anything but static. In fact, as experienced by the learner, growing in bimusicality is a dynamic process of reducing the felt distance of a new musical style until it becomes part of his or her transformed musical identity (refer back to Figure 10 in Chapter 4).

In effect, what feels at first to be overwhelmingly "new" to the learner – whether this be improvising chordal accompaniment on piano at a local church, or singing a new vocal style in a new language within an unfamiliar music culture on the other side of the world – is gradually drawn into his or her expanding frame of cultural reference and sphere of technical proficiency. The learner's sense of distance is lessened as the learning gap is narrowed through practice and engagement. If this process advances productively, what was originally a "D1" experience, a "D3" experience, or anything in between becomes something that the learner speaks of in "D0" terms as simply part of his or her life as a musician. Hence, explanations such as the following, also from Nicholas, on his process of learning various new Central Asian instruments (categorized "D3") after acquiring a Central Asian style on violin, his original instrument (labeled "D2").

"It was something radically – I had to, neurologically, I'm sure lots of new pathways had to be created. But once those pathways were created [as I was] learning the first one... the next and the next became easier and easier. I ended up playing four or five of these sort of [type of instrument]. They snowballed, one was very helpful to the next."

Nicholas's process of learning these new Central Asian instruments appears, on paper, to be a music learning experience over greater distance than learning to play a Central Asian style on a previously learned instrument. However, Nicholas spoke of this "D4" experience as increasingly easy due to his growing familiarity with the learning process and the cultural environment. He later even described himself as an insider looking outward when he performs on these Central Asian instruments in a Western setting for audiences who are unfamiliar with them.

"I don't have the feeling of joy of playing it as much when I'm just playing it for somebody to take videos of me. It's not like interacting with people. They're taking videos because it's weird, not because they get it. They don't speak this language. They don't speak this musical language. It means nothing to their heart, it means nothing to their core."

Caroline described her experience of participating in the music style she learned in South Asia as it was used by local communities for spiritual practice, saying that it helped her feel she was part of the community and altered her own perspective on the world. And, as quoted in Chapter 4, Peter said of learning to play a Central Asian chordophone, "I didn't want to get close. I wanted to be [a member of this ethnic group] when I played [their instrument]." All these interviewees are relating views of this process of bringing musical styles previously distant to them into their identity and regular practice. What at some point in the past felt to them like a greatly removed musical discipline could be spoken of in the present in "D0" terms because of their growth in bimusicality.

How, then, can teachers encourage their students to recognize musical distance as a factor in their second-music learning process, and to think about how to reduce the amount of distance that they feel? How can students placed into an unfamiliar learning environment adjust their own practices to accomplish this more effectively? As discussed in the previous section, immersive and active listening to samples of the new musical style is a non-negotiable element of the learning process. However, additional steps taken in the lesson environment itself may also help. Given that this research project has been conducted in the context of North American academia, and the majority of study participants were educated in Western musical traditions as their "first music," the following recommendations are intended for North American music educators seeking to help their students engage productively with a new musical genre, style, or tradition. The wider applicability of these models is presently unknown – broader survey and interview research would be required.

Just as children unconsciously acquire understanding of the grammatical rules of their first language through environmental exposure (Tomasello, 2009), so also do they absorb the

norms of their home culture's musical styles. When seeking to learn a second language later in life, the vast majority of students need formal instruction to cultivate their grammatical understanding of the new language; they are no longer able to acquire linguistic productivity through environmental exposure alone (Ellis, 1985; Birdsong, 1999; Singleton & Ryan, 2004). Skill Acquisition Theory (SAT) corroborates this, as it holds that adult learners of a new skill – whether the skill is linguistic productivity or cross-cultural musical performance – first acquire explicit, analytical knowledge which gradually becomes automatized into implicit, procedural understanding by means of repeated practice (Speelman, 2005; Taie, 2014). In the context of second-language acquisition, SAT suggests that adult learners benefit from being explicitly taught the rules of a new linguistic system and then practicing them in their own communication to gradually approach more fluid and correct utterances.

In the same way, second-music learners engaging with a new musical style removed from the norms of their first music are likely to need some overt explanation of the principles governing the structure of the music and the techniques by means of which it is realized on an instrument. The farther removed this music is – in other words, the greater the degree of distance characterizing the learning experience – the more important this explanation becomes. If the learner is engaging with a musical style more akin to his or her previously learned music, then his or her own innate understanding of musical "grammar" is more likely to prove applicable. As the learner becomes more acclimated to the musical style – that is, more able to listen to it with comprehension, and to identify and correct his or her own mistakes in performance – the degree of distance he or she feels decreases, and observation and imitation become increasingly important avenues for developing understanding of the nonverbal, intangible qualities of the

genre. The following diagram – developed independently of Schippers (2005)' seven-continuum transmission model (SCTM), but bearing some similarity – suggests an approach.

Figure 14.

Suggested Introductory Teaching Approaches over Varying Degrees of Distance

Minimal distance	Maximal distance
Teacher demonstrates musical style; immersion/imitation precede discussion or analysis.	Teacher explains musical system; discussion/transcription/analysis precede practice or performance.
Note: As the student becomes in	acreasingly familiar with the new musical style,

Note: As the student becomes increasingly familiar with the new musical style, teaching time should increasingly prioritize observation, imitation and technique practice (movement right to left on this continuum).

This explanation fits the interview data, wherein numerous interviewees reported being able to progress from classical training to improvisatory playing on the same instrument through observation and imitation alone under the guidance of a mentor. However, the same approach carried out over a greater degree of distance coincided with much more frequent reports of frustration and discouragement.

A final example taken from interview data provides additional confirmation of this model. Ellen shared three distinct bimusical experiences during her interview – learning chordal improvisation on piano in college after growing up as a classically trained performer, studying South Indian vocal percussion via Skype lessons in the United States, and performing organ in a local Western European style while living in Europe. I conjectured that these learning experiences felt to her increasingly distant. However, when I contacted Ellen to ask for her feedback on my distance classifications before including them in my analysis, she pointed out an important caveat; the great difference in the structural principles underlying Western classical keyboard music and South Indian vocal percussion caused her Skype-lesson experience to feel

more distant to her than her European organ performance, even though the latter took place during a period of cross-cultural immersion and the former did not. Because of her preexisting knowledge of the theoretical principles underlying Western music, she was able to enter into organ performance in Europe with some familiarity. On the other hand, how did she cope with the relative unfamiliarity of South Indian vocal percussion? As previously quoted, in addition for performing for her teacher during lessons and receiving feedback,

"We spent a lot of time also analyzing. I think one of the big things for second-language or second artistic-domain learners as adults... is being able to break apart the parts and understand how it's put together, and then you're able to figure out the larger pieces... So we spent a lot of time analyzing, understanding how things were put together."

Although this statement points out a limitation of the distance-classification model in itself – namely, that it does not factor in relative amounts of difference between distinct musical systems – it also shows that analytical knowledge can decrease felt distance, compensating for the unfamiliarity of a new cultural context. That this emerged as a finding of the present study may simply be due to that all the interviewees participating have a Western musical background to at least some extent, and that Western music culture tends to prioritize written and analytical knowledge as marks of genuine musicianship. For learners coming out of this environment, developing the same dimensions of knowledge in a new music culture may have a comforting effect, allowing them to anchor themselves in a familiar mode of thinking as they engage with the unknown. However, it is also possible that a connection between second-language and second-music acquisition in post-childhood learners – both of which appear to benefit from instruction in the structural principles of the musical or linguistic system being learned, makes teaching approaches that provide students with these frames of reference more effective.

**Cultivating musical community.** The importance of community in second-music learning was apparent in the previous chapter's discussion of learning values, but taking practical

steps to seek out people with and from whom to learn a new musical style is also an important point of pedagogical application for music educators. This area of discussion has to do with the following learning values:

Learner observes and imitates teacher's performance.

Learner has a positive relationship with a musical mentor.

Learner builds new relationships and engages the community.

Learner allows his/her sense of identity to be transformed.

Many interviewees commented on how important it was to their second-music learning process to practice and perform alongside other musicians who provided specific advice, targeted feedback, and emotional support. For example, Anna, as she shared from her experiences playing Christian worship music with groups of musicians from various cultures, explained,

"I was just afraid that I wouldn't be able to really gel. Because on the team they all knew what they were doing... But I definitely had people on the team just sit by me and be like, okay, here's how you play it, or they'd give me an example and I'll play it back and they'd be like, 'Yeah, that's good.' I was worried about messing up, but the more I practiced with someone that that was their culture... It was easier to pick up when someone showed you."

Gina, reflecting on her process of learning to improvise chordal accompaniment on piano, offered similar thoughts.

"I had some people who were really intentional about pouring into me during that time because I wasn't the best keyboard player... I had really kind people who would help me a lot... so, it was like, 'I'm not alone.'"

Fiona, sharing her memories of learning to play Black Gospel piano, explained,

"I definitely needed [the other band members'] help when I was starting out. The encouragement definitely helped. They knew I was young, I was the youngest person on the praise team... so I was like, 'It's me, I'm 16, hi, I don't know what I'm doing!"

Later in the same interview, when asked what other piano players should do to develop performance skills in Black Gospel style, Fiona again emphasized the importance of community – and not just with Black Gospel musicians alone. She counseled piano players seeking to learn

Black Gospel style to attend congregational worship at an African-American church, and explained why.

"I think it's definitely helpful, because I feel like a lot of times people are afraid to go into [Black church culture]. And it's not just the music, I think it's a cultural race barrier too, so it's this fear... I think that [learning Black Gospel music] has a lot to do with it realizing that it's not just something that's fun and different – which is not to say that it can't be... [But] it's okay to enjoy different styles of worship, and also realize it's very serious business for a lot of people... [Learning is] also being willing to put aside something that might make you a little uncomfortable, or something that you're not initially used to being exposed to, to understand this is how people express themselves and express their worship. So I think I cultural understanding has a lot to do with it."

Fiona appeared to feel quite strongly that learning Black Gospel music appropriately should not be merely an exercise in acquiring new technical skills at the piano, but also in learning to understand the culture and heart behind congregational worship in African-American churches – knowledge that could only come through immersion in and building relationships with a local group of African-American Christians. Caroline described a similar experience in South Asia, where she was able to participate in community music-making after taking lessons on a local instrument and vocal style; she explained that singing and playing along with others caused her own understanding and enjoyment of the music to grow. And Nicholas poignantly illustrated the challenge of performing Central Asian music in the absence of community with other people who genuinely understand and enjoy the tradition.

"I'm asked to play these instruments, and outside of their intended context there's a lowered level of of internal thrill about playing them... I don't have the feeling of joy of playing it as much when I'm just playing it for somebody to take videos of me. It's not like interacting with people. They're taking videos because it's weird, not because they get it... They don't speak this musical language. It means nothing to their heart, it means nothing to their core... [On the other hand, when] I'm actually communicating meaning, belonging, all these other deep meanings that have deep emotions connected to their roots... I'm communicating with people, rather than them looking at something that doesn't have intrinsic meaning to them. And I think communicating meaning with music in a context [in which] it has meaning to the other participants – that's a very highly stimulating environment to develop this particular musical language... [It's] very reciprocal."

Based on the recommendations made to second language learners in existing research, learning and practice in community appear to be significant for both second-language and second-music acquisition. Moyer (2013) recommends that second language learners practice "asking for feedback... [and] imitating native speakers" (p. 81), and Singleton and Ryan (2004) point out the importance of "time spent in the target language community" and "naturalistic exposure to the target language" (p. 102). While it is hardly unexpected that practicing a language with others is significant for the development of native-like communication skills, it is surprising how easily this element of second-music learning can be neglected in pedagogical approaches. Sending a student to the library to research an unfamiliar music culture, or to a private practice room to drill techniques and memorize repertoire in a new musical style, is not without its benefits; however, as the interviewees cited above testified, there is no substitute for simply making music with people – as a means of learning in immersion, by means of trial and error, within the context of relationship-building and shared creative satisfaction.

So, music educators can help their students cultivate stylistic diversity by encouraging them to spend time practicing and performing with other musicians who are active in the desired musical style, and to seek out a local community of musicians and non-musicians alike who use and enjoy this music. The potential benefits of this approach are profound; not only is the student given access to hands-on help and prompt and specific feedback from musical-cultural insiders, but he or she also has the opportunity to engage with the lifestyle and values of a new group of people. Forming friendships in which collaborative music-making is a routine practice, as well as connections with a musical-cultural community leading to tasting new foods, learning new words, and discovering new cultural norms, holds great power for building habits of sustainable

long-term growth in a second music. If music students are to keep growing in a new musical style for years to come, their engagement with it must go beyond the walls of a practice room.

**Distance, technique, and musical "accent."** Another factor at play in the amount of distance a second-music learner perceives is the amount of difference, in terms of construction and performance technique, between the instrument or instruments he or she already plays and the new one he or she is learning. The following learning values are involved:

Learner is self-monitoring.

Learner understands the theoretical-analytical musical system.

Learner observes and imitates teacher's performance.

Some interviewees mentioned that having already learned an instrument similar to the new one they were studying was helpful. For example, Gina made recommendations for other second-music learners based on her own experiences learning to play an East Asian chordophone after learning guitar at home.

"Maybe even – to give you a better understanding before you put your hands on the instrument and start learning and playing, especially if you haven't [played a stringed instrument before] – I play guitar, I have played other string instruments... So, to begin to get familiar with guitar or something like that [would help]. To say, 'Okay, this is a stringed instrument, I have to get both hands working. This one's making shapes, and this one's picking, or chordal, or just strumming while the other hand's doing chords...' Those kinds of ideas."

However, other interviewees reporting on similar experiences – in fact, two more interviewees discussed learning Asian chordophones after having had previous experience on Western-style guitar – surprisingly reported that having already learned a closely related instrument actually made it harder for them to achieve correct performance practice on their new instrument. As referenced previously, Peter explained that he initially made rapid progress learning a Central Asian chordophone because of his background as a guitarist. However, once he began to take private lessons on the instrument, his teacher alerted him that he was improperly

transferring guitar techniques over to this new instrument, and he quickly learned to hear the difference for himself.

"While there are some skills that can be rolled over from the guitar, don't transfer them directly or you will America-fy them. There are some people who speak a language with a foreign accent. I didn't want to play the [Central Asian instrument] with a guitar accent... I had developed some habits that were not good, that were crossovers. But then when [my teacher and I] went into the private lesson setting, he immediately pointed out, 'No, that's not the way that you strum it.' And when he pointed that out in the very first few private lessons, I realized what had happened."

Peter's continued reflections on this issue and its connections to language learning were intriguing.

"I wanted to learn to play the [instrument] like a [local], not like a foreigner would play it. And the reason I say that is because I think – it's true in language as well as music – that we bring things down to the common denominator. If there's something similar in one culture, whether it's a music culture or a language culture... we kind of adjust so that we get close, but we don't do it exactly. I didn't want to get close. I wanted to be [a member of this ethnic group] when I played the [instrument]."

In this view, underestimating the degree of distance between a previously learned musical style and a new one is perilous, because it leads the learner to assume that he or she can apply existing techniques and error-detection skills to provide himself or herself with an accurate sense of the quality of his or her performance. However, he or she may be blinded to his or her own errors by the very familiarity that seems to provide an advantage. James provided a parallel testimony from his experience as a guitarist learning to play a Southeast Asian chordophone:

"Yeah, it did help [having learned guitar previously]... As far as the finger dexterity and everything, it was way easier after knowing the guitar... The strumming pattern was a little weird. To learn that, that was one thing that was really hard actually. I think, honestly, if I hadn't known how to play guitar, it might have been easier, that part."

Peter, who has experience in both music and language learning, used the term "accent" to describe this phenomenon of improperly transferring previously developed techniques from one instrument to another. Other interviewees related similar experiences of being told by their

teachers that they were performing the music like foreigners, even when they could not at first hear the difference themselves. Existing research on accent in second-language acquisition shows that achieving a native-like accent in a second language learned after childhood is difficult, and many second-language learners never completely reach this goal – but some do. Bongaerts (1999) concluded after studies on these high-achieving second-language learners that, together with focused practice in aurally differentiating new speech sounds, "intensive training in the production of L2 speech sounds aimed at developing the finely tuned motor control required for accurate pronunciation" was a key factor in their success (p. 155).

Although such research on second-language learning as a process of developing new motor skills is not widespread, music is much easier to understand as a "procedural" practice (Elliott, 1995, p. 70) grounded in learning and refining new motor skills to improve instrumental technique. Conceptualizing musical "accent" in a learner's second music as the result of the transference of both listening skills previously acquired through passive enculturation and performance techniques previously developed through active practice may hold some explanatory power for the experiences these interviewees shared. It seems to merely be a quirk of the interview data that the three interviewees who spoke most concretely on this issue of "accent" were all guitarists who studied Asian chordophones. However, without a wider frame of reference, it is difficult to draw conclusions about what this may mean for the development of bimusicality in other contexts. Although the connection between linguistic and musical "accent" in second-music learning is intriguing, further research more specifically targeted to this area needs to be conducted in order for conclusions to be drawn.

**Composition as an expression of bimusical identity.** Although the previous three areas of observations and recommendations for second-music learners have displayed points of

connection to second-language learning, this final item for discussion is in many respects unique to music-making. In discussion of bimusicality with interviewees, a topic that unexpectedly came up again and again was that of composition. The following learning values are involved:

Learner is intrinsically motivated.

Learner is not overly afraid of mistakes.

Learner builds new relationships and engages the community.

Learner allows his/her sense of identity to be transformed.

This was not an area of inquiry that was addressed at all in the list of interview questions prepared in advance (as can be seen in Appendix B); rather, five out of the 16 interviewees mentioned repeatedly that creating new music was for them an important and enjoyable means of synthesizing diverse musical influences and expressing them in a way that affirmed their own poly-musical identity. This practice thus deserves further consideration. For example, Dorothy, a composition student, explained,

"I think I've given up on the hope that I'll create something truly original, and I don't really care anymore. I just want to create something good... I would pull from some styles I've heard in the past, but then I would mix in certain things. But I try to do it intelligently now. So I'm starting with one style that makes you feel a certain mood, and then to accent certain things I'll bring in another style... If [other composition students] don't have that background [in listening to many different types of music], I mean, they can write expressively and create a mood, but it's going to be very similar each time. And I feel like I have a lot more... tools to pull from because of the types of music I've listened to."

Fiona described herself as a songwriter in similarly eclectic terms.

"Genre-wise, I would categorize myself as a neo-soul artist, so mixing influences of Gospel [and] R&B. But neo-soul implies it can go in any direction. You can have folk, alternative elements in it, and I kind of like experimenting with everything... When I first started [writing songs], I didn't write Gospel music... I realized that very early on this sounds more like stuff on K-Love than it sounds like Gospel... And then, as my chord vocabulary grew, so did my appreciation for different styles and trying to experiment with different sounds. And so the first couple different songs I wrote, I could call contemporary, and then I wrote one song that I would call very jazzy, and then another song that I would call very folk-y... I'm going to see where that hits and keep experimenting with styles."

James described how learning Southeast Asian musical styles has influenced his own songwriting.

"My old stuff maybe sounded more like Bright Eyes or Arcade Fire, and then my newer stuff... You can listen and decide for yourself. [Question: 'Do you find that your experiences learning [local] music have influenced your own songwriting or composition of music?'] Yeah, I think it has, actually... I wrote a song... and it's just about the place, and I think especially the strumming in most of their folk... style is, I don't know how you would describe it, it's really relaxed, kind of laid-back. It's got kind of an island vibe or something. And I think most of my more recent stuff has more of that sound."

Isabel related a similar experience incorporating influences from her years of living in Southeast Asia into her own original musical compositions. She described consciously drawing aspects of the local soundscape into her works, and being pleased with the results. Peter, who composed songs in a Central Asian folk style, also described his compositional process in terms of interaction with the musical-cultural environment:

"I need to fill my head with [this ethnic group's] culture... Everything that you think of when you think of a culture. Walking out onto the street and the sounds of the [ethnic group's] language fill your ears... The smells of [the ethnic group's] food and the sounds... Mostly it's [their] sounds. Whether that is the sound of food cooking, whether sounds of people, whether it's sounds of donkeys braying as they're pulling a cart along the streets... Those are the kinds of things that I'm thinking of... Because I don't have the other aspects of [this] culture, it may take a longer period of time for me to just soak myself in [this ethnic group's] music before I'm back into [this style of] music-making mode."

The motivations these interviewees described for composing varied from completing school assignments, to enjoying the creative process writing music with and for friends, to adding new works in authentic local style to an existing body of folk music literature. However, for all of them, composition was a means to process new musical influences while not losing themselves in the process.

As discussed in Chapter 4, studying a second music may alter the learner's sense of musical identity; these interview data suggest second-music learners appear to benefit from practicing composition as a way of engaging creatively with diverse musical influences while

expressing themselves and satisfying their own creative goals. Again, because this area of inquiry was an unexpected product of the interview process, and less than half of the interviewees brought it up at all, further study targeting the role of composition in developing bimusicality would be helpful. It would be very interesting to know, for example, if including opportunities for composition throughout the second music-learning process results in faster, more profound, or more lasting development of bimusicality. While this is an intriguing area of potential pedagogical application, for now, all that can be surely said is that this area holds an opportunity for continued research.

### **Developing Resources for Second-Music Learners**

The fourth and final research sub-question developed to guide this study deals with developing curricular materials that may help second-music learners grow in acquiring bimusicality. Although crafting extensive curriculum for second-music learning is beyond the scope of the present project – and doing so brings up additional challenges, which will be addressed in the following section of this discussion – a few sample resources, based on the findings and conclusions presented in Chapters 4 and 5, are included here as an example of the pedagogical outcomes of this study. These documents are explained below, and included in full as Appendices D-F.

**Pre-assessment.** The first sample resource developed during this project, included in full in this document as Appendix D, is a pre-assessment worksheet for prospective second-music learners. Each of the nine questions on this worksheet is based on one of the nine learning values identified in Chapter 4. Some of the questions simply ask students to describe themselves, while others encourage them to imagine their future responses to certain situations, and one exercise is given to simulate the process of learning by observation and imitation without verbal cues. The

goal of administering this worksheet to music students is to make them aware of some of the issues that are likely to arise during their second music-learning experience, and to encourage them to reflect in advance on how they will engage with these challenges. Although each student's bimusical experience will be unique to his or her setting and personality, the common trends that arose through the analysis of interview data suggest that asking the same kinds of general questions across varied contexts can still prove fruitful.

**Distance worksheet.** The second resource developed during this project, included as Appendix E, is a worksheet designed to help second-music learners consider the concept of distance as explained in Chapter 4 and its potential effects on their learning experiences. The worksheet walks students through the process of deciding whether or not they are learning a "new style," whether or not they are learning on a "new instrument," and whether or not they are learning in a "new cultural setting." It also allows for nuanced answers to those questions. For example, if a student considers the "new style" to be unfamiliar to him or her only in some respects, he or she is encouraged to explain specifically what these are. Other questions draw out the additional facets of distance in second-music learning that interviewees themselves raised; these are the differences in the musical-theoretical systems of the learner's previously acquired and new musics, and the degree of similarity or difference between his or her previously studied instruments and the new instrument in question. Finally, the student is asked to ascribe a distance label to his or her second music-learning experience that he or she feels most accurately reflects his or her own situation. The goal of administering this worksheet to students is to help them process in what specific ways their second music-learning experience will be new to them, and to prepare them for follow-up discussion with a teacher about the ways in which previously learned theoretical-analytical knowledge and performance technique may shape their learning process.

Listening worksheet. The final resource developed for second-music learners, included here as Appendix F, is a worksheet intended to walk students through the process of compiling a catalogue of musical examples to listen to within their selected musical style. As interviewees repeatedly affirmed throughout the interview process, and as has been discussed in depth in this chapter, active and immersive listening to a new musical style is an invaluable part of the second music-learning process from its very inception. For students who are unsure how to go about the process of finding music to listen to, this worksheet provides three avenues of inquiry; requesting examples from the student's musical mentor, asking local members of the musical-cultural community for recommendations, and doing individual research in online music databases. If the student's private instructor in the new musical style has already recommended that he or she listen to certain recordings, then this worksheet should not supersede the teacher's wishes. However, if there is a need for the student to find listening material, then this worksheet may prove a useful tool for beginning the process.

### Conclusion

The observations, suggested approaches, and resources offered to music educators in this chapter are intended to offer fresh perspective on the ever-present challenge of encouraging music students to cultivate stylistic diversity and guiding them to engage thoughtfully with their multi-musical world. Whether a private piano instructor is wondering how to begin introducing classical repertoire to a student accustomed to playing by ear, the director of a Christian praise and worship band wants to help a new guitarist become comfortable improvising lead lines, or a college professor of world music is seeking to prepare students to learn a new instrument through extended immersion in a new music culture, viewing these situations as opportunities for learners' bimusicality to grow and drawing on methods from the disciplines of ethnomusicology

and second-language acquisition research may prove an effective new approach. The pedagogical recommendations given here are all pending evaluation through implementation and testing – which lies beyond the scope of the present study – but even if these particular suggestions are altered, the value for music educators at the intersection of the disciplines of music education, ethnomusicology, and second-language instruction remains.

### **Chapter 6: Conclusions and Recommendations**

Conclusions drawn from the survey and interview data collected for this project show that bimusically-informed music pedagogy has value for music educators. In answer to the overall research question directing this thesis — What correlations, if any, exist between second language acquisition strategies and learning processes used by adolescent and adult bi-musicals to develop emic understanding of new musical styles? — the nine learning values and various pedagogical recommendations identified in this study show many points of connection between second-language acquisition theory and second-music learning. In this conclusion, the potential shortcomings of the methodology implemented in this study, the relationship between music and language in culture, and the overall significance of continued research at the intersection of ethnomusicology, second-language instruction, and music education will be considered.

#### **Concerns and Limitations**

In retrospect, it is important to acknowledge the shortcomings of the research design as they were revealed throughout the data-gathering and analysis process. Although engaging with concepts so multifaceted and so personal as bilinguality and bimusicality comes fraught with many potential pitfalls, two concerns were most salient during the process of conducting this study. These concerns are discussed individually below.

The problem of talking about music. One interviewee joked during an interview session that "talking about music is like dancing about architecture"; although we both laughed at the time, the underlying issue of the inherent limitations of interview methodology in research on bimusicality is worth serious consideration. As discussed in this chapter and in the opening section of Chapter 2, it is precisely the non-verbal nature of music that makes it a domain of the human experience distinct from spoken language. Interacting with any music in any human

manner is situated and experiential; a music realized in a cultural context is not significant because it is an assembly of meaningful sound units, but rather because it generatively and creatively satisfies the needs of the human beings in that socio-cultural setting in some fashion. (Refer to Figure 13 above for a summary of these distinctions between music and language.)

When these issues were raised previously, they were addressed to clarify the differences between music and language; however, any study of music that is so thoroughly mediated by language as ethnographic interviewing will of necessity encounter the same challenges again. At times, asking interviewees to put their musical experiences into words seemed a self-defeating proposition. For example, James, describing the difference he learned to hear between his guitar-influenced technique on a Southeast Asian chordophone and his instructor's example, said,

"They have a certain strumming pattern. I can't really describe it. It's just a little bit different, it has a different – they feel the rhythm in a different way than we do, or than I do... I could hear the difference, but, I don't know, I think it just has to do with when – because my hand was going up and down the same [way], it was just, there were subtle – what's the word in English?... Which strums were emphasized, that kind of thing was the difference."

All of this is not meant to imply that talking about music is not a worthwhile exercise, or even that conducting interview research on music in culture is not a valuable source of insight into this dimension of the human experience. However, it is necessary to acknowledge that when a non-verbal experience is transposed into the domain of language, some aspects of the experience will become difficult or even impossible to translate. To return to the joke quoted above: although the example is dramatic, there is truth in the quip that just as dance does not lend itself to expressing the details of architectural design, language is not fully able to encapsulate the situated and experiential qualities of music. What precisely was lost due to this fundamental challenge to this interview-based study cannot be known for certain, but suggestions for alternate approaches to research on bimusicality that may address this shortcoming are given below.

Seeking out non-Western perspectives. As mentioned at the conclusion of Chapter 2, a gap in existing research on the relationships between second-language acquisition and second-music learning is that many studies deal with Western European languages and Western classical musical styles. While more recent research has expanded into the area of tonal languages, investigations into links in cognitive processing between music and language that include study participants with non-Western musical backgrounds is lacking. The present research project incurs similar limitations. Although interviewees brought to bear a diverse array of second music-learning experiences from around the world (see Figure 9 in Chapter 4), nearly all interviewees confirmed having been enculturated into and/or formally trained in Western musical styles as their "first music." Although this is not a surprising consequence of conducting such a study over a compressed timeframe in the context of Western musical academia, and it does not invalidate the results presented here, it is an important caveat to recognize. How these findings might evolve if musicians with first-music background in non-Western musical styles were proportionally represented in the body of study participants is unknown.

### Modeling the Relationship between Music and Language

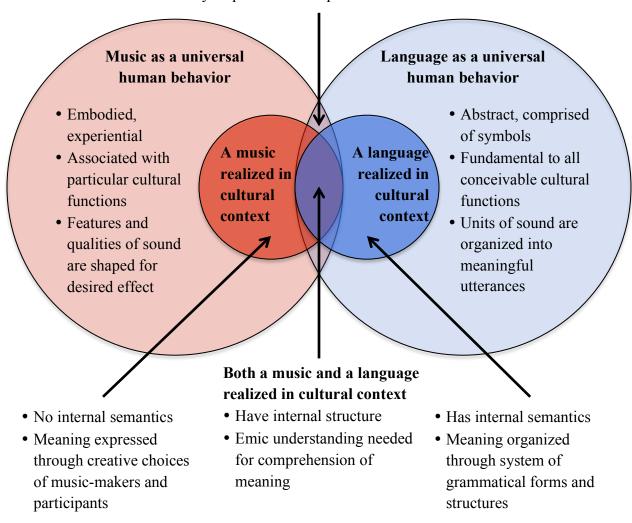
Considerable time was spent in Chapter 2 on defining the relationship between music and language – a necessary prerequisite for any study seeking to find points of connection between them. While Table 2 in Chapter 2 summarized existing research from the fields of ethnomusicology, music philosophy, and music education addressing this issue, a new way of visualizing this information emerged through the remainder of the research process. The diagram below summarizes the view of the relationship between music and language that is fundamental to this study, and that may also benefit future investigations in this same area.

Figure 15.

Music and Spoken Language as Human Universals and Situated Practices

# Both music and language as universal human behaviors

- Humanly ordered sound over time
- Expressive and communicative
- Primary acquisition via exposure/enculturation



This diagram conceptualizes two distinct aspects of music and language, as described in Chapter 2 – each one is a fundamental, universal element of the human experience that is realized in myriad ways in the context of particular places, times, and cultures. What is true of music as a universal human behavior is also true of a particular music as a situated practice – but

the reverse is not. Thus, for example, the truth that while a particular combination of musical sounds may be profoundly meaningful for listeners who have an emic understanding of that tradition, the same sounds do not constitute a universal language that all music listeners can interpret with the same faithfulness; "meaning by association" resides within a particular musical practice, not within the human universal of music as a whole. When this issue of "semantics" is clarified, the place of internal structure, or "syntax," in both music and language likewise becomes clear. Likewise, when the differences in the content of music and language learning are delineated – that music is a way to be human that is "experiential" and "embodied," beyond the bounds of what can be encapsulated by phonemes and morphemes as symbols of meaning – it becomes apparent that processes of music and language learning are overlapping, but they lead to different ends. There is a way forward for studying music and language in relationship to one another – without conflating the two – when these issues are addressed at the outset.

Therefore, this research project concludes that because second-language acquisition and second-music learning take place in similarly cross-cultural settings and make related demands on the learner's attitude and interpersonal relationships, certain guiding principles are cross-applicable between the two. However, because music is embodied, experiential, and generative in ways that spoken language is not, successful second-music learning also transcends what can be put into words alone. The ultimate goal of developing bimusicality is to synthesize a new musical identity – one that is neither wholly the learner's previous musical self nor exclusively part of the new music culture, but that folds both into a sustainable and satisfying whole. The single most significant point of connection between bilinguality and bimusicality may simply be that encouraging music students who are developing understanding of a new musical style to view themselves as "second-music learners" validates the profound worth of learning new ways

to connect with a diverse world of music. If music students see themselves as engaging in a process with some similarity to learning a new language, they may be better equipped to face the challenges that lie ahead.

### **Suggestions for Further Study**

Ideas for various research approaches that may help to fill gaps in current scholarship on bimusicality have been mentioned throughout this paper, but several suggestions that would specifically address the limits of the present study are collected here. Firstly, this project could be expanded by repeating the same survey-and-interview methodology already used with a more diverse group of study participants, particularly comprising second-music learners whose first music is of non-Western origin. This project could also be expanded in a different direction by including non-interview data sources, including video and/or audio recordings of second-music learners' lessons and performances and field observations of their learning context, to avoid the obstacles of using language to describe musical experiences that have been discussed. Finally, this study could also continue onward to test the practical effects of implementing the pedagogical recommendations suggested here; possibilities range from integrating the preassessment and distance and listening worksheets previously described into an existing crossstylistic music learning class in an American music college, to identifying incoming students' level of distance, developing pedagogical methods that balance explanation-analysis with listening-imitation methods accordingly, and assessing the impact this has on the student's learning experience. This would provide further data to confirm, reject, or qualify the validity of the pedagogical suggestions offered here.

Other issues raised during this project would benefit from being specifically addressed on their own. While the concept of changing identity surfaced repeatedly in this study, additional

research focused on changes over time in how second-music learners perceive themselves and identify their "heart music" (Harris, 2013, p. 82) might bring additional clarity to this area – which is itself a significant point of connection with recent sociological research on bilinguality and multilinguality (Edwards, 2013; Miller & Kubota, 2013; Sachdev, Giles, & Pauwels, 2013). Likewise, the issue of "accent" in second-music learning as compared to second-language acquisition is intriguing, but an in-depth exploration is not possible given the limited data on this gathered during the present study. Further inquiry into how precisely second-music learners develop the ability to perform a new musical style in a way recognized by musical-cultural insiders as authentic may shed more light on this. Finally, research on music composition as a practice that offers second-music learners a unique opportunity to synthesize and express their new poly-musical identity would follow up on the threads identified in this project but, for a lack of data, not followed through to a definite conclusion. Integrating composition into second-music learners' lessons from the outset may have positive effects on their identification with and retention of a new musical style, but this remains merely speculation until additional research is conducted.

### **Conclusion: Significance of the Study**

The ethnomusicological concept of bimusicality and preexisting research on methods of second-language acquisition hold great value for music educators. While the field of music cognition continues to thoroughly explore the ways in which the human brain interacts with musical stimuli, ethnomusicology holds explanatory power for the socio-cultural dimension of music that is likewise of great importance for contemporary music education. Meanwhile, even while music and language are overlapping but distinct realms of the human experience, viewing the process of cultivating stylistic diversity and cross-cultural musical engagement in music

students as "second-music learning" throws into relief aspects of this process that have been rarely explored. While many more discoveries remain to be made as the disciplines of ethnomusicology, second-language acquisition, and music education interact with one another, this study shows that engaging with this process of discovery holds the promise of reward for music teachers and students alike – not only in the realm of pedagogical theory, but also as musicians understand themselves more fully, build new relationships, and experience profound enjoyment of new styles of music.

Ultimately, bimusicality and the pedagogical practices that cultivate it offer music students and teachers transformational engagement with a multi-musical world. Such engagement presents musical-cultural experiences that learners may never otherwise seek out, relationships with individuals and groups that learners may otherwise never meet, and a sense of self forever altered by some degree of identification with a music that was once alien. If the chance to more deeply appreciate and understand new styles of music were not valuable enough on its own, the opportunity to come to know and care about more of humankind that comes with cross-cultural engagement is without price. Music educators have the responsibility and the joy of helping their students open new doors into their musical-cultural universe, and "second-music" teaching may hold forth to them a valuable key.

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### **Appendix A: Screening Survey Questions**

- \* Do you agree to participate in this research project?
  - O I have read and understood the above information and agree to participate in this project. If I am interviewed, the researcher has my permission to audio-record me as part of my participation in this study.
  - O I do not agree to participate in this project.

* What is your name? (First and last)						
* What is your email address?						
How old are you?						
What is your gender?						
O Male						
O Female						
What is your ethnicity?						
<ul> <li>Black or African-American</li> </ul>						
<ul> <li>Hispanic or Latino</li> </ul>						
<ul><li>White</li></ul>						
<ul> <li>Asian or Pacific Islander</li> </ul>						
<ul> <li>Native American</li> </ul>						
<ul> <li>Prefer not to answer</li> </ul>						
Other, please specify:						
What is your occupation?						

How important is music to you?

- O Essential I can't imagine going without it
- Very important
- O Somewhat important
- Not important I have other priorities

Please choose the description below that best fits you.

- O I don't spend much time thinking about, listening to, or playing music.
- O I enjoy music and may have some past experience learning about or playing it, but I wouldn't call myself a "musician."
- O I play and/or sing from time to time, but mostly for my own enjoyment, not with or for other people.
- O I play and/or sing regularly with and/or for other people, but I don't intend music to be my career.
- O I am, or intend to be, a professional musician.

What experience	es have most shaped your musical preferences and practices? Please rank up to
five options from	n the list below. (Leave the other answers blank.)
Loca	ation / environment where you lived growing up
Fam	ily's choices of music to listen to
— Mus	ic classes in school or lessons with a teacher
Ente	ertainment (movies, radio, television, etc.)
Mus	ic used in worship gatherings or for spiritual practice
Frie	nds' musical background or preferences
— Desi	re to learn to play a particular instrument or kind of music
	rest in a specific musical tradition or culture
	re to get to know or spend time with a certain group of people
	yourself able to play and/or sing music from more than one musical genre, n – or are you learning to do so?
	n play and/or sing in multiple musical genres, styles, or traditions
	n play and/or sing in one musical genre, style, or tradition, and I am learning at
least one	
	n learning to play and/or sing in multiple musical genres, styles, or traditions
	anot play and/or sing in multiple musical genres, styles, or traditions
Advanced. (Leave Voice (y Piano (yo Guitar (y Percussion Brass ins Woodwing String in World in Other ins	proficiency in each instrument you play below as beginner, intermediate, or we all categories that do not apply to you blank.)  es/no):  es/no):  on instrument (please specify):  strument (please specify):
you perform usi provide a brief d Instrume Instrume Instrume	ament you listed above, together with all the musical genres, styles, or traditions ng it. (If you are unsure what to call a particular genre, style, or tradition, please description instead.)  ent:

### **Appendix B: Interview Questions**

### Instruments/genres:

What different instruments and/or types of music do you play? What makes these types of music distinct from one another?

### Age of learning:

How old were you when you started learning to play this instrument/style? Why did you start learning? What has motivated you to continue? Who has taught you, or how have you learned?

### Learning experience:

As you learned to play in a new genre or style, did you have to learn new physical skills or techniques on your instrument?

Did you have to learn to hear aspects of music differently?

What else changed in how you thought about music? Please describe.

#### Error correction:

How did you recognize and correct mistakes as you learned a new genre or style? Did anyone help you?

If you were afraid to make mistakes, how did you cope with that?

#### Performance and context:

How often do you perform on this instrument or in this style?

In what settings, and with what people?

When you play music just for yourself or just for fun, what kind of music do you play?

How has learning to play in multiple genres or styles affected how you think of yourself and/or how you see the world?

How has learning to play music in multiple genres or styles affected how you spend your time and who you spend it with?

What are some areas in which you struggle, or would like to improve, as a musician in a particular genre or style? What do you think you should do?

What specific advice would you give to another musician who wants to learn to play a new instrument, or in a new genre or style, that you know?

What do you wish people understood about you as a musician?

Is there anything else that you would like me to know?

### **Appendix C: Coding Tags and Definitions**

#### Personal Attributes

### ID – Identity

Interviewee reflects on his/her own view of him/herself, or others' attitudes toward him/herself.

### FH – Family history

Interviewee shares family history relevant to his/her music learning experiences.

### HUM – Humility/openness

Interviewee reflects on his/her orientation toward unfamiliar and/or difficult learning experiences.

### MIS – Attitude about mistakes

Interviewee shares his/her feelings about making mistakes while learning and/or performing music.

#### MOT – Motivation

Interviewee discusses his/her reasons for learning music.

### SD – Self-discovery

Interviewee affirms having learned something new about him/herself.

### Learning Approaches

### ANA – Analysis/theory

Interviewee is taught the analytical/theoretical systems governing a style of music.

### CMP – Composition

Interviewee composes original music, alone or in collaboration with others.

### CT – Classically trained/reading written music

Interviewee is taught to play music from written notation and/or in classical Western style.

#### ERR – Error correction

Interviewee recognizes and responds to his/her mistakes as part of his/her learning process.

#### IMI – Imitation

Interviewee imitates another musician's example as part of his/her learning process.

#### LE – Learning by ear/improvisation

Interviewee is taught to play music without written notation and/or to improvise.

#### LIS – Listening

Interviewee listens to music as part of his/her music learning process.

#### MEN – Mentorship

Interviewee is apprenticed one-on-one to another musician as part of his/her music learning process.

#### TEC – Technique

Interviewee practices new motor skills, or refines existing ones, as part of his/her music learning process.

# Cultural / Interpersonal Factors

### ENC – Encouragement

Interviewee shares a specific instance in which he/she was encouraged during the music learning process, or reflects on the importance of encouragement.

### CC – Cross-cultural experience

Interviewee shares a cross-cultural experience relevant to his/her music learning experiences.

### COM – Community

Interviewee reflects on interacting with groups of people in particular settings as part of his/her music learning experiences.

### LL – Language learning

Interviewee reflects on learning a new language.

### TEA – Teacher relationship

Interviewee reflects on the interpersonal dynamic between him/herself and his/her mentor.

# **Appendix D: Sample Pre-Assessment**

This questionnaire is designed to help you think through some issues that may arise during your process of learning a new musical style. Follow the directions below and write down your responses where indicated.

1. What are your reasons for wanting to learn this new style of music?
2. Reflect on your attitude toward making mistakes when you are practicing or performing music. How does a mistake make you feel? What do you do after you make a mistake?
3a. Name a style of music that you feel competent to play and/or sing. Can you tell when you or others make mistakes performing in this style? How do you know?
3b. Now think about the new style of music you are going to learn. Do you think you can recognize when someone makes a mistake in this style? Why or why not?
4. Spend some time learning about the music theory of the music culture you are planning to enter. Consider perspectives from within the music culture itself, as well as research done by observers from outside. If members of the music culture do not think about musical analysis the same way you do, take note of that as well. Record below some facts about this culture's musical system that you find interesting or unexpected. Also, write down some key musical terms in the local language, if you are able to find them.

5	V	7 1011	will	need	to	find	9	teacher	and	set	aside	ahout	30	minutes	for	thic	exercise.
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Choose a skill you are interested in learning. It doesn't have to be related to music, but it does need to involve practicing physical movements in some new way. (For example: dicing an onion, knitting, learning a dance step.) Ask someone who already knows how to do this to teach you, but without words. Instead, he or she must demonstrate, and you must observe and follow his or her example, until he or she agrees that you have done it correctly, or you run out of time.

Once you have done this, reflect on the process. Did learning without words change how you learned? Did you find it helpful, or was it more difficult or stressful? Were you able to complete the skill to your teacher's satisfaction in the time that you had?
6. Identify the person who will be your mentor in the second-music learning process. (If you don't already have a mentor, seek one out.) How well do you know this person now? What can you do to help build a positive relationship with him/her?
7. Identify the musical-cultural community whose music you are learning. How can you get to know members of this community better? In what specific ways does learning their music open up opportunities for you to spend time with them and serve them?
8. You may feel uncomfortable and even humiliated as you become a novice learner again in a new style of music. What response do you expect from yourself in these difficult moments? If you don't like this reaction, what do you think you should try to do instead?
9. What kinds of music do you consider your "heart music" now? Do you think your "heart music" could change?

# **Appendix E: Sample Distance Worksheet**

Many different factors are at play in learning a new musical style. Consider the chart below, which describes various degrees of "distance" between a music learner's preexisting musical experience and the new kind of music he or she is going to learn.

**Degree of distance** | **Definition** 

D0   Minimal distance D1   New style learned on same instrument in same cultural setting D2   New style learned on same instrument in same cultural setting D3   New style learned on same instrument in new cultural setting D4   New style learned on same instrument in new cultural setting Evaluate your anticipated experience learning a new kind of music with the questions below.  1. Will you be learning to perform a musical style, genre, or tradition that is new to you? Why is it new, or why not? If only some aspects of it are new, what are those?  2. If the musical style, genre, or tradition is new to you, how different do you think its underlying structure and organizing principles are from the kinds of music you already know? Will any of the "theory" you already know apply to this new musical style?  3. Will you be learning to perform this musical style, genre, or tradition on a new instrument, or on one that you already know how to play?  4. If the instrument is new to you, how similar do you think it is to other instruments that you already know how to play? Will you be able to apply any techniques that you alread know?	5	
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## **Appendix F: Sample Listening Worksheet**

Listening consistently and thoughtfully to examples of the new musical style, genre, or tradition you want to study will be a very important part of your learning process. Use this worksheet to help you build a catalogue of recordings to listen to.

1. Ask your mentor/teacher to recommend at least 5 recordings and/or musicians for you to

listen to and imitate in your own performance, if he or she has not already done so. Write these down below.
1.
2.
3.
4.
5.
2. Talk to a friend or acquaintance who is a member of the musical-cultural community whose music you are learning. Ask him or her to give you the names of some songs/works/musicians within this musical style, genre, or tradition that he or she would like you to hear. Write these down below.
1.
2.
3.
4.
5.
3. Research online to find recorded examples of the musical style, genre, or tradition you are learning. Here are some places you can look:  Alexander Street "Music Online" – www.alexanderstreet.com  Note: You will need to access this website via a library portal in order to be able to use its paid resources.
Smithsonian Folkways – www.folkways.si.edu
Youtube – www.youtube.com
Find at least 5 recordings attributed to the musical style, genre, or tradition you are learning. Write these down below.
1.
2.
3.
4.
5.
4. Ask your mentor/teacher to look over your answers to questions 2 and 3 and give you feedback.



January 19, 2017

Kerry Lianne DiGiacomo IRB Approval 2750.011917: Acquisition of Bimusicality in Post-Critical Period Music Learners

Dear Kerry Lianne DiGiacomo,

We are pleased to inform you that your study has been approved by the Liberty University IRB. This approval is extended to you for one year from the date provided above with your protocol number. If data collection proceeds past one year, or if you make changes in the methodology as it pertains to human subjects, you must submit an appropriate update form to the IRB. The forms for these cases were attached to your approval email.

Thank you for your cooperation with the IRB, and we wish you well with your research project.

Sincerely,

G. Michele Baker, MA, CIP

Administrative Chair of Institutional Research

The Graduate School



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