ABSTRACT

Title of Dissertation: THE USE OF FIGURATIVE LANGUAGE IN THE

CONSTRUCTION OF MUSICAL MEANING: A CASE

STUDY OF THREE SIXTH GRADE GENERAL MUSIC

CLASSES

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The intent of this study was to examine how musical meaning is constructed using figurative language (i.e., tropes such as metaphor) in the music classroom. The researcher observed three sixth-grade general music classes taught by one teacher in a private school for girls. Audio recordings of nineteen class sessions, including individual discourse of the teacher and six students, were transcribed for analysis.

Theories of cognitive linguistics were applied to the data, with the theory of embodied schema guiding the analysis. Five schemata involving figurative language emerged: containment and entity, personification, verticality, regularity vs. irregularity, and location, space and motion. An additional emergent category of timbre articulations was presented.

Analysis showed the ubiquitous use of the container metaphor with its in-out spatial orientation for musical events, elements, and even for persons. There

were personifications of music, perceived as an "agent" who implies, speaks, and has needs. Classroom discourse frequently involved polysemous words such as up or down, high or low. Students offered value judgments of musical events based on their notions of regularity or irregularity. To a surprising extent they rejected dissonance and non-Western tunings which they perceived to be irregular rather than different. There were references to music as an external force that causes movement, occupies space, and has a clear location. Students lacking the professional vocabulary to describe timbre used similes, analogies, onomatopoeia, and synthetic metaphors.

Several pedagogical implications were identified. The ambiguous meanings of polysemous words offer opportunities to explore cognitive relationships that exist between those different meanings. Teachers can bring musical meaning to consonance and dissonance by verbally bridging the chasm between disparate understandings of those concepts. Student strategies dealing with timbre descriptions point to the efficacy of developing metaphoric capacities in students. Teaching methods involving kinesthetic experience support the notion of embodied cognitive schemata, but further discussion is needed concerning the relationship among sensory experience, mental representation, and linguistic expression in the construction of musical meaning. Data analysis shows that figurative language is essential in constructing musical meaning, even as it challenges established educational thinking and practice.

THE USE OF FIGURATIVE LANGUAGE IN THE

CONSTRUCTION OF MUSICAL MEANING: A CASE STUDY OF

THREE SIXTH GRADE GENERAL MUSIC CLASSES

by

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DEDICATION

To my mother Emilija and my late father Balys Pakštas, who brought me up to cherish language, music, and many other things.

To my husband Romas, without whose loving support this would not have been possible.

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Chapter I

Introduction

To this day I have vivid memories of the frustration at not being able to communicate with teachers and fellow pupils during my first weeks in Kindergarten. My parents were World War II refugees who had recently immigrated to the United States and we spoke only Lithuanian at home. English was a second language for me and I had learned just a few basic phrases to get by in the working-class Chicago neighborhood where we lived and where most of our neighbors were monolingual English speakers.

In our family language was more than just a means of communication. It was something sacred, a cultural icon that could not be neglected, because so much else had been lost and left behind. This was a view of language that my neighborhood friends could not understand. Music also had a special place in our household. My father was a professional musician, and my mother—an accomplished amateur. Sounds of the piano, violin, saxophone and a variety of Lithuanian folk instruments intermingled with songs, sung in several languages.

Despite the early discomfiture of not being able to communicate well, I later came to appreciate the ability to express myself in more than one language. My awareness of the complexities and intricacies of both language and music grew.

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Even after I chose music education as my profession, I found myself drawn to topics and work related to my background in language. I sought to find out more about how we learn and teach both language and music. I was intrigued with the theories of Lev Vygotsky (1978), who considered language to be a set of signs and symbols—a tool which mediates and changes people's inner environments. When it came time to choose a dissertation research topic, I sensed an opportunity for the intellectual exercise of merging two ongoing "strands" of language and music in my life.

Language plays a major role in the music classroom. A review of literature on music teaching strategies and styles by Tait (1992) stated that one third to one half of music instructional time, as documented in the reviewed studies, involves a verbal component. Since so much of instructional time is verbal, Tait and Haack (1984) reasonably insist on the need to examine the role language plays in the music classroom:

> If we are genuinely concerned with developing the quality of the musical experience we <u>need</u> to explore the language connection. Only then can we hope to identify and develop those forces that contribute to our feeling moved when we experience music. . . . Language is the essential tool that allows us to conceptualize and think about, to analyze and teach about these vital musical matters that ultimately can take us beyond words. (p. 37)

In my search for a research focus, I read Karen Gallas' book The Languages of Learning: How Children Talk, Write, Dance, Draw, and Sing Their Understanding of the World (1994). Gallas observes:

> We acknowledge the many distinct discourses that the children must acquire to be successful in school: the discourses of science, math, literature, social studies, and the arts, of sports and the playground. Further, each year there is a slowly evolving discourse of each class of children, containing in it special words, themes, and references that reflect the interests, ethics, and common experiences of that class. It is to this discourse that children quite naturally pay attention; and I must be aware of it if I want to be an influential part of the classroom community, in effect acknowledging that the social, creative, and intellectual concerns of the children form a corpus that I must know and study in order to be an effective teacher. (p. 15)

I became interested in exploring the view that there exist not only different languages through which we communicate, but a myriad of types of discourse within the same language. Regelski (1981) observes that there is more than one type of discourse in the music classroom, and that not all discourse is useful and meaningful to students, if they do not understand the words. According to Regelski, words will have relevance only when they have a living meaning (connotation) for the people exchanging them, and when clear designations of meaning are possible and agreed upon by the participants. He classifies language

into <u>connotative</u> and <u>denotative</u>: "The former is rich, metaphoric, subjective, and expressive. The latter is technical, objective, and often abstract and cold" (p. 326).

Discourse analysis appeared to be an appropriate mode of inquiry for studying language of the music classroom, but I needed training and guidance, so I took an independent study in the Department of English. One of the first questions the professor asked was, "Have you considered narrowing your research to the topic of metaphor?" My response must have been a blank and quizzical stare, because I had no idea what she meant. I was sent home to read George Lakoff and Mark Johnson's <u>Metaphors We Live By</u> (1980) and so began my personal journey into the world of cognitive linguistics.

The study

Cognitive scientists use many levels of analysis to understand how we perceive, think, remember, understand, and learn. Language is one avenue by which researchers study cognitive processes. Classroom discourse can be studied to explore how teachers and students construct knowledge, understanding and ultimately meaning in a specific content area such as music. A deeper understanding of discourse in the classroom is significant because, "it can help us understand why different kinds of interaction in teaching and learning situations can be experienced as more or less educative" (Erickson, 1992, p. 220). This study will serve as a source of information about how children think and speak about music. Bernstein (1972) speaks of the need to be aware of children's experiences:

"If the culture of the teacher is to become part of the consciousness of the child, then the culture of the child must first be in the consciousness of the teacher" (p. 149). Language use is one window into the culture of the child and the teacher.

In order for us to be effective teachers, we must be aware of the distinct discourses that the children must acquire to be successful in the music classroom. Several researchers have investigated the importance of labeling and "professional" vocabulary to enhance music concept formation. However, educators also recognize the importance of students' personal vocabularies when describing their musical perceptions. Terms such as experiential, exploratory, connotative, metaphoric or figurative all are used to describe this kind of language. By focusing on these forms of language, we gain insight into how musical meaning is constructed using non-technical terms and concepts.

For the purposes of this study the term figurative language will be used to encompass all of the above terms. An appropriate characterization of figurative language is the one proposed by Swanwick (1999): "A fundamental process by which we are able to think new things, an activity during which two (or possibly more) conceptual domains intersect, often unexpectedly and with novel consequences" (p. 31). More succinctly put, "A metaphor is a characterization of a phenomenon in familiar terms" (Dickmeyer, 1989, p. 151).

The intent of this research was to apply recent theories in language and cognition to musical experiences in classroom situations. Through this study I sought to magnify the understanding of musical cognition and how teachers and

students think and verbally construct musical meaning as reflected by the use of figurative language in the music classroom. By examining pre-adolescent children's discourse, teacher discourse, as well as the interactions between teacher and students and among students, I sought to gain insight into the various schemata that are in operation during classroom talk about music.

This study is also focused on the efficacy of certain types of language use in the music classroom. Teachers may consider directing their efforts towards developing different types of verbal language, both in themselves and in their pupils, as they seek to model creative ways of thinking and talking about musical ideas. The findings of this study may also provide guidance for the training and in-service professional development of music teachers.

This inquiry was focused by these questions:

1. What conceptual schemata emerge when analyzing figurative language in the music classroom?

2. What is the function of figurative language in the construction of musical meaning?

3. How can a music teacher use knowledge about figurative language effectively to describe musical concepts and processes, and to respond appropriately to figurative language used by students?

The research presented in this dissertation was conducted in a private day-school for girls. Three sixth-grade general music classes, taught by the same teacher, were observed and tape-recorded over a seven-week period. Recorded

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verbal communication in the classroom was transcribed. Transcriptions of the class

sessions, as well as notes and interviews, were analyzed.

This introductory chapter continues with a discussion of the importance of

this study in light of certain gaps in the literature of cognitive research in music

education, as well as on language in music cognition. A section on the types of

discourse that are found in the music classroom serves as an introduction to the

type of language that will be analyzed in this study, supplemented by examples of

figurative language in children's discourse about music. The final section contains

key terms used in this study.

Importance of the study

In this section I briefly define cognition and the aims of cognitive

researchers. It is my purpose to bring to light some areas of cognitive research

which have received less attention, not to present an exhaustive review of the

extensive literature of cognitive or linguistic research in education or music

education. Many leaders in music education cited below urge researchers to

include investigative models, methodologies and theories that are used in related

fields outside of music education. These urgings influenced the mode of inquiry in

this study.

Cognition and cognitive research in education

Cognitive science is a broad, interdisciplinary field that draws on

psychology, artificial intelligence, linguistics, philosophy, and neuroscience. The

term cognition has many meanings and uses. In psychology it has been used to refer to mental processes or the processing of information. Cognition can also be understood in a wider sense to mean the mental act of knowing, including awareness, perception, intuition, reasoning and judgment. Rogoff (1990) broadly defines cognition within a framework of problem solving:

> Problem solving emphasizes the active nature of thinking, rather than focusing on cognition as the passive possession of mental objects such as cognitions and percepts. . . . A problem-solving approach places primacy on people's attempts to negotiate the stream of life, to work around or to transform problems that emerge on the route to attaining the diverse goals of life. (p. 9)

Cognitive scientists seek to comprehend perceiving, thinking, remembering, understanding, learning, and other mental processes. According to Bower and Cirilo (1985), cognitive psychologists seek to "understand how the mind works, how it manages to perform the small miracles of skill we see around us in everyday behavior" (p. 71).

Cognitive psychologists keep moving further away from the study of specific capabilities and experiences towards a more holistic approach to the study of cognitive processes:

> The high degree of flexibility of human cognition requires that we think of much of the human cognitive architecture not as determining specific thoughts and behaviors but as an abstract set of mechanisms that potentiates

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a vast range of capabilities. We must get underneath people's behavior in particular circumstances to discover the basic information-processing capacities that allow adaptive responses to a wide range of situations. (Stillings, Weisler, Chase, Feinstein, Garfield & Rissland, 1995, p. 16)

In the early 1970s educational researchers began to criticize the prevalent process-product research in education for its narrow focus on observable phenomena, such as teacher and student behavior. As reported by Peterson (1988), researchers began focusing on teacher and student cognitive processes during classroom instruction. Student cognition was perceived as a mediatory process between teacher behavior and student achievement. It was now considered possible to explore not readily discernible phenomena, rather than to focus exclusively on teacher behavior, student classroom behavior, and student achievement. Consciousness and cognition were no longer to be measured exclusively in terms of external behaviors.

The state of cognitive research in music education

Although a great deal of research has been conducted in the area of teacher and student cognition in general education, a number of reviewers have noted the lack of concern for the subject-area content in these studies (Peterson, 1988). Music is no exception and leaders in music education have echoed this concern in their reviews of research literature, as found in the Handbook of Research on Music Teaching and Learning (Colwell, 1992). In this volume Davidson and Scripp (1992) surveyed the research on cognitive skills in music and stated that

psychologists of music have taken a relatively narrow view of cognitive development and that a more inclusive matrix is needed to attain a comprehensive view of cognitive skills in music. The authors encouraged researchers in music education to expand their view of cognitive psychology from its narrow focus on instructional psychology to include the wide matrix of cognitive skills that are used in musical practice.

Reviewing the gaps in the educational research literature on general music, Reimer (1994) observed:

> Few if any of our tests used as basic research tools have anything whatsoever to do with what cognitive psychology is now suggesting we need most to know—how students think, solve problems, understand, exercise creativity, internalize skills, make judgements, reflect about their learning, apply their learning in meaningful settings, connect learnings, go about discovering, set goals and subgoals, make predictions, set learning agendas and assess their success in achieving them. (p. 8)

Reimer went on to say that, "we will need to learn much more than we presently understand about the ways knowing about and knowing why affect knowing within and how" (p. 11).

Almost fifty years ago Spindler (1955), in discussing the ties between anthropology and education, urged that the language of teaching and learning be examined in context: "The conceptual categories and symbolic referents of speech in communication between teacher and child call for a meta-linguistic, language-in-

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culture application" (p. 14). Campbell (1994, 1998) maintains that music educators

have stood on the periphery of psychology, sociology, anthropology, linguistics,

and even physics, which could provide investigative models. Campbell calls the

existing research on children's perception and cognition of music antiseptic, dry,

disconnected from the child, devoid of context, as well as too dependent on the

stages of child development, rather than allowing for the unpredictable individual

variations in children (1998, p. 9).

At the time of this writing, there still appears to be insufficient attention in

music education research to investigative models, methodologies and theories used

in cognitive research.   Walker (2000) claims that theories of music cognition and

hermeneutics are out of step with scholarship in other fields, such as philosophy,

anthropology and ethnomusicology. In <u>The New Handbook of Research on Music</u>

<u>Teaching and Learning</u> (2002), Bartel and Radocy acknowledge that anthropology

and ethnomethodology have gained popularity as methodological approaches, but

linguistics continues to have little effect on music education research. This study

aims to address that absence.

<u>Research on language in cognition</u>

In studying how people acquire, represent, organize and use knowledge,

researchers look for keys that will open doors to understanding that process.

Cognitive researchers constantly seek ways to expand their research tools and to

find new windows through which to view their human subjects in order to better

understand human thinking and development. Research on a topic can be focused

on one of many levels of analysis at a given time, depending on the most promising

avenues of study (Stillings, Weisler, Chase, Feinstein, Garfield & Rissland, 1995).

This is one of the hallmarks of cognitive science.

Language is one of those windows and repeatedly has been named as a

very important aspect of knowledge about the world (Bower & Cirilo, 1985).

Many researchers believe that cognitive development is an inherently social

process, and that language is not merely a reflection of cognition, but an important

vehicle used to bring about change (Jacob, 1992). Vygotsky (1978) considered

language to be a tool which mediates and changes people's inner environments.

Turner (1996) went even further and examined the possibility that speech and

writing exert biological influence upon the brain:

> If we use the old metaphoric conception of the brain as an agent who "deals
>
> with" language or as a container that for a moment "holds" language while
>
> examining it for storage or discard, then it is natural to think of the biology
>
> of the brain as unchanged by its dealings with language. But if we use
>
> instead the conception of the brain as an active and plastic biological
>
> system, we are led to consider a rather different range of hypotheses: The
>
> brain is changed importantly by experience with language; language is an
>
> instrument used by separate brains to exert biological influence on each
>
> other, creating through biological action at a distance a <u>virtual</u> brain
>
> distributed in the individual brains of all the participants in the culture; early

experience with language affects cognitive operations that go beyond language. (pp. 159-160)

There is no shortage of research on various aspects of classroom discourse (or classroom talk, as it is often called). However, just as there has been a lack of attention to subject-area content in cognitive studies, there is also a lack of content-specific investigations of classroom discourse. A notable exception is the work of the math education community, which has conducted a considerable number of studies on discourse in mathematics classrooms (Blanton, Berenson & Norwood, 2001; Knuth & Peressini, 2001; Radford, 2003).

For the most part, rather than focusing on content-specific discourse, researchers have studied classroom discourse for determining social and hierarchical relationships in the classroom (Atweh, Cooper & Bleicher, 1998; Cazden, 1988; McDermott, 1977; Mey, 1993; Page, 1990; Rogoff, 1990; Rogoff & Lave, 1984), for revealing discourse structure, or categories and genres of speech acts (Gee, Michaels & O'Connor, 1992). In this area most studies have been concerned with teachers' questioning strategies (Altermatt, Jovanovic & Perry, 1998; Dore, 1985; Heath, 1982; Wimer, Ridenour, Thomas & Place, 2001). One example of this type of research in music education is Kruger's (1998) case study of two music teachers, which analyzes the internal rules, standards and styles of reasoning that shape discursive practice. The study also discusses the relationship among power, knowledge and curricular practice.

Music researchers, theorists, philosophers of music and music education

and others have explored the connection between verbal language and the music

experience in the classroom, but most have studied music vocabulary. This will be

discussed further in the next section of this chapter. Most researchers admit that

this connection is a difficult interaction to examine because language qualifies,

attributes, characterizes and affects the musical experience (Reimer, 1997). Tait

and Haack (1984) concur: "Language is not the same experience [as music], the

words are not the same feelings" (p. 37). Despite the complexity of the interaction

of music and language, this study seeks to make a contribution to the body of

research literature on cognition in music education. By studying figurative

language use for an extended period in a contextual, content-specific situation, I

have sought to address some of the gaps revealed by previously cited music

education researchers, such as Bartel & Radocy, Campbell, Davidson & Scripp,

Reimer, and Walker. Also, the application of the theory of cognitive linguistics,

which will be further explained in Chapter II, helps bring recent scholarship from

another field into research in music education.

Types of discourse in the music classroom

As noted earlier, language qualifies the musical experience and certainly

does not equate with the musical experience. However, even exponents of a praxial

philosophy of music education such as Elliott (1995), do not deny the importance

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of language in the process of active music making, and acknowledge that there are different types of discourse at work in the music classroom:

> Imparting formal musical knowledge in the process of active musical problem solving requires the use of various "languages." As Vernon Howard suggests, the term "languages" includes everything from the theoretical and technical terminology of a musical practice to practice-specific jargon to similes and metaphors to diagrammatic conceptions. (p. 61)

Arts education scholars have been interested in labeling and vocabulary development for quite some time (Gardner, 1973, 1981, 1982). Hair's (2000-2001) review of research reveals that both children and adults have difficulty describing music and have a limited music vocabulary unless they are taught. It has been suggested that a limited arts vocabulary interferes with children's aesthetic development (Stellaccio, 1993). Furthermore, adults should be cautious in interpreting children's descriptive vocabulary, which often involves the use of incorrect terms.

Numerous researchers have investigated children's acquisition of music vocabulary, as well as its effects on musical perception, as reviewed by Stellaccio (1993). Hargreaves and Zimmerman (1992) expanded on the importance of labeling in music as it relates to concept formation and overall child development:

> Concept formation involves labeling, categorizing, and organizing perceptions into meaningful concepts that will provide the key for later

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study and enjoyment of the complexities of music. Labeling is important

since the label helps to clarify the concept. The ability to handle an

increasing number of concepts is a fundamental fact of development.

(pp. 385-386)

However, there is disagreement about whether mere labeling of sound

phenomena necessarily increases recognition of musical events. Tait (1992) argues

that "putting labels on sound phenomena may be helpful in assessing accumulated

knowledge, but it does not indicate the depth, intensity or value of a musical

experience" (p. 527). Increasingly, educators believe that in order for the language

of the music classroom to become personal, students need to describe their

perceptions using their own experiential vocabularies. Researchers need to pay

more attention to the entirety of classroom narrative, rather than merely labeling

certain categories as more or less important.

Peoples' texts are not trivial outcomes of communicative needs. . . .

Humans are constant creators of complex and multifaceted meanings.

Therefore, particularly in educational research, we feel that to err on the

side of overinterpretation is wiser. What we seek to avoid are analyses that

misconstrue the discourse of any person as meaningless or impoverished.

(Gee et al., 1992, p. 233)

Auker (1991) believes that music teachers are too concerned with the final

product at the expense of the process. He believes that "pupil talk" is an important

component of the creative process and that teachers should allow more time in the classroom for pupils to discuss ideas amongst themselves:

> We intervene and tell them to 'stop talking and get on with the music.' I strongly believe that a better product will in fact emerge if we take seriously the role of language in the music lesson, because, <u>lacking the musical vocabulary</u> which allows a professional composer (for example) to think directly in terms of musical sounds, <u>it is through spoken language</u> that children can begin to explore and share what they have to offer in terms of musical creativity. (p. 166) [underscoring added]

> Elliott (1995, p. 97) recommends that talk about music be practice-specific.

Western music, for example, can be discussed:

1. systematically (e.g. dominant, first subject, fugue, etc.);

2. relatively (comparisons among musical qualities, such as high-low);

3. phenomenologically (e.g. thick-thin sounds);

4. descriptively (e.g. sounds of celebration, mourning);

5. emotionally (e.g. happy, melancholy).

Figurative language, which uses metaphors and other tropes, presumably would be most operative in the last three categories of Elliott's classification system.

> Tait (1992) classifies music classroom language into three groups:

1. <u>professional</u> vocabulary derived from the music itself (words such as vibrato, crescendo, intensity);

2. <u>experiential</u> vocabulary which helps integrate musical knowledge with personal experience of that knowledge (imagery, metaphor, analogy), and

3. <u>process</u> vocabulary words which combine overt and covert musical behaviors (words such as analyze, describe, express, and demonstrate).

While there has been a considerable body of research on groups one and three of Tait's classification (Cassidy & Speer, 1990; Flowers, 1983, 1984, 2003; Hair, 1981, 1987, 2001-2002; Nierman, 1985; Rodriguez & Webster, 1997; Utley, 1973; Zimmerman, 1971), it is the second group, which Tait calls <u>experiential</u> vocabulary, that has not been studied to any great extent. Hair (1981) conducted a study to determine what terminology from their own vocabulary subjects would use to label music concepts. Pupils in grades 2, 3 and 4, as well as college students were tested. The study focused on single words (such as noisy, hammered, labored, ominous, screeching), rather than phrases or "speech events" (discourse units defined by goals, as well as spatial and temporal boundaries). Hair noted that few of the previous studies on non-technical vocabulary that she had reviewed investigated the vocabulary of elementary school children in relation to music. Hair's findings on terminology replacement did not contradict those of Farnsworth (1969), who had reviewed the use of non-technical terminology more than a decade earlier:

> Research by Schoen, Gatewood, Mull, and others has demonstrated beyond the possibility of doubt that synonymous words will be employed with some

consistency to describe the character of much of our Western music whenever the listeners are drawn from roughly the same subculture. The degree of agreement is little affected by differences in listener intelligence, tested musical aptitude, musical training, or age level (if above the sixth grade). (p. 80)

O'Brien (1989, 1992) studied the use of metaphors, similes and analogies in addition to technical language during music listening instruction of seventh grade general music students. The study showed that the combination of figurative and technical language by the teacher improved student attitudinal responses toward the music being studied. In her study she reported a dearth of research that experimentally investigates the effects of figurative language in music listening instruction. That observation is still applicable at the time of this writing, and can be extended to include any type of research on figurative language in the general music classroom, especially if we do not include studies on guided imagery.

Gardner (1982) sees figurative language as an essential element in the aesthetic cognition of children:

We can discern metaphor in the very first form of learning, in which the child searches out commonalities in objects or situations known to be different, and then proceeds to behave in a similar fashion toward comparable elements. We also encounter metaphor in the highest reaches of creativity, where someone is articulating a scientific theory or describing a subtle mood. Both situations feature the perception of a resemblance

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between elements (as well as an awareness that the elements belong to different domains) that constitutes the hallmark of all genuine metaphoric thinking. And we see repeatedly the important role played by metaphoric thought and by metaphoric examples in a teacher's efforts to convey a novel concept to a student. (pp. 166-167)

Boardman (1989) claims that those who understand any field of human knowledge do so because they see that field or domain as a model of reality. She admonishes music teachers not to lose sight of this and "to help our students grasp the deeper meaning of musical structure and thus gain the ability to use music as a metaphor of reality" (p. 5). Szego (2002) suggests that "ethnographers might profitably ask, 'What are the metaphors that organize instructional communication, when are they used, and how do they affect musical practice?'" (p. 723). In Chapter II, many other sources will be examined reflecting the large and growing interest in figurative language, especially metaphor.

Teachers are constantly looking for ways to make things that are strange become familiar to their students. Children verbalize what they are attempting to understand and master. When students use language, they reflect their cultural, political, economic, social and personal situations. When they talk about music, even when it is within the confines of the music classroom, they refer to the music that occurs in their lives outside that immediate environment. Teachers' and children's discourse reflects different mental models or schemata of the entire domain of music.

<u>Examples of figurative language in children's discourse about music</u>

Young children are adept at creating and using figurative language in their discourse. Rodriguez and Webster (1997) asked children of various ages, "What were you thinking when you listened to this music?" One first grader answered, "It was kind of like… king music… and kind of like… poor music… put together… the high notes were rich… and the low notes were poor" (p. 18). As will be discussed in Chapter II, children of this age create unsophisticated metaphors that are perceptual or mythological. They do not convey a psychological message.

Campbell (1998) interviewed several children about their musical experiences inside and outside of the music classroom. Jonathan, a sixth grader, was particularly interesting. (It is also opportune that Jonathan is of the same age as the students in this study.) An excerpt of Campbell's transcript and accompanying field notes (which are underlined by Campbell) follows:

Q: What kind of music are you singing?

A: <u>He shifted his weight, slumping further in his chair. He stretched his legs out in front of himself and folded his arms across his chest and above his violin case.</u> Well, we're doing "To Music," "Si me dan Pasteles," "Ca' the Ewes," "Siyahamba." She picks the songs. <u>By "she," I think he is referring to his music teacher.</u> My older brother knows some of them, because the sixth-grade choir sang them two years ago. So he had these songs stuck in his head, and I would hear him sing them, and now

they're stuck in my head. His hair swung back as he shook his head, as if to clear the song from it.

      Q: What do you mean, stuck?

      A: I mean, every time I turn around, I hear this song or that song, kind of inside. It's catchy. (p. 153)

One of the things that struck me the most when reading this passage was that Jonathan had personified songs. They are no longer abstract, but have become physical, bounded entities, which have the capability of getting "stuck" in a physical place—his and his brother's heads. Campbell goes on to talk to Jonathan about other things, like drumming, about reading music. However, the personified image of music is something to which he returns, but this time quite strikingly:

      A: . . . It's important to be able to read music, OK? But the choir music is

      confusing. There are so many words and so much music that we can't read

      as fast as the music goes. I spend so much time flipping through pages that

      I don't even sing all my parts on time. But when I go home, the song pops

      into my head, it gets stuck, and I'm singing it with no trouble at all. He

      looked at me, then away, as he challenged me with his next question. Don't

      you music people ever decide that too many notes might get in the way of

      the music?

      Q: I think so. In some styles, we don't use notes to make music.

      A: He continued in an effort to defend his position. I know. Rock

      musicians don't read music. Most of them don't. And they play some

complicated stuff. I don't think jazz players read notes much either. Yeah,

notes are good for writing down music you don't want to forget, or that you

want someone else to play later on. But too many notes in these choir

pieces – my part, your part, the piano part—they can choke you when they

come too thick and fast. (p. 154)

Jonathan's personified songs have gained momentum and have the capacity to

travel from one location to another. Not only are they capable of getting stuck,

they now pop in and out, and have even turned violent. Their overpopulated

battalions of notes are now choking Jonathan. I became intrigued with the way this

student had taken an abstraction and turned it into something that was physical. I

reflected on how a music teacher could use this knowledge in transmitting abstract

concepts to students. Could personification, for example, be used more frequently

in the language of instruction? Finally, I wondered if I would find such colorful

and striking examples in the data that I was about to collect. As the reader will

discover in Chapter IV, figurative language does abound in the music classroom. It

is just that we as observers are so accustomed to many of its forms that we no

longer regard it as novel or figurative.

Key terms

Cognition – the act of knowing, including such mental processes as

awareness, perception, intuition, thinking, reasoning, judgment, remembering,

understanding language, and learning.

Figurative language – Language using tropes (figures of speech), such as metaphors, similes, idioms, analogies, hyperbole, metonymy, oxymoron, irony and so on. Figurative language expresses one thing in terms normally denoting another with which it may be regarded as analogous. The term metaphoric(al) language is encountered in literature and often is used synonymously with the term figurative language. It is not restricted to the use of metaphor alone. Unless referring to the work of another author, the term figurative will be preferred in this study.

Idiom – an expression in the usage of a language that is peculiar to itself either grammatically ("no, it wasn't me") or in having a meaning that cannot be derived from the conjoined meanings of its elements ("kicked the bucket").

Intersubjectivity – "the degree that two collaborators on a task share the same definition of the task and its setting. The degree of intersubjectivity can vary from minimal sharing to nearly complete sharing when 'two interlocutors represent objects and events in identical ways'" (Wertsch, 1984, p. 12).

Metaphor – Traditionally, metaphor is a figure of speech in which a word or phrase literally denoting one kind of object or idea is used in place of another to suggest a likeness or analogy between them ("drowning in money", "all the world's a stage"). A metaphor consists of two or more referents: the tenor , (the literal topic) and the vehicle, (the figurative). However, the word metaphor is often used as a cover term to represent all tropes and figurative or symbolic expressions. It is this latter meaning that will be encountered more frequently in this study, unless the traditional meaning is specified.

Metaphor frames – constructions in which the vehicle or the tenor of a metaphor is extended and expanded over several speaking turns and involves more than one speaker. This makes the semantic associations of the metaphor explicit between or among the speakers (Toris, 1995).

Metaphoric(al) language – see figurative language.

Metonymy – a figure of speech consisting of the use of the name of one thing for that of another of which it is an attribute or with which it is associated ("lands belonging to the Crown").

Musical meaning – The term musical meaning appears in the title of this study and is a concept that has been understood in a variety of ways. Meaning is preferred over words like understanding or knowledge, which are narrower in focus. For the purposes of this study, I prefer a definition allied to Leonard Meyer's. He explains that meaning is the significance a listener gives to musical structures (schemata) in relation to his or her musical knowledge and expectations. The significance can vary among listeners because each has different competencies regarding musical traditions, norms, practices and contexts. Some expectations are fulfilled, while others are not, and this creates tensions and resolution. (Meyer, 1973; Cumming, 1994)

Polysemous – having multiple, but related meanings. Polysemy involves the extension of a central sense of a word to other senses by devices of the human imagination, such as metaphor and metonymy.

Professional language – Tait (1992) uses this term to describe music classroom vocabulary which is derived from the music itself (words such as vibrato, crescendo, intensity). Various other authors have referred to this technical language as process, denotative or analytic vocabularies. In this study professional language or professional vocabulary will be the terms that are used most often to describe this category of language.

Schema (plural: schemas or schemata) – structures by which we organize our experience in ways that we can comprehend. Comprehension occurs when there are sufficient cues in the new information, so that the learner can connect it to existing schemata. Comprehension falters when there are insufficient cues in the new information to link it to the appropriate schemata, or when the comprehender does not possess the crucial schemata (Bower & Cirilo, 1985; Hargreaves & Zimmerman, 1992; Johnson, 1987). Boardman (1989) states that schema theory makes the transfer of learning possible. The task of the music teacher is to identify the schemata that guides "musicianly behavior" (p. 4) and upon internalization, allows students to function as independent musicians.

Simile – a figure of speech explicitly comparing two unlike things that is often introduced by like or as ("cheeks like roses"). Some similes have become clichés ("sleeping like a log").

Zone of proximal development – a phrase used by Vygotsky (1978) to define "the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined

through problem solving under adult guidance or in collaboration with more capable peers" (p. 86).

Summary

Cognitive scientists use many levels of analysis to understand how we perceive, think, remember, understand, and learn. Researchers no longer focus exclusively on input, such as teacher behaviors, or output, such as student achievement. Thinking processes and problem solving capabilities have become important subjects to examine.

Researchers of teacher and student cognition have not paid enough attention to subject area content. This is especially true in music education, and leaders in the field have expressed concern that psychologists of music have taken a narrow view of cognitive development and have not availed themselves to any great extent of research tools from related disciplines, such as ethnomusicology, sociology, anthropology or linguistics.

Language is one avenue by which researchers can study cognitive processes. If language is a set of signs and symbols, classroom discourse can be studied to explore how teachers and students construct knowledge, understanding and ultimately meaning in a specific content area. Teachers' and children's discourse reflect different mental models or schemata of the domain of music and warrant close examination.   Several music educators have stressed the importance of language in the formation of musical concepts and aesthetic development.

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"Pupil talk" should not be discounted as trivial and unimportant, even when it is deficient in correct vocabulary. Various authors have referred to this technical category of language as, <u>analytic</u>, <u>process</u>, <u>denotative</u> or <u>professional</u> vocabularies. Mere labeling through the use of professional vocabulary may not be sufficient to personalize the musical experience.

Educators are recognizing the importance of students' personal vocabularies when describing their musical perceptions. Terms such as <u>experiential</u>, <u>exploratory</u>, <u>connotative</u>, <u>metaphoric</u> or <u>figurative</u> all have been used to describe this kind of language. By studying figurative language we can gain insight into how musical meaning is constructed using non-technical terms and concepts. A basic assumption of this study is that figurative language in the music classroom provides insight into how we cognize the musical experience that may not be readily discernible when limiting research to the professional vocabulary of music.

The study of how teachers and students in three sixth-grade general music classes think and verbally construct musical meaning as reflected by their figurative language use was conducted in a private day-school for girls. These music classes were observed and taped over a seven-week period. Transcriptions of the class sessions, as well as notes and interviews were analyzed, and recent theories in language and cognition were applied to the collected data.

Chapter II

Theoretical Framework

Four topics are pertinent to understanding the theoretical framework of this study: (a) cognitive theories and their view of language in learning, (b) theories of adolescent development and language, (c) theories regarding figurative language, and (d) research paradigms for qualitative studies in education.

As is common in qualitative studies, other pertinent discussion of research literature will be interspersed throughout other chapters (LeCompte & Preissle, 1993). This approach was useful for this study, since only after collecting data did patterns emerge to provide guidance for which literature would be relevant to the analysis.

Three cognitive theorists and their view of language in learning

Numerous researchers have addressed the issue of language in cognition, but three theorists have been particularly influential players in what Gardner (1987) and others have called the "cognitive revolution" which accounts for most recent theories of developmental psychology. This is not a comprehensive overview of the cognitive work of Jean Piaget, Lev Vygotsky and Jerome Bruner. Instead, the

aim is to highlight their views and in some cases, the views of those that have

continued their work on language in the cognitive process.

<u>Piaget and neo-Piagetians</u>

The work of Jean Piaget (1896-1970) has exerted a profound influence in

the field of developmental psychology.   He was interested in the great issues of

Western epistemology, which included the nature of time, space, causality, number,

morality, and other Kantian categories. According to Piaget, these categories

needed to be constructed as a child developed (Gardner, 1987).

Piaget's most enduring theory is that development proceeds according to a

universally occurring series of stages, each qualitatively different from the other.

During these stages a child acquires certain mechanisms that enable the transition

to a higher stage. These stages include the <u>sensorimotor</u> stage of infancy, the

<u>intuitive</u> stage of early childhood, the <u>concrete operational</u> stage of middle

childhood, and the <u>formal operational</u> stage of adolescence and adulthood. The

relevance of Piaget's stages to this study will be further considered later in this

chapter in a discussion of reasons for the choice of age group for this study.

Another influential theory of Piaget's is the development of symbolic

function, or more specifically, semiotic function. Piaget and Inhelder (1969)

stated:

> Unlike images and other semiotic instruments, which are created by the
>
> individual as the need arises, language has already been elaborated socially
>
> and contains a notation for an entire system of cognitive instruments

(relationships, classifications, etc.) for use in the service of thought. The

individual learns this system and then proceeds to enrich it. (p. 87)

According to Piaget, although language makes thought possible, language does not

constitute the source of logic, but, on the contrary, is structured by it.

Although the theories of Piaget are still quite influential, there has been a

move away from his postulation of universal stages and his explanations of

structural regularities in thinking. Information-processing theory has influenced a

group of theorists, who have become known as "neo-Piagetians." They suggest

less cohesive stages and allow for the influences of cultural settings, the contexts of

the occurrences, and individual abilities. According to the neo-Piagetian model,

stage transitions occur at different ages in different domains, making the concept

much more complex and diverse than portrayed by Piaget (Bower & Cirilo, 1985;

Hargreaves & Zimmerman, 1992).

Vygotsky and neo-Vygotskians

Lev Vygotsky (1896-1934) suggested that just as tools change people's

environments, so the use of signs changes people's "inner environments" or the

structure of their minds. Both tools and signs mediate between people and their

environment. In accordance with many anthropologists, Vygotsky (1978)

contended that human language use is a form of tool use. A child acquires certain

semiotic mediators (signs, symbols), which act as psychological tools for

functioning in a particular society.

Vygotsky believed that inner speech or verbal thought is determined by a culture's norms and values. He differed from Piaget, who maintained that behavior is the result of natural maturation or a series of naturally-occurring developmental stages. Vygotsky suggested a cultural development schema that focused on the child's acquisition of semiotic mediators that act as bridges between a child's earlier and later forms of thinking. When a child learns to use symbols the way the culture uses them, the child's thinking becomes radically altered (Cole & Scribner, 1978; Kozulin, 1990).

While Vygotsky was not the first to stress the social origins of language and thinking, he was probably the first modern psychologist to suggest mechanisms by which culture is transformed and internalized by the individual. According to him, an externally occurring process undergoes reconstruction and then begins to occur internally, thus changing from an interpersonal to an intrapersonal process (Vygotsky, 1978). Vygotsky believed that the transition from interpsychological to intrapsychological activity occurs because the same mediational means— language—is used in both. How this occurs was the object of Vygotsky's research (Jacob, 1992).

Vygotsky's view differs significantly from Piaget's contention that the young child is largely impervious to social influence. For Piaget, development moves from the individual level to the social level, while Vygotsky believed development moves from the social to the individual, and that social guidance aids children in learning to communicate, plan and remember deliberately from the first

years of life. Vygotsky believed that the object of research should be the social

activity in which an individual functions. Piaget's approach was the reverse—to

focus on the individual, with social influence overlaid on the individual's activity,

but only after the child is able to take on another person's perspective (Rogoff,

1990; Wertsh, 1985).

Vygotsky also argued with Piaget about child development, insisting that

children do not develop the same way as a function of age. Instead, he offered the

concept of the zone of proximal development by which children transcend their

independent and spontaneous level of achievement under social stimulation. He

believed this zone is specific to humans and is critical to human cultural

achievement. He examined interactions between an expert and a novice (e.g.,

mother-child, teacher-student, student-student) in which the interaction results in a

cognitive change in the novice. According to Jacob (1992), interest in Vygotsky's

zone of proximal development led to a wide variety of studies focusing on

interactional processes in which methods of discourse analysis have become

increasingly important. Vygotsky himself recorded narrative descriptions of how

individuals accomplished tasks given to them.

Just as Piaget fathered an extensive family of neo-Piagetians, there should

be no surprise about the existence of neo-Vygotskians, who continued to study

relationships among culture, context, and cognition. Wertsch (1984) extended

Vygotsky's work regarding the zone of proximal development. When an adult and

a child carry out a task, they have different definitions of the situation. The

primary task of the adult is to change the child's definition of the situation so that it approaches the adult's definition. Intersubjectivity, according to Wertsch, is the degree to which the adult and the child share the same definition of the task and the setting. This can vary from minimal sharing to complete sharing of the definition. Intersubjectivity is often created through semiotic mediation—language. Much of Wertsch's empirical work has been devoted to studying how teachers use language to bring about a higher degree of intersubjectivity with the learner. He has also begun to explore the link between forms of language and the larger social order.

Lave (1988) sought to get away from the previous dichotomy of social versus cognitive behavior. She focused on activities rather than societies or individuals, which now became the point of interaction between sociocultural factors and individuals. "Relations between human action and the social or cultural system at the level of everyday activities in culturally organized settings" (p. 14) become the focus. Musical activities taking place in a music classroom can constitute such a social system embodying the temporal, spatial and social order necessary for the kind of study proposed by Lave.

As summarized by Jacob (1992), the work of the neo-Vygotskians has shifted the focus to the understanding of processes in local contexts, with a "view of humans as constructors who act as whole persons in activities and a view of social interaction as a central contributor to cognitive change" (p. 324).

<u>Bruner</u>

Jerome Bruner (b. 1915) has written extensively about the function of language in education. "Teaching is vastly facilitated by the medium of language, which ends by being not only the medium for exchange but the instrument that the learner can then use himself in bringing order into the environment. The nature of language and the functions it serves must be part of any theory of cognitive development" (Bruner, 1966, p. 6). Two decades later, writing again on the function of language, he also included linguist Roman Jakobson's concept of <u>metalinguistic function</u> as a useful tool for examining the language of education. He defined metalinguistic function as:

> Turning around on one's use of language to examine or explicate it, as in the analytic mode of philosophers or linguists who look at expressions as if they were, so to speak, opaque objects to be examined in their own right rather than transparent windows through which we look out upon the world. (Bruner, 1986, p. 125)

Bruner has developed a theory on the stages of learning, which is comparable to Piaget's stages of cognitive development. He labels these stages <u>enactive</u>, <u>iconic</u> and <u>symbolic</u> (1966). Bruner stresses the role that language plays in thinking, generalizing and subsequently hypothesizing and inferring. Experience becomes translated into language and language functions as the transition to the symbolic learning stage, when symbols do not necessarily resemble that which they represent. It is not language per se that makes the

difference, but rather what matters is the internalization of language as an instrument of thinking.

Bruner admired the work of Vygotsky and shared many of his views on language as a form of tool use.

Language is perhaps the ideal example of one such powerful technology, with its power not only for communication but for encoding "reality," for representing matters remote as well as immediate, and for doing all these things according to rules that permit us both to represent "reality" and to transform it by conventional yet appropriate rules. (Bruner, 1966, pp. 25-26)

Much like Vygotsky, Bruner stressed the pedagogical role of social interaction in the educational process (Bruner, 1996; Brown, 1997) to achieve what Vygotsky called the transition from interpsychological to intrapsychological activity.

Mental growth is in very considerable measure dependent upon growth from the outside in—a mastering of techniques that are embodied in the culture and that are passed on in a contingent dialogue by agents of the culture. This becomes notably the case when language and the symbolic systems of the culture are involved, for there are a multitude of models available in the culture for shaping symbolic usage—mentors of all shapes and conditions. (Bruner, 1966, p. 21)

Bruner's references to models and mentors are very much in line with Vygotsky's

theory of the zone of proximal development and Wertsch's work on

intersubjectivity.

> Bruner (1986) states that,

> Language. . . creates and transmits culture and locates our place in it. . . .

> Learning how to use language involves both learning the culture and

> learning how to express intentions in congruence with the culture. This

> brings us to the question of how we may conceive of "culture" and in what

> way it provides means not only for transacting with others but for

> conceiving of ourselves in such transactions. (p. 65)

This view differs from Piaget, who thought language reflects thought but does not

determine it. In Piaget's view, language was subordinate to thought. In this sense,

Bruner's view of language is more in line with Vygotsky's, who believed that

language was an agent for altering the powers of thought (Bruner, 1986).

Bruner also expressed interest in exploring "ways in which we create

products of mind, how we come to experience them as real, and how we manage to

build them into the corpus of a culture as science, literature, history, whatever"

(1986, p. 45). According to Bruner, we construct models which enable us to keep

an enormous amount in memory while paying little attention to detail. Of

particular interest in the context of this study is what Bruner had to say about model

building and metaphor:

World making of this type rides from time to time on wild metaphors. . . .

The history of science is full of them. They are crutches to help us get up

the abstract mountain. Once up, we throw them away (even hide them) in

favor of a formal, logically consistent theory that (with luck) can be stated

in mathematical or near-mathematical terms. The formal models that

emerge are shared, carefully guarded against attack, and prescribe ways of

life for their users. The metaphors that aided in this achievement are

usually forgotten or, if the ascent turn out to be important, are made not part

of science but part of the history of science. (p. 48)

In addition to the metaphorical and the "mathematical" (presumably non-

metaphorical) terms that are in operation in constructing mental models (which can

be related to the concept of <u>schemata</u> to be discussed later in this chapter), Bruner

also recognizes that there are two functions of language that are constantly

operative. He calls it the "two-faced" nature of language. "It serves the double

function of being both a mode of communication and a medium for representing

the world about which it is communicating. How one talks comes eventually to be

how one represents what one talks about" (1986, p. 131).

<u>The early adolescent and language development</u>

The choice of sixth graders (approximately 11-12 years of age) for this

study was not happenstance. Santrock (1993) states that at this particular age, as

adolescents' thought becomes more abstract and logical, their use of language also

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changes, including the proper use of satire and metaphor in writing and conversation. They become more accustomed to allowing individuals to take turns in discussions, instead of everyone talking at once; they learn to use questions to convey commands; "they are better at using words like the and a in ways that enhance understanding; they are better at using polite language in appropriate situations; and they are better at telling stories that are interesting, jokes that are funny, and lies that convince" (p. 123).

Many theorists support this view of developmental changes in language use. Children of middle school age (grades 6-8) fall into Piaget's fourth and final stage, called the "formal operations stage." This tends to appear between the ages of 11 and 15 for most children (but definitely not all). In this stage students move beyond concrete experiences, they think more abstractly and logically, solving formal problems in a systematic, deductive fashion (Piaget, 1963). During the previous concrete operations stage (approx. age 7-12) children have already acquired the skills necessary for discussion, "and from this internalized discussion, and that conducted with oneself, which is reflection—of collaboration, of arguments that are orderly and understandable by another" (Piaget, 1977, as cited in Rogoff, 1990, p. 145). During the formal operations stage these skills become even more pronounced when "hypothetic-deductive thought is . . . supported by a language (common or mathematical) and is thus collective thought" (Piaget, 1977, as cited in Rogoff, 1990, p. 145). Stellaccio (1993) reviews research studies which

assert that the aesthetic development of children parallels ordered stages of cognitive development.

The acquisition of facility with figurative language is also related to age. Reyna and Kiernan (1995) stated that children's ability to interpret metaphors is constrained by their cognitive abilities, and that the development of interpretative ability has been studied from Piagetian and information processing theoretical perspectives. Although Piagetian stages have been called into question, the idea that the understanding of metaphor is a logical-analytical task belonging to the formal operational stage has continued to prevail in linguistic circles (Reyna & Kiernan, 1995, p. 311).

Younger children understand figurative language literally, and later learn not to put literal interpretations on idioms and figurative expressions (Gleason & Ratner, 1988). Younger children put perceptual interpretations or magical interpretations onto metaphors. This has been found in children as old as nine (Reyna & Kiernan, 1995), while older children can explain the psychological "gist" of a metaphor. For example, the authors of the previously cited study presented the metaphor: "The prison guard had become a hard rock." A perceptual interpretation would be that the guard had developed hard muscles. A magical interpretation would be that a witch had turned the guard into stone. The true psychological interpretation would be that the guard had become callous and unyielding.

Gardner (1973) focused on the acquisition and use of symbols in mathematics, language and music. He suggested that children pass through a series

of "waves of symbolization," and contended that this process is complete well before the years of adolescence.   However, he too agreed that it is not until the age of eight or nine that children recognize the basic intent behind a figure of speech, and that children reach genuine metaphoric comprehension only in the preadolescent years. Children as young as three create and use striking metaphors, but these are almost always based on a physical resemblance between elements, rather than on a conceptual, expressive, or psychological link (Gardner, 1982). It should be noted that Gardner also reports a decline of the spontaneous incidence of metaphor during the school years.

> The decline may reflect two factors: first, once the child has mastered a basic vocabulary, he is under less pressure to stretch the resources of language to express new meanings; second, a general bent toward conformity and rule-guided behavior discourages the school child from violating those categorical boundaries he has just finished constructing. (p. 165)

While language is the primary focus of this study, it is not the only variable that should be considered when studying early adolescent subjects.   There are also age-related theories regarding musical development. Gordon (1987) contended that musical aptitude is developmental until the age of approximately nine, when it becomes measurably stabilized. Serafine (as cited in Hargreaves & Zimmerman, 1992) concluded that most temporal and nontemporal musical processes have been acquired by the age of 10 or 11. She identified temporal processes as those that

involve relationships among discrete musical events in time, and nontemporal

processes as those that deal with more general, formal properties of music. This

included the ability to identify phrase boundaries, to recognize differences between

textures and to identify transformations.

Each of these theories strengthens the position that by the sixth grade most

children will have reached a stage of cognitive, linguistic and musical maturity as

well as developmental stability. This is why this particular age group was selected

for the study. On the other hand, it is assumed that sixth graders are still young

enough to not have begun decreasing the use of figurative language for the reasons

mentioned above and described by Gardner.

<div align="center">Theories regarding figurative language</div>

Types of figurative language

Before embarking on a discussion of the role of figurative language

in the cognitive process, it will be helpful to describe what is included under the

umbrella of the term figurative language. As noted earlier, the terms metaphoric

language or metaphorical language have been frequently used synonymously with

the term figurative language, despite the fact that other tropes besides metaphor are

used.

In this study preference is given to the term figurative language to avoid

ambiguity. However, the reader will also encounter the use of the word metaphor

as a cover term to represent all tropes and figurative or symbolic expressions, since

this is how the term is used in the theoretical literature of cognitive linguistics. Unless specified that the word <u>metaphor</u> is used in the traditional sense, it will be used as such a cover term.

There are many possible figures of speech, or tropes, other than metaphor. These include irony, indirect requests, sarcasm, oxymoron, hyperbole, simile, metonymy, analogy and so on. Many researchers have neglected these other tropes, believing that only metaphors have real cognitive value, but others believe that much of our thinking is based on figurative processes that include a vast array of tropes (Gibbs, 1993). In this study metaphor is the figure of speech that will receive the most attention. However, various other forms of figurative language, especially analogies, similes, idioms and metonymy will be considered if they are helpful in defining categories, relationships and links to the musical experience.

<u>Metaphor</u>. In a true metaphor "words that normally do not collocate are brought together to imply a comparison" (Chimombo and Roseberry, 1998, p. 155) as in the expression "you are the sunshine of my life." A metaphor consists of two or more <u>referents</u>. One of these referents, the <u>tenor</u>, or the topic, relies on literal interpretation. The other referent is the <u>vehicle</u>, or the figurative, the unfamiliar or the imagined. Of all the categories of figurative language, metaphor compresses the greatest amount of information. Mac Cormac (1985) also argues that metaphors, unlike <u>analogies</u>, create tension in the listener, because they not only emphasize similarities among the referents, but also focus on the dissimilarities.

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Simile. A figure of speech that expresses a resemblance between things of different kinds ("cheeks like roses"). Some contend that components of metaphors and similes share common ground—that there is an implied similarity between the tenor and vehicle, and the only difference between metaphor and simile is that the former involves an implicit comparison, while the latter involves an explicit comparison through the use of "like" or "as" (Toris, White & Hughes, 1994; Verbrugge & McCarrell, 1977). Murry (cited in Mac Cormac, 1985) has described metaphor as "compressed simile." Mac Cormac disagrees with Murry and supports other theorists who say that there is a fundamental difference because metaphors involve semantic transference while changes of semantic meaning are less likely in similes.

Idiom. An expression whose meanings cannot be inferred from the meanings of the words that make it up. Idioms have sometimes been described as "dead metaphors" because the relationship that unites the literal meaning of a phrase like "pull my leg" with the metaphoric meaning is lost. However, some theorists have demonstrated that many idiomatic expressions are decomposable or analyzable and the meanings of their parts contribute to their overall figurative meaning (Gibbs, 1993).

Metonymy. Substituting the name of an attribute or feature for the name of the thing itself (as in "the xylophone came in too early.") Metonymy is similar to metaphor because in each a connection is described by substituting one term for another. Others argue that metaphor is based on similarity whereas metonymy

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expresses relations between objects, such as part-whole, cause-effect, and so on (Gibbs, 1993).

The role of figurative language in learning and cognition

The importance of studying the non-technical discourse that takes place in music classrooms was presented in Chapter I. It was argued that by specifically focusing on experiential, connotative, metaphoric or figurative language we can gain insight into how musical meaning is constructed using familiar terms and concepts.

Howard Gardner and others cited in the previous chapter are not the only ones who have emphasized the importance of figurative language in a teacher's efforts to convey a novel concept to a student. Work about the cognitive significance of metaphor has shown repeatedly that metaphorical teaching strategies often lead to better learning than do explicit strategies (using what has been called denotative, analytic or technical language), since they enable the transfer of learning and understanding from what is well-known to the less well-known in a more memorable way (Cacciari, 1998; Gardner, 1982; Guck, 1994; Petrie & Oshlag, 1993; Sticht, 1993; Zbikowski, 2002).   However, some researchers have gone even further, saying that teaching without figurative language is not possible. If teachers are to base their instruction on the conventional wisdom that they should begin with things that students already know, how are they to ever introduce that which is completely new? Petrie and Oshlag (1993) claimed that "radically new knowledge" requires the use of

metaphor in the pedagogical process of leaping the chasm between old and new knowledge and consequently acquiring new knowledge. "This is not just the heuristic claim that metaphors are often useful in learning, but the epistemic claim that metaphor, or something very much like it, is what renders possible and intelligible the acquisition of new knowledge (p. 582).

Due to the work of linguists, psychologists, anthropologists and others, metaphor and other types of figurative language have come to be regarded as a "fundamental mode of cognition affecting all human thought and action" (Turner, 1987, p. 4). Mac Cormac (1985) noted that in the mid 1970s the legitimacy of metaphors in the study of cognition was still being debated, while at the time of his writing metaphors had become so widely accepted as proper cognitive devices that the question shifted to how they could be properly described. In explaining metaphor as a cognitive process, he presumed the existence of deep structures of the human mind, serving as language-generating devices. He contended that metaphor is a mediating device among the mind, the brain, and the external world. According to Mac Cormac, metaphors are generated by means of a three-level hierarchical, but nonexclusive process: Level 1—surface level: culture and language; Level 2—deeper level: semantics and syntax; and Level 3—deepest level: cognition.

During the last two decades the recognition of metaphor as a mediating cognitive device in our conceptual systems has developed considerably. One issue that has been vigorously debated in this context is the categorization of language into literal and metaphorical. Mac Cormac (1985) explains that even metaphors can become part of literal language when they become widely used. With extensive usage metaphors become commonplace, lose their tension and become conventional. The leg of a table or a head of cabbage are examples of "frozen" or "dead" metaphors.

However, more and more theorists have taken the position that the distinction between metaphorical and literal language has no psychological correlate in the underlying processes involved in their comprehension, and that there is no basis for a rigid differentiation between scientific and other kinds of language (Ortony, 1993).

In 1980 Lakoff and Johnson wrote a seminal work, titled Metaphors We Live By. In this work, Lakoff and Johnson insisted that all language is essentially metaphorical, and that metaphors partially structure our everyday concepts, which is then reflected in our literal language. These literal or dead metaphors continue to carry their hidden figurative meaning, even though it has been disguised. Lakoff and Johnson contended that metaphor is found not just in language, but also in thought and action and that our entire conceptual system is fundamentally metaphorical. The way we think, what we experience, and what we do every day is

a matter of metaphor. Since our communication is based on the same conceptual

system that we use in thinking and acting, language is an important reflection of

that system. Lakoff (1993) also claimed that metaphor should be understood as a

property of our conceptual system, not as a property of language.

In a similar vein, Turner (1987) chided linguists and literary critics who

regard ordinary everyday language and literary language as separate realms to be

investigated independently. According to Turner, classical rhetoricians turned to

literature as a source for exploring the human mind, "but now we are in the

stultifying position of intelligent people assuming that literature and science,

including the science of the mind, have nothing to do with each other" (p. 10).

The ideas presented by Lakoff and Johnson profoundly influenced many linguists,

psychologists, philosophers, social scientists, artists and even neurobiologists. As

interest in these ideas spread, there emerged a need to bring together this

interdisciplinary community of researchers. A symposium organized by Rene

Dirven in Duisburg (Germany) in the spring of 1989, (retroactively called the First

International Cognitive Linguistics Conference) is considered to be "the birth of

cognitive linguistics as a broadly grounded, self-conscious intellectual movement"

(http://www.cognitivelinguistics.org/history.shtml). Organizations such as the

International Cognitive Linguistics Association (ICLA) and the Center for the Cognitive

Science of Metaphor were founded (http://philosophy.uoregon.edu/metaphor/metaphor.htm).

The journals, Cognitive Linguistics and Metaphor and Symbol (formerly Metaphor

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and Symbolic Activity), have published articles dealing with a broad spectrum of topics related to cognitive linguistics.

The basic tenet of cognitive linguistics (sometimes called cognitive semantics) is that "language is an integral part of cognition which reflects the interaction of cultural, psychological, communicative and functional considerations, and which can only be understood in the context of a realistic view of conceptualization and mental processing" (http://www.cognitivelinguistics.org/aims.shtml).

It is through this lens of cognitive linguistics that I have chosen to look at the data collected for this study. Of the many proponents of cognitive linguistics, I have focused most on the work of George Lakoff, Mark Johnson, Mark Turner, Gilles Fauconnier, Raymond W. Gibbs, Jr. and Cristina Cacciari. In the next two sections, I summarize two topics presented by cognitive linguists that are most relevant to this study: embodied meaning and image schema.

Embodied meaning

Lakoff and Johnson (1980) have proposed that typically we conceptualize nonphysical phenomena by grounding them in physical experiences:

Human spatial concepts. . . include UP-DOWN, FRONT-BACK, IN-OUT, NEAR-FAR, etc. . . . In other words, the structure of our spatial concepts emerges from our constant spatial experience, that is, our interaction with the physical environment. Concepts that emerge in this way are concepts that we live by in the most fundamental way. (pp. 56-57)

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Lakoff and Johnson (1980) presented numerous illustrations of figurative expressions that are based on spatial concepts and physical experiences. For example, we metaphorically say that "ideas are objects" when using expressions such as, "Your words seem hollow" or "I gave you that idea" (pp. 10-11). When we say that we are "feeling down" there is an implication of sadness. This is has a physical basis since a drooping posture is associated with sadness and depression (p. 15). The expressions "I'm a little rusty today" and "the wheels are turning now" suggests the metaphor "the mind is a machine" (p. 27). We personify inflation when saying that it "has attacked the foundation of our economy" or "robbed me of my savings" (p. 33).

Lakoff and Johnson (1999) drew attention to the properties of the human body that shape the way we conceptualize:

We have eyes and ears, arms and legs that work in certain very definite ways and not in others. We have a visual system, with topographic maps and orientation-sensitive cells, that provides structure for our ability to conceptualize spatial relations. Our abilities to move in the ways we do and to track the motion of other things give motion a major role in our conceptual system. The fact that we have muscles and use them to apply force in certain ways leads to the structure of our system of causal concepts. (pp. 18-19)

The authors go on to say that, "Every understanding that we can have of the world, ourselves, and others can only be framed in terms of concepts shaped by our bodies" (p. 555).

Johnson (1987) has devoted an entire book, <u>The Body in the Mind: The Bodily Basis of Meaning, Imagination, and Reason,</u> to exploring how it is possible for abstract meanings to have a bodily basis. He contends that imaginative structures of understanding, such as schemata, metaphor, metonymy and mental imagery depend on the nature of the human body and human experience in a given culture. "Through metaphor, we make use of patterns that obtain in our physical experience to organize our more abstract understanding. . . . Our bodily movements and interactions in various physical domains of experience are structured . . . and that structure can be projected by metaphor onto abstract domains" (p. xi). Johnson argues with proponents of the objectivist Western philosophical and cultural tradition who propose that concepts can exist by themselves, objectively, and that embodiment (what he calls "humanness") has no bearing on meaning and rationality. He finds fault with the notion that "the structure of rationality is regarded as transcending structures of bodily experience. . . . As a consequence, the way human beings grasp things as meaningful—the way they understand their experience—is held to be incidental to the nature of meaningful thought and reason" (p. x). Johnson believes that the body has been ignored because reason has traditionally been thought to be abstract and transcendent. Lakoff and Johnson (1999) claimed that "there is no such fully

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autonomous faculty of reason separate from and independent of bodily capacities such as perception and movement" (p. 17).

The ideas of cognitive anthropologists, linguists and psychologists have not escaped the attention of music researchers. Walker (2000) notes the striking absence of the "body" in the fields of music cognition and hermeneutics and discusses the work of Johnson and other scholars who theorize that representational frameworks for thought are developed through the body's sensory experiences. Walker states:

> Musical production involves the body. Musical production involves
> movement. Musical production is not solely an internal construction of
> tonal-rhythmic patterns, it is the external process of thought and movement
> in time and space through which one simultaneously creates and perceives
> both sonic and movement patterns. If music's production involves both
> sound and movement, it is difficult to believe that music's perception
> involves only sound. (p. 29)

Walker proposes a "theory of bodily-based hermeneutics of music" (p. 31) in which musical knowledge and meaning are based on covert representations of the physical experience of music. She looks for spatial, bodily-based images in musical discourse:

> Happily, the language used by musicians themselves when teaching,
> writing, or talking about music is full of physical metaphors. As Western
> musicians, we constantly speak of "form," "structure," "sections," and

"symmetry." We talk about "phrase length," "harmonic density," "heavy rhythm," and "light tone." Our conception of pitch is inextricably connected to the directional conceptions of up and down, higher and lower. Many metaphors involving architecture like "form," "bridge," or "structure," while giving rise to unquestionably spatial images, simultaneously suggest movement, often organic movement. (p. 34)

While acknowledging the importance of verbal metaphor, Walker's theory focuses more on the close cognitive association between music and movement. She says this association is a much closer connection than between music and language and that it is difficult to describe the internalization of movement in words:

If performance cognition is a complex "thinking-in-action" with movement as one of its most important elements, could not one conceive of the act of informed listening to be the covert representation, a physical memory, of the actions involved in musical production? This introduces a type of embodied thinking that bypasses verbal description entirely. (p. 36)

I believe that Walker downplays the function of language in this thinking process. As the reader becomes acquainted with the discourse taking place in at least one situation—the music classroom that is the object of this study, it will be apparent that the internalization of movement and other bodily experience is in fact reflected in words, and does not entirely bypass verbal description.

Other music researchers have also examined the interrelationship of the body, space, and music cognition. Zbikowski (2002) uses the theories of embodiment proposed by Johnson, Turner and Lakoff to map physical space onto metaphorical musical space. Brown (in press) suggests that musical space is focused by the bodily gestural interaction taking place within it. Zbikowski's and Brown's work will be discussed further in Chapter IV. Guck (1994) states that even the technical vocabulary of Western music is rooted in metaphor and therefore the role of metaphor and analogical thinking in musical discourse should be studied. "For example, the notion of space is so pervasively and deeply embedded in the language of musical discourse, and of musical thought, that if we wish to speak of music, we must speak in spatial terms" (p. 2).

Image schema

According to Lakoff & Johnson (1999), one of the most important discoveries of cognitive science is that most of our thought is unconscious, "Not in the Freudian sense of being repressed, but in the sense that it operates beneath the level of cognitive awareness" (p. 10). The authors go on to say that cognitive science and cognitive linguistics provides a way to study the unconscious conceptual system and our sense of what is reality. One such lens is the study of how we create concepts through categorization.

If it is true, as discussed in the previous section, that conceptualization is shaped by functioning in the physical world, this will be reflected in language and cognition. Gibbs (1998) believes that there is a link between people's recurring

bodily experiences and the metaphorical language that creates structures for abstract concepts (p. 114). Various theorists have termed these structures as <u>patterns</u>, <u>gestalts</u>, <u>cognitive models</u>, or <u>categories</u>. All living beings categorize, because they need to structure experiences into discernible units:

> Even the amoeba categorizes the things it encounters into food or nonfood. . . The amoeba cannot choose whether to categorize; it just does. The same is true at every level of the animal world. . . . Categorization is, for the most part, not a product of conscious reasoning. We categorize as we do because we have the brains and bodies we have and because we interact in the world the way we do. (Lakoff & Johnson, 1999, pp. 17-18)

Rosch (1978) explains that the reason we categorize is "to provide maximum information with the least cognitive effort" (p. 28). This is done by creating categories which map the perceived world structure as closely as possible. A second purpose of categorization is cognitive economy: "to reduce the infinite differences among stimuli to behaviorally and cognitively usable proportions" (p. 29). These two principles of categorization—structure and cognitive economy— determine how abstract the category will be, and what the internal structure of the category will be, once it is formed.

To explore the way these kinds of structures are created in order for us to experience, understand and reason about the world, Johnson (1987) proposed the term <u>image schema</u>. He cautioned that the word <u>schema</u> should not be limited by the traditional meaning of the word, which is typically understood as a cluster of

general knowledge. Instead, Johnson explained that his use of the term is derived

from Immanuel Kant's understanding of schemata as "structures of imagination

that connect concepts with percepts" (p. 21). Johnson claims that "in order for us

to have meaningful, connected experiences that we can comprehend and reason

about, there must be pattern and order to our actions, perceptions and conceptions"

(p. 29). These patterns or image schemata are structures for organizing our

experiences and comprehension, based on constantly recurring bodily experience.

He goes on to explain that they are dynamic, rather than fixed or static:

> Schemata are structures of an activity by which we organize our experience
>
> in ways that we can comprehend. They are a primary means by which we
>
> construct or constitute order and are not mere passive receptacles into which
>
> experience is poured. Unlike templates, schemata are flexible in that they
>
> can take on any number of specific instantiations in varying contexts.
>
> (pp. 29-30)

Gibbs (1998) adopted Johnson's meaning of the term image schemata,

calling them patterns or experiential gestalts, "that emerge throughout sensorimotor

activity as we manipulate objects, orient ourselves spatially and temporally, and

direct our perceptual focus for various purposes" (p. 113).

Turner (1996) offers an example of an image schema:

Consider the image schema container. Like all image schemas, it is

minimal. It has three parts: an interior, an exterior, and a boundary that

separates them. We experience many things as containers: a bottle, a bag, a

cup, a car, a mountain valley, rooms, house, cupboards, boxes, chests, and

drawers. Two of our most important containers are our heads and our

bodies. (p. 16)

Turner explains that when we recognize that several events are perceived as

being structured by the same schema, we are recognizing them as being part of the

same category.

We detect regularities in environment and compress them into much less

detailed conceptual templates that then guide our behavior. We adjust these

schemata a little under further experience. So, for example, we have a

schema for <u>door</u> that lets us interpret and otherwise handle new doors. We

have a schema for <u>restaurant</u> that makes it possible for us to eat in other

cities. (Turner, 2001, p. 138)

Once several events become part of a category, a gestalt, or a schema,

nonmetaphorical concepts can emerge (Lakoff & Johnson, 1980). Abstract

conceptual structure arises from image-schematic structure "by metaphorical

projection from the domain of the physical to abstract domains" (Lakoff, 1987, p.

268). "We think of events, which have no shape, as having a shape: open-ended or

closed, discrete or continuous, cyclic or linear" (Turner, 1998, p. 50).

It should be noted that when Gibbs, Turner and others use Johnson's term

<u>image schema</u>, they are not referring exclusively to an image—a visual stimulus.

The mental image can, of course, be visual, but it can also be an auditory,

kinesthetic, tactile, imaginative, or structural representation of abstract experiences

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and perceptions (Gibbs, 1998; Gibbs & Colston, 1995; Johnson, 1987; Lakoff, 1987; Turner, 1998). Turner gives rising pitch, increasing pressure, a jab to the skin and temporal rhythm as examples of image schemata. Spatial image schemata can be used to make sense of abstract concepts that are not spatial. Time can be perceived as linear or circular (1998, p. 50).

Even though language and music are separate domains, "nonetheless, inasmuch as both language and music are products of human cognitive processes, it also seems sensible that they will rely on some of the same cognitive capacities" (Zbikowski, 2002, p. 331). If we accept the theory that abstract concepts emerge because they are first perceived as a schema, based on bodily experience (i.e. bodily movements through space, our manipulation of objects, and our perceptual interactions), there must be evidence of such embodied schemata in the discourse of music. Musical concepts can be rather abstract, elusive phenomena. As a teacher strives to make meaning of abstract musical concepts, the cognitive process of structuring an abstract domain in terms of something more concrete should be in evidence in the music classroom. These premises guided my analysis of the linguistic data collected for this study.

There are dozens of basic-level categories or schemata that have been proposed by proponents of cognitive linguistics. The works by Lakoff, Turner, Johnson, Gibbs, Fauconnier, Rosch and others cited in this research provide discussions of the various possible schemata of figurative language. Also, the University of California at Berkeley Institute of Cognitive Studies has compiled a

comprehensive conceptual metaphor home page (http://cogsci.berkeley.edu/),

containing a master metaphor list, copyrighted by George Lakoff. All of these

sources helped in the search for cognitive schemata in the data collected for this

study.   The emergent schemata that I found to be most applicable and compelling

will be presented in Chapter IV.

Applicable qualitative research paradigms

Qualitative researchers generate and approach their data using a variety of

methodological and theoretical perspectives, all of which seek to authentically

portray an intact society or culture (LeCompte, Millroy & Preissle, 1992). The

"culture" of the classroom can certainly be such an intact setting. In a case study

the researcher provides an in-depth exploration of a bounded system or a detailed

examination of one setting based on extensive data collection (Bogdan & Biklen,

1998; Creswell, 2002).

Methodologies and theories influence the way the researcher sets goals,

designs a study, selects participants and contexts, frames questions, and interprets

the collected data. They also define the researcher's role in the research process.

According to Wolcott (1992), most current qualitative research in education is not

an adoption of a single methodology, but a hybrid adaptation of several practices

and disciplines. This study is an example of such a hypbrid approach. Following is

a brief discussion of three methodologies and theories that influenced the design of

this case study: (a) discourse analysis, (b) symbolic interactionism, and (c)

cognitive anthropology.

Discourse analysis encompasses a variety of techniques, tools and objects of

study in order to understand complex relationships among social, linguistic, and

cognitive processes. It is not a unified theory, method or practice which serves as a

model for guiding research.

The interpretation of discourse is the assignment of meaning to discourse

units. "Roughly speaking, meanings are conceptual objects of various degrees of

complexity, depending on the complexity of the corresponding expressions" (Van

Dijk, 1985, p. 104).

In certain cases researchers study discourse structure for its own sake by

analyzing words and lexical units, form, meaning, regularities, taxonomies, and

discourse genres (stories, arguments, descriptions, conversations, classroom

discussions, etc.). Others focus on the study of discourse as it relates to other

social, cognitive, political, or cultural processes and outcomes. Such observers

may ask how students talk about magnetism in a science class uses discursive

features that reflect different mental models of that disciplinary domain. Those

interested in the sociocognitive approach to discourse analysis often take the view

that the mind is constituted through social interaction (Gee et al., 1992).

In a traditional discourse analysis of an educational setting a researcher

might look at power relations that exist between teacher and students, cultural and

ideological norms, background of the discourse participants, physical settings,

grammatical and syntactic relations, nonverbal language, and other factors (Chimombo & Rosebery, 1998). However, this study is not discourse analysis in the customary sense since it does not include many of the foci described above. While some of these elements will come into play when I analyze the use of figurative language in the classroom, they will not be my primary objects of analysis.

In this study I am "assigning meaning to discourse units" (Van Dijk, 1985) called schemata. Just as the science teacher uses discursive features that reflect different mental models of magnetism, I will be looking for mental models of concepts in the domain of music. By analyzing longer discourse units or speech acts rather than musical terms or vocabulary in isolation, I believe better judgements can be made about the construction of meaning.

Symbolic interactionism was a term coined in 1937 by H. Blumer of the Chicago School of the 1920s and 1930s. Exponents of this concept included G. H. Mead, William James, C. H. Cooley, John Dewey, and W. I. Thomas (Woods, 1992). Blumer explained that meaning is conveyed by symbols (signs, language, gestures and so on) and meaning is constructed in social interaction. These meanings are then internalized, stimulating thought through language, which increases the person's powers of reflectivity. This contrasts with those who argue that behavior is the product of internal drives or determined by external structural and cultural forces in society. The model is that of a creative constructor and coper, not someone who merely responds to factors playing on them. Symbolic

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interactionists believe that participants need to attach the same meaning to symbols for joint activity to ensue. Thus the relationships between cultural meanings of a group and individual meanings need to be explored and elaborated (Woods, 1992; Jacob, 1992). Symbolic interactionist researchers ask questions like: How do varying interpretations of meaning, expectations, and motivations affect human behavior, and how does the process of constructing meaning take place? The research setting is typically small-scale, micro-level observation of individuals in interaction with others (LeCompte & Preissle, 1993).

Since one of the aims of this research is to magnify the understanding of musical cognition and how teachers and students think and verbally construct musical meaning through social interaction, the paradigms of this research tradition are applicable. The symbolic interactionists' belief that participants need to attach the same meaning to symbols for joint activity to ensue is related to Vygotsky's (1978) zone of proximal development and Wertsch's (1984) concept of intersubjectivity.

Cognitive anthropology includes analysis of speech samples from individuals in their cultural frame of reference, seeking to produce cognitive maps. Cognitive anthropologists look for organizing principles, patterns of behavior and beliefs of human groups. W. Goodenough, J. Janses, C. Frake, S. Tyler, J. Spradley and E. Jacob are the major contributors to the cognitive anthropology theoretical perspective in the social sciences (LeCompte & Preissle, 1993, pp. 131-132). One of the major questions and topics for investigation is: How does

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language reflect the cognitive processes of individual human beings? Cognitive anthropologists believe that each group of individuals has a unique system for perceiving and organizing phenomena in the material world, that this cognitive system constitutes culture, and that most cultural knowledge is reflected in language (pp. 128-129).

The concept of cognitive maps or systems that organize phenomena in the material world is akin to Johnson's (1987) concept of <u>image schema</u>. The cognitive anthropologists' search for organizing principles and patterns of behavior through analysis of speech samples is related to the methodology chosen for this research study.

<center><u>Summary</u></center>

Cognitive theories are among the most recent developments in psychology. Piaget, Vygotsky, Bruner, and many other theorists have all addressed the subject of language in cognition. All describe language as a set of symbols, which mediates in the learning process.

Early adolescence is an appropriate period to study figurative language, cognition and musical perception. Piaget (1963) and others point to early adolescence (age 11-15) as the stage when children have acquired the ability to think abstractly, logically and deductively. Gardner (1973, 1982), Reyna and Kiernan (1995), and Santrock (1993) contend that at this age children's language reflects the proper use of satire, humor and metaphor. Metaphors are no longer

understood perceptually or magically, as they are in early childhood. Adolescents are able to give a true psychological interpretation of metaphoric language. Research also has shown that at this age musical aptitude is no longer developmental, but has stabilized.

Vygotsky's (1978) concept of the zone of proximal development is relevant to this study. Vygotsky believed that when an expert (teacher, parent, or a colleague) interacts with a novice (student), the result is a change in the novice's cognitive processing. Discourse analysis has increasingly been used to test this interactional process. Vygotsky's concept has been expanded by Wertsch (1984) and others, who focus on the differing definitions of the situation by the expert and the novice. Intersubjectivity, or the degree to which the adult and the child share the same definition of the task and setting is often created through language.

Bruner (1966, 1986, 1996) also stressed the importance of language as an instrument of thinking, especially when children transition to what he calls the symbolic stage of development. Much like Vygotsky, he sees language as a tool for internalizing the surrounding culture, for metacognition, and for creating mental models.

Increasingly, figurative language is regarded as a fundamental mode of cognition, reflected not only in language, but also in thought and action. Many cognitive linguists, including Lakoff, Johnson, Turner, Gibbs, Fauconnier and Cacciari believe that our entire conceptual system is metaphorical. Some

researchers, such as Petrie and Oshlag (1993), argue that the acquisition of new knowledge is not possible without the use of metaphor in instruction.

Many cognitive linguists believe that nonphysical phenomena are embodied, or grounded in physical experience. Our understanding of the world is shaped by how we interact with the physical world. This embodiment is reflected in metaphor and other figurative language, which provides structures or categories for abstract concepts. These categories are called <u>image schemata</u>, a term that was proposed by Johnson (1987). An image schema is a structure for organizing our experiences and comprehension, based on constantly recurring bodily experience. An image schema can be a visual, auditory, kinesthetic, tactile, imaginative or structural representation of an abstract concept.   Premises of the theory of embodied schema guided the analysis of the data collected for this study.

The paradigms of three major qualitative research traditions were used in designing this study. Discourse analysis assists in discerning how meaning is assigned to different schemata in the domain of music. Symbolic interactionism emphasizes that meaning is conveyed by symbols (such as language) and that construction of meaning occurs through social interaction. Cognitive anthropology focuses on the production of cognitive maps, akin to schemata, which organize phenomena through the analysis of speech samples that reflect cognitive processes. Elements of all three of these research paradigms are reflected in the design of this study.

Chapter III

Background and Research Procedures

In qualitative research, we seek to develop universal statements of general social processes, not statements of commonality or generalizability. In order for translatability to be possible, the characteristics of the group and phenomena to be studied must be delineated so that comparisons to other settings can be conducted with confidence (Bogdan & Biklen, 1998; LeCompte & Preissle, 1993). Before embarking on a discussion of emergent schemata and the specifics of language use in the music classroom, let us review where the research took place and who were the key participants.

In the first part of this chapter the reader is presented with information about the school, the teacher, and the students. This is followed by a description of the sixth grade music curriculum, with particular attention to those activities which were observed during the course of the data collection. The third part of the chapter explains procedures for data collection and data analysis that were used.

The names of the school, the teacher, and the students all have been changed to protect the privacy of the participants. To preserve the anonymity of those involved, sources for the school website and other referenced documents are not provided.

The participants

The school

I began the search for a school to collect data for this study with public school districts of the metropolitan area in which I was located. Although qualitative research is not generalizable, I thought a public school setting would be comparable or translatable to wider populations and settings. However, it soon became clear that the type of research I wanted to conduct would not be permitted in any of the area public school systems. Szego (2002) notes that this is a common problem. Permitting access to students often requires an investment of trust and time on the part of school administrators and permission to do ethnographic research is often denied or limited. Due to privacy concerns, all of the public school districts in the metropolitan area in question have instituted very restrictive conditions for researchers, including a prohibition of any kind of audio or video taping of classroom settings. After exploring public institutions as the venue for my research, I turned to private schools in my area. Mrs. Amanda Lock, an exemplary general music teacher was recommended to me, and she was the determining factor in my choice of the Woodgate School for this study.

The Woodgate School, a private day school for girls founded in the beginning of the last century, has no religious affiliation. The school is divided into the Lower School (grades 3-6) and the Middle and Upper School (grades 7-12). Each is housed in its own building and has a certain degree of independence

from the other. The school is situated in a middle to upper middle class suburb of a major East Coast city.

As stated on the Woodgate School website, the aim of the school is to educate girls to think critically and creatively, to develop their self-confidence, to explore their interests, to take risks, to respect a diversity of opinions and ideas, to exercise leadership, and to serve the school and neighboring communities. The students are expected to "model the basic values of honesty, awareness, responsibility, respect, and kindness; to appreciate a healthy mind and body; and to savor the joys of learning."

The school's website also declares the following:

(a) We believe in the importance of a sequential college preparatory curriculum, which includes strong programs in physical education and the arts.

(b) Our faculty recognizes the developmental needs and individual learning styles of students and offer a variety of teaching methods at all levels.

(c) Intellectual curiosity, risk-taking, and mental discipline are encouraged and modeled by our faculty.

Although the upper middle class socioeconomic level of the all-girl student body of the school chosen for this study might be seen as a limitation, it also provides some advantages. Some studies show, albeit inconclusively, that there may be positive attitudinal and achievement outcomes for girls in single-sex

schools or classes (Baker, 2002; Haag, 2000). Also, the verbal abilities of children

from a more advantaged socioeconomic environment can be expected to be more

developed (Atweh, Cooper & Bleicher, 1998; Biemiller & Slonim, 2001).

The teacher

Mrs. Amanda Lock teaches general music and chorus at the Woodgate

School. At the time music classes were observed and data collected she was also

the Chair of the Music Department. She is an exemplary general music teacher,

choral conductor and a recognized leader in the local and state community of music

educators.   She is vitally interested in the cognitive processes of the pupils she

teaches. I first found out about her interest in the use of language in the general

music classroom from a handout of a session that she and a Woodgate School

colleague presented at a state music educators conference. In this conference

presentation handout, titled "Finding Meaning in Music," the authors state:

> Music becomes meaningful to children as it relates to their own realms of
>
> experience and emotion. . . .   At the core our experience with music is our
>
> emotional involvement in it, which is as individual as the life we
>
> experience. We cannot, as teachers, guide children to find meaning in
>
> music if we ignore their intuitive experience with it. . . . We should work. . .
>
> hard to foster language development that will enable children to describe
>
> and understand their emotional intuitive responses to music. This is the
>
> language of poetry—of imagery, metaphor, and analogy.

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These ideas were very much in line with the topic I hoped to investigate, so I approached Mrs. Lock with a request to have her classes become the object of this study. I visited the sixth grade music classes for preliminary observations to confirm that this would in fact be a suitable setting for the research I intended to conduct. These visits confirmed that Mrs. Lock's teaching style encouraged active learning, critical thinking, problem solving and discussion about musical experiences. Students appeared to be engaged, focused and inquisitive.

During a post-observation interview, I asked Mrs. Lock to share her perspective about the role of language in the music classroom. Although in her view "you're going to learn most about music by making music," Mrs. Lock also noted:

> There's a lot of validity to having them articulate in some way their experience of music, and for me to help them [the students] through those years to find vocabulary that works. I'm not sure that we've found the right process for it. . . . Even if they can't articulate it in the sixth grade yet. . . I think it is an important element of what I do.

She cautioned, however, that this is not her ultimate objective. The real goal is related to the children's lives outside the classroom experience and indeed outside the school itself. She said, "What music's power really is in their lives I think is probably my end goal."

The observed sixth grade classes are part of Woodgate's Lower School, which includes grades three through six. There were three separate classes of approximately twenty students per class.

The Woodgate School admissions office provided these data about the student body: the current (2003-2004) Lower School is comprised of 16.3% African American students, 16.8% Asian American students, 1% Latina, 2.2% Middle Eastern, and 1% multi-racial for a total of 37.5%. In addition, 3.8% are foreign nationals. The race and ethnicity of the remaining 58.7% of the students is not identified. Information for 1999 is not readily available, but, according to both the admissions official and Mrs. Lock, the percentages are comparable. In an effort to maintain economic and racial diversity in the student body, the Woodgate School grants substantial scholarships to gifted and talented girls who do not have the financial means to attend the school. The current average financial aid grant is $12,700 toward a tuition of $20,220, with 18% of the students receiving financial aid.

In addition to studying the sixth-grade classes as entities, I tape recorded two "target students" in each of the three classes. Janice, May Chu, Dhara, Ruth, Liela and Charlotte were selected by Mrs. Lock. I requested that these girls should be as different from each other as possible regarding their ethnic background, personality, learning style and interests, but should be fairly adept at verbalizing and communicating ideas. An extensive musical background was not to be a

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determining factor in the choice of students. The teacher did not necessarily select students who were considered talented or interested in music. In fact, some were to be chosen specifically because of their lack of involvement in formal music instruction outside of the general music class environment. The target students will be discussed in Chapter V.

Parents or guardians of the six target students received letters explaining the research project (see Appendix A) and were required to return a consent form (see Appendix B). The Woodgate School did not require parental notification or consent for the students in the study who were not individually taped.

The sixth grade music program

The Woodgate Lower School curriculum includes general music for all students. Classes meet for forty-five minutes two times per week. In addition to general music classes, there are performance electives, which include chorus (starting in the fifth grade), string ensemble (starting in the third grade), as well as wind and percussion ensemble (starting in the fourth grade).

General music instruction takes place in a large, carpeted, well-lit classroom. The students usually sit on the floor in an informal manner, although stacked chairs are available. The classroom contains an impressive collection of authentic instruments from around the globe, as well as a complete Orff instrumentarium. The Woodgate School provided Mrs. Lock an opportunity to spend a sabbatical in the Indonesian island of Bali, where she studied Indonesian

music, and there are several large instruments from the Indonesian gamelan instrumentarium for the students to use. The classroom also contains an electronic keyboard and sound equipment. There are several rather old editions of music textbooks. These are used more as song resources, but not as a basis for the music curriculum.

The music curriculum

The Woodgate School music curriculum was written in 1993 by the entire music faculty of five teachers, and was in use in 1999—the year of the classroom observation. It is presently being reviewed and updated. It was created keeping in mind the philosophy of the school, as well as the personal and professional philosophy of the music teachers. As stated on the school website, the integrated curriculum is grounded in music performance, history, criticism, and aesthetics, with the goal of helping students understand how music communicates and how it relates to human feeling, intuition, and creativity.

The sixth grade music curriculum consists of five broad topics: (a) discovering musical voices and exploring sound, (b) movement in music, (c) hearing and using symbols, (d) the creative process, and (e) music as culture.

Discovering musical voices and exploring sounds. This unit includes development of the singing voice; experimentation with sounds produced by traditional instruments, computers and incidental objects; learning about polyphonic and homophonic harmony; dissonance and consonance; developing an understanding of the essential elements of sound: volume, duration, timbre,

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resonance and pitch. This unit also states these goals, which are especially relevant to this study: to "expand technical and metaphoric vocabulary to describe sounds" and to "build a bank of metaphors using imagery of energy, motion, flow, fabric and color to explore how sounds communicate."

Movement in music. This unit is not specifically about moving to music or about dance. Although innate, physical responses to music are covered by this topic, it relates mostly to understanding the concepts of beat, rhythm patterns, syncopation, stressed beat, meter, tension and release, energy and flow in terms of time and space. It is particularly telling that these elements of music are consciously linked to movement, not limiting them to an internal understanding of tonal-rhythmic patterns. This would seem to reflect the influence of Émile Jaques-Dalcroze, who advocated that musical concepts be taught through gross motor movement.

Hearing and using symbols. This unit aims at developing student skills in using standard notation for performance and composition. It follows the aural exploration of syncopated rhythms and chord building. Experimentation with non-traditional notation systems is also included in this unit.

The creative process. This unit presents the notion that the processes of composing and improvising are attempts to communicate. Clear parallels to the writing process are established, emphasizing experimentation, editing, organization, evaluation, and revision. According to Mrs. Lock, an important concept presented in the sixth grade curriculum is the many ways of creating

tension and release in music. Consonance and dissonance represent one of the subtopics of the unit. Igor Stravinsky's "Rite of Spring" was used to illustrate these ideas, and the students demonstrated what they learned through improvisation and composition, although this was not one of the activities that I observed.

Music as culture. A broad range of cultures, traditions and styles are included in this unit, stressing the importance of understanding music in its historical and societal context. American folk and popular tradition, jazz, calypso, electronic and non-traditional sound sources, classical music, opera and musical theater are specifically listed. In the sixth grade particular attention is paid to music that tells a story, such as ballads, musical theater, program music and opera. That particular year there was an in-depth study of Giuseppe Verdi's "La Traviata."

Activities presented during the observation period

During the observation period, Mrs. Lock presented ten distinct curricular activities, which are briefly described below. Some lasted only part of a class period, while others extended over several meetings. Most of the activities were observed in all three groups, but a few were observed in only one or two of the classes due to scheduling circumstances. The activities are listed in the order that they were observed.

Echo clapping. Several class sessions began with an echo clapping activity as a warm-up exercise. The girls stood in a circle and clapped an exact repetition of an improvised four-beat pattern. Sometimes the teacher created the pattern, but usually the students led the activity, taking turns by pointing to the next leader. It

required concentration, memory and the ability to maintain a steady beat throughout the activity. Verbalization was minimal.

Design Technology. The Woodgate School students participate in a program called Design Technology. The goal is to make the girls comfortable using tools, and to apply principles of design in construction. Design Technology is not a subject with a regularly scheduled time period. Several times during the year all classes are cancelled and the students spend the entire day designing and constructing projects. This is an interdisciplinary program, which also involves science and social studies teachers. This particular school year the students designed and created musical instruments, so the music teacher was involved as well. The students had just completed building chordophones, using pine boxes and rubber bands. The next project was the construction of a musical instrument of African origin, called an mbira. During the final phase of the observation period the girls were in the process of planning their third project. They had the choice of constructing a rattle, a rain stick, a xylophone or a chordophone. They worked individually, if they chose to make one of the first two, or in teams, if they chose to make one of the latter two. There were several discussions during music classes about how to improve the designs, about acoustics, as well as tuning issues.

Improvising and composing with instruments. On one occasion students were asked to create ostinatos using Orff instruments. When the task was completed, the ostinatos were combined into an improvised performance and conducted by one of the students who showed individual performers when to enter.

This was followed by a prolonged analysis of the performance's form and texture, leading to an improved second performance. On another occasion, when there was time left at the end of an activity, the teacher led the students in an improvised timbre piece for a variety of definite and indefinitely pitched percussion instruments. A discussion on the source of unity and texture followed. It was clear both from the performances and the subsequent discussions that these types of improvisations occurred often in Mrs. Lock's classroom.

Interpreting a song through movement. Students were instructed to find the Israeli song "Tzena, Tzena" in their textbooks (see Appendix C). The teacher asked the students to sing the song and to reflect the quality of the music in their voices. She demonstrated by playing the song two different ways. The first time the articulation was heavier; the second time it was lighter and the notes more detached. She let them know that the first rendition was not the one that she preferred. She and the students conversed about the differences. She then asked them to express themselves with physical motion while listening to the song, and to determine whether they felt the energy of the song was telling them to move into the floor or off the floor. This was followed by an extended discussion about the relationship between the music and physical motion.

The basics of harmony. The song "Tzena, Tzena" was later used to introduce lessons on harmony and chord construction. The girls were directed to each get an Orff instrument (xylophone, metallophone or glockenspiel). Mrs. Lock explained that one of the best ways to harmonize is to create chords, which are

simply combinations of two or three pitches. This led to a discussion of consonance and dissonance, followed by an extended explanation and conversation of how a triad is constructed. The teacher also introduced a musical concept that simple songs can be harmonized using the tonic, the dominant, and the subdominant. Only the roots of those chords were used at this time.

Comparing two ballads. The students received copies of an English ballad "The Golden Vanity" (see Appendix D). The lesson began with Mrs. Lock asking the girls to look at the music and talk about what they expected to hear. There were lengthy discussions on students' predictions about the tempo, the rhythm, the mode, the mood and other musical elements of the ballad. The song was then sung to verify the predictions. The elements of a ballad were also discussed. On another day, the girls received copies of another ballad, "The Turkish Revery" (see Appendix E). This is the American version of "The Golden Vanity" with a striking twist in the plot and a number of musical contrasts. The girls again were asked to predict what they would hear based on the music they saw. After singing the song, the teacher asked the students to compare the two ballads and speculate about why the song had changed its character so much when it was brought to the New World.

Classifying and describing instruments. Students were asked to listen to a piece of music from Uganda, but were not given any information about the performer or the instruments involved. After an extended discussion, it was revealed that all of the accompanying sounds they had heard were created using bamboo. This served as an introduction to a small group activity on the qualities of

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sound. Students were asked to choose a classroom instrument, to experiment with it and fill out a worksheet describing various aspects, such as amplitude, range, classification and timbre. In a follow-up activity the students exchanged worksheets with a partner and had to guess which instrument was being described, merely from the written descriptions. The names of the instruments were not written on the worksheets. The students then shared with the entire class, describing which "hint" on their partner's worksheet helped them the most in identifying the instrument that was being described.

Exploring interesting sounds. The activity began with a discussion on resonators and whether a collection of cookie cooling racks and oven racks that Mrs. Lock had brought to class could be considered musical instruments. The students were then assigned to work in groups of three. Each group was given a wire rack with two strings attached. One student was to hold the rack by the strings and have another student strike the rack with a tuning fork   Next they were to wrap the strings around their index fingers, place their fingers into their ears and have the rack struck again. The latter part of the exercise produced some very interesting sounds, which were completely different in quality and amplitude from the former. Students were instructed to talk about the differences between the sounds, possible reasons for the differences, whether the sounds were musical, and whether a composer could use those sounds in a composition. The activity led to a broad discussion about the physics of sound, acoustics, resonance, sympathetic vibrations, amplification and timbre.

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Chord construction. A few weeks after the initial presentation on the basics of harmony (described earlier), the teacher continued instruction on keys, scales, and the use of the I-IV-V progression in harmonizing songs. The students were given worksheets to help them construct triads in several keys. The dominant seventh chord was also introduced. Working in small groups, the girls were asked to practice playing chord progressions on Orff instruments in the key of their choice.

Experiments in the physics of sound. The final observed activity was a series of experiments demonstrating the motion and effects of sound waves. The students were asked to think about the source of sound and how sound travels from its source to the ear. The girls were divided into small groups. In the first of two experiments they were to strike a tuning fork on a hard surface and to place the vibrating tips close above the surface of a glass of water, without submerging the tuning fork. This action produced rings of ripples on the water's surface. In the second experiment the girls were to lightly touch the tuning fork to a sheet of paper that had pencil shavings on it. Most groups were able to produce a soft, buzzing sound. Finally, the students were to place a small amount of pencil shavings on a single bar of a xylophone or metallophone. The shavings were placed on either side of the place where the bar sits on the resonator box. Then they were asked to repeatedly, but gently strike the center of the bar with a mallet and to observe what happens to the pencil shavings. The pencil shavings moved toward the bar's

acoustic "dead spot," which led to a discussion about the nature of dead spots and why they occur.

Data collection

Mrs. Lock's three sixth-grade classes at the Woodgate School were observed and recorded over a period of seven weeks from February 22nd to April 9th, 1999. Each of these classes met twice a week for a forty-five minute period. According to the teacher, the schedule during that particular semester was highly irregular because of class cancellations due to snow days, last-minute assemblies and class events. This necessitated an unforeseen return for additional observations after the spring vacation. The class observations were sequential with the exception of a one-week gap following the spring break due a previous commitment that I had made.

My role was that of participant-observer. I usually sat in the back of the classroom next to the tripod with the video camera. When necessary, I adjusted the placement of tape recorders and microphones. Occasionally, I engaged in the ordinary activities of the group at the direction of the teacher, but did not intervene to redirect those activities. Sometimes students asked me questions as I approached them during small group activities. On some occasions I questioned students, sharing some of the observations with the teacher for feedback. My intent was to observe and describe an existing situation, and not to influence any change in language use as I was collecting data.

The primary method of recording data was audio recordings using portable cassette recorders. One cassette recorder was placed in a central location in the classroom to record the class proceedings. The previously described "target children," as well as the teacher carried small, individual tape recorders in pouches, which were attached to belts on their waists. They also wore lapel microphones during the recorded class meetings. The discourse of these seven individuals was transcribed completely, so that they could be tracked and profiled over the course of the study. The microphones on the cassette recorders worn by the teacher and the students also recorded the general proceedings of the class, in addition to the discourse of each individual.

In cases where the students were divided into groups for discussion, composition or other cooperative activities, each group was recorded separately. In such cases the number of groups varied from two to seven, depending on the activity.

I also took field notes on a notebook computer. Notes included descriptions of events, which would not be recorded on the audiotape, as well as observations, comments about the ongoing activities, and other notes, which were later helpful during the preparation of transcripts. A stationary video camera was used for the purpose of aiding transcription of the audiotapes.

In May, one month after completing the observation period, before the end of the school year, I returned to the Woodgate School to conduct individual interviews with each of the target children. I asked them about their musical

background, their interest in music, and about the observed activities in the music class. Upon completion of the individual interviews, the students were invited as a group to the school conference room for refreshments, so that I could thank them for their participation in the research project, and to give them an opportunity to make some final observations about the experience. This meeting was also audiotaped.

Mrs. Lock received the completed transcript in the spring of 2003. Since the amount of data was extensive, I did not ask her to read it meticulously. Also, I did not want to direct her attention to any single aspect of the transcripts or to predispose her reading in any way, so my guiding questions were very broad. I asked for a general reaction to the transcriptions. I also asked her to note if anything surprised her, or if the material confirmed what she expected to find.

Several weeks later I gave Mrs. Lock an early draft of Chapter IV in which I presented the emergent schemata. Up until this point I had not discussed my approach to analyzing the data through the lens of cognitive linguistics with Mrs. Lock. In July of 2003 I interviewed her and presented more specific questions about both the transcripts and the chapter draft. She also was asked to read the final draft of the dissertation and to provide comments and observations. Information gleaned from interviews with the teacher and the students is found in Chapter V.

Triangulation of data collection for the purpose of establishing validity was achieved through the recording of field notes, audio and video taping of the entire

group, individual taping of the teacher and the target children, and by conducting interviews with students and the teacher. A view of the situation was obtained from three different perspectives: (a) the perspective of the researcher, (b) the teacher, and (c) the two target students in each class. Constant tracking and subsequent interviewing of the target students provided additional verbal protocol material. Some of this discourse might generally be considered "off-task," but in fact provided useful and interesting data.

Participant awareness of the research project

Researchers are concerned about how their research project and even their mere physical presence may influence observed activity. This was intended to be a descriptive study. Even though I informed the teacher as well as the students that I was interested in classroom discourse, I made no attempt to influence the teacher or the students in their use of language. Although awareness of the research project may have influenced the discourse, it was hoped that over time the subjects would become less conscious of the microphones and an outside presence, and would revert to their "normal" patterns of behavior.

The teacher in particular was aware of the fact that figurative language was the object of this study. I asked Mrs. Lock whether she thought the research project prompted her to interact with students any differently, to use figurative language to any greater extent than was usually used, or to change her choice of activities. She stated that her intent was to teach the lessons as she would typically teach the class

because she knew that was what I was interested in observing. She did acknowledge, however, that any time someone else is in the room the teacher has the sense of being "more on notice."

I posed the same question to the students who were interviewed after the data had been collected. All six students said that after the first day they forgot that they were wearing a lapel microphone and did not think my observation prompted them to speak any differently than they usually do. One student, Dhara, said that although she did not think she spoke any differently, sometimes she felt compelled to "talk something smarter, or (give) better answers."

Asked why they thought they were chosen by the teacher to be a student to be taped, the girls responded in various ways. May Chu and Charlotte said they did not know. Ruth said, "Probably cuz I talk a lot in class when I'm supposed to, and when I'm not supposed to. I just talk." Dhara thought she may have been chosen because she plays an instrument and usually talks a lot. Janice also thought she was picked because she's "usually really talkative" in class. "And for the most part I know where we are in music and everything. Some people are just like sitting there and not paying attention. But usually I'm paying attention." Liela said she was not sure why she had been chosen. She acknowledged that she is usually quieter than the other girls, but noted that she participates in class discussions.

Transcription

Audiotapes were transcribed verbatim using a slightly abbreviated system described by Gumperz and Berenz (1993). This system is suitable for conversations, as well as for monologic texts. There was no attempt to record everything that was audible or to provide exact measures of pitch or duration. However, the symbol system helped identify the interactive aspects of conversational management, speech events, timing and intonation, as well as nonverbal phenomena. Appendix F contains a table of transcription notation symbols. Appendix G contains an excerpt of a class transcription using the transcription notation system.

Nineteen class sessions were audiotaped and transcribed in their entirety. Each class transcript was compiled from several tapes. The basis of each transcript was the audiotape of the teacher. Since not all discourse was audible on the audiotape of the teacher, the transcript was then amplified by the "general recording" tape, which was recorded in a different area of the classroom. Finally, the utterances of the two "target" students were also added to the transcript. In classes where small group activities occurred, each group was also recorded. The transcriptions of these additional tapes were included in the final transcript. This method of producing a cumulative class transcript from several audiotapes reduced to a minimum the number of unintelligible passages. Although the occurrence of open parentheses, signifying unintelligible speech, might seem frequent when

reviewing the transcripts, in most cases, the unintelligible portions were a single word or the length of a short phrase.

A total of one hundred and eleven forty-five minute tapes was transcribed to create the transcript. The transcript of the nineteen lessons is contained in four hundred and fifty single-spaced pages.

When transcription data are cited in the subsequent chapters of this study, they are presented using standard English punctuation rather than the transcription symbols given in Appendix F. However, some of the transcription symbols are retained in the citations. When emphasis of certain words is not sufficiently clear from the context of the excerpt, the asterisk (*) or double asterisk (**), indicating extra prominence, are shown before the accented words, as in the transcript. When speech is inaudible or unintelligible, open parentheses ( ) are used. When an informed guess can be made at an unclear word or segment, that word or segment is placed in parentheses.

When citing conversations, the capital letter "T" signifies that the teacher is speaking, and the letter "S" signifies that it is a student. Occasionally, one of the "target students" may be identified instead of using the generic designation of "S" for Student.

Words or phrases in cited transcript sections are underlined to draw the reader's attention to them for their illustrative value. The reader can assume that if no source documentation is given, all examples of discourse that are indented or in

quotation marks are taken from the class transcripts. Quotations from interviews

with the teacher or the six students are identified as such.

Categories and coding

When the complete transcriptions of class instruction were reviewed,

coding categories were developed on a post hoc basis. A priori categories were not

determined to be useful. I chose to code the data into categories in these three

steps.

Instructional activities. The first coding step delineated instructional

activities. During the observation period the teacher presented ten distinct

activities, which were described earlier in this chapter. These segments included all

discourse from the beginning to the end of the instructional activity. That includes

classroom management episodes, as well as instruction. Most of the transcribed

data were included in one of these activity codes. The exceptions were:

assembling for class, transitional dialogue between activities, and conversations

during the dismissal phase of the class.

Expressive language. In Chapter I a distinction was made between two

types of language used in the music classroom. The first category was referred to

by various authors as professional, process, denotative or analytic language. The

second category was identified as experiential, connotative, metaphoric or

figurative. The latter category is the focus of this study. Therefore, the first task

was to narrow the scope of the data by delineating those passages of the transcribed

lessons, which were to be analyzed further. I coded these passages with the

intentionally broad label of "expressive language." The label "expressive language" was chosen to be more inclusive than other labels mentioned here (such as metaphoric or figurative). This is not a term that I have used or defined elsewhere in this study since its sole function was to mark those passages of the transcript that would be analyzed further. "Expressive language" passages include instances of figurative speech, comparisons, as well as other non-technical ways of talking about music and its elements. Some of these passages were only the length of a single phrase, while others encompassed several pages of transcription.

Only discourse that referred to music or the process of understanding music was coded as "expressive language." Therefore, there were many instances of figurative language in the data that were not chosen for further analysis. For example, the teacher used the metaphor "thinking is moving" when she said, "I'm going to quickly run through this with you" while giving directions for an activity. Since she was not referring to music or the process of understanding music, it was not included in the "expressive language" category and was not selected for further analysis.

Embarking on the study of metaphor in education can take the researcher in a variety of interesting directions. For example, Sternberg (1990) analyzed metaphors as foundations for theories of intelligence. Yero (2002) discussed various metaphors of education, such as "a lesson is a journey," "time is a resource" or "concepts are objects". However, these types of metaphors are also

beyond the scope of this study and were also not included in the category of "expressive language."

If the language used to describe music was figurative, but also commonplace, it was not always included in the "expressive language" category. For example, the teacher compared the root of a chord to the roots of trees, making the point that the root of the chord will always be below the other notes of the triad. Referring to the lowest note of the triad as the root is certainly metaphoric, but also so common among musicians, that we might refer to it as a "dead metaphor," much like the "leg of a table," as discussed in Chapter II. While many theorists would claim that these literal metaphors continue to carry hidden meaning, they were often omitted in the coding process. Because they are common in the lexicon of music teachers and students, I felt there was no need to draw attention to them. It is my aim to describe the figurative language that is less apparent to the casual observer so that this information could be used for developing metaphoric capacities in classroom discourse. Similarly, there were numerous examples of metonymy that could have been coded (e.g., "Am I a low instrument?"), but they were not of sufficient significance for the same reason.

Emergent schemata. The third coding step was examination of the sections coded "expressive language" in search of emergent schemata of figurative expressions that were prominent and occurred repeatedly. The search for these emergent schemata was shaped by the theoretical underpinnings and assumptions of cognitive linguistics (Lakoff, 1987, p. 269). The reader is reminded that Johnson

(1987) proposed the term image schema to define meaningful structures for organizing our experiences and comprehension, based on constantly recurring bodily experience. He sought to explore how these kinds of structures are created in order for us to experience, understand and reason about the world. Gibbs (1998) calls these image schemata patterns or experiential gestalts, "that emerge throughout sensorimotor activity as we manipulate objects, orient ourselves spatially and temporally, and direct our perceptual focus for various purposes" (p. 113). This was discussed more comprehensively in Chapter II.

The five main schemata that emerged in the data are presented in Chapter IV, namely: containment and entity, personification, verticality and regularity versus irregularity, and location, space and movement.   There was also a sizable body of figurative language that did not fall into a single conceptual schema. If schema is a recurring level of organized unity (Johnson, 1987), there was one category that did not fit this condition. This was language used to describe timbre. All of these expressions were coded into a separate timbre category. These examples will be discussed in Chapter IV as well.

Most of the emergent schemata, as well as the category of timbre are located within the "expressive language" passages. Occasionally, for purposes of syntactic clarity, the emergent schema passages were extended beyond the boundaries of the "expressive language" passages. The verticality schema, however, was coded throughout the entire data set. The reasons for this will be explained in Chapter IV.

The coding system described above was used only for transcripts of the nineteen observed class sessions. Transcripts of interviews with the teacher and the six target students were not coded, since they were considered supplementary material. The search for schemata was restricted to discourse that was conducted in the context of classroom instruction.

Coding was done using an Australian software program called NUDIST (Non numerical Unstructured Data Indexing Searching and Theorizing) Vivo 1.3 (version 1.3.146) developed by Qualitative Solutions and Research Pty. Ltd (Copyright © 1999-2001). This is a multifunctional software system for the development, support and management of qualitative data analysis. It allows the researcher to create a storage and retrieval system, to search for words and phrases, to create an index system, to link categories and explore links, find and analyze emerging patterns. An excerpt of a coded transcript is shown in Appendix H. The coded portion of transcript shown in Appendix H is an excerpt of the transcript provided in Appendix G. The names of target students in the coding have been blocked out to preserve anonymity.

<u>Summary</u>

Three classes of sixth graders at a private day school for girls were studied over a period of seven weeks. Classes were audiotaped and field notes were taken about the proceedings in the class. Additionally, two children from each class, as well as the teacher, were taped individually to provide a complete profile of their

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language use over the course of the study. All six individually taped subjects, as well as the teacher were interviewed after the seven-week observation period. The role of the researcher was that of participant-observer.

Once the recorded data were transcribed they were coded for analysis. Use of figurative language during music class discourse was the focus of attention. The search for emergent cognitive schemata was shaped by the theories of cognitive linguistics. The process of analysis, with the assistance of a data indexing software program, revealed cognitive schemata of the domain of music.

Chapter IV

Emergent schemata

In Chapter II, I discussed the idea that our conceptual system is fundamentally metaphorical in nature. The concept is based on the work of linguists, psychologists and philosophers such as George Lakoff, Mark Johnson, Mark Turner, Gilles Fauconnier, Raymond W. Gibbs, Jr. and others. They posit that figurative expressions encountered in everyday situations are not random occurrences, but rather form coherent systems and cognitive categories, which will be referred to here as <u>schema</u> (singular) or <u>schemata</u> (plural).

In analyzing the data, the search for emergent schemata of prominent and repeatedly-occurring figurative expressions was shaped by a continuous appraisal of the theoretical underpinnings and assumptions of "cognitive linguistics" (Lakoff, 1987, p. 269). It was guided by Johnson's (1987) understanding of schemata as meaningful structures for organizing our experiences and comprehension, based on constantly recurring bodily experience. These assumptions were discussed in Chapter II. In some cases schemata that have been identified by other researchers were found to be applicable to this data. In other cases I proposed my own schemata that I believed encompassed and defined a certain category of discourse. The five schemata that emerged in the data and which are presented in this chapter

are: (a) <u>containment and entity</u>, (b) <u>personification</u>, (c) <u>verticality,</u> (d) <u>regularity versus irregularity</u>, and (e) <u>location, space and motion</u>.

I am not suggesting that these five schemata are the only ones to be found in the data. A linguist, a musicologist, a philosopher or a psychologist might have focused on different aspects of the discourse and used different criteria to categorize figurative language. Different schemata might have emerged from such analysis. My reading of the data was shaped by my perspective as a music teacher. Although applicability to teaching and learning was not a condition that I used to generate the final list of schemata, the all-important question, "So what?" was always in the back of my mind. "Emergent" is the operative word in describing the process of generating these schemata after repeated examination of the transcripts of nineteen class sessions.

In this chapter, each schema is introduced with an overview of relevant theory and background. This is followed by a presentation of examples from the research data. The reader is reminded that words or phrases are underlined to draw attention to them for their illustrative value in a particular schema, and that certain transcription notation symbols are retained for clarity, as explained in Chapter III. Each section ends with a discussion of the significance of the material presented.

The reader may sense a certain amount of tension when reading the subheadings in which various metaphoric schemata are presented using the word "is" instead of "as" (e.g. "Music is a container" instead of "Music as a container"). This is intentional. The comparison created with the use of the words "like" or

"as" would change the figure of speech from a metaphor (in the traditional sense) to a simile, weakening the semantic transference between the tenor (the literal topic) and the vehicle (the figurative). The form used here is also a convention used throughout the literature of cognitive linguistics.

Containment and entity

Background

A good example of a schema involving bodily experience is the <u>container</u> schema. At the heart of this schema is the experience of our bodies as entities or containers, which have an inside and an outside (Gibbs, 1998; Johnson, 1987; Lakoff & Johnson, 1980). We put food, water and air into these containers, and wastes, air, blood, and other substances emerge from them. We also experience physical containment in the things that surround us: we move in and out of beds, clothes, bathtubs, rooms, vehicles and other kinds of spaces that have physical boundaries. We see, touch and manipulate objects, and place them into containers that have an inside and an outside, such as cups, boxes and bags.

Three mandatory parts comprise these containers: an inside, an outside, and a boundary that separates them. Therefore, something is either <u>in</u> or <u>out</u> of the container. The physical boundary can impose constraints: it can protect the container's contents from external forces; it can restrict the motion of the objects or forces within the container; it can restrict or facilitate the view of the contained objects; and it can maintain the contained objects in a relatively fixed location.

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This understanding of bounded space is viewed as the basis for understanding set membership theory, an idea basic to logic and reasoning. If set A is contained by set B and set B is contained by set C, then set A is a member of set C (Johnson, 1987; Lakoff, 1987; Lakoff & Johnson, 1999).

We can also experience as containers physical entities which have no distinct boundaries, such as forests, fields and clouds, by projecting boundaries upon them. We can impose boundaries on a visual scene, on something we hear, on our motor movement, and numerous abstract experiences, such as emotions, the mind, linguistic meaning, moral obligations and social institutions (Gibbs, 1998; Lakoff & Johnson, 1999). "However, they all require some activity of establishing relations, either among physical or among abstract entities or events" (Johnson, 1987, p. 31).

There are numerous examples of metaphors containing the particles in, into or out. For example, when we do something in ten minutes, we experience time as a container. When things come into and go out of sight, the container is the visual field. Personal relationships can be understood in terms of a container, for example when one is trapped in a marriage and can't get out of it. When we emerge out of a stupor, or get bailed out of trouble, the container is our mental state (Lakoff, 1987).

Clearly, the human experience is filled with activities and other phenomena conceptualized as containers. As Lakoff (1987) points out, "the container schema is inherently meaningful to people by virtue of their bodily experience" (p. 273).

<u>Instances of containment and entity in the data</u>

The language of music abounds with expressions that use the particles <u>in</u>, <u>into</u> and <u>out</u>, which, as stated above, imply a bounded entity. The data generated in Mrs. Lock's classroom were no exception. The container metaphor was the most common schema of all found in the sections of text chosen for analysis.

<u>Key and mode.</u> Many container references are so common in musical discourse that we rarely pause to consider them. The most frequent instances in the research data were references to being in a certain key, scale or key signature. For example, during a particular lesson the teacher made these observations: "We'd have to use these pitches because we're <u>in</u> the C scale," or "it's all <u>from</u> the same scale; we don't have anything <u>in</u> here except notes from the C major scale," and "there are flats and sharps <u>in</u> the key signature." Similarly, students remarked that, "Some of them have special kinds of notes that are <u>in</u> different keys" or asked, "Shouldn't that like resolve <u>into</u> a C major?"

References about being in a certain mode were almost as common. For example, the teacher inquired, "So if the chords are <u>in</u> minor, what might you predict about the melody?" or "Is there anything besides the fact that it's <u>in</u> minor that makes it sad?" In one response, a student noted that, "<u>In</u> major it [the melody] sounds cheerier, <u>in</u> minor it sounds kind of dark and gloomy." In the following exchange between teacher and student one could imagine that the song is being removed from one container and placed into another:

S: Could you play it <u>in</u> minor?

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T: Would I play it <u>in</u> minor? Mhm. So, that means you knew it was <u>in</u>

major, right?

S: Yeah.

T: O. K. [The teacher sings and plays the song—which was originally in

the major mode—in minor.] Having heard it <u>in</u> minor, which—

S: That sounds better.

During a classroom discussion of the ballad, "The Turkish Revery," (see

Appendix E) it was noted that the song is in minor. One student associated that

characteristic with the state of mind of the composer, observing, "A lot of artists

when they're making pictures, when they're <u>in</u> a bad mood, they draw like dark

pictures. Well I think the person who wrote this, he's <u>in</u> a bad mood."

The examples given above are only a small sampling from the data of the

many instances of key and mode perceived to be containers. While these examples

are expressions common to every musician, I draw attention to them because few

readers might have thought of key or mode being a bounded entity—a container.

In the next sections we move on to examples of container schema that are not as

obvious.

<u>The body is a container for music</u>.   There were an unexpected number of

references to the body or parts of the body as a receptacle for music or particular

elements of music. During a small-group activity one student attempted to answer

a worksheet question about the source of sound after a certain experiment had been

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conducted in the group. "I don't know—it wants to take a stroll <u>into our ears</u>!" she exclaimed.

Many examples of the body being perceived as a container for music were in relation to "Tzena, Tzena," an Israeli song in the music textbook (see Appendix C). After singing and clapping the song, the teacher asked the students to "transfer the beat that you <u>put in your hands to your feet</u>. But I want you to do more than just keep the beat. I want you to see if you can make your feet—the way you feel the <u>beat in your feet</u> respond to . . . the music." At another time the teacher asked students to imagine they were choreographing the song and to think about the "feeling <u>in your feet</u> of the beat."

In some cases the voice was considered synonymous with the body, which again was imagined as a container. In a different group, the teacher asked students to sing the same song, "Tzena, Tzena" with this instruction, "I would like you to reflect <u>in your voice</u> the quality of the music." One girl suggested that adding instruments would make the song livelier, which resulted in this exchange:

T: How can you do that without instruments?

S1: You can have some beat <u>in your voices</u>?

T: Have some beat... turning your voices <u>into what</u>?

S2: <u>Body</u>?

T: I think so. There was no sense of the beat <u>in your bodies</u> as you sang. . . You're going to enjoy it more, you're going to have more fun with it if you

put the energy in it that it needs. So can we try it again? And I want to hear

the beat <u>in your bodies</u>.

During an echo clapping activity the teacher explained that "the ultimate

goal is for you guys to actually <u>internalize that beat</u>. . . . and I'm going to be

looking around to see what kinds of things you do with your body to allow this

slower beat to <u>sink in</u>." While doing the same activity with a different group of

students, the teacher admonished, "If you don't have a sensation of beat <u>in your</u>

<u>knees</u>, you're not doing this right."

In a lesson on differentiating a triad from a seventh chord, Mrs. Lock

appealed to students for more active involvement. "Now I'm asking you to listen

with your ears. Listen with your knees. Listen with your mind. Listen with your

nose. How does it affect you? What do you hear?"

From these examples, most of which were generated by Mrs. Lock, it would

appear that the teacher equated internalization of music or musical elements into

the body as confirmation that the girls were responding properly to the material

being taught. In these examples, music was perceived as a force that works from

the inside out and the teacher wanted to generate physical evidence of this.

Music is a container. As we have seen in the previous section, the body can

be a container for music. However, music itself can also be perceived being a

container. During various lessons the teacher asked students what they "heard <u>in</u>

the music," whether there was "a change <u>in</u> the music," "what's the difference <u>in</u>

those sounds," "what does it mean if we make harmony <u>in</u> music?" At one point

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she corrected herself, observing "I shouldn't say never. Music never has 'nevers' in it. Math does, but music doesn't." On another occasion a student noticed that if a song has "flats in it, . . . it's gonna be like not real bright." When the teacher asked, "What's the function of a scale in music," a student answered, "To get in tune."

The concept of music was sometimes perceived more tangibly, taking on the form of a measure, section, song or composition. These forms of music were also perceived as containers. For example, there were frequent instances such as "in the middle of the measure," "in section three," "in the beginning," "what kinds of fast notes do you see in there?"

When asked to describe the energy of the song "Tzena, Tzena," one student compared it to an enclosed room, and the energy of the song to a bouncing ball:

S1: I envision a ball in a little enclosed room

going, "dam-ta-da-ra-da-ra" against the wall [the other girls laugh]

and it keeps going, cuz it's a bouncing ball, but it's enclosed in a room so it

can't like stop.

T: So, you see it as kind of compact energy, not a huge great big—

S1: —but lots of energy compacted into a small place.

S2: like me.

T: compacted—

S3: —yeah, yeah.

References to the various elements of music also contained the words in and out. For example, "in that [vocal] range," "there was a change in pitch," "there wasn't an awful lot of variety in the texture," "it was in the harmony," "that vibration grows in its volume," "Didn't you hear that in the rhythm?" and "is the accent in a 'ta-timri-ta-timri' [in reference to a Kodály vocalization of a rhythm pattern] where you expect it?" At one point in a lesson Mrs. Lock explained that "resonance is the place the sound lives and grows."

In some cases these same elements of music did not contain the particles "in" or "out," but nevertheless were perceived as a bounded entity with a physical form. For example, during a particular lesson the teacher asked the students to "cut the amplitude in half," "please watch the amplitude," "girls. . . a quarter of the volume, a quarter of the amplitude that you've been using." Students were encouraged to "keep the beat," and to not "lose the beat" and rhythms could be "smooth," "choppy," "uneven," and "bumpy." Students were "creating harmony," "building a seven chord," and the teacher asked, "What were you doing that made it harmony?

Musical performances are containers. Not only are music and the elements of music perceived as containers. Music performances can also be containers. For example, the teacher warned the girls not to start singing too soon, so they would not have to think, "Oops, am I going to be singing a solo if I come in here?" After an instrumental group improvisation in which the students were to use ostinatos that they had just created, one girl remarked, "I thought that it sounded kind of

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festival-like and then Catherine came in with her junk band." The evaluation of the

performance continued, with particular attention to the shape and textural plan.

The students were also to decide which instruments should remain in the next

performance of the improvisation, and which ones should be eliminated.   The

process of deciding about how to proceed with the composition conjures up images

of making soup in a large kettle, adding and removing ingredients:

> S1: I'd take out like the (inaudible)
>
> T: O.K. . . . So we would take Janice out. What else would you take out.
>
> And again Lizzy, why would you take her out?
>
> S2: ( ) because like the different pitches...
>
> T: The pitches didn't work with the (cage) over there, right? . . . Are there
>
> any others you would take out?
>
> S2: I think *that one because like the sound of that instrument is a little
>
> different from the rest of them. . . .
>
> S1: I probably would take out mine and maybe Margie's?
>
> T: Because? . . .
>
> T: O.K., it's a pitch clash kind of problem. . . the pitches don't work? . . .
>
> S3: I'd take out the metallophone because there are a lot of sort of bells and
>
> drums, and the metallophones don't really go with that kind of feeling.
>
> T: Keep that thought. Though considering what's already been dropped
>
> out. . . . O.K., I have one that I would take out, and I'm not sure that I
>
> wouldn't replace it... the slapstick over there. . . .

S4: We should just <u>take out</u> a lot of the drums because there's a lot of them.

S5: yeah. . . .

T: It's your decision, do you want all these drums?

S6: Don't, don't *do it, don't do it—nooo! [in mock desperation]

T: Oh yours is already *<u>gone</u>. Yours is <u>gone</u>! [laughter] . . .

S6: <u>I'll just step out of the circle</u>. . . .

S7: <u>Cut out</u> (some of the percussion).

S6: And <u>add</u> more *melody. . . .

T: Add more melody? Girls, when we think about the various ways of creating texture, volume is only one of them. What's another really important part? . . .

S6: Make a whole lot of them. . . . Have a whole lot of a certain instrument, so (it would) be thicker. . . .

T: that's the way to get it thicker, but what if you want it thinner?

Notice that the girl whose instrument was eliminated suggested that she should "step out of the circle," that is—she should remove herself physically from the "performance container."

Johnson (1987) also offers examples of events as containers, for example, "Tell me your story again, but leave out the minor details" in which the story event is a container, or, "I give up, I'm getting out of the race" in which the race event is a container. He explains the figurative use of the word <u>out</u> in events interpreted as spatially-bounded entities as:

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a primitive case of metaphorical extension of the preconceptual OUT

schema. The OUT schema, which applies prototypically to spatial

orientation, is metaphorically projected onto the cognitive domain where

there are processes of choosing, rejecting, separating, differentiating

abstract objects, and so forth. Numerous cases, such as <u>leave out, pick out,</u>

<u>take out,</u> etc. can be either physical bodily actions that involve orientational

schemata, or else they can be metaphorically oriented mental actions.

(p. 34)

In this case the students were talking about leaving out and adding sounds to a

composition, even though the physical bodily action of playing an instrument was

involved.

The data example above also contained frequent use of metonymy when

names of instruments or students represented the sound to be produced by a

particular performer. In one instance "Catherine came in <u>with</u> her junk band," but a

few turns later, there was a suggestion to take <u>Janice</u> out, and even later there was a

suggestion to take out the <u>metallophone</u>. The performer, the instrument the

performer plays, and the sound performed on the instrument all are regarded in

relation to the performance container.

<u>Discussion</u>

In "The Public and the Artist," published in a 1922 issue of <u>Vanity Fair,</u>

Jean Cocteau wrote, "I want someone to build me music I can live in, like a house.

Music is not all the time a gondola, or a racehorse, or a tightrope. It is sometimes a

chair as well" (cited in Sommer & Weiss, 1996, p. 297). One can accuse Cocteau of a motley compilation of mixed metaphors, but he certainly illustrates the point that music can be envisaged in very different ways. The reassuring comfort of an enveloping house or chair contrasts sharply with the excitement of a racehorse or a tightrope. How we conceptualize music is very often not an abstraction, an emotion or a process. The examples presented from this data reveal that music, the elements of music, and the receptacles of music are often perceived in very physical terms.

For a music educator this raises many questions. Let us recall the properties of a container described in the introductory remarks of this section. Containers contain three parts: an inside, an outside, and a boundary that separates them. Therefore, something is either in or out of the container. The physical boundary imposes constraints and protects the container's contents from external forces. It can restrict the motion of the objects or forces within the container and it can maintain the contained objects in a relatively fixed location. Are these container metaphor properties beneficial for a music teacher, and can they be helpful in the process of constructing meaning? Conversely, is the imposition of these properties onto musical phenomena a hindrance that impedes instruction of certain aspects of music? In either case, can language be used to either encourage this conception, or, if it is deemed to be not beneficial, to steer students away from it? These are questions that should be addressed by the music education community.

<center>Personification</center>

Background

"Art is a jealous mistress," said Ralph Waldo Emerson. While the role of personification in literature is unquestionably extensive, its role is not as apparent in the music classroom. Nevertheless, examples of personification were found throughout the data. This schema is closely related to the containment schema. In several cases, the previously described entities (containers) have attained human qualities, such as desires, opinions, intentions.

Personifications are "metaphors through which we understand other things as people" (Lakoff & Turner, 1989, p. 72). We can best understand things when they are put in human terms, when we give them human motivations, characteristics and activities (Lakoff & Johnson, 1980). "Personification permits us to use our knowledge about ourselves to maximal effect, to use insights about ourselves to help us comprehend such things as forces of nature, common events, abstract concepts, and inanimate objects" (Lakoff & Turner, 1989, p. 72).

Instances of personification in the data

The personification of music. Throughout the data we see instances of music personified. Songs were often referred to as having an "overall character." A song could "change its character," have "energy or motion" and "affect your mood." We see that music is capable of relaying information and telling us what to

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do. In one activity, after singing the song "Tzena, Tzena" with the students, Mrs. Lock stated:

> T: If you were dancing, get a sense of whether this <u>music wants you to be</u> into the floor or off the floor.
>
> S: I think <u>it wants you to be</u> off the floor, like jumpy kind of.

The following exchange indicates an out of the ordinary development. Not only is the music personified, but the floor itself becomes an active participant. In order to better convey what it feels like to be moving off the floor, the teacher said: "In other words you think <u>it</u> [the floor] <u>springs you away"</u>.

This was followed by a reference to personified beat. The teacher said, "You want to feel the beat. Does <u>it want</u> to go into the floor, or does <u>it want</u> to spring off the floor." One student replied that "<u>it makes you want</u> to move really fast," and another added, "if it was like a slow beat and legato you'd <u>flow with it</u>, you wouldn't always be jumping, jumping up and <u>energized</u>."

The second time Mrs. Lock taught this lesson to a new group (on the same day), a similar exchange took a considerably longer time, and she greatly expanded the use of personification. In the following dialogue, we see the metaphor frame extended over several speaking turns between the teacher and a number of students. Some students participated fully in the extension of the personification, while others (i.e. Student 2) appeared to "sidestep" it:

T: This time I want you to do something with your feet on every beat,

O.K.? Let the *music tell you what to do, though, girls. . . . The music, the

quality of the beat is what should direct what you do with your feet.

The girls moved to the song, but Mrs. Lock was not satisfied with their efforts. She

asked them to do it again, saying, "Let's see if this time you can *really *listen to

what the music is saying to do with your feet." After a second attempt, she asked a

more specific question:

T: This time I want you to ask yourself when you finish, "Did that music

tell my feet to have a sensation of moving *off the floor or *into the floor?

Which one did the music tell me to do—was it a feeling *in or *off?"

The girls moved to the beat of "Tzena, Tzena" once again, and then responded to

the teacher's question. Notice that now the music is no longer merely speaking, but

in some cases compelling the students to action:

S1: It made me feel like I wanted to jump around. I think it has a bouncy

feeling, so it made me feel like I want to go off. . . .

S2: I thought, well, at first that I was like going *into the floor, but then I

felt like jumping.

T: Was there a change in the music that made you go from one to the

other?

S2: I don't know—

T: —or did you just change your mind about what the music was saying.

S2: I just changed my mind. . . .

T: . . . Is there anything you thought of? Is there <u>anything that spoke to you</u>

about it?

S2: That I was floating ( )

T: <u>It gave you</u> more of a floating feeling?

S2: No—like dropping. . . .

T: So you think that it <u>changes its character</u> throughout?

S3: Yes. . . .

T: And so what . . . <u>makes you</u> want to feel more bouncing off the floor?

At this point the teacher interrupted the activity because of discipline problems.

There was an extended discussion of more than twenty speaking turns. When the

class returned to the activity, one of the students continued the metaphor frame

without prompting from the teacher.

S: <u>It makes you</u> want to go down.

T: That <u>makes you</u> want to do *what?

Several students: Jump.

Since most of the students felt that the music was suggesting a downward

movement into the floor, the teacher continued playing the piano and asked:

T: Anybody felt like <u>it needed to go</u> *into the floor at all? Who felt as

though <u>it wanted to go</u> *into the floor?

In this exchange the music not only implies, speaks, directs, changes character, and

makes you do things; it also has needs and wants.

The activity continued with Mrs. Lock asking the class to perform two different motions to the song: one that felt like it was going into the floor, and one that felt like it was going off the floor. This time the personification of the floor was extended:

T: What do you have to feel like the <u>floor is *doing to you</u> when you're off the floor?

S1: Like a trampoline.

T: . . . when you're *into the floor Catherine? It's a matter of <u>pushing or pulling</u>, isn't it? . . . Ready? . . . I want you to do something . . . where <u>you feel that the floor is asking you</u> to go down into it.

Two days later, when the same activity was taught for a third time, it became substantially shorter—less than half of the second lesson. Many of the personifications used in the first two presentations were also used in this lesson: "Let's give it a lot more of what the <u>music implies</u>" or, "I want the <u>music to tell you what to do</u>. Let the <u>music tell your feet</u> how they want to feel the beat. . . . Are you feeling the beat in the matter in which the <u>music is telling you</u>? . . . <u>What does the music ask for</u>?" Later in the activity Mrs. Lock asked, "Is there anything that you specifically heard, or can you compare this music in any way to something that you've seen or felt that has the same kind of <u>energy or motion</u>?" The way the question was phrased opened the way for an entire series of similes: "It reminded me—we're all doing the can-can of the Rockettes," "like dancing music," "a kangaroo," "I thought it was kind of like grasshoppers," "I thought it was more like

a trampoline." This time there were no references to the "role" of the floor or the beat in the movement activity.

  Elements of music personified. In the "Containment and entity" section of this chapter I presented examples of music as well as elements of music which were treated as containers. The same is true in this case: we see not only the personification of music in general, but also the personification of the various elements of music. In the previous description of the "Tzena, Tzena" activity, we encountered the personification of beat. In another lesson, a student talked about a dotted rhythm pattern and described the beats as "sort of one's catching up to the other. . . . It sounds like it's delayed and hurried." On another day, the teacher noted, "You don't necessarily catch on real quickly to what these rhythms are going to do." A student said, "a dotted eighth note turns into a quarter note." In another instance, a rhythm pattern causes something to happen to a song (an entity):

  T: The timris, [a reference to a Kodály rhythm name for a dotted rhythm] the rhythms <u>did what to it</u>?

  S: <u>Made it</u> [the song] bounce.

  There were many other scattered references to personified elements of music. Many of these were provided by the teacher. For example, "Watch the amplitude—<u>it's creeping up</u>," "That would be kind of fun to try—to see how the <u>harmony worked</u>," "It's a pitch clash kind of problem. . . the <u>pitches don't work</u>," and "If you thought one of these pitches . . . <u>needed to be</u> the lowest, which one

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would you suggest <u>needed to be lowest</u>?" Dissonance "<u>wants</u> to take you back" to consonance.

Students also provided examples. One commented that the major or minor mode "<u>can make you feel</u> like a different mood," another spoke of harmony "<u>working</u> together," while another added that harmony is "two or more <u>notes that work together</u>."

During one small-group activity students were given a metal rack to strike with a tuning fork. When asked to explain the sounds they had heard during the activity, several students personified the sound waves: "When you have the low like sound waves, maybe sometimes they might just die out (in thin air) because <u>they're going</u> too slow to <u>meet your ear</u>, and when you go like this <u>it travels</u> a shorter distance and <u>it gets into your ears</u>." In another group engaged in the same activity, a student observed that "the <u>vibrations went</u> through the string, and then it <u>went into your ear</u>, and it got louder and lower." During an activity focusing on the physics of sound, the girls were instructed to fill out a worksheet. The following rather plodding discussion among three students highlights some "thinking out loud," as they struggled to create a mental image of what the sound is doing. Part of the challenge they faced was making their observations concise enough to put on paper:

S1: O.K. ... sound of vibrations [probably writing those words]

S2: How does it sound?

S1: It spreads, I guess?

S2: It spreads.

S3: <u>It travels</u> through pretty much anything.

S1: O.K. <u>Travels</u> through pretty much everything.

S2: **How, **how?

S3: *I don't know, it just *does! [giggles] <u>It just *goes somewhere</u>. It

<u>wants</u> to <u>take a stroll</u> into our ears.

S1: It *spreads. It spreads.

S3: Yeah.

S2: It spreads like through—

S3: —it spreads like light.

S1: <u>It travels</u> by traveling.

S3: It travels—

S2: —it travels by spreading.

S3: It's in the air, through the air, ( ) it travels— *I don't know!

S1: It travels "I don't know?" O.K. "it travels I don't know" [writing]

S2: It travels, but... <u>ready</u> to cross the surface of whatever it's on?

S3: It travels... by traveling across the surface of whatever— Yeah!

S1: It travels by— [seems to be writing]

S3: It travels by like... it travels by <u>making</u> whatever it is— it like— by... by

<u>making it vibrating</u> with it... like making whatever it's on vibrate *with it.

S2: It travels by making whatever it's on vibrate.

S3: It travels by making— Can I borrow someone's eraser?

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S2: That's how it makes *sound. It travels by—

S3: Yeah, I *know, but can I borrow your eraser?

S1: It's (over) *sound waves, O.K.?

S3: Can I borrow someone's eraser?

S1: Sound waves. Yeah. We'll say that.

S3: *Please?

S2: ( ) it travels by *sound waves.

Discussion

In many of the above examples of personification, the music or its elements caused the human participant to make a change of state or location—either physically or metaphorically. According to Lakoff (1987), causation is direct manipulation, which can be characterized by certain properties:

1. There is an agent that does something.

2. There is a patient that undergoes a change to a new state.

3. Properties 1 and 2 constitute a single event; they overlap in time and space; the agent comes in contact with the patient.

4. Part of what the agent does . . . precedes the change in the patient.

5. The agent is the energy source; the patient is the energy goal; there is a transfer of energy from the agent to patient.

6. There is a single definite agent and a single definite patient.

7. The agent is human.

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8. The agent wills his action. . . is in control. . . bears primary responsibility for both his action and the change.

9. The agent uses his hands, body, or some instrument.

10. The agent is looking at the patient, the change in the patient is perceptible, and the agent perceives the change. (pp. 54-55)

Lakoff notes that the most representative example of causation will have all ten of these properties, but not necessarily. Even if the agent is not human or if the agent's action is not willful, there can still be causation, only to a lesser degree. In several of the cited examples many of these ten properties were in operation. The music, the rhythm patterns, the beat and the sounds became "agents" that caused something to happen to a "patient"—the class participant. In many instances Mrs. Lock was the one who encouraged the "patient" to receive the "agent" (the source of energy). The energy is transferred from agent to patient.

It is possible that by ascribing human characteristics to music and its elements, we have endowed them with much more energy than we had previously thought. In the cases where causation was manifest, there was no mention of the composer of the song who might have endowed the composition with certain human characteristics. The music itself seems to have taken on those properties and was responsible for affecting the "patient." Music teachers might do well to note the characteristics of the "agent" and the "patient" as they seek to develop the process of students being "moved" by the energy of a musical experience.

Verticality

Background

Another concept very evident in the research data is the "verticality" schema, in which an "up-down" spatial orientation is used, based on physical experience of the world. As Lakoff and Johnson (1980) observe:

> We have bodies and we stand erect. Almost every movement we make involves a motor program that either changes our up-down orientation, maintains it, presupposes it, or takes it into account in some way. Our constant physical activity in the world, even when we sleep, makes an up-down orientation not merely relevant to our physical activity but centrally relevant. . . . Thus UP is not understood purely in its own terms but emerges from the collection of constantly performed motor functions having to do with our erect position relative to the gravitational field we live in.
>
> (pp. 56-57)

Zbikowski (2002) gives a musical example of a physical activity which reinforces the association between pitch and "up-down" spatial orientation. When we make low vocal sounds, the chest resonates, and when we make high sounds, the source seems to be located nearer to the head.

This discussion of up and down is particularly relevant to music teachers. In an overview of research concerning the difficulties children have in describing music, Hair (2000-2001) reported various studies in which children of four to six

years of age had great difficulty applying words like "up and down" or "high and low" to the concept of tonal direction.

Frequently this problem has been attributed to the fact that the young child is not developmentally able to verbalize or perhaps even to comprehend the difference between high and low, soft and loud. Campbell and Scott-Kassner (1995) describe the child's predicament this way:

The words "high" and "low" or "up" and "down," when applied to pitch, are confusing to young children. Because pitches are not high or low acoustically and because most keyboards are presented to children on a horizontal plane, children are understandably confused by the vocabulary we use to discuss pitch. In addition, the words "up" and "down" are often used to talk about volume as well as pitch; for example, "Turn down the TV, it's too loud!" (pp. 110-113)

Bluestine (1995) argues that high and low are easy musical concepts to understand only if they are presented to children visually:

Although music can be represented visually, it is not a visual art; it is an aural art. Therefore in music, "high" and "low" are not even descriptions; they are nothing but metaphors—easy perhaps for adults to understand. But what's easy for adults to understand is not necessarily easy for children. My experience is that most children cannot grasp the meaning of these adult metaphors without notation. And certainly they mean nothing to an out-of-tune singer. (How much luck have you had correcting out-of-tune singers

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by telling them to "sing just a little bit higher" or "sing a smidgen lower"? (p. 36)

Zbikowski (2002) reminds us that thinking about pitch has not always been correlated with "up" and "down." In Greek music theory this is seldom encountered, even though there are numerous descriptions of pitch relations in terms of two-dimensional space.

Just when "up" and "down" consistently came to be correlated with musical pitch is unclear, but the linkage was in place at least by the beginning of the tenth century. . . From around the tenth century . . . musicians in the West began writing about and depicting pitch in terms of "high" and "low," mapping structural relations from the domain of vertically oriented, two-dimensional space onto the domain of music. (p. 63)

Zbikowski also draws attention to the fact that even today not all cultures associate pitch relations in terms of "up" and "down." In the West, this may have arisen when musicians developed ways of notating polyphonic music on a page—a physical space. As pitches become "lower," they are also written "lower" on the staff. However, in Bali and Java, high and low pitches are associated to "small" and "large" by associating the pitches to the size of the musical instruments that produce those sounds. The Suyá of the Amazon basin conceive pitches as "young" and "old," a conceptual metaphor which comes from the Suyá's belief that the voice becomes deeper with age. Abril (2001) notes that in some languages the musical terms for high and low pitch are different from the words for high and low

used in a non-musical context. Abril gives the word pairs <u>agudo/grave</u> and

<u>aigu/grave</u> as examples of Spanish and French words with single-meanings that do

not have spatial or other auditory connotations,

The greatest problem in the use of words like <u>up</u> and <u>down</u> in conjunction

with musical concepts is that they are polysemous—they have more than one

meaning. Flowers (2003) makes these observations about the problem of

polysemous words:

> The classic example is "high" and "low." While we may describe the
>
> problem of labeling pitch contrasts according to the prevailing paradigm of
>
> the day, educators have known for years that these terms are problematic for
>
> young children. . . . Other word pairs such as light/heavy, light/dark, or
>
> big/small worked better for them. Several cross-cultural studies have
>
> shown that children perform better when word pairs are not polysemous and
>
> when word pairs are used consistently. . . . Knowledge about children's
>
> abilities in making musical discriminations, their existing lexicon with its
>
> benefits (prior word knowledge) and hindrances (intentionally or
>
> unintentionally polysemous words), and the rapid growth in vocabulary
>
> throughout the elementary grades should inform our approaches in teaching
>
> children how we conceptualize and label musical sounds. (p. 26)

Thus we see that the concept of verticality is determined by culture, by historical

developments, and certainly by the situation and function of our bodies. It is no

wonder there is cause for confusion.

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<u>Instances of Verticality in the Data</u>

The apparent profusion of expressions using orientational verticality, as well as the problems they pose for the musician because of their polysemous character, led me to search the data for such instances of figurative language more extensively. Rather than limiting the search to instances of verticality in the selected passages of "expressive language," as described in Chapter III, I chose to search all of the data. This served as a check to see if anything of interest had been excluded by searching only in the selected "expressive language" passages. Secondly, since the category involving the words "high," "low," "up" and "down" has been so problematic for music educators, I felt a search of the complete data set would be beneficial.

I created a list of words which would encompass as many instances of verticality as possible. A Boolean search using the words <u>up</u>, <u>down</u>, <u>high</u>, <u>low</u>, <u>rise</u>, <u>raise</u>, <u>fall</u>, <u>drop</u>, <u>top</u> and <u>down</u> yielded 1,327 results. Most of the results were eliminated as irrelevant for analysis since they were not related to descriptions of musical concepts or processes. When these words were used in expressions such as "put the book <u>down,</u>" "<u>raise</u> your hand," "you end <u>up</u> going the same way," "I have to look it <u>up</u>" or "play the rhythm that's <u>up</u> there [on the chalkboard]" they were not studied further.

The search was not limited to whole words. In many cases this was useful, because it yielded words like <u>up</u>ward, <u>down</u>ward, <u>low</u>er, <u>high</u>er, and <u>fall</u>ing. However, it also included words such as s<u>top</u>, s<u>low</u>, fol<u>low</u>, me<u>low</u> , st<u>up</u>id and

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interr<u>upt</u>. The latter instances were also eliminated. Exclusion of irrelevant

instances of the chosen words resulted in seventy-nine passages for further study.

Many of these were examples of the previously mentioned references to

high and low, or up and down, in terms of pitch and therefore were of less interest.

The remaining passages were looked at more carefully, because they departed from

the meaning of highness or lowness of pitch. These were compared to Lakoff &

Johnson's (1980) various categories of metaphor that use the spatial orientation <u>up</u>

and <u>down</u>.

<u>Light and active is up, heavy and passive is down.</u> In this passage students

were instructed to sing the song "Tzena, Tzena," (see Appendix C) as mentioned

earlier in this chapter. After singing the entire song, the teacher asked:

If you were choreographing this and you were going to tell people how to

dance, would you tell them that the feeling in your feet of the beat needs to

be into the floor? Is it an energy that goes <u>down</u> in, or is it an energy that

springs off?

In this case it is reasonable to assume that <u>off</u> is an expression of the

concept of <u>up</u>. One student remarked, "it's off the floor 'cuz it may be a strong

beat, but it's really bouncy, and it makes you want to move really fast, <u>up</u> and

<u>down</u>." Another girl disagreed, saying the beat felt more like it was into the floor

because "you move more <u>down</u> than <u>up</u>." Yet another student thought that "first it

sort of wanted to go <u>down</u>, but didn't quite make it... in terms of like <u>down steps</u>."

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The teacher expanded the idea, asking if the "first beat was the springboard that sent the rest of them off." The student agreed.

The teacher tried to encourage more responses by asking students to make observations about what they felt or heard in the piano accompaniment or how the words were sung that made them feel like moving "more <u>down</u> than <u>up</u>." "Well, there's some <u>low</u> notes," answered one of the girls. When the teacher asked whether the direction of the movement depends on low or high notes, several students said no, but the teacher did not discount the girl's answer, saying that "highness" or "lowness" might make a difference. It appears that the student did not answer the teacher's question directly, but obviously the highness or lowness of pitch was relevant in this student's mind regarding how she physically felt the music.

One student said the second half of the song was "light and airy, like it's kind of <u>floating up</u>." A student in another class observed that the beat was "kind of like grasshoppers," while another said it was "bouncyish" like a trampoline, not a "driving beat" or a "<u>low</u> beat," but rather a "<u>high</u> beat." She said that even though it was bouncy, "it's not like a soft delicate beat; it's kind of loud and entertaining." This particular reference to low and high was especially interesting because it referred to beat. At first glance we could assume that the student is referring to tempo. However, by juxtaposing "driving beat" with "low beat" and a "bouncyish trampoline" or a grasshopper with a "high beat" a more accurate conclusion would be that the student is describing the difference between heaviness (low) and

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lightness (high).   There are many possible physical explanations for these

associations. An erect, upright posture of light physical weight is often associated

with happiness, health and activity. A drooping posture that is closer to the ground,

possibly because of its weight, is associated with sadness, depression, passivity and

mundane reality. Zbikowski (2002) notes that when the body descends physically,

there is a lessening of potential energy. Also, the act of singing a descending scale

involves a feeling of relaxation and a lessening of potential energy (pp. 73-74).

The student's reference to "low beat" and "high beat" could be a complex blending

of feelings, images, and sonic events that are mapped onto the notion of physical

descent.

     <u>Happy is up, sad is down</u>. Most people assume that if someone is feeling <u>up</u>

or if spirits <u>rose</u>, the person is happy. If someone <u>falls</u> into a depression or if spirits

<u>sink</u>, the assumption is that the person is sad. In our culture, the minor mode is

often associated with sadness. A similar association emerged during classroom

discussions about the difference between the two ballads "The Golden Vanity" and

"The Turkish Revery." Students noted that one song was in a major key, and the

other in a minor key. "The Turkish Revery" was determined to be sad. However,

the minor mode was not the only reason for the perception. When the teacher

asked, "Is there anything besides the fact that it's in minor that makes it sad?" one

student responded that it also has <u>lower</u> notes. The teacher then asked the students

to compare the range of the two songs. They were not much different. However,

the melodic direction of "The Turkish Revery" was downward, which probably

was the reason the student said the song had <u>lower notes</u>. Of most interest was her

initial observation that it was the "lowness" that caused it to be sad.

This association of the minor mode with lowness and sadness was not an

isolated case. In another group, students were asked to make predictions about the

same two ballads just by looking at the page containing printed notation. One girl

said she thought one of the songs would be in minor because of the flats in the key

signature. The teacher explained that flats or sharps in the key signature do not

make the song major or minor, but then went on to observe:

> T: I think that's a really interesting point, and it's a misconception, and
>
> something we have to remember. . . . Can anybody guess why she would
>
> think that? Think about what a flat does. Katrina?
>
> S: It makes it low.
>
> T: It makes it go a half step lower. Right, and so therefore in your memory
>
> you're thinking, "Ah, flats makes things go down. Down makes me think:
>
> minor, darker, (sadder)," but it's a misconception.

Actually, it was the teacher, not the student who said flats would make the

song sound sad because flats make things lower. However, the connection drawn

by the teacher between downward direction, minor, darkness and sadness in

response to the student's observation was a logical blending of polysemous

meanings.

In another class, the teacher asked students to use adverbs or adjectives to

describe a scene about the differences in energy between the two ballads. One

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student observed that "The Turkish Revery" was "slow and <u>low</u>."   Another added

that it is "darker and sadder," further reinforcing the connection between low and

sad.

     <u>More is up, less is down</u>. The idea that "more is up" is readily discernible

from our everyday experiences in the physical world. The more objects one adds to

a pile, the higher the pile becomes. We say that our income <u>rose,</u> the number of

books printed each year keeps going <u>up</u>, the number of errors is <u>low</u>, or we turn the

heat <u>down</u>. The concept of "more is up" is certainly not foreign to an elementary

music teacher who urges a student to sing higher, only to have the student sing

louder. This is reinforced by an orchestra conductor, who wants the ensemble to

increase the volume, and therefore stands more erect with arms raised high.

Conversely, when he wants the volume to decrease, he might crouch and turn his

palms down, reinforcing the notion that more volume is up, and less volume is

down.

     In a classroom activity during which students were improvising on

instruments, one girl suggested that everyone could "go <u>up</u> a little gradually, until it

gets real loud and then stop."

     In the previously described lesson using the song "Tzena, Tzena," one

student remarked about a reference in the lyrics of the song (see Appendix C): "It

gets weird, because it goes like, '<u>raise</u> your voices <u>higher</u>' (and) the notes go <u>lower</u>.

I think they should go <u>higher</u>." The teacher acknowledged that she was right, but

went on to explain that there are two ways of thinking about <u>higher</u>. It could mean

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louder, as one student had suggested, but it could also be referring to the voice range being higher, rather than an ascending melodic pattern. In this case there were several opportunities for confusion. The song lyrics "raise your voices higher" could be a reference to higher volume, a higher range, or an ascending melodic pattern.

"More is up" analogies were not limited to volume. In one case, when playing a series of dissonant clusters on barred classroom instruments, the teacher asked the students, "on a scale of one to ten, how would you rate that as dissonance? Ten being the worst." In another class involved in the same activity, she asked the students whether "we moved up or down on the dissonance scale." In this case more dissonance was up, as in an imaginary dissonance thermometer in which the mercury goes up as the dissonance increases. Johnson (1987) would call this an instance of the "scale schema" (p. 122), which is based on our experience of the world partly in terms of more, less, and the same. While many of the instances of "more is up" are quantitative, some, like the example regarding the "dissonance scale," are qualitative—when objects and events are experienced as having higher or lower degrees of intensity and can be "measured" by a vertical scale.

Discussion

Music educators seem to view the polysemous character of the concepts up and down or high and low solely as an obstacle to understanding a musical concept. The inability to apply up and down to pitch is treated as a shortcoming of the novice musician, who has not yet been properly instructed, or has yet to achieve a

sufficient level of development to make that singular association. There seems to

be a need to find a way to limit a student's conception of <u>up</u> and <u>down</u> to pitch

relations, and several suggest avoiding those terms altogether (Abril, 2001; Costa-

Giomi & Descombes, 1996, 1997; Flowers, 2003; Flowers & Costa-Giomi, 1991).

On the other hand, Johnson's view of polysemy is quite different:

> The traditional account of meaning has never come to grips with the full
>
> range of cases of polysemy. Recent studies indicate why this is so:
>
> Polysemy involves the extension of a central sense of a word to other senses
>
> by devices of the human imagination, such as metaphor and metonymy, and
>
> there is no place for this kind of account in the Objectivist view.
>
> (1987, p. xii)

Johnson explains that polysemy does not merely represent multiple

meanings for a single term, but multiple <u>related</u> meanings. Otherwise, he argues,

they would be homonyms, (e.g., a bank of a river and a bank for financial

transactions). He says there is a simple reason why we have come to use the same

term for different meanings: "We use the same term because all of the senses are

related. They are related because they share some underlying image schema, some

extension of that schema, or some metaphorical projection of that schema" (p. 107).

Lakoff (1987) concurs:

> In . . . polysemy, an individual word correlates with each member of a
>
> natural category of concepts—a prototype-based category. That is what
>
> polysemy is about. Polysemy involves cognitive organization in a lexicon.

Even at the level of the individual word, language is an inseparable part of

general cognition. . . . The generalizations governing polysemy can only be

described and explained in terms of conceptual organization. (pp. 333-334)

Traditionally, music teachers have associated usage problems of word pairs

such as <u>high</u> and <u>low</u> or <u>up</u> and <u>down</u> with young children. However, we have seen

that even much older children with a substantial amount of musical experience have

a great variety of uses for these words. As language develops, students gain a

richer understanding of these word pairs, much more laden with "hidden"

meanings. As students mature linguistically, there is an ever-expanding schema

("mental space") associated with these word pairs in their "non-musical" world.

Therefore, in many cases nontraditional usage of up and down, or high and low

should not be viewed as a developmental deficiency, but in the context of an ever-

expanding understanding of verticality. These students may in fact be functioning

in a metaphorical category, while teachers (professional musicians) have trained

themselves to think in more narrow, technical "musical" terms when using these

words.

<div align="center">Regularity versus irregularity</div>

<u>Background</u>

As I analyzed the data I continued to encounter value judgements of

musical events that the participants labeled as right or wrong, good or bad. There

were numerous instances of discourse about events in music that were considered

disordered, unusual, out of the ordinary, and causing feelings of unease. These

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were in opposition to musical events considered normal, orderly, comfortable and pleasant. I was surprised at the extent to which the students appeared to reject (at least verbally) that which they considered to be out of the ordinary.

The following exchange serves as an illustration of how the class dealt with perceived irregularities in rhythm.   Students were asked to examine a page containing notation of the ballad "The Golden Vanity" (see Appendix D) and based on what they saw predict how the song would sound:

S1: It's going to be like off?

S2: Off?

S3: What?

S4: What do you mean, off?

S5: It's going to be *off.

T: Off what?

S2: Syncopated?

S1: Yeah.

The teacher explained that there was no syncopation in "The Golden Vanity." The fifth student (S5) participating in the conversation above then tried to explain, that even though the song is not syncopated, "it's just not 'every day' bom bom bom bom." Presumably she was trying to describe the difference between regular, "every day," even quarter notes, as opposed to the dotted rhythms that are present in the song. In either case, both syncopation and dotted quarter note patterns were perceived to be "off" and irregular.

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In search of a new schema I again turned to cognitive linguistics. Lakoff and Turner's (1989) analysis of "perfection" offered one possible explanation for the phenomena I encountered:

Opposition is understood in terms of a very basic metaphor, PERFECT IS REGULAR; IMPERFECT IS IRREGULAR. We say of something perfect that it is "without a blemish," which means that there is no irregular spot in it. We also say that it is "spotless" or "flawless" or "immaculate." We can say that behavior is less than perfect by calling it "highly irregular." We also have the commonplace knowledge that anything in the real world is at least slightly irregular. No line in the real world is absolutely straight, and all living things have bumps and spots and incongruities and asymmetries. When we combine the metaphor IMPERFECT IS IRREGULAR with the knowledge that real things are irregular, this entails, metaphorically, that living things are inherently imperfect, while abstract, nonreal ideas can be perfect. (p. 153)

Based on the metaphor "perfect is regular, imperfect is irregular" I generated the "regularity versus irregularity schema," which contrasts musical events that are considered either regular, or irregular. This schema revealed a considerable amount of information regarding what students said music should sound like.

The most distinct category of opposition to emerge, and the one which encompassed the most examples, was consonance versus dissonance. Before

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examining the data, a brief discussion of the meaning of consonance and dissonance is necessary.

The concept of consonance and dissonance in Western music goes back centuries and is one of the most contentious issues in music history. Some scholars discuss consonance and dissonance as a purely acoustical phenomenon. Others believe that our understanding of consonance and dissonance is culturally determined or culturally mediated.

A consonant interval, such as the octave, has a simple ratio (2:1). The minor second has a more complex ratio (16:15) and is considered dissonant. The article "Consonance" in the New Grove Dictionary of Music and Musicians (Palisca & Moore, 2001) offers an explanation as to why simple ratios may be considered more pleasing than complex ones. In addition to the phenomenon of frequencies coinciding on an acoustic level, there is also the biological phenomenon in which nerve impulses are synchronized to a particular phase of the stimulating wave in the cochlea or inner ear. Thompson and Schellenberg (2002) report a study with young infants, which suggests there is an innate preference for sensory consonance and an innate dislike for sensory dissonance.

There may also be psychoacoustic reasons for certain preferences. The pitches do, mi, sol, and fa, which have the largest degree of sensory consonance with the tonic of a scale, also occur most frequently in musical pieces. "Children may learn implicitly that tones heard more often in a musical piece are particularly stable. . . . Thus, when listening to unfamiliar music, listeners readily construct a

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hierarchy of pitch importance using frequency-of-occurrence information"

(Thompson & Schellenberg, 2002, p. 466).

On the other end of the continuum is composer Igor Stravinsky, who can be considered a representative of those who suggest that the perception of consonance and dissonance is culturally conditioned. In his Poetics of Music (1970) Stravinsky discusses the battle between consonance and dissonance:

Consonance, says the dictionary, is the combination of several tones into an harmonic unit. Dissonance results from the deranging of this harmony by the addition of tones foreign to it. One must admit that all this is not clear. Ever since it appeared in our vocabulary, the word dissonance has carried with it a certain odor of sinfulness. . . .

In textbook language, dissonance is an element of transition, a complex or interval of tones which is not complete in itself and which must be resolved to the ear's satisfaction into a perfect consonance.

But just as the eye completes the lines of a drawing which the painter has knowingly left incomplete, just so the ear may be called upon to complete a chord and cooperate in its resolution, which has not actually been realized in the work. Dissonance, in this instance, plays the part of an allusion.

Either case applies to a style where the use of dissonance demands the necessity of a resolution. But nothing forces us to be looking constantly for satisfaction that resides only in repose. And for over a century music

has provided repeated examples of a style in which dissonance has emancipated itself. It is no longer tied down to its former function. Having become an entity in itself, it frequently happens that dissonance neither prepares nor anticipates anything. Dissonance is thus no more an agent of disorder than consonance is a guarantee of security. The music of yesterday and of today unhesitatingly unites parallel dissonant chords that thereby lose their functional value, and our ear quite naturally accepts their juxtaposition. (pp. 34-35)

Intellectually, many musicians might agree with Stravinsky's view that the function of dissonance in Western music has changed dramatically in the last century. However, descriptions of consonance and dissonance expressed throughout the music lessons observed and used by both the students and their teacher reveal a much more elemental attitude towards dissonance.

Instances of regularity versus irregularity in the data

Consonance versus dissonance. In a previous section of this chapter I referred to the Israeli song "Tzena, Tzena," which was used for a movement activity. Later the same song was also used to introduce lessons on harmony and chord construction, leading to a simple tonic, subdominant and dominant seventh chordal accompaniment for the song. Students were instructed to pick any pitch they wanted, and to play it three times. Several girls predicted the result was "going to be <u>awful</u>," and were asked why they did not like it. One student responded, "Everybody's playing different notes and notes on the scale that <u>clash</u>

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with each other. This is like <u>all different</u> notes from different scales." The teacher

noted that all of the notes were in fact from one scale, since they were using C

diatonic instruments. The idea that if the choice of pitches is limited to a certain

scale one would automatically get consonant results was a misconception that

occurred repeatedly in student discourse throughout the observations.

Another student commented that "somehow they [the sounds] don't sound

<u>good</u> together." Mrs. Lock asked a third student what she heard that she did not

like. The girl responded in a nasal, shrill voice, "it was like eegh, eegh, eegh."

When a student played a wrong note in what was supposed to be a consonant

chord, the teacher commented, "It didn't sound <u>right</u> to me. It didn't have that <u>pure</u>

<u>sound</u>. Once again."

When the same lesson was taught to the second group of students and the

girls were asked to play various dissonant intervals, reactions included, "it sounded

<u>bad</u>," "<u>clashed</u>," "<u>disordered</u>," "<u>random</u> major and minor all together," "<u>wrong</u>

notes to put together," "<u>minor</u>," "really <u>not kosher</u>," "<u>jumpy</u>," "kinda like <u>cringe</u>

<u>like</u>," "like <u>running fingernails down the chalkboard</u>."   Mrs. Lock drew the girls'

attention to their physical reactions, like shivering and scrunched up faces. The

students were then asked to express their feelings about the consonant triads they

were instructed to play. This time the girls said, "more <u>happy, joyful</u>," "more

<u>relaxed</u>," "<u>brighter</u>," "sounds <u>better</u>," "fits <u>better</u>," "feels <u>better</u>," "it was like <u>in the</u>

<u>harmony</u>," "it was <u>major</u>," "it's just like the <u>sun compared to the ghost ship</u> thing,"

and "it makes you <u>want to listen</u> to it (while) the other one (was like) ugh!"

The third time Mrs. Lock taught this lesson, she prefaced the activity on dissonance with the question, "What is harmony?" One student answered that it's something that "really *really sounds good with that note, so it goes together, sort of." After a brief exchange about using notes of a particular scale to create the harmony part, another student explained that, "sometimes you can just (have) two different people singing the same melody, but one of the people singing different notes ( ) of the scale, and the other..." (This student most likely was recalling a harmony part, which retained the contour of the main melody, perhaps in equidistant intervals.) A third student responded to the student who had explained that harmony is "notes that sound good together," by saying, "You could *still have a harmony, but if it's in the wrong thing, it just would be *bad harmony." Another student agreed, saying, "They sort of clash, but they're harmony too."

The students, who were sitting at Orff instruments, were asked to play a C with the left mallet, and the seventh above it (B) with their right mallet. Verbal reactions to playing dissonant intervals included, "clashing," "dissonant," "dissonance would be like having a fight; two notes that clash would be like having a paper cut and if you have lemon juice, ouch, or salt." These observations were followed by "vinegar" and "churning water." The teacher affirmed their observations by commenting that "dissonance is when it doesn't feel comfortable, I guess."

The class then experimented with several dissonant intervals and the girls were asked to rate them. Mrs. Lock framed the question this way: "On a scale of one to ten, how would you rate that as dissonance? Ten being the worst."

A month later students were presented with the theory of scales (traditional and nontraditional or artificial), chord functions and progressions. When asked for reactions to improvised melodies based on the students' artificial scales, the responses were, "Well, they were creative [laughter]," "insane and very strange and demented," "yuck," "eeouw," "to put it nicely—out of place."

The class then worked on chord progressions, involving major triads and dominant seventh chords. As described in the "containment" section of this chapter, many felt that the seventh chord made them feel "left out," and there was a need to return "home." As one student explained, "When you do triads it seems like it's all organized and stuff, but then you add the seventh. . . the seventh note is out of place."

During the same lesson with another group, the teacher asked, "When would you want to use dissonance if you were a composer?" This time the responses were more sophisticated and related to the function of dissonance: to surprise the listener, to add franticness or disorientation, to provide a gloomy and mysterious feeling. This led one student to ask a question about the popular piano piece "Chopsticks":

S: Does it start on G and F?

T: A G and an F. It does. It begins with a dissonance.

S: And then it sounds <u>good</u>.

T: And then it resolves.

Mrs. Lock followed up with a discussion on clothing and dissonant colors that clash and do not look good together. "But have you ever noticed that sometimes a certain kind of clashing color can become stylish? And then all of a sudden it almost doesn't feel dissonant any more because you've become accustomed to it." She then returned to her original question about why composers might use dissonance, noting "Dissonance causes tension. It makes you feel a little like, 'oo,' and then finally 'whew.'" The students played several progressions, illustrating the tension and release. Finally, one girl remarked, "You listen to a lot of rappers. They clash a lot."

   <u>Western versus non-Western scales and tuning</u>. As mentioned earlier, the concept of consonance and dissonance was the element of music that yielded the most examples in the "Regularity versus irregularity" schema. A topic tangentially related to consonance and dissonance is the subject of non-Western tunings. There were also examples in the data of the girls evaluating non-Western scales and tunings as being irregular rather than just different.

   During Design Technology classes the students had been working on an interdisciplinary project, which involved the design technology and the music teachers in planning and implementation of the projects. The girls had just completed the construction of African-style <u>mbiras</u>, sometimes called "thumb pianos." However, they had not yet tuned the metal prongs. Mrs. Lock asked the

girls if they could play a tune like "The Golden Vanity" on these instruments. Most said that they could not and tried to explain the reasons.

Note the difficulty, especially in the first few turns of this conversation, that the students have in trying to describe the task of playing "our melodies" on an instrument, which is from a "different" country and probably not tuned to a Western scale:

S1: It's a definite instrument, [the student probably meant that it has definite pitch because they had just been discussing the difference between percussion instruments of definite and indefinite pitch] but this is not the kind of instrument that you could really play a tune on because it's just... it doesn't really give itself to it.

S2: Yeah it could. . . .

S1: If you have a melody that's from another country, if it doesn't have the—

S2: —yeah, (it's not) the kind of instrument for this kind of song. . . .

T: O.K. I think you're saying a melody from a different country. How do those melodies . . . from different cultures vary from our melodies?

S3: Well, some of them have special kind of notes that are in different keys. But they also have staccatos and they have accents, and certain kinds of rests.

T: Mhm. Let's go back to those special kind of notes. Let's work a little bit more with that idea. What do you mean, 'special kind of notes?' Can you talk to that?

S2: You don't always have like a C and a D and a ( ). They have their songs that they think that normally works for them. . . . It's not universal format.

The class proceeded with a lively discussion on tuning, recalling the non-Western tuning of the Indonesian gamelan they had an opportunity to play when they were in the fifth grade. Throughout the discussion the students referred to the tuning as "clashing," not being "standard" or "universal." The inference was that Western tuning is standard, universal and does not clash.

Discussion

Words like tension, surprise, disorientation and resolution used by some of the students in discussions about consonance and dissonance are within the realm of Stravinsky's description of the function of dissonance, but these words were far outnumbered by such labels such as bad (vs. good), wrong (vs. right), not kosher and yuck.   Many times the participants described physical reactions such as lemon juice in a paper cut or cringe like (in opposition to what happens when you want to listen to it). As noted earlier, Mrs. Lock described some of the physical reactions to dissonance that she observed. There were also quite a few responses that described feelings or emotions, such as franticness, disorientation, gloominess, happiness or joy.

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It should be noted that the contexts of the consonances and dissonances under discussion were rather limited. The girls were asked to make judgments about individual intervals, triads and scales. During this series of lessons there were no extended opportunities to talk about listening examples of dissonant music. There were, however, a few occasions for instrumental improvisations, which certainly yielded non-tonal compositions. Although subsequent discussions about these compositions were about texture and timbre rather than consonance and dissonance, there were no adverse reactions expressed to the dissonances in these performances. This may be related to the fact that there are in fact two "types" of consonance and dissonance. According to Thompson and Schellenberg (2002) one is sensory, the other is musical consonance and dissonance. The first is an acoustical phenomenon, while the second is developed through knowledge and enculturation. The initial dislike for sensory dissonance needs to be "unlearned" through instruction and enculturation. "These effects of learning may run counter to initial predispositions: Indeed, insofar as the aesthetic quality of chords can be judged outside of a musical context, the most beautiful may involve considerable dissonance" (p. 464).

Brown (in press) presents some novel ideas germane to this discussion of consonance and dissonance. He explains that Lakoff and Johnson's "neo-Kantian conception of the image-schema" (p. 1) is a cognitive or kinesthetic schema that does not necessitate feelings or emotion. He proposes an extension of the Johnson/Lakoff conception, which he calls the emotive-schema. Just as the image-

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schema contains an internal structure that is projected onto a new domain, Brown suggests that his proposed emotive schema also consists of "rules involving emotive interactions with one's self, the world, and others. That is, they will be bodily gestures (or have originated from bodily gestures) instantiating rules for manipulating emotions and associated behaviors" (p. 11). He proposes the schemata of acceptance/happiness versus rejection/unhappiness, and applies them to dissonance and consonance in music. On one side of the spectrum is the negatively charged dissonance, which is often coupled with tense facial expressions and clenched, huddled, withdrawn body positions. This contrasts with dilated pupils, open eyes and a general feeling of relaxed openness that accompanies the positive state of consonance. Brown cites numerous cross-cultural studies which strongly support the universality of these and other bodily responses to emotions.

However, the value judgements that were expressed in the classroom discourse had more to do with the participants' ideas of perfection, and were not limited to their emotional responses. In addition to reacting emotionally, students, and to some extent the teacher, had very clear opinions on the "right" way and the "wrong" way that music should be constructed. Nevertheless, Brown's investigation is a valuable extension of the discussion on how we react to regularity and irregularity in music. Although I accept his application of the emotive schemata of "acceptance" and "rejection" to the topic of consonance and dissonance, I prefer to retain my own framework of "regularity" and "irregularity," which encompasses more than emotion and its accompanying bodily responses.

Location, space, and motion

Background

Throughout the data there were references to music or elements of music that were perceived to be in a location. There were also examples of the perception of music or elements of music moving from one location to another.

Lakoff (1987) reminds us that, "things that exist exist in locations. To be is to be located. Moreover, we know that something exists if it is in our presence; otherwise, we cannot be sure" (p. 518). He goes on to explain that we often encounter the words "come" and "go" in these "existence is location" expressions. In these cases they do not indicate the motion of coming or going, but activation, as in the expression, "Here comes the chance of a lifetime!" or the music note "comes where you don't expect it to be." Therefore, a location can be "a conceptual space, divided into two parts so that entities in locations near the speaker exist and those in locations far from the speaker do not exist" (p. 519). The "existence is location" metaphor applies to several of the cases encountered in this data.

In addition to the musical examples of the "existence is location" metaphor, which is static, there were instances in the data of music in relation to motion. Musical motion is a rather convoluted concept. Even though musicians regularly speak of a melody or a rhythm moving, this understanding of musical motion is completely metaphoric. Tones in a melody do not move, but stand still. This is skillfully explained by Zuckerkandl, (cited in Johnson & Larson, 2003):

In the Marsellaise, for example, we hear the first tone E—it does not move; then comes A, another static tone; this one is repeated; then comes B; and so on. No tone, as long as it sounds, moves from its place. What has happened to the motion? . . . Motion is the process that conveys the thing from here to there, in a continuous and never suspended traversal of the interval. If it stops anywhere, the motion is instantly abolished. But in a melody we have nothing but this, nothing but stops, a stringing together of static tones, and, between tone and tone, no connection, no transition, no filling up of intervals, nothing. It is the exact opposite of motion. (p. 65)

Johnson and Larson (2003) go on to explain that the metaphoric understanding of musical motion follows the logic of our understanding of motion in space. They hypothesize that metaphors for musical motion are grounded in experiences of physical forces and physical motion. The authors present three different ways that we conceptualize motion in space and directly link them to the metaphors of musical motion.

One way that we experience motion is by seeing objects move. We apply this to our conception of time and say that "time is rushing past us" or that Christmas has long since passed" (p. 66). In both cases we see time moving through space while we are standing still, watching it move along a path in a certain manner. We do the same thing in music when we say "here comes the recapitulation," or "the music goes faster here" (p. 69).

A second manner in which we experience motion is by moving ourselves. We envision time to be a landscape through which we move, saying that "we're coming up on Christmas" or "we're halfway through June already" (p. 68). There are correlating musical expressions in which we move from one location to another on a musical landscape, saying "we're coming to the coda" or "the soloist is waiting to come in seven measures from here" (p. 71). In both of these cases the participant is traveling in the musical landscape. However, one can also be a stationary participant in the musical landscape and watch the musical events taking place at different locations on the landscape. In such cases we might say that we "look ahead to measure 21" (p. 72).

The third way we experience motion is when we feel our bodies being moved by certain external forces, such as wind, water or large objects. Music can be such a force, causing certain effects. Therefore music can "blow you away" (p. 75) and "music moves us" (p. 76). Bear in mind the discussion on causation in relation to the "personification" schema earlier in this chapter. Those same characteristics of causation are in operation in this case.

Instances of location, space and motion in the data

Frequently elements of music found in the data were perceived to have a clear location or place. For example, "Pitches that are next door to each other tend to be more dissonant," or "the B is right next to the C." When asked to look at a scale written out on a staff, and asked by the teacher to name what she saw, one student replied, "I'd say it's like stepping notes." During a particular small-group

activity in which the girls were constructing dominant seventh chords, one of the students remarked that, "When you add the seventh, it seems like the. . . seventh note is <u>out of place</u>."

The placement of pitch in a certain location is not that surprising, since the physical act of playing pitches on an instrument usually involves manipulating a string, a key, a bar or a valve that is in a fixed location. The keys on a keyboard are "next door to each other" or far apart. Written notation also reinforces the idea of proximity of pitches. However, rhythmic beats and individual notes in a piece of music were also perceived to be in a certain location. Since music is temporal, it would be logical to say that a song would be fast at some <u>times</u>. Yet it is much more customary to say, as one of the students did, "There are quite a few sixteenth notes, so it might be kind of fast in some <u>places</u>." Similarly, the teacher explained syncopation by saying that a particular note is "<u>coming where</u> you don't expect it to be" instead of <u>occurring when</u> it is expected, and in another class she asked if the students knew "<u>where</u> the beat is." A student observed about the written notation of a song that, "It kinda looks like there's a note for each syllable, so we may not have to. . . <u>fit in</u> words." On another occasion, a student said that a song has "the same notes in the same <u>positions</u>." In a related observation, the teacher stated that "in the same <u>space</u> as one eighth note you gotta have two sounds."

Many of the above descriptions can be visualized in the kind of spatial musical landscape described by Johnson and Larson. In some cases the participant might be a motionless observer of the pitches living <u>next door</u> to each other; in

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others, a traveler in the landscape. When comparing the two ballads described earlier, one student observed that in relation to "The Golden Vanity," "it was kind of you just like jump in and start singing and stuff, but for this ["The Turkish Revery"] you can't just like start in and . . . like start singing 'cuz it's too like sad, or it doesn't like pick up." One of the songs compelled the student to take a jump onto the path in the landscape, while the other song seemingly did not.

Several of the examples provided in the "Personification" section of this chapter are applicable here as well. Recall the student who was describing the succession of beats as "one's catching up to the other" or sound waves that were "going too slow to meet your ear." Both are examples of music moving past us as we observe.

Also recall the activity using the song "Tzena, Tzena," in which the music, according to one student, "made me feel like I want to go off." Another student remarked that "it makes you want to move really fast." This entire lesson was an example of the teacher wanting the students to be moved by the musical force, as was discussed in the "Personification" section.

Perceptions of consonance and dissonance were discussed in the previous section of this chapter. However, consonance and dissonance also emerged in terms of motion to a certain location. In this case dissonance travels along a musical landscape, wanting to bring the listener back home to consonance, as in the following teacher-student exchange:

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T: Unless you really wanted to make people feel <u>left out</u>, you never hear a song ending on the seventh chord . . . because it feels like it hasn't <u>brought you back to home</u> again. What else did it?

S1: Well it sounded like it was into major and minor; like there was one note in there that kind of made it sound darker, but the rest of it is (inaudible)

T: O.K. Let's do it one more time. . . . Sounded like what?

S1: Like kind of come after it.

S2: It sounds like to me it could be like <u>bursting forth</u>. There's going to be more coming after it.

T: So it tends to be <u>leading</u>, right? Mhm [plays the dominant seventh chord, followed by the tonic chord on the piano several times as she is speaking]. It has very much a sense of <u>leading</u>. . . . What it really wants to do is <u>take you back</u>. . . to the C chord. . . . It wants to <u>take you back to the home</u> chord.

<u>Discussion</u>

Teachers of music have been referring to musical motion to great advantage. However, few have considered that literal motion in music is in fact not possible, and that they have been superimposing the logic of motion in space onto the metaphorical understanding of movement of music. As noted by Johnson and Larson (2003), "It appears that you can experience musical motion only because of

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your embodied experience and your embodied understanding of physical motion"
(p. 78).

If the use of metaphor is to be effective in reinforcing the metaphoric notion of motion in music, there needs to be a closer examination of the internal logic of the spatial metaphors that shape the musical metaphors. We need to define who or what moves, the way it moves, and where it moves to. Causation and intentionality also need to be considered.

Of the many types of spatial movement described by Johnson and Larson, there were not very many in which the participants were in the role of the stationary observer overlooking the musical landscape. One reason may be that I did not have the opportunity to observe many "listening lessons" but had more opportunities to see active music making. Another reason may be that this perspective requires the participant to view the entire musical work as an abstract object in its entirety. It also requires the ability to view the landscape from different perspectives (Johnson & Larson, 2003). These sophisticated skills may be beyond the capacity of the students who were observed.

<div align="center">Other figurative language</div>

As I analyzed the data in search of emergent schemata, I repeatedly encountered interesting descriptions and comparisons that did not seem to coalesce into a single conceptual schema. This language was not as strong in that it did not embody musical concepts through the use of metaphor. Much of this discourse

used similes, analogies, onomatopoeias or vocal imitations of sounds. I noticed that all of this language was used to describe timbre, therefore, I coded these expressions into a separate category. Although this category is not a schema in the sense that defines the previous five sections of this chapter (if we consider schema to be a recurring level of organized unity), it is a distinct, albeit unexpected, category of figurative language that emerged from the data.

During the course of nineteen lessons there were numerous opportunities for students to describe timbre. Many of these occurred during the worksheet activity about describing instruments, and during the experimentation with sounds produced on wire racks. Many timbre descriptions were also used during experiments dealing with the physics of sound. Parts of these activities involved work in small groups where the teacher was only occasionally present, so many of the descriptions were generated entirely by the students without any adult supervision or guidance.

During the activity in which students were given the task of describing their chosen instruments, the girls had the most difficulty in articulating "timbre words." This is not surprising: Cacciari (1998) notes that the vocabulary available in English for describing auditory timbre is quite impoverished, necessitating the use of metaphor. Thompson & Schellenberg (2002, p. 478) observe that not only is there a shortage of "timbre words" in our language as Cacciari suggests, but "timbre is notoriously difficult to define," since it often is the only attribute that distinguishes sounds that otherwise are equivalent in pitch, duration and loudness.

However, the observed students were quite creative in overcoming the challenging task of describing timbre. Many used a noun describing the part of the instrument that vibrates or material used to construct the instrument and turned it into an adjective. This yielded such descriptions as "airy," "plasticky," "woody," "metallic," "metally" and "tinny." These types of descriptions were very common throughout activities involving timbre.

Another method of creating "timbre words" was to take the verb or noun that describes what the instrument "does" (e.g. rings, vibrates, creates a racket) and turn it into an adjective. These transformations resulted in words like "ringy," "rackety," "rattly," "vibracious," "crashing," "clacking," "shaky," "grating," "buzzy," "booming," "jingling," "tinkly," and "tingling." Some of these words are also onomatopoeias.

Another category of words encountered in the data is what Cacciari (1998) calls cross-modal "synthetic metaphors." These are "descriptions of something one experiences by a definite sense organ by using adjectives whose referent is another" (p. 128). Cacciari provides a summary of types of metaphorical transfer from one sensory modality to another:

1. <u>Touch words</u>: generally transfer to taste ("sharp taste"), to color ("dull color") or to sound ("soft sounds"). Quite rare are shifts to vision or smell.

2. <u>Taste words</u>: transfer to smell ("sour smell") and sound ("sweet music"), but they do not transfer back to tactile experience or forward to dimension or color.

3. <u>Olfactory words</u>: do not transfer to other senses.

4. <u>Dimension words</u>: transfer to color ("flat gray") or to sound ("deep sound").

5. <u>Color words</u>: shift only to sounds ("bright sound").

6. <u>Sound words</u>: transfer only to color ("quiet green"). (p. 129)

The teacher and the students used many such synthetic metaphors, which I present here, grouped according to the types described by Cacciari. There were many instances of <u>dimension words</u>, such as "thin," "thick," "thick and thin mixed together," "deep," "floaty," "hollow." There were also <u>touch words</u> like "soft," "rough," "ticklish," "bumpy," "sharp," "heavy" and "light." From the <u>color word</u> category only "bright" and "dull" were found (although Cacciari's uses dull as an example of a touch word). No <u>taste words</u> were found.

The students often used similes, making comparisons with other sources of sound: "sounds like an oboe," "sounds like a guitar," "sounds like rain," "sounded like water," "sounds like thunder," "sounds like a toy store," "sounded kind of festival-like," "sounds like Jingle Bells," "galloping," "if you hit a pan," "it felt Caribbean like," "a fuzzy sound—like when you put a candle in the fire," "sounds like a bubble when you bang it [a woodblock] on your skin," "it's like a horror

movie or something," "like a Native American flute" and "doesn't it sound Native American?"

Finally, when students appeared to be at a complete loss for words, they employed quite a few imitations, such as "wow-wow-wow-wow," a nasal cat "meow," "it sounded like it was going woo-oo, woo-oo." In the following example, the teacher came to check on the progress of girls, working in a small group:

S: If you were really playing like a jazz thing, it sounds kind of like the—

T: The high hat.

S: The drums or whatever.

T: It's the cymbal.

S: It's like "tsch tsch tsch tsch" [spoken in a dotted rhythm]

T: Right, right. I think that it's the brush on the cymbal where they go—

S2: Tsch tsch.

During another small group activity involving experimentation with sounds produced on wire racks, students appeared to be at a complete loss for words. Transcriptions of tapes of the small groups show dozens of utterances such as, "Oh my God" "cool," "way cool," "awesome," "that's absolutely bizarre," "it's so weird" "I *loved it," "like wow" and "e-e-e-e-." A rare departure from the norm was this student's comparison of two sounds:

Ah, this is kind of hard to explain, but... I don't know. When you hit it out

*there, it's kind of just like, I don't know... If I was kids it's like banging

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pans going down the street going "yeah!" But when you put it in your ears, I don't know... Maybe it's because it's like vibrating in your finger and in your ear and stuff, it sounds more—actual music you can play. You know, the symphony or something. Not just some clamor.

Another student offered this explanation about the sensation produced by the sound of the wire racks:

You know when you have something metal in your hand and you're running it down a school railing; the metal school railing? It sounds like that. And you put your ear to it, which I've done before. It sounds like that. . . . And it makes that noise. It like vibrates like that and it echoes.

The following conversation between three students is a delightful example of how the girls working in groups negotiated their way through the assigned task:

S1: It sounds louder.

S2: What did she do to you?

S3: It sounds louder.

S1: Oh my God! It sounds like those *horror movie thingies.

S2: Yeah, well I *told you.

S1: It sounds cool. Keep on doing it.

S3: See, it goes through this, and it goes through ( )

S1: It's a horror movie.

S3: It goes *through the string, it goes through your finger, and then it goes *into your ear, and then since your ear can hear, it sounds **louder.

S2: Of course it sounds (louder)

S1: But the timbre is totally different.

S2: Of course it was *totally different.

S3: It's like a vibration socket.

S1: No, it just like sounds *lighter.

S2: It sounds the same ( ).

S1: Did you do your homework?

S2: Yeah, I did.

S1: Did we have to collate?

S2: I don't know, sorry.

S3: It sounds the same just totally...

S2: No it doesn't.

Throughout the discourse we have seen a variety of strategies used by students to cope with the difficult task of describing timbre. Students described timbre by creating adjectives from the nouns and verbs that define the sound source. They used the other physical senses, such as touch, taste, and sight to describe sound. They recalled sounds encountered in other contexts and compared them to the sound they were trying to describe. They also imitated sounds when they could not find the words to describe them. All of these strategies were effective and useful tools in constructing musical meaning.

Summary

The idea that our conceptual system is fundamentally metaphorical in nature is based on the work of linguists, psychologists and philosophers such as George Lakoff, Mark Johnson, Mark Turner, Gilles Fauconnier, Raymond W. Gibbs, Jr., Cristina Cacciari and others. They posit that figurative expressions encountered in everyday situations are not random occurrences, but rather form coherent systems and cognitive categories, which in this study are referred to as schema/schemata.

The collected data in this study were analyzed according to repeatedly-occurring figurative expressions and organized into five conceptually-based schemata: (a) containment and entity, (b) personification, (c) verticality, (d) regularity versus irregularity, and (e) location, space and motion. One additional category of figurative language was related to articulating timbre.

At the heart of the "container" schema is the experience of our bodies as entities or containers, which have an inside, an outside and a boundary that separates them. The container metaphor, with its in-out spatial orientation, was the most common schema of all found in the sections of text chosen for analysis. Frequent instances included references to being in a certain key, scale or mode. There were many references to the body or parts of the body as a receptacle for music or its elements. Examples revealed that music, its elements, and the "receptacles" of music are often perceived in very physical terms.

"Personification" as a schema in figurative expression is closely related to containment. Personifications are "metaphors through which we understand other things as people" (Lakoff & Turner, 1989). Instances of personification were found throughout the data. Music attained human qualities and was personified as a causal "agent" (as described by Lakoff, 1987) that implies, speaks, directs, changes character, makes you do things, has needs and wants.

The "verticality" schema, with its up-down spatial orientation, is also based on physical experience. Lakoff and Johnson (1980) observe that it has "to do with our erect position." Research shows young children find it difficult to apply up-down, as well as high-low to tonal direction (Hair 2000-2001). Given the polysemous nature of up and down or high and low, music educators usually view the use of these labels as obstacles to understanding musical concepts. Passages in the data were compared to Lakoff & Johnson's (1980) categories of metaphor that use the up-down spatial orientation. I found instances in the data in which light, active, happy and more were viewed as up, while heavy, passive, sad and less were seen as down.

The "regularity versus irregularity" schema is based on the metaphor that "perfect is regular, imperfect is irregular" (Lakoff and Turner, 1989). It was prompted by observed frequent value judgements of musical events assigned by participants in the study, who labeled them as right or wrong, good or bad. There were numerous instances of discourse about events in music that were considered disordered, unusual, out of the ordinary, and causing feelings of unease. These

were in opposition to musical events considered normal, orderly, comfortable and pleasant. To a surprising extent students appeared to reject that which they considered to be out of the ordinary. The most distinct category of opposition to emerge, and the one which encompassed the most examples, was consonance versus dissonance. Related to this was the tendency by students to perceive non-Western scales and tuning as irregular rather than just different.

The "location, space and motion" schema involves references throughout the data to music or its elements perceived to be in a particular location, occupying a particular space or being in motion. Because tones in a melody do not move, musical motion is a metaphoric notion. However, during the course of the observation the teacher and students repeatedly perceived music as an external force that causes movement. Frequently, elements of music found in the data were also perceived to have a clear location or place. Many descriptions were visualizations of a spatial musical landscape, where the participant was seen as a motionless observer or a traveler within the landscape.

Finally, the search of emergent schemata produced a category of descriptions and comparisons, all related to timbre, that did not coalesce into a single conceptual schema. Much of this discourse used similes, analogies, onomatopoeias or vocal imitations of sounds. Although this category is not a schema in the sense of being a recurring level of organized unity, it is a distinct grouping of figurative language. Students found it especially difficult to articulate "timbre words," something researchers such as Cacciari (1998) and Thompson &

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Schellenberg (2002) have confirmed. However, they were quite creative in their attempts to describe timbre, turning descriptive nouns or verbs into adjectives, creating cross-modal "synthetic metaphors" using other physical senses (Cacciari, 1998), and recalling sounds encountered in other circumstances.

Clearly, figurative language is indispensable in the construction of musical meaning. Furthermore, it can be grouped into categories which map the perceived structure of music and musical events as closely as possible, reducing stimuli to behaviorally and cognitively usable proportions (Rosch, 1978, p. 29). These categories or schemata imaginatively connect musical concepts with how they are perceived by participants.

Chapter V

Voices of participants

In Chapter IV, I presented a view of the discourse of one teacher's sixth-grade general music classes using a very explicit and focused mode of analysis. I examined the data for repeatedly-occurring figurative expressions, which I categorized according to schemata—meaningful structures for organizing our experiences and comprehension, based on recurring bodily experience.

Since classroom discourse and emergent schemata were in the forefront of Chapter IV, to some extent the participants remained in the background. Although their voices were an intrinsic and integral part of the analysis, they remained detached from individual personalities. In this chapter, I review conversations with some of the participants of the study, seeking to enhance the reader's view of the classroom that I had the opportunity to observe.

As stated in Chapter III, the six target students who had been individually audiotaped during observed classes were interviewed in May of 1999. In the first part of this chapter, I present a summary of those conversations along with some observations about the students' classroom discourse.

In addition, I interviewed Mrs. Amanda Lock in July of 2003 after she had an opportunity to examine the transcripts of the observed classes, as well as an

early draft of Chapter IV. Our conversation focused on specific events during the observation period. Our final conversation took place in November of 2003 after Mrs. Lock had read a later draft of the study. Mrs. Lock's remarks are interspersed with my observations about the topics under discussion.

<center>The target students</center>

Two students from each of the three sixth-grade classes were taped individually during the observed class sessions. All six were also interviewed one month after the conclusion of the observations, giving me the opportunity to make an initial appraisal of the data. In addition to learning more about the students themselves, I was interested in their metacognitive skillss—their ability to consider and assess their own learning and determine the relevance of the information that was taught. It was particularly interesting to hear the students' recollections of the class sessions that had been observed. During the interviews I did not attempt to use or encourage figurative language use.

I had hoped to provide a detailed profile of each student's use of language and to highlight individual variation and distinctiveness of their discourse. Unfortunately, the students generated insufficient data to enable thorough individual profiles. Each girl had interesting things to say on various occasions, but not enough to create a comprehensive portrait. More often than not the girls' speaking turns during the observed class sessions involved one-word responses or utterances of agreement, such as "uh-huh" or "mm-hm." Nevertheless, each

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student did reveal certain discourse tendencies and exhibited individual personality traits or interests. Excerpts of conversations with the students, in conjunction with brief biographical sketches, provide another point of view for the reader about the participants, the research data, and the environment in which they were collected.

Only the discourse in those sections of lessons that were coded as "expressive language" was examined more closely. Ruth and Dhara were the two students from group A who were individually taped; Janice and May Chu were in group B; Liela and Charlotte were in Group C.

Ruth

Ruth is white and describes herself as "American—not really anything" as far as ethnic background is concerned. She played the piano for four years and found it enjoyable. Ruth says she was always making up songs on the piano. However, she thought her teacher was "really mean and just awful" and the lessons became "kinda like torture," so she and her family decided to stop them. Ruth now sings in the school chorus. She says it is important to have music in school because "it teaches you a lot about just kind of anything. . . . I think it's really important, even though I'm not sure why." She thinks her talents lie in sports—basketball, soccer, softball, tennis and skiing.

Her family has musical interests. Her father used to play the trombone with a band, and her mother once played the violin, but according to Ruth, "we're not really musical now." She likes to listen to Broadway musicals, such as "The Scarlet Pimpernel" or "Annie Get Your Gun." Her favorite station plays "oldies,"

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but she also likes to listen to stations that play a mix of contemporary music styles. Ruth says she would find it difficult to imagine life without music, because she is always "listening or humming something."

Ruth says she does not know what she wants to do when she becomes an adult and appears somewhat put off by the question. "My mom wants me to be a lawyer, cuz she thinks I argue good. And so I thought it would be fun to be a Tom Grisham [sic]. . . . He writes all those books, and he's a lawyer. I thought that would be fun. . . . (Dad) says he doesn't really care, as long as I get an engineering degree."

Asked to recollect the lessons that were observed, Ruth recalled the study of ballads, during which she "learned the different ways songs can kind of make different feelings. You can take something different from a story even though it might be the exact same story." Asked how those differences were created, she said it was "just the way it was formatted. . . . It was the different tune and whether it was kind of fast or slow. Things like that. It makes you feel different. The type of speech. And also the point of view of the story." Ruth also said she vaguely remembered learning about the physics of sound – sympathetic vibrations, how sound travels and how resonators work. When studying chord construction Ruth "learned about what sounds good in music. And how the format was set up and how the notes work." Asked to list her favorite music class activities, she said, "it's fun to make up a piece that sounds good," and she also liked performing the various experiments that showed how sound travels.

Ruth was an active participant in classroom discussions. Her preferred figure of speech for description during the observed classes was simile and she often used analogies. She compared various music or elements of music to "the can-can of the Rockettes," "a kangaroo," "vinegar," "a ball in a little enclosed room, going, 'dam-ta-da-ra-da-ra'," or "like banging pans going down the street going, 'yea'." When she was at a loss for words, that did not stop her from participating; she would demonstrate what she meant by vocalizing sound effects, explaining for example, "it's just not every day bom bom bom bom." When Ruth lacked music terminology, she could be creative, explaining that something could still be harmony, even if it is "bad harmony," or that something is "not universal format."

Dhara

Dhara's mother is Filipino and her father is Indian. Dhara, who was born in Florida, went to a French school for five years and considers herself fluent in the language. She also understands a little of the native languages spoken by her parents.

Playing the violin is a big part of Dhara's life—she started when she was three years old. Dhara says she often gets a little bored in music classes at school, because she already knows the material, but at other times she enjoys it. When asked to describe the kind of music she plays, Dhara responds, "Classical mostly. Vivaldi—that's what I'm playing right now. It's very energetic, except for one piece that I know: the second movement of the Concerto in G Minor. Well, it's

really sad and everything, and my mom—she said if she has a funeral she wants me to play that piece for her," she explains with a laugh. Dhara also listens to classical music at home. She likes Vivaldi, Barber, and especially Mozart because of the energy in the music. "It sounds very simple, but it really is very complex, the way it's made. All the instruments and everything. . . . How all the instruments are layered in a lot of his concertos and everything. . . . All the layers of instruments are different, and it's so cool—I like it a lot."

Dahra's mother sings, plays the guitar and piano, and used to be a choir director. Dhara says her father is not very musical, but she thinks he is "starting to get musical" because he often has to listen to "our music." She also likes Indian music, describing its sound as very different than other music. "Sometimes they have syncopated rhythms, like on weddings there's a bunch of girls and they're all around this one person with the drum and they have like 'dum da ba, dum da ba,'" which she intones in a repeated pattern of quarter notes, followed by two eighth notes. "Most of the people that sing it—the girls—have really, really high voices, like 'woo-oo,'" she imitates the high-pitched singing. "And it's really different from what is here in the United States."

Dhara says she does not think music in school is that important "in the sense that you'll need it" in life, but it is something she finds enjoyable. "And I think if you want to be really educated it would be really good to know a lot about chorus, and music and reading notes." When asked to describe an educated person, she observes with a laugh, "Einstein. . . . I think music helps you think better. A lot

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of the people that play instruments are smart people. . . . It's really weird that a lot of the people that are geniuses—they played instruments. It's neat. . . I think there's a connection." Dhara would like to become a medical doctor, go to India to set up a clinic for the unfortunate people that she has seen there.

Asked to remember what she had learned in her music class, Dhara recalled the activity of making a string instrument from rubber bands and boxes and learning about how the construction affects pitch and timbre. In recounting the experiments on acoustics and a lesson on learning to describe instruments, she also focused on timbre. From the ballad lessons Dahra said she learned "that the beat is only as fast as you want it to be. But the second ballad—everyone thought it was going to be really fast, 'cuz it had eighteenth notes [sic] and everything, but then when we chose a beat that was really slow, it went almost slower than the first one, which was a lot happier and it had . . . longer notes. And of course a ballad is a story."

During the course of the six observed classes Dhara was the most verbally active of the six students. She took 489 speaking turns, although most of them were simple affirmations or one-word responses to direct questions. Many of her responses were onomatopoeic imitations (such as "bong" or "wow-wow-wow"). She seemed to focus on the timbre and texture of music more than on other elements of music, just as she did during the interview recalling what she had learned a month earlier.

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Janice

Janice, who is African American, used to play the flute and is still in the school orchestra, but says she quit taking lessons because there were too many other things to do. She enjoys sports, plays basketball and says she spends a considerable amount of time on homework. However, she continues to play the flute at home for her own enjoyment. She says she likes to play "syncopated music—really jumpy."

Other members of her family also have musical interests. Her mother used to play the flute, her father—the trombone, and her sister—the clarinet. Janice likes to listen to a variety of musical styles, including hard and soft rock, "oldies," "new age," and jazz. "Usually the songs that I like have really nice beat, and they get stuck in my head a lot, so I think of them a lot." Asked to explain, she responded:

> Like if I hear a song that I like, and I like the beat and everything, I'll like
> sing it and then it will get stuck in my head, and so I keep thinking about it,
> and I'll just like hum it during school and stuff. And it won't get out, and
> I'll keep thinking about it. I'll be like, "No, no—stop thinking about it!" It
> won't come out until I think about something else.

Janice says she likes music class at this school more than in public school which she attended the previous year. She says the students at this school are a lot more free, and the teacher allows them to walk around the classroom and examine the instruments. At her old school, she says, children were told to sit down right

away because "they didn't trust us." Also, there are many more instruments at this school, so two people do not have to share.

Since Janice is African American, I asked her whether she thinks she knows more about African American music than the other girls in her class. She responded, "Yeah. I like gospel, and I like listening to spirituals and like old stories of black people, because my great grandmother tells me stories sometimes. Sometimes she tells us slave stories, and sometimes she tells us stories about her. Like during the depression and other times."

Janice had difficulty recalling what she had learned during classes that I had observed. After several hints, she described the sequence of some of the activities, but did not indicate what she had learned. Janice was able to relate a little more about lessons involving the two ballads, which she described as "cool." Asked to recall what she learned musically, she explained, "that when they tell a story, sometimes they make it really funny, but usually it's kind of sad, and if they want it to be a sad story—then they'll make it in minor, but if they want it to be like a really happy story, they'll make it in major." When asked to recall some other differences between the two ballads, Janice explained, "they were kind of about the same thing, but I think the ending was different with them. 'Cuz one was that the guy died, and the other one was that no one died, I think. . . . The one that turned out happy was a lot quicker, but the one that was sad was like really slow, so you kind of realize that it was going to be a sad song. More like a gloomy song."

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Janice was among the less verbally active of the six girls, taking 374 speaking turns during the six observed lessons. Aside from general reactions and acknowledgements, many of her comments had to do with how things "went together." For example, she described dissonance as "not kosher," and said the notes sounded bad and did not work together. She had suggestions for improving the balance during an instrumental group improvisation. She said instruments should not be grouped into sections which play similar parts, but should be intermingled, explaining that "if you're all bunched up it gives you a big advantage now, but it also—you like can't hear the others sometimes. So what if you like mish mashed it like first a high and then (a low)." Plain talk about complex subjects was a hallmark of Janice's discourse.

May Chu

May Chu is from Singapore and came to the United States when she was nine. She used to play the piano, but said she stopped because she did not like the teacher. She also played the violin, but now enjoys playing the clarinet. She is a member of the school chorus and the orchestra. May Chu listens to rock music and "oldies," some country and other popular music.

Mary Chu says everyone in her family is musical: her father plays the harmonica, her mother sings, her sister plays the piano, her brother takes voice lessons, plays the piano, and writes songs— "Mostly ballads, but it's talking about himself." She describes his music as being "Almost always in major, but then he

was really moved by the [Columbine school] Colorado shooting, and so he wrote a song that was in minor."

She says music in school is not that important, insisting that skills needed for employment will be found in Mathematics and English. On the other hand, she admits that if there was no music in her life, "it would be like three quarters empty." She thinks she might become a lawyer; one reason is that her sister is a law student. Besides, "my dad says I have arguing skills," she notes as she giggles, "and I like talking."

Asked what she remembered about the activities during the observed period a month earlier, May Chu said she "learned about how songs can be told in major and minor and still basically mean the same thing. And ballads tell stories of people and some of them have happy endings and some of them have tragic (ones)." She also remembered the activity in which students struck cookie racks with a tuning fork. Asked about the point of the activity, she replied, "Well I think what she [the teacher] wanted us to find out was . . . the difference between sounds and music." Her favorite activity in music class was experiments with sounds. "I like when you get to make up pieces, and when you like hear music on the CD player. Some of the music is like really strange, but then we get to discuss it afterwards."

May Chu's classroom talk was the most interesting of the six girls who were taped. She participated the most during class discussions that dealt with timbre, consonance and dissonance, as well as creative enterprises like

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improvisation. It was important for her to make connections with other sound sources when trying to describe what she was hearing. For example, she called a composition "festival-like" or said that a certain drum sounded like a "war drum." During a discussion on consonance and dissonance she wanted to know whether the opening notes of the song "Chopsticks" were an example of what they were discussing in class. She described consonance and dissonance as, "the sun compared to the ghost ship." She suggested adding instruments to the song "Tzena, Tzena" to make it more lively, not satisfied with the piano accompaniment. Although she did not speak as often as some of the other girls (415 speaking turns), May Chu was always engaged in classroom activities and responded creatively to the teacher's questions and other students' comments.

Liela

Both of Liela's parents are from India and she speaks Hindi at home. She plays the violin and is a member of the school orchestra. She used to play the saxophone, which she says was a lot easier. She also belongs to the chorus. Liela's father plays the tabla—a pair of Indian drums, and her parents listen to Hindi music at home. Her older sister played the piano for a long time, and her little brother played trumpet in the school band. Her extra-curricular school activities include participation in musical chanting and the playing of drums and cymbals at temple rituals. Her favorite artists are Ricky Martin and NSYNC because their music "is upbeat and has nice melodies and nice lyrics."

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Liela is not that sure that music is a very important subject in school, and thinks there was a lot of time wasted watching videotapes of people making instruments. However, she acknowledges that it would be useful to someone who might want to compose or play an instrument. "Then they at least have that background."

Liela is a girl of few words. Eliciting responses about herself, about the music class, and about what she had learned was no easy task. After much prompting about the activities that had been observed a month earlier, she explained how chords are constructed, and observed "there's really an instrument in anything, pretty much. Like the baking rack, or whatever." Liela was slightly more forthcoming about the ballad lessons, noting that, "different countries take songs from other countries and they vary it a little bit. Like 'The Turkish Revery' and 'The Golden Vanity' have the same story almost, with a little bit of a different sway. . . I think 'The Turkish Revery' was a little bit lower or something. And different time signature. . . The 'Golden Vanity' was a little more major, then 'The Turkish Revery' was like minor."

Liela spoke the least during the six lessons that were observed, taking only 219 speaking turns. Compare this to Dhara, who took more than twice that number (489 speaking turns). During the passages that were coded "expressive language" Liela spoke less than 25 times over six classes. Most were general reactions or one-word answers.

<u>Charlotte</u>

Charlotte's family background is Scottish, Irish, and English. She says it is important to teach music in school since "it's something in your daily life. You hear music every day, so it's really helpful to know what it's like. . . . You know what you're listening to. Some people just turn on the radio, and they go, 'Oh, cool,' but you know what the beat is, and what notes."

Charlotte takes private oboe lessons and is a member of the school orchestra. She belongs to her church chorus and had recently participated in its production of the musical "Godspell," which involved many hours of rehearsal, and which she found very enjoyable. Charlotte's family listens to classical music at home, but she listens to "kid music—normal kid music," as she describes it. Her favorite radio station plays a mix of popular styles, and she likes "oldies" as well. She also listens to Celtic music and attends the local Scottish games every year. Charlotte describes the music she has heard there as "jumpy—it's happy music," while Celtic music, in her opinion, is slow and sad. "I think they were kind of depressed. They always sound depressed in all that music."

Charlotte enjoys science and social studies, and thinks she would like to be a teacher. She has also thought about being a pediatrician, but says she is afraid of hurting someone. She enjoys reading long fantasy fiction and rides horses.

Asked what she had learned a month earlier in music class, Charlotte recalled learning that making instruments is not as hard as one might think. Making instruments was one of her favorite activities because of the opportunity to

see "so many people with all their different imaginations." Charlotte explained that

during the lessons about ballads the teacher was trying to show that different

civilizations have different music. Asked to remember some of those differences,

she responded, "Well, one was more jumpy and major and happy than the

other. . . . And they ended differently. One was kind of minorish and the other was

majorish." Charlotte also explained the purpose of learning about chord

construction: "If you think about it most songs are made out of those chords. And

I don't think many girls were really thinking about it. They were just like, 'Oh,

cool, it's a song.' But there's so many different parts to it that they're not really

thinking about. It [the activity] made them think about it."

Charlotte was very active in classroom discussions, and of the 452 speaking

turns that she took, almost 23% were during sections of the class coded as

"expressive language." However, closer examination revealed that most of those

speaking turns were simply reactions or comments of agreement. When she did

speak about elements of music, her focus was on rhythm patterns, the rhythm

values of notes, observations about even or uneven, different or irregular rhythms.

The teacher's perspective

In Chapter III, the introduction to Mrs. Amanda Lock included her views on

the role of language in the music classroom, and her ultimate goal as a music

teacher. In this section, I summarize and present excerpts of our conversations

about specific classroom events during the observation period. I wanted to know

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the motivation behind some of her instructional decisions and her statements. I was

also interested in Mrs. Lock's responses to the class proceedings now that she had

an opportunity to view them after a certain amount of time has passed.

About classroom discourse

During one class a student responded to Mrs. Lock's question about the

energy and motion of the song "Tzena, Tzena," using musical terms like legato and

staccato. The teacher corrected her, saying that she wanted non-musical motion

words instead. On another day, Mrs. Lock wanted the students to compare "The

Golden Vanity" and "The Turkish Revery," but cautioned "Don't give me musical

words for the difference. Give me just the plain kind of adjectives and adverbs you

might use if you were describing (it) to a friend, who hadn't heard it." I asked Mrs.

Lock why she did not want the student to use professional vocabulary, and what

was the advantage of having the students use their own expressions. Mrs. Lock

knew that I was studying figurative language use, and I wondered whether that

influenced her to ask the students to change their responses. She explained that the

research study was not the reason she asked them to use their own language:

I think legato and staccato immediately get categorized as set things. There

are so many shades of legato. There are so many kinds of staccato. Again:

*how are you hitting that floor? *How are you plucking it? Is it a 'pick?'

[she said the words quickly, in a high-pitched voice]. Is it a *jab? [she

uttered the words in a forceful, low-pitched voice]. What *kind of staccato

is it? Those are the things—those are the many, many shades that make

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something breathtaking when you go to a concert. Because it isn't: 'Oh, now it's legato, now it's staccato.' What kind? When you say it's walking music, *how are you walking? Are you feeling bouncing? Are you dragging as you're walking? What's happening here?

It was to get them to really articulate their own feelings and responses, and to think about the many ways that music can move, without going to piano, to forte. It's never just piano. What kind of soft? Is it a whisper that you're trying to—dying to make heard, but you can't? [she demonstrated in a barely audible voice]. You're told that you can't talk any louder than this. Is it that kind of soft? Or is it the soft that comes from exhaustion? Those are the kinds of things that I want them to move towards.

About the climate of the classroom

I asked Mrs. Lock if she encountered any surprises during her review of the transcripts of the taped class sessions. She responded:

I was dismayed at how much talking went on in a single class. . . . Since then I've tried to become more sensitive—getting the explanations out of the way and let the music do the teaching. Music first, talking later. As I looked through there, I thought, "Oh! All those pages of talk!"

I remembered as I went through the three distinct groups and that the third one was the more challenging group. . . I remembered the faces and the names of the difficult children. . . . It was interesting particularly to

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read when it came to disciplinary kinds of things. That's when I really felt as though there was too much talk.

Asked whether she thought discipline problems affected discourse in the classroom, Mrs. Lock agreed it did. She explained that "there's a tenseness to it. You lose that kind of natural spontaneous response to the kids, and they to you as well."

It was obvious that Mrs. Lock had different relationships with each of the three sixth grade groups. There was a "favorite class," which I call Group A, in which corrections of behavior were infrequent. There also was the class, which I call Group B that could be described as "in between," where discipline issues emerged from time to time. Finally there was the "problem class," which I call Group C, in which instruction was interrupted fairly frequently by corrections of behavior.

While the differences in spontaneity and affability among the three classes were fairly obvious from the transcripts, I was interested in comparing the use of figurative language among the groups. Surprisingly, there was very little difference among them in the amount of discourse that I had labeled as "expressive language." A quantitative comparison revealed that I had coded 33% of the transcripts of activities in Group A, 28% of the activities in Group B, and 32% of the activities in Group C as "expressive language."

The reader will recall that personification was a prominent theme during the movement activity in which the song "Tzena, Tzena" was used. The teacher asked the students what they felt the music was telling them to do, or what they felt like the floor was doing to them. When I asked Mrs. Lock what she was trying to achieve with the activity, she answered that her specific focus was the quality or the nature of the beat:

> I always try to find those things that will help kids get into the nature of music, and that's why for a long time we used this idea of descriptive language—to help kids express their responses to music, physical and emotional. (One way of) responding to music and even to make it more musical is to look at the nature of the beat. You see it in movement all the time—in dance music. Look at. . . Irish dancing, which is definitely into the floor.

When asked what concept she was trying to convey with the expressions "into the floor" or "off the floor" and what "professional" vocabulary the teacher might use to express that same idea, she responded that she would prefer not to use "professional" vocabulary. She would say it the same way:

> I would talk about into the floor and off the floor, because I think it's very definite movement. It's the motion of dance, and I think that's what often is missing. . . . I'm after the nature of the response to the sound. If there is a sense of lightness, of lifting, of airiness in that, then that's going to totally

change the sound of production. The way you go at it is going to change

the sense of movement as you sing through a phrase. If it's heavier into the

floor, even if it doesn't change the tempo, it's going to change the sense of

accent, the emphasis, all of those things. If you go after the metaphor of

dance, which is "into the floor" or "off the floor," you can use that with

professional musicians, or with anybody. When you listen to professional

musicians, I think that's what's missing in stylistic interpretation.

I was particularly interested in the teacher's personification of the floor when she

asked the students, "What do you have to feel like the floor is doing to you?" I

asked Mrs. Lock about the function of the floor when she asked that question, and

whether the floor represented some element of music. Her response:

Does it stop you? Does it give you spring? . . . I talk about listening with

your knees, listening with your feet. Have something other than a logical,

linear, cerebral way of listening to music, which is the very Western way. . .

We each have preferred responses to listening. Some people immediately

think of words in terms of responding to music. Other people—and I'm one

of those people—feel movement. Whether I'm sitting still in my chair or

not. My body responds to what I'm hearing in terms of how I would move,

how I would dance. . . . The third way is to visualize, which I don't do at

all. I'm not a visual person in any sense.

Mrs. Lock's characterization of herself was quite accurate. Most of her

verbal prompts for this particular activity had to do with energy and motion as a

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driving force. As a matter of fact, during our final conversation (in early

November, 2003) she took issue with the Zuckerkandl quote in Chapter IV in

which the author explains that no tone, as long as it sounds, moves from its place.

> I don't think a tone ever stands still. Physically. . .if you are singing or
> playing an "A" the amount of physical pressure is constantly changing.
> Therefore the amplitude is never static and probably could be proven. If
> you ever tried to sing a pitch, it's always going a little up or a little down in
> vibrato. And so I think that even at the very moment that a pitch is sounded
> it has movement inherent in it. Granted there may be different kinds of
> movement physically—when you move to the beat, in terms of vibration,
> acoustic vibration, but I'm not so sure I would agree that tones and the
> melody do not move, but stand still. I think they physically do. Certainly
> emotionally they do. And that's what you say to kids. . . . But I think they
> physically move too because the minute you intone anything, it's subject to
> constant change in the actual vibration..

Movement and music appear to be inseparable in Mrs. Lock's mind. On the

other hand, during the observed class sessions many of her students needed a point

of reference in visual, physical entities, and made references to kangaroos,

grasshoppers, trampolines and bouncing balls. Both the teacher and her students

expressed their understanding of the beat in spatial terms, often using containment

metaphors. Mrs. Lock perceived the music as moving, while her students often

needed to compare the motion of music to other moving entities.

<u>About the research findings</u>

I asked Mrs. Lock if she was surprised by the approach I used to analyze language use in the classroom and whether any of the ideas presented in Chapter IV had occurred to her previously. Mrs. Lock confirmed that she indeed was surprised:

> I had assumed that one of the reasons you were interested in coming to my school was that we did all of this work on language to help children just talk about music—to give the vocabulary. I was expecting more that had to do with words that saw music in terms of its energy, its motion, its timbre, its tension, etc. So that was a whole new way of looking at language, and I found it fascinating. . . .I'm most interested in how you think an understanding of this figurative language applies to the teaching of music.

We spoke about Cacciari's (1998) observation that English language vocabulary for describing timbre is quite impoverished. Mrs. Lock concurred:

> I think I came to that conclusion this year [the 2002-2003 school year] actually—in the fourth grade, where I spend a lot of time talking about musical timbre and realizing what a difficult subject it was to put words to. And then (I wonder) if that's even appropriate for fourth grade. I don't know. But it does come back in the fifth and sixth grade and . . .it's not an easy concept, because we have so few words for it . . . . I came to that conclusion this year. It hit me for the first time.

Mrs. Lock explained that this is certainly not the first time she had considered the confusion that is caused by the polysemous words "high" and "low."

When I asked her what she thought of some researchers' recommendation to avoid polysemous words, Mrs. Lock responded:

My first impression is to say that's almost impossible. It's too much a part of our culture. . . . Particularly in younger grades, when whether or not a child can be successful at the task you give her depends on her understanding of the concept of high and low, it does suggest that we find alternative ways of presenting that concept. We regularly get comments from our learning specialists that say, "So and so has been tested and we have to make sure that we teach in many modes for her." . . .I think . . . that we're almost compelled to make sure that we find alternative methods for teaching the concept of varying pitch. Even definite versus indefinite pitch, which I make a big deal of. There are kids who even have difficulty with that concept. And so "high" and "low" probably presents even a larger challenge to kids. We do need to find alternative ways to teach that concept for children for whom high and low will never make a lot of sense until they're maybe too old.

I asked Mrs. Lock what she thought of the value judgements that her students seemed to attach to consonance and dissonance, and what can be done to elicit a musical reaction rather than simply a sensory reaction to consonance and dissonance.

Consonance and dissonance does have that negative—even aside from music, it does have a negative connotation. Isn't that why we call certain things consonance and dissonance? And it is a matter of experience. The negative things that we have ourselves thought of years ago as dissonant, we now hear as dissonant intellectually or acoustically, but it doesn't have the same negative emotional response from us.

Mrs. Lock observed that the students' responses appeared to be culturally defined. I asked her how such responses can be changed to become more musical. Mrs. Lock noted that in her classes such changes are effected in composition. Students are asked to start with something they perceive as consonant, then move on to dissonance, and back to consonance to experience the sensation of tension and release. Mrs. Lock added that negative responses to dissonance are not necessarily determined by age. "It's not even child-like. It's a human reaction to have these negatives."

Mrs. Lock also noted that she found containment and personification examples in the data especially fascinating saying, "It's pretty amazing. You don't go through many sentences before you use it again. It's part of our speech." However, she was not sure of the pedagogical implications. "In some ways I saw that as validation of our attempt to allows kids to verbalize their response to music in perceptual terms rather than musical-specific— you call them professional terms."

Summary

The students whom I interviewed at the Woodgate school lead busy lives, filled with enriching experiences. They all expressed lofty career goals and exhibited a sense of self-confidence that was very refreshing. Most of the girls are engaged in musical activities outside of the general music classroom—at home and in their communities. All of the girls had interesting things to say about the meaning that music has in their lives. They had more difficulty verbally relating the musical meaning of the activities that they had experienced in their classroom during the observation period.

Each student's discourse style was apparent, even from the limited amount of data that they generated during the observed classes. Ruth, for example, often used similes and sound effects to describe music. Dhara focused more on the timbres of the sounds she encountered. Janice constantly revisited the issue of how music is "put together." May Chu regularly made connections with other sound sources and contexts when trying to describe what she was hearing. Charlotte was preoccupied with rhythm. Liela, however, did not provide enough information to draw any conclusions about how she constructs musical meaning.

Mrs. Amanda Lock is a highly reflective practitioner who examines every aspect of her teaching. She ardently wants her students to understand the power that music can have in their lives.

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Motion and energy are concepts that drive much of Mrs. Lock's music instruction. She attempts to transmit this to her students verbally, through the performance of music, and through physical movement.

Conversations with Mrs. Amanda Lock showed her genuine interest in exploring the research findings from her classroom in relation to the ways she might teach about timbre, consonance and dissonance, pitch relations, and about getting students to verbalize the musical experience.

Chapter VI

Summary and Implications

Summary of the Study

Cognitive scientists use many modes of analysis to understand how we perceive, think, remember, understand and learn. The study of language is one such mode of analysis. Many cognitive psychologists and researchers (Piaget, Vygotsky, Bruner, Gardner and others) have stressed the importance of language in the cognitive process. They describe language as a set of symbols, which mediates meaning in the learning process. Many music educators (Auker, 1991; Elliott, 1995; Flowers, 2003; Hair, 2000-2001; Stellaccio, 1993; Hargreaves & Zimmerman, 1992; Regelski, 1981; Tait, 1992; Tait & Haack, 1984; and others) have underlined the importance of language in the formation of musical concepts and in the development of aesthetic sensitivity.

Teachers' awareness of the different types of language that children use is necessary for effective learning and teaching. "Pupil talk" should not be discounted as trivial and unimportant, even when it is deficient in professional music vocabulary. Mere labeling through the use of technical vocabulary may not be sufficient to personalize the musical experience, and educators are recognizing the importance of students' personal vocabularies when describing their musical perceptions.

Increasingly, figurative language is regarded as a fundamental mode of cognition, reflected not only in language, but also in thought and action. Figurative language uses tropes (figures of speech), such as metaphors, similes, idioms, analogies, hyperbole, metonymy, oxymoron, irony and so on, to expresses one thing in terms normally denoting another with which it may be regarded as analogous. By studying figurative language we can gain insight into how musical meaning is constructed using non-technical terms and concepts.

Many cognitive linguists, including Lakoff, Johnson, Turner, Gibbs, Fauconnier and Cacciari, believe that our entire conceptual system is metaphorical, and some researchers maintain that acquisition of new knowledge is not possible without the use of metaphor. These theorists believe that nonphysical phenomena are grounded in physical experience, and our understanding of the world is shaped by how we interact with the physical world. This embodiment is reflected in metaphor and other figurative language, which provides categories for abstract concepts. These categories are called image schemata, which are structures for organizing our experiences and comprehension, based on constantly recurring bodily experience. An image schema can be a visual, auditory, kinesthetic, tactile, imaginative or structural representation of an abstract concept.

The intent of this research was to apply recent theories in cognitive linguistics to musical experiences in classroom situations. Premises of the theory of embodied schema guided the analysis of the data collected for this study. I sought to magnify the understanding of musical cognition and how teachers and

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students think and verbally construct musical meaning, as reflected in the use of figurative language in the music classroom.

The inquiry was guided by these questions:

1. What conceptual schemata emerge when analyzing figurative language in the music classroom?

2. What is the function of figurative language in the construction of musical meaning?

3. How can a music teacher use knowledge about figurative language effectively to describe musical concepts and processes, and to respond appropriately to figurative language used by students?

The research was conducted in a private day-school for girls. Three sixth-grade general music classes, taught by the same teacher, were observed and tape-recorded over a seven-week period. Recorded verbal communication of the nineteen class sessions was transcribed. Transcriptions, as well as notes and interviews, were analyzed.

Data were reviewed for the emergence of cognitive schemata. The five schemata that emerged and were presented in Chapter IV are: (a) <u>containment and entity</u>, (b) <u>personification</u>, (c) <u>verticality,</u> (d) <u>regularity versus irregularity</u>, and (e) <u>location, space and motion</u>. One additional group of figurative language was related to describing <u>timbre</u>.

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The <u>containment</u> schema is based on the premise that we experience our bodies as entities or containers, which have an inside, an outside and a boundary that separates them. The container metaphor was the most common in the data. Frequent instances included references to being in a certain key, scale or mode. There were many references to the body or parts of the body as a receptacle for music or its elements.

<u>Personification</u> as a schema is closely related to containment. Music was perceived as having attained human qualities and personified as a causal "agent" that implies, speaks, directs, changes character, makes demands, has needs and wants.

The <u>verticality</u> schema, with its <u>up-down</u> spatial orientation, is also based on physical experience and has to do with the erect position of our bodies. Passages in the data that use the <u>up-down</u> spatial orientation, included instances when light, active, happy and more were viewed as <u>up</u>, while heavy, passive, sad and less were seen as <u>down</u>.

The <u>regularity versus irregularity</u> schema is based on the metaphor that "perfect is regular, imperfect is irregular." There were numerous instances of discourse about events in music that were considered disordered, unusual, out of the ordinary, and causing feelings of unease. These were in opposition to musical events considered normal, orderly, comfortable and pleasant. Students appeared to reject that which they considered to be out of the ordinary. The most distinct

category of opposition to emerge was consonance versus dissonance. Students also perceived non-Western scales and tuning as irregular rather than just different.

The location, space and motion schema involves references throughout the data to music or its elements perceived to be in a particular location, occupying a particular space or being in motion. The teacher and students repeatedly perceived music as an external force that causes movement. Frequently, elements of music were also perceived to have a clear location or place. Many descriptions were visualizations of a spatial musical landscape, where the participant was seen as a motionless observer or a traveler within the landscape.

There were additional examples of figurative language which did not form a conceptual schema, but which nevertheless were grouped into a separate category. These were descriptions of timbre that used similes, analogies, onomatopoeia or vocal imitations of sounds. Although students found it especially difficult to articulate "timbre words," they were creative in their attempts, turning descriptive nouns or verbs into adjectives, creating cross-modal "synthetic metaphors" using other physical senses, and recalling sounds encountered in other circumstances.

In Chapter V, I presented excerpts from conversations with some of the participants of the study, seeking to enhance the reader's view of the classroom that I had the opportunity to observe. Six target students who had been individually audiotaped during observed classes were interviewed one month after the end of the observation period. I also interviewed the teacher, Mrs. Amanda Lock, after she had an opportunity to examine the transcripts of the observed classes, as well as

drafts of the research study. Our conversations centered on specific events during the observation period.

Implications for Educational Practice

Writing about reform-minded music teachers, Thiessen and Barrett (2002) cite a set of standards developed by The Interstate New Teacher Assessment and Support Consortium (INTASC). This document presents ten principles that define what newly-licensed teachers should know and be able to do. Principle 6 states, "The teacher uses knowledge of effective verbal, nonverbal, and media communication techniques to foster active inquiry, collaboration, and supportive interaction in the classroom" (p. 760).

Educators need to become more aware of the entirety of language used in the classroom by themselves and their students, striving to make it more focused, deliberate and intentional. Not losing sight of Tait and Haack's (1984) caution that, "Language is not the same experience [as music], the words are not the same feelings" (p. 37), language is nevertheless an indispensable tool in the construction of musical meaning. While it is understandable that many music educators and theorists have argued for less "talk" in the music classroom in favor of actual "music making," one should not lose sight of the fact that the way teachers use language to describe musical concepts can facilitate or hinder their students' musical understanding. It is not sufficient to focus on the development of the professional vocabulary of music. As shown in this study, many musical concepts

are articulated through figurative categorization (schema) that does not involve professional vocabulary. One of the research questions which framed this study was: What is the function of figurative language in the construction of musical meaning? It is to categorize and structure experiences into discernible, usable units. We create figurative categories, that is schemata, which map the perceived world structure as closely as possible. The perceived structure of the musical world is no exception.

Figurative language provides a unique tool for mediating between the abstract and the concrete as we construct musical meaning. As many cognitive linguists have noted, we conceptualize abstract, nonphysical phenomena by grounding them in constantly recurring bodily movements and physical experiences. Amorphous entities are perceived to have shape, location, orientation and mobility. Patterns, structures or image schemata for organizing our experiences and comprehension arise through metaphorical projection from the domain of the physical to the abstract. This conceptualization, shaped by functioning in the physical world, is reflected in language and cognition. This study has shown that there is evidence of such embodied schemata in the discourse of music. Musical concepts can be rather abstract, elusive phenomena. Quite possibly many music theorists and music educators have not been aware of the extent to which we structure abstract musical concepts in terms of something more concrete. Johnson and Larson (2003) remind us that:

Music is meaningful in specific ways that some language cannot be, but it

shares in the general embodiment of meaning that underlies all forms of

symbolic expression, including gesture, body language, ritual, spoken

words, visual communication, and so on. Thinking about how music moves

us is not going to explain everything we need to know about language, but it

is an excellent place to begin to understand how all meaning emerges in the

flesh, blood, and bone of our embodied experience. (p. 81)

It should also be noted that when students construct meaning using

figurative language as a tool, there is a risk they may oversimplify and

overgeneralize. Petrie and Oshlag (1993) even warn that on occasion metaphors

are taken literally, which interferes with the later development of knowledge and

concepts. Despite these dangers, they do not suggest eliminating the use of

metaphors, but rather using a variety of cross-cutting metaphors and sources of

knowledge.

Thus, even if we grant the possible misuse and misleadingness of metaphor,

especially in advanced learning, and even if we were to assume the goal of

making what is learned more explicit, it still appears that metaphors and

analogies play a central, even indispensable role in the pedagogical process

of acquiring that subject. (p. 581)

Despite this caveat, I maintain that figurative language is an essential instrument in

the teaching and learning of music, even when participants are not conscious of its

use.

However, when various characteristics and structures of figurative language are bought to the forefront for us to consider, they do present challenges to established educational thinking and practice. While I find the mere existence of cognitive, embodied schemata described in Chapter IV an intriguing topic for study, there remains the issue of how these research findings apply to educational practice more specifically. In the remainder of this section, I present four major pedagogical issues which confronted me, as I contemplated the findings of this study. They are: (a) polysemy, (b) intersubjectivity, (c) embodiment of music in space, and (d) articulation of timbre.

Polysemy

Researchers have repeatedly shown that children find it difficult to apply the concepts of up-down, as well as high-low to tonal direction. This difficulty can be attributed in part to the polysemous nature of the words themselves. As the students' vocabulary and complexity of language develop, they discover that up, down, high and low can mean many things. They learn that these word pairs can be used to express not only direction, but also scale, weight, volume, even mood and point of view. However, in the music classroom teachers often continue to insist students limit the understanding of these words to "high" and "low" pitch.

Flowers, and other researchers cited in this study, have suggested avoiding polysemous word pairs altogether, and when they are used, to do so in consistent ways. Having examined polysemous word pairs dealing with verticality even in the limited number of lessons observed in this study, I do not believe that is possible.

Many references to <u>up</u> and <u>down,</u> or <u>high</u> and <u>low</u> are not conscious choices and not readily apparent to either the speaker or the listener. In this study, they emerged only after a transcript of the lessons was prepared and examined. Even if the teacher was able to confine all references of <u>high</u> and <u>low</u> to pitch, which is highly unlikely and probably would hinder the natural flow of speech in the classroom, the students' polysemous understanding of the words would encompass many more concepts based on their experiences outside the classroom. Furthermore, if polysemous words correlate with each other in a natural category of concepts—a cognitive schema, and involve systematic relationships between them (Lakoff, 1987), it is difficult to disconnect one from another. A cognitive relationship exists between polysemous words.

Teachers should find ways to limit the definition of expressions of verticality in the classroom. Narrowing these expressions to an understanding of pitch is in fact necessary when training musicians to communicate musical concepts. However, they should not try to erase or fight against the metaphorical richness of these polysemous word pairs by dismissing other interpretations as erroneous. On the contrary, it could benefit students' learning, if music teachers were more aware of the different meanings associated with them and work within this more expansive framework. In fact, teachers could draw the students' attention to the fact that expressions of verticality contain a variety of meanings, and to identify explicitly in this context the particular meaning that is sought. According to Bruner (1986), this is how meaning is constituted:

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The relation of words or expressions to other words or expressions

constitutes, along with reference, the sphere of <u>meaning</u>. Because reference

rarely achieves the abstract punctiliousness of a "singular, definite referring

expression," is always subject to <u>polysemy</u>, and because there is no limit on

the ways in which expressions can relate to one another, meaning is always

underdetermined, ambiguous. To "make sense" in language. . . always

requires an act of "disambiguation" [emphasis in the original] (p. 64).

Bruner goes on to say that children constantly negotiate how one expression relates

to another. They explore ways to overcome ambiguity in an attempt to construct

meaning from discourse.

Knowing how children's lexicon helps or hinders the conceptualization of

music is truly important. In my own practice I have encountered the frustration of

failing to grasp why students had difficulty limiting their understanding of

verticality to pitch, even when they were well into their middle school years. I had

not considered that students would be applying their "non-musical" extended

meanings of these words to a musical situation, and that this was completely

normal and commonsensical. An understanding of how polysemous words

(especially polysemous expressions of verticality) expand or hinder the students'

process of constructing musical meaning can inform our practice of teaching

children how to conceptualize and label musical phenomena. Those who train

prospective music teachers may be well-advised to include discussion of the

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phenomenon of polysemy in their programs, and to propose appropriate verbal clarifications to "disambiguate," as Bruner recommends.

Intersubjectivity

Vygotsky's (1978) cultural development theory, which focused on the child's acquisition of semiotic mediators that act as bridges between a child's earlier and later forms of thinking, was presented in Chapter II. Vygotsky proposed the concept of the zone of proximal development by which interactions between an expert and a novice result in cognitive change in the novice. Similarly, Wertsch (1984) says that the primary task of an adult is to change a child's definition of a situation so that it approaches the adult's definition, resulting in intersubjectivity, a third situation definition in which both agents can share the same way of perceiving objects and patterns.

Clearly, there is need for semiotic mediation in the classroom discourse involving consonance and dissonance. First of all, educators should be more aware of the idea that there exist two types of consonance and dissonance (Thompson & Schellenberg, 2002). Sensory consonance and dissonance is an acoustical phenomenon. Children's innate dislike for sensory dissonance needs to be "unlearned" through instruction and enculturation. Long-term knowledge of music affects judgments of consonance, and leads to musical consonance and dissonance. The musical understanding of consonance and dissonance is culturally determined or culturally mediated.

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Teachers should be made more conscious of the high probability that their students have an innate preference for sensory consonance and a dislike for sensory dissonance. This results in the simple, sometimes primitive verbal responses encountered in the data of this study describing reactions to examples of consonance and dissonance. This perception may in fact be useful when developing an initial understanding of the role of tension and release in music that is caused by their occurrence. However, at a later stage, most teachers would presumably like to lead their novice musicians in the direction of Stravinsky's definition of consonance and dissonance. In this case, labels such as bad, wrong, not kosher and yuck, which were encountered in the data, hinder the construction of musical meaning. The development of a culturally determined definition of consonance and dissonance requires an appropriate change in language itself. Teachers may look for ways to bridge the chasm between sensory and musical consonance and dissonance through appropriate classroom events and careful, purposeful use of language, leading eventually to a change in definition, response, and ultimately—cognitive change.

The same recommendation applies to other instances when students express displeasure or unease with elements of music that are deemed "irregular" (e.g., rhythms, tuning). If teachers are aware that students have a tendency to verbally accept those things that are perceived to be regular (i.e., approaching "perfection"), and to reject those things that are not so perceived, they can more effectively regulate the use of language in the classroom so that students would not be so eager

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to make value judgements regarding the "right" way and the "wrong" way to construct music.

Embodiment of music in space

Throughout the course of nineteen lessons, I encountered students who endeavored to assign meaning to musical experiences by transforming them from the abstract to the concrete. The girls simplified musical reality by creating functional and implicit "theories" to understand abstract and explicit theories. They used three schemata that have been described in Chapter IV: containers, personification, and the notion of music in a particular location and space to "grasp" abstract musical concepts.

This is very much in line with German philosopher Immanuel Kant's view of imagination. He believed that there could be no meaningful experience without the operation of imagination, and he understood imagination as a capacity for organizing mental representations into meaningful unities that we can understand (Johnson, 1987). Sticht (1993) strengthens this position, saying, "The metacognitive knowledge of how to manipulate ideas explicitly in metaphor so as to transform either one's own or another's knowledge into new knowledge makes metaphor a major tool for extending our capacities for analytical thought, at the same time changing us as tool users" (p. 631).

Zbikowski (2002) vividly illustrates this transformation in his discussion of anthropomorphism (which I termed personification in this study), which maps the properties of living beings onto sound objects. Applying the conceptual model of

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living beings onto music yields "a mental space populated with animistic pitches" (p. 113).

These views of embodied experience contrast sharply with that of Bowman (1994), who states:

> Sounds do not line up one beside or behind one another as the objects of sight generally do. Rather, sounds emanate in all directions at once, intermingle, coalesce with, and pass through each other. Sound's touch is no surface sensation but one of penetration. It reaches within and passes through us. So, whereas visual experience is of things out-there, sonorous experience is a corporeal one of events in here. (p. 52)

Bowman explains that things which are visually seen are sorted out in space, they have a place in relation to each other and to us, they have a sense of separateness and distance, and they have clarity and distinctness. However, sonorous experience, he insists, lacks vision's sense of durable constancy. "Where sight gives us physical entities, the aural world is phenomenally evanescent, processual, and disembodied," says Bowman (p. 52).

The data in this study clearly show this is not always true. Although sounds may in fact emanate in all directions at once, that is not how students described the motion of sound. The students and the teacher often referred to musical elements as being "out-there" (in Bowman's terms), containing an implied surface, separateness and distinct location—much like visually-perceived objects. At times sonorous experiences reached within, especially when the human body was

perceived as a container for music. However, music did not always pass through the listener, as Bowman describes. Sometimes it went past the listener, sometimes it stood still while the listener moved, and sometimes the listener observed its movement from afar.

Recall the activity in which students were asked to describe the driving force of the song "Tzena, Tzena." While Mrs. Lock spoke of energy and motion, many of her students needed a point of reference in visual, physical entities, such as kangaroos, grasshoppers, trampolines and bouncing balls. Both the teacher and her students expressed their understanding of the beat in spatial terms, often using the concept of containment. It may be useful for the teacher to be aware that there may be a difference in the way she and her students perceive music. Perhaps through language she might blend her tendency to express things in terms of movement and her students' more visually oriented responses.

In Chapter IV, I asked whether container metaphors are beneficial in the instructional process, and conversely, is the imposition of this schema onto musical phenomena a hindrance that impedes instruction of certain aspects of music? Containers have certain properties, and when we map the concept of a container onto music, we map those properties onto music as well. As Cacciari (1998) states, "Metaphors also have a life of their own because they give a linguistic identity to events, persons, and entities using already existing systems of knowledge" (p. 147).

This study examined the discourse of pre-adolescent musical novices. Could it be that older, more musically sophisticated students or professional

musicians do not impose these visual characteristics (such as containers and

landscapes) onto sonorous experience? Although research on this topic is not

extensive, findings by Brown (in press), Guck (1994), Johnson and Larson (2003),

Zbikowski (2002) and others presented in this study suggest that representatives of

all populations impose an embodied understanding of various musical elements

onto music. Whetherthis is desirable is another question. Again, quoting

Bowman:

> Sound also has an urgency unparalleled in visual experience. This
>
> "peremptory immediacy," as Burrows characterizes it, can neither be
>
> ignored nor controlled, and may assume qualities ranging from the
>
> intoxicating to the violent and invasive. Thus, the sonorous world is
>
> characteristically more urgent and engaging, and our relationship to it more
>
> vulnerable than is typically the case in visual experience. (p. 52)

By extension, is Bowman claiming that the more visual (or embodied) our

understanding of music and its elements, the less urgency and engagement we

experience? This is a question that needs to be examined by music educators and is

beyond the scope of this study. If, however, music educators were to come to a

consensus that embodiment of musical phenomena is a hindrance to the immediacy

of the musical experience, teachers would need to discard many of their methods

and strategies for teaching music, especially in the elementary general music

classroom. Émile Jaques Dalcroze's translation of physical experience to musical

experience is an internalized mental representation of embodied music. Dalcroze

students are taught that rhythm is motion. Furthermore, as Dalcroze has written in

Eurythmics, Art and Education (cited in Landis & Carder, 1972) "Rhythm is the

link between mind and senses, and this to such a degree that each pupil speedily

rejects the current opinion which looks upon the body as inferior to the mind. He

quickly comes to regard his body as an instrument of incomparable delicacy,

susceptible of the noblest and the most artistic expression" (p. 16). According to

Mead (1994), Dalcroze believed that:

> students should continually be cultivating a memory bank of aural, visual
>
> and kinesthetic images which could be recalled at any time for reading,
>
> writing, performing or creating music. The stronger and more carefully
>
> defined the images, the longer and more precisely they remain in the
>
> memory. (p. 5)

Madeleine Carabo-Cone (1986) takes Dalcroze's conception of the body as

an instrument even further. She states that, "There is hardly a better way to present

a concrete representation of an abstract idea than through visual and tactile

experience that is reinforced and coordinated with the auditory and the kinesthetic"

(p. 172). While her sensory-motor approach to music learning is not as well-known

as Dalcroze's, her techniques have been employed by many music educators.

Walking on a giant music staff to indicate pitch location on the floor, for example,

is meant to develop children's self-image of "becoming" a staff, a musical

instrument, a sound or a song. Similarly, I have observed many activities in which

students are asked to step onto specific circles on the floor to indicate that they are

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hearing a tonic or dominant chord. Students are asked to step into a row of "Hula Hoops" placed side by side on the floor to show understanding of how many beats there are in one measure by the corresponding number of steps in the hoop. Listening maps found in all current music textbooks, reminiscent of previously-discussed musical landscapes through which we travel, are in direct conflict with the cited notion that, "Sounds do not line up one beside or behind one another as the objects of sight generally do." Kinetic hand signals used in the Kodály method also reinforce the notion of pitch being in a certain location and having a visual shape. The Orff approach stresses the sensory approach by using kinesthetic activity as a vehicle for improvisation, understanding form, preparation for playing instruments, and personal expression. All of these methods and strategies serve to reinforce the understanding of musical elements as bounded containers or locations, situated on a musical landscape. All of these strategies presuppose that musical meaning is constructed not internally or abstractly, but through kinesthetic experience or the cognitive schema which recalls a recurring bodily experience. Gordon (2001), who gives primacy to sonic experience, also acknowledges the importance of movement during performance since it prepares children "to 'audiate space' as well as time" (p. 45).

Germane to this discussion of how we perceive the abstract, temporal art of music is Lipscomb's (1996) explanation of musical memory in cognitive organization:

Music is a transitory art form consisting of sounds organized in time. No

sooner has a musical tone been perceived than others are impinging upon

the sensory system. Since it is impossible to consider music cognition apart

from this temporal element, memory must play a significant role. . . .

Schemata in memory are not the musical sounds themselves, but rather an

abstracted schematic representation that can be accessed either as a source

for comparing present sounds to those heard in the past or in mentally

recreating (i.e., imaging) previously experienced sounds. (p. 152)

Lipscomb's observations using terms such as "imaging" and "schematic

representation" come very close to Johnson's concept of image schema, further

discounting the notion expressed by Bowman that the visual element is unrelated to

the "phenomenally evanescent, processual, and disembodied" (p. 52) aural world.

It should be said, however, that Bowman's portrayal of music as an

intoxicating, violent and invasive force is certainly compatible with the examples

of personification of music evident in the data of this study. Describing music as

an invasive force certainly implies causation during which music becomes an

"agent" that causes something to happen to a "patient." This too is an embodied

perception of music.

Clearly, a discussion is needed on the role of the body and our other senses

in the perception of music and the construction of musical meaning. It would be

useful to involve in such deliberations not only music educators, but also linguists,

psychologists and representatives of other disciplines with their own point of view about the most fundamental of human experiences.

Articulation of timbre

Metaphors are often used to express concepts that are inexpressible in literal language. Since auditory timbre is a sensory experience that lacks an extensive descriptive vocabulary in the English language, we devise a variety of strategies to accomplish the task.

Researchers have used various methods to identify how timbre is perceived (Thompson & Schellenberg, 2002). They include tasks which require identifying or naming the timbre, grouping similar-sounding timbres, rating how bright or dull a timbre sounds, discriminating whether timbres are the same or different, and rating how similar two timbres sound. Thompson and Schellenberg maintain that the perceived "brightness" of a timbre is one of the most significant dimensions.

The results of this study suggest some additional strategies for music educators. As discussed in Chapter IV, Cacciari's (1998) "synthetic metaphors" are descriptions of something experienced by a sense organ, using adjectives that are normally associated with another sense organ. This strategy might prove to be a useful tool in helping students describe what they hear. Since touch words, taste words, dimension words and color words can be transferred to sounds, students might be purposefully encouraged to cross the senses and describe timbres using adjectives that generally do not apply to auditory stimuli.

Teachers could also expand and develop some of the other strategies that the students in this study used to cope with the difficult task of describing timbre. Students can be encouraged to create "timbre words" by turning nouns or verbs associated with the sound source into adjectives. Another method is to employ similes and analogies, using sounds encountered in other circumstances. Onomatopoeia or vocal imitations of sounds are yet another way to describe timbre when words are insufficient. All of these strategies can be systematized and used in a more conscious manner in the general music classroom.

Gardner (1982) suggests that educational efforts should concentrate on developing metaphoric capacities at an early age. One of his suggestions for working with children who find it difficult to produce expressive metaphors is to provide linguistic frames, such as this fill-in sentence: "The brightly colored dress seemed as noisy as___" (p. 167). Similar approaches might be used to elicit more expressive descriptions of timbre.

Recommendations for Further Research

Leaders in the educational community have repeatedly advocated the study of the language of teaching and learning in context. While the number of such studies in music education is increasing, there is still a great need for research focusing on content-specific discourse in the context of the classroom. As Szego (2002) notes, "Pursuing student opinion and listening closely to student discourse not only reveals their occasional wrestle with the pedagogical environment but also

the nature and depth of their subjective musical experiences and the meanings they attach to them" (p. 719). Investigative models and research paradigms used in ethnomusicology, psychology, sociology, anthropology, linguistics, physics, and other areas should be applied more vigorously to music education research.

More specifically, I hope that this study encourages other researchers to examine the literature of cognitive linguistics and to design studies to test these theories on other populations of music students. This study was limited to examining the figurative discourse of novice, preadolescent girls in a private school setting. The language abilities of this particular age group are still developing. The effects of maturation and exposure to further musical experiences inevitably influence their use of figurative language. Researchers might build on this study by examining the discourse of older students and adults, both novice and proficient, in classroom and professional situations. Guck (1994) has conducted some research with undergraduate and graduate music students on the "role of metaphoric and underlying analogical thinking in musical discourse" (p. 2). She found that when the students were asked to discuss a piece in non-technical terms, the conversation turned to metaphor and facilitated a "closer, more profound hearing of each musical work" (p. 11). However, much more research is needed in this area. A longitudinal study examining whether the use of figurative language decreases with the increased acquisition of a professional music vocabulary would be particularly interesting. Also, metacognitive studies could be designed to examine students'

and teachers' verbalizations of their thoughts and behaviors, as they use figurative language in the classroom.

Johnson and Larson (2003) suggest that research be undertaken about "how metaphors grounded on apparently universal aspects of bodily functioning might still give rise to cultural differences in the understanding of music, differences based on differing cultural values, interests, and practices" (p. 64). Cross-cultural studies of the use of metaphor in constructing musical meaning might show significantly different conceptions of musical experience around the world. We cannot assume that bodily experience will be interpreted in similar ways in all cultures, and the comparative study of how metaphor functions in other cultures would be most revealing.

It also should be pointed out that the time children spend in the music classroom constitutes only a fraction of their total involvement with music. It is certain that the kind of music they encounter beyond the classroom differs significantly from the general music class repertoire. How children's talk about music differs in these varied situations is beyond the scope of this study, but certainly of profound interest to the educator who seeks to establish meaningful links with students. It is hoped that these differences in children's talk might be the focus of future studies.

Those who are interested in cognitive linguistics may also want to examine a relatively new body of research which studies mental spaces. This model of conceptual integration and blending was developed by Gilles Fauconnier and Mark

Turner. It emphasizes the idea that there is no difference between literal and figurative cognitive operations (Fauconnier, 1997; Fauconnier & Turner, 2002; Turner & Fauconnier, 1995). In metaphors, there is input from two different conceptual structures. These are blended and integrated, resulting in a new mental space, which contains new structures, which were not provided by the two inputs. Zbikowski (2002), who has studied conceptual blending in relation to music theory, explains:

> For instance, concepts about humans spelling and concepts about animals are often brought together in children's stories to produce talking animals. Such creatures are powerful devices in storytelling, for they offer narrative possibilities beyond those offered by characters with only human or animal attributes. In a like fashion, the combination of musical concepts with those from other domains creates possibilities for meaning construction that reach far beyond those of music alone. (p. 77)

As Turner (1998) observes, "Inferences, arguments, and ideas developed in the blend can have effect in cognition, leading us to modify the initial inputs and to change our view of the corresponding situations" (pp. 1-2). This model may be useful in analyzing how musical "mental spaces" are blended in the classroom.

Many of the ideas presented by Tait and Haack (1984) in their book Principles and Processes of Music Education: New Perspectives provided the

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impetus for this study. Their words, cited in the first pages of this research study are worth repeating:

> If we are genuinely concerned with developing the quality of the musical experience we <u>need</u> to explore the language connection. Only then can we hope to identify and develop those forces that contribute to our feeling moved when we experience music. . . . Language is the essential tool that allows us to conceptualize and think about, to analyze and teach about these vital musical matters that ultimately can take us beyond words. (p. 37)

I trust that my view of language has provided the reader with a window into the process of conceptualizing, cognizing and constructing musical meaning.

A number of researchers are asking questions concerning the relationship between sensory experience, mental representation, and linguistic expression. "The way in which a perceptual system holds the information concerning objects and events in time and space is highly complex and sophisticated. The underlying concepts and their verbal labels keep only a schematic trace of such complexity" (Katz, Turner, Gibbs & Cacciari, 1998, p. 187). It is hoped that this study has shed light on that complexity, and that it will encourage other inquiry into this vast subject of language in cognition in the context of music teaching and learning.

Appendix A

Participant Consent Form

I agree to participate in a research study exploring the use of figurative language in the music classroom to expand understanding of the construction of musical meaning.

This ethnographic analysis is to be done in all three sixth grade music classes which I teach, for a period of four weeks. My classes will be audiotaped, videotaped, and field notes will be taken about the proceedings in the class. The role of the researcher will be that of participant observer. Also, I will be interviewed at the completion of the data collection period.

I grant permission to use all of the collected data in the proposed doctoral dissertation and any subsequent publications that may emerge from this study.

I understand that my name and any other identifiers that might link me, my students, my peers, or my place of employment to this study will not be used in the reporting of this research. To ensure confidentiality I will be referred to in the study by a pseudonym.

I further understand that I am free to ask questions, or to withdraw my consent at any time during the course of this study.

Research participant / date _____

Researcher: Emilija Sakadolskis / date _____

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Appendix B

Sample Consent Letter and Forms to Parents or Guardians

Dear Parent or guardian:

I am very pleased that the _____ School has given me permission
to collect data for my dissertation towards a Ph.D. degree in Curriculum and
Instruction at the University of Maryland College Park. My area of specialization
is music education, and I will be conducting this study in Mrs. _____
sixth grade general music classes from February 22, 1999 through March 19, 1999.
The proposed title of the dissertation is: " The Use of Figurative Language in the
Construction of Musical Meaning: An ethnographic Analysis of Three Sixth Grade
General Music Classes." More simply put, I will be studying how students use
their own personal language to express their perceptions about music. I am
particularly interested in their use of vocabulary which is not directly related to
music. Metaphors, similes and analogies will be my primary focus.

In order to do this, I will tape all classes. Additionally, I would like two
girls from each sixth grade class to wear a lapel microphone during class so that I
may accurately record all of their reactions to the proceedings. I request your
permission for your daughter to be one of those who will be individually taped.
She has been proposed by Mrs. _____.   The major reason for the choice
is her willingness and ability to verbalize in classroom situations. Additionally, at
the end of the data collection period your daughter would be interviewed twice:
once in a group with the other 5 individual subjects, and a second time in a one-on-
one situation with myself, the researcher.

Your daughter's name or any other identifiers which might link her to the
study will not be used in the reporting of this research. She and her fellow
classmates, as well as her teachers and the _____ School will be
referred to by pseudonyms to ensure confidentiality. I will not discuss anything she
says with the teacher if it does not pertain to music or learning. You can be sure

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that offhand remarks and off-task talk will not be reported, since the last thing I would like to do is bring any strain into classroom relationships. I hope quite the opposite to result: an increased understanding between students and teachers. Studies like this are intended to deepen our understanding of how students think, which is what teachers ask themselves every day.

I sincerely hope that you find this study to be of value. I would be very pleased to present my findings to the parents and teachers of the sixth grade students upon completion of this study if there is interest.

If you decide for any reason whatsoever to not grant permission for your daughter to be individually taped in this research study, this will not in any way have repercussions for your daughter. Also, if you have any concerns during the study and wish to withdraw your permission during the course of the study, you are perfectly free to do so.

If you have any questions or concerns about this study, please feel free to call or write, and I will be glad to provide more detailed information.

Sincerely,
Emilija Sakadolskis

Appendix C

Song "Tzena, Tzena"

"Tzena, Tzena." Words by Mitchell Parish. Music by I. Miron and J. Grossman. From The Music Book Grade 6, pp. 92-93. New York: Holt, Rinehart and Winston. © 1950 by Mills Music, Inc. Copyright renewed. Duplicated by Permission.

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Appendix D

Song "The Golden Vanity"

THE GOLDEN VANITY

1. There once was a ship, and a stur - dy craft was she; She
2. One day on the deck of the *Gold - en Van - i - ty* The

went by the name of the *Gold - en Van - i - ty.* And
captain raised his spy - glass to see what he could see. And

ne'er a fin - er ves - sel did sail up - on the sea. Oh, she
lo_____ and be - hold, he did spy the en - e - my As they

sailed up-on the Low Lands Low. She sailed up-on the Low Lands Low.
sailed up-on the Low Lands Low. As they sailed up-on the Low Lands Low.

3. The captain was pond'ring the course he would pursue,
   When up spoke the cabin boy, the youngest of the crew.
   "Pray, sir, what will you give me to rout the foe for you
   As they sail upon the Low Lands Low?" (*2 times*)

4. The captain was amazed and a little bit annoyed
   To think he must depend on a lowly cabin boy,
   But he said he'd give his daughter, his very pride and joy,
   If he'd sink them in the Low Lands Low. (*2 times*)

5. The boy spread his arms and into the sea he dived.
   He swam and he swam, it's a wonder he survived!
   He bored some tiny holes in the other vessel's side
   And he sank it in the Low Lands Low. (*2 times*)

6. Then back once again to the *Vanity* he sped.
   He thought as he swam of the pretty girl he'd wed,
   For, "You shall have my daughter," the captain'd plainly said,
   "And you'll sail upon the Low Lands Low." (*2 times*)

7. And when he reached the ship and was safely at her side,
   "Good captain, help me come aboard!" the cabin boy did cry.
   The captain, though, ignored him, and merely breathed a sigh
   As he sailed upon the Low Lands Low." (*2 times*)

8. "Good captain, help me up," cried the cabin boy once more,
   "Or else I'll bore your ship and send it to the ocean floor."
   The captain then moved quickly and pulled the lad aboard
   And they sailed upon the Low Lands Low." (*2 times*)

Appendix E

Song "The Turkish Revery"

THE TURKISH REVERY

1. "Cap-tain, cap-tain,___ What will you give me If
2. "Gold and sil - ver ___ Shin - ing so bright, And my

I do sink the___ Turk-ish Rev-er-y, If I sink her in the low-down,
fair - est daugh-ter shall wed__ you to-night, If you sink her in the low-down,

low - down,___ low - down, If I sink her in the low-down lone-some low?"
low - down,___ low - down, If you sink her in the low-down lone-some low!"

3. Then he bared his breast
   And he swam in the tide,
   And he bored three holes in the old ship's side,
   And he sank her in the low-down, low-down, low-down,
   And he sank her in the low-down lonesome low.

4. Then he bared his breast
   And he swam in the tide,
   He swam till he came to his own ship's side
   As she rolled in the low-down, . . .

5. "Captain, captain,
   Take me on board!
   If you don't, you'll have to forfeit your word,
   For you promised in the low-down, . . ."

6. "Sailor boy, sailor boy,
   Don't appeal to me,
   For you drowned sixty souls when you sank the *Revery*,
   When you sank her in the low-down, . . ."

7. "If it weren't for the love
   That I bear for your men,
   I'd sink you the same as I sank them!
   I'd sink you in the low-down, . . ."

8. Then he bared his breast
   And down swam he.
   He swam till he came to the bottom of the sea,
   And he drowned in the low-down, . . .

"The Turkish Revery" American Folk Song. From the <u>Richard Dyer-Bennett Folk Song Book</u>, published by Dy-Cor Corporation.
Reprinted in Crook, E., Reimer, B., & Walker, D.S. (1974). <u>Silver Burdett Music,</u> <u>Teacher's Edition Book 6</u>. © 1974 General Learning Corporation.
Used by Permission of the Dyer-Bennett Family.

Appendix F

Symbols for Discourse Transcription

Symbol	Significance
//	Final fall
/	Slight final fall indicating temporary closure (e.g., more can be said on the topic)
?	Final rise
'	Slight rise as in listing intonation (e.g., more is expected)
-	Truncation (e.g., what ti- what time is it/)
_	Level ending

Symbol	Significance
..	Pauses of less than .5 second
…	Pauses greater than .5 second (unless precisely timed)
<2>	Precise units of time (= 2 second pause)
=	To indicate overlap and latching of speakers' utterances: spacing and single = before and after the appropriate portions of the text to indicate overlap; turn-initial double = to indicate latching of the utterance to the preceding one.

Ex. R: so you understand =the requirements?=

     B: =yeah, i understand them/=

     R: so you understand the requirements?

     B: ==yeah, i understand them/

Symbol	Significance
::	Lengthened segments (e.g., wha::t)
~	Fluctuating intonation over one word
*	Accent; normal prominence
**	Extra prominence
{[ ]}	Nonlexical phenomena, both vocal and nonvocal, that overlay the lexical stretch
[ ]	Nonlexical phenomena, both vocal and nonvocal, that interrupt the lexical stretch (e.g., text [laugh] text//)

Symbol	Significance
( )	Unintelligible speech
(did)	A good guess at an unclear word
# #	Use cross-hatches when extratextual information needs to be included within the text (e.g., R: did you ask M #surname# to come?)

(Based on Gumperz & Berenz, 1993, p. 121)

Excerpt of Class Transcript Using Transcription Notation System

Note: The names of the school, the teacher and students have been changed

to protect their privacy. Throughout the text, the teacher is referred to as Teacher

or T; one student is Janice or J; the other student is May Chu or M; voices of

students who are not identified are designated S1, S2 and S3.

The Woodgate School
March 1, 1999, time 11:45 a.m. to 12:30 p.m.
Group B, class #2
Tape numbers:
6-2(2)a—Teacher (T)
6-2(2)b—Janice (J)
6-2(2)c—May Chu (M)
6-2(2)d—general recording (ends at around #870)

T: no instruments today girls/ just come on in and sit down//
S1: ( )
T: no *instruments//
#general noise#
no *instruments// #non-music discourse#
#above transcribed from end of tape 6-3(1)#
T: and you turned this on?... you turned this on? oh/ ok//
S1: ( )
T: now you'll have those instruments too/
we're just not going to do the first instrument ( )
S1: ( )
T: ok everybody/ let's go:// everybody stand up//
S3: oh no://
T: oh; yes// it'll wake you *up// get you through til lunch time// come on/
everybody up//
right/ together/ left together/ right together/ left together/ right together/ together/
right together/ left together/ other right some of you/ and right together/
other *right Janice// right together/ left together/ yes/ we can//

would you go just turn the- am'am/ Mattie' just turn the fan off// just turn it to..nothin//

i'm only gonna do two' #sound of rhythmic clapping# back up everybody//

#echo clapping back and forth between teacher and students#

make more *room// #clapping continues# point/

stop// we're going the wrong way// ah/ can we back up here some more// ( ) out of room//

ok/ back up/ girls' come this way// come this way//

S3: ( )

T: ok/ we're only doing *two before you point' ok' one' right together/ left together/

right together' here we go// right together' left together/ right together/

come on/ get that (beat) in your shoulders// right together/ left together//

right together' ready go// #clapping sounds—echoing#

good *pick-up Julia// #clapping sounds continue#

S1: ( ) oh

T: that's ok/ do it again// #clapping continues#

one two three four/ one two three four/ # rhythmic clappping and stomping sounds#

T: this is the last one// #clapping and stomping#

ok/ get some people to pass out those red books and turn to page ninety-two in them//

#general noise while girls do what is asked and teacher plays Tzena, Tzena on piano#

T: ninety two// #piano playing continues#

M: it's ninety two/

T: ok/ ready' here we go//

#teacher and girls sing Tzena Tzena at a rapid tempo#

i think if i was at this party i would go home and say/ boring//

S3: yeah #several voices#

T: can you pick your- pick your books up off"..

and i would like you to reflect in your *voice/.. the quality of the music//

#continues playing piano while speaking# it's not *this/

#plays excerpt of song two different ways—second one lighter and notes more detached#

somebody describe the difference// or whatever you were going to say//

M: okay// well is it possible that like instead of.. okay/ is it possible that we get instruments and we just like.. play an instrument to this song and just add in like sounds?

T: what would the instruments *do//

M: [laughs] well the only thing ( )

T: no/ what would you think-

S3: ( )

T: May Chu let her *finish' what-

M: I think they would probably add a livelier *beat to it//

T: it would add a livelier *beat/ ok/ how can you do that *without instruments//
how could you *do that//.. *without adding instruments//
M: You can.. have.. some.. beat in your voices' and like-
T: have some beat'- turning your voices into what//
S1: (body?)
T: i *think so// there was- ah_
there was *no sense of the *beat in your bodies as you sang/
*none whatsoever// yes//
S3: i don't want to talk for everybody/ but am/ i'm not that fond of the song' and/
[girls laugh] (it's kind of hard to) excited about it'
T: well/ *that's ok/ but you know/ that's kinda what we're going to do'
and you know/ as in *anything' Julia' i *appreciate that'
but in almost *anything ah/=
S3: =( )
T: whether you love it or *not/
you're going to enjoy it more if-.. you're going to have *more fun with it/
if you put the energy in it that it needs// so/ can we try it again?
and i want to hear the *beat in your *bodies/
J: okay
T: ok/ Mattie' ok/
#plays introduction on piano and speaks while playing#
first of all/ try holding the books up off the floor/ here we go//
#girls sing first phrase#
*more energy// #singing continues#
what did you *do when you gave me more *energy//
what did i actually hear that was different//
S1: louder #several voices#
T: it got *louder/ didn't it// ok/ did you do anything *else that gave it more energy//
Cynthia' from now on *all of your comments need to be directed (to) the group/
ok'
here we go/ section *two:// do whatever you need to do to give it more energy//
ready' go// #continue singing#
S3: ( )
T: did it get any more *energy that time//
S2: ( )
T: pardon me?
S2: (never asked us to)
T: oh well/ do i need to *ask you this time' ok/ let's go on to the *next section then/
and i want *more energy// ok? this time i'm *asking you//
section three// one.. two.. one two' Mattie' you need to pick it up'.. *off the floor/
that's it// #playing the piano through all of these comments#
one two ready go// #girls sing next section of song#
T: did it have/... more *energy// yes/
J: a little/

S3: well i'm not answering that/ i have another comment
T: ok/
S1: ok/ it gets weird because it goes like ( ) raise your voices higher' the notes go lower'
i think they should go *higher// ( )
T: {#singing# clap your hands and.. raise your voices higher make a-}
you're *right// [laughs] on the *other hand/ there are two ways of thinking about *higher// what way=
S3: =louder/
T: ok/ what_ louder/ yeah' but ok'.. go back to the beginning
{#singing# Tzena Tzena Tzena Tzena/ how can anything-}
and then_ {#singing# clap your hands and raise your voices higher}
in what sense *is it higher//
S3: it's like the whole thing's ( )=
J: =more *energy=
T: the whole thing's what'
S3: the whole second part is higher than the first part//
T: what word do we *use/ what-
S1: range'
T: somebody said it over there/
S1: the range/
T: yeah/ the *range of it is higher/
and i think that was the sense in which whoever made up this tune made it go higher//
cuz it didn't go_ {#singing# clap your hands and make your voices higher} ok_
they put it up here/{#singing in a higher range# [girls laugh]}
but you are- but you're quite right that the does melody goes on down// ok//
did it have any more energy that time//
S1: no/
S3: a *little/
T: it was what?
S1: no/
T: you think it *was bouncier?
J: yeah/
T: i saw actually two people *moving over here//
and it- and i'm sure=
S1: =( )[laughter]=
T: =that as a result their *their singing was better//
Why don't you all stand up/ i want you to- oh put your books down and in slightly//
don't lose the page' stand up' i know we're crowded'
i'd like every other one of you to turn your- turn to the outside//
just turn to the outside/ every other one//
S1: every other one/
T: every other one turn to the outside//

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every other one tu:rn to the outside//
J: turn/ turn//
M: ( )
#girls' voices heard in the background#
T: ok/ that's good/ good/ girls_ it doesn't have to be perfect//
those are fine/ you both stay in// now/
i would like you to do something with your feet/ that is not too *loud'
because we still want to hear the music// but i want your feet to move on every beat//
now_ just to make sure that you know what that beat *is'
would you just *clap the beat a little bit as you sing// from the beginning// Tzena//
ready' go// #singing and clapping heard#
ok' ready' now/
S1: ( ) feet
T: this time i want you to do something with your *feet.. on every beat//... ok?
let the *music tell you what to do, though// girls'... what did i just say?
S3: let the music tell you what to do ( )
T: ple:ase/ don't say *i am going to// oh *boy// *i've got a chance to make noise'
to jump high' to jump low' to kick out' uh'-uh//
i want you to do something with your *feet/ and the tune/ the music/
the quality of the beat/ is what should direct what you do with your feet//
ready' go {#singing and playing the piano# Tzena Tzena Tzena Tzena}
you know/ now i would *say that what you're doing with your feet/
pretty much reflects the way you sang it//...
M: [laughs]
T: and i think that the music does have more intrinsic *value than that//
so let's see if this time you can *really *listen to what the music is saying
to *do with your feet// ok?
M: [whispers] ( )
T: i know you're a little bit crowded/ some-
back out/ back out a little bit// ok// #piano playing#
M: you turn the wrong way and it's ( )
T: let's see what can *happen with this// one.. two... #piano continues#
{#singing# Tzena Tzena Tzena Tzena how #girls continue#}
a:ah// now i've seen a *lot more// ok/ i'll give you one last chance/
but *this time=
M: ok well the thing is we can't exactly *sing when you're *bouncing up and down/
[laughter]
T: i'm not asking you to sing_ don't have to sing May Chu/
M: ok/
T: ok/ girls/ this time-
J: oh
T: this time i want you to ask yourself/ when you finish/ did that music tell my feet/

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to have a sensation of moving *off the floor' or *into the floor//
which one did the music tell me to do// was it a feeling *in' or *off// ready'
#piano and singing#
J: actually/ you just lost my ( )
M: yeah ( )/
T: ok/ sit down// what do you think//
S1: ( )
S2: i'll help you ( ) sorry//
T: no right or wrong answers girls' your *opinions//
S3: [laughing] ( )
J: you did it on purpose
T: ok/... Nadia/
S2: i think that the beat feels like i wanted to jump up and down//
[laughter]
T: excuse me// who's speaking?
S1: Nadia/ #several voices#
T: who should you be looking at?
M: Nadia
S1: Nadia #several voices#
T: thank you// try it again Nadia//
S3: it made me feel like i wanted to jump around/ i think it has a *bouncy feeling'
so it made me feel like i want to go off'
T: so yours was *off the floor// whether you agree or disagree/ give me *your
opinion//
S2: ok/ i thought well at first that i was like going *in to the floor/ but then i felt
like jumping//
T: was there a *change in the music that made you go from one to the other?
S2: i don't know=
T: = or did you just change your *mind about what the music was saying//=
S2: =I just changed my mind//
T: so at first you thought it was an *in:to the floor ah/
S2: yeah/
T: ok' am_
is there anything that you *thought of' is there anything that *spoke to you about
it?
S2: ( )
T: pardon me?
S2: ( )=
T: =no no_ what did you *say//
S2: that i was floating ( )
T: it was a more of a=
S1: =( )
T: it gave you more of a *floating feeling//
S2: no/ like a dropping ( )

T: dropping/ ok_ yes//

S3: ( ) like the music' it got higher ( ) think that you're ( ) up more than go down? like she was saying that ( )

T: so you think that it changes its character throughout the-

S3: yes/

T: would there be-
can you=

S3: =like in section three'

T: section three would be more what//

S3: ( ) higher i guess'

T: and so what would you- that make you want to feel more bouncing *off the floor'
or=

S1: well in the beginning i thought it was ( ) side to side' and the music goes da da da da #imitating the contour of the melody and rhythm# ( )
#other girls laughing in background#

M: [laughs]

T: am_ is there something really *funny that you want to *share with us?

S3: no' [giggling]

T: Allie' could you- need to step *out so that then she could talk? what's going on//=

S1: =no/ (it's not Allie's fault)//

T: ok//.. but it's a *problem to have a conversation
when there's somebody laughing over about something else// unless we're-
are we laughing about something together?

J: yeah//

S2: yeah// #several voices#

T: well then can you *share what it is//

S2: [laughing] ( )

J: ( ) draw up her sk- her skirt//

T: ok/ it shouldn't be *in here then/ right? ok/ ok// now/ let's go back to-
tell me what you were hearing//

S1: ( )

T: ( ) ah_ *that's the kind of problem we get into isn't it? i mean'
it really changes our *direction doesn't it/ after- ok//
you were *saying' and we missed it//

S1: ( )

T: mhm' mhm' ( ) say that again//

S1: well/ at first it's like side to side' (music goes)
{na na na na #singing a third back and forth#}
in the beginning' then you ( )

T: can you sing it? can we all sing it together
and will you kind of raise your hand when you hear what you're saying that's different? ready and go//

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#singing song#=
S1: ( ) piano
T: excuse me/ pardon?
S1: {da ra' da na/ #singing#}
T: something that the *piano was doing//
S1: in the beginning it was {da na na na #singing in a third#}
then it goes {#singing# Tzena Tzena-}
T: want me to play the *piano then/ tell me when to stop//
#teacher plays piano and sings a few words and then stops#
ok/ what *about it//
S1: It makes you want to go down/
T: that makes you want to do *what//
S3: jump// #several voices#
J: jump//
T: Julia'
S2: going up and down/ ( )
S1: (yeah) (*i should go up and down)
T: {ok/ so it's- the *quality of the- ok// #piano continues throughout#} ok//
J: ( ) major// follow the leader//
T: anybody felt like it needed to go *into the floor at all//..
who felt as though it wanted to go *into the floor//
S1: ( )
T: in the beginning?
S3: yeah/
T: what about it//
S3: well like it was ( ) i thought like Tzena/ Tzena/ Tzena/ Tzena' i felt like dzoo/
dzoo/ dzoo/ dzoo// but then when/ we did am Tzena/Tzena/ everyone's ( ) i felt like
coming back up/
T: sing that far and see if any of you can see what-
help us decide why she might have *felt that way//
the *beginning she says is pounding *in'
stand *up as a matter of fact// stand up//.. do something- do something where you
feel as though you *are going into the floor/ and then see if-
J: *up/ *up/ ( )
S1: ( )
T: there's anything to change// #introduction on piano# ready? go//
#singing and playing#
T: ok/ *all of you/ something *into the floor at this point// ready' go//
#singing# ok/ now/ Cynthia what was rule one// it had to be what//
S1: ( )
T: on the beat// one- ok// ready? one movement for every beat// ready go//
#singing and playing#
T: i guess maybe i should-_ ok// what does it *mean to be into the *floor//
S1: ( )

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M: ( ) like you're ( )
T: can you all-_ take your foot/ and put it into the floor for me//
#sound of stomping#
T: a:ah/ thank you// ok/ what does it mean to be *off the floor/
take your foot and make it go *off the floor//
#sounds in the background#
T: has to *hit the floor at some point'
J: but not as *hard//
T: it doesn't hit it as *hard//
what do you have to feel like the floor is *doing to you when you're off the floor//
S1: ( )
S3: like a trampoline//
T: or- what- when you're *into the floor Cynthia//
J: pushing you *up//
S1: ( )
T: it's a matter of *pushing or *pulling/ isn't it//
J: yeah=
T: ok//
J: i can push//
ok'here we go//
ready? #piano# here we go//
J: which line?
T: the first part i want you to do *something/
where you feel as though... do something where you feel that the floor is asking
you to go down *into it//
S1: [laughing]
T: something- [#girl continues# laughing] Mattie' why don't you step out/
S1: (sounds) funny//
T: well honey/ you know' i know/ but it's really getting kind of hard to keep going/
ok' ok' #sound of piano# and the *second time should be a sense of lifting *off the
floor/
ready' go// *in//
{#singing and playing# keep going *in// ... now *off...}
M: oh my God/
T: in the final analysis/ if you were going to choreograph a dance/.. for this//
S3: ( )
T: which would *you choose/
S2: ( )
T: May Chu?
M: well' am' when we really *doing the thing there was some ( ) it was like
shaking ( )
T: what was *causing that//
M: vi-bra-tions/
T: what *kind of vibrations//
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J: so much ( )//
S2: ( )
T: sympathetic *vibrations/ yes// ok// in the final *analysis/ what would you do?
off the floor or into it if you were choreographing//
S1: ( )
T: you would do *both?
J: yeah
T: if you were choreographing?

Appendix H

Coded Transcript Excerpt

Browser   Document   Edit   View   Format   Tools

T: actually/ you just lost my ( )
M: yeah ( )/
T: ok/ sit down// what do you think//
S1: ( )
S2: i'll help you ( ) sorry//
T: no right or wrong answers girls' your *opinions//
S3: [laughing] ( )
T: ok/... you did it on purpose
S2: i think that the beat feels like i wanted to jump up and down//
[laughter]
T: excuse me// who's speaking?
S1: Nadia/ #several voices#
T: Nadia/ #several voices#
T: who should you be looking at?
M: Nadia
S1: Nadia #several voices#
T: thank you// try it again Nadia//
S3: it made me feel like i wanted to jump around/ i think it has a *bouncy feeling'
so it made me feel like i want to go off'
T: so yours was *off the floor// whether you agree or disagree/ give me *your opinion//
S2: ok/ i thought well at first that i was like going *in to the floor/ but then i felt like jumping//
T: was there a *change in the music that made you go from one to the other?
S2: i don't know==
T: = or did you just change your *mind about what the music was saying//=
S2: =I just changed my mind//
T: so at first you thought it was an *into the floor ah/
S2: yeah/
T: ok' am_
is there anything that you *thought of is there anything that *spoke to you about it?
S2: ( )

T: pardon me?
S2: ( )=

Section: 1   Paragraph: 153   Coding

All Nodes Displayed

Expressive Language
Vertical-2
Vertical-2, Containment, Container, Verticality-Expressive Language,
Expressive Language
Interpretative Movement-Expressive L
Containment, Container; Expressive Language-Containmen
Personification
Verticality
Interpretative Movement, Expressive Lar
Verticality-Expressive Language, Interpretative
Expressive Language-Containment, Container; Containment, Containment,
Personification
Personification

Browser Document Edit View Format Tools

T: =no no_ what did you *say//
S2: that i was floating ( )
T: it was a more of a=
S1: =( )
T: it gave you more of a *floating feeling//
S2: no/ like a a dropping ( )
T: dropping/ ok_ yes//
S3: ( ) like the music' it got higher ( ) think that you're ( ) up more than go down? like she was say
that ( )
T: so you think that it changes its character throughout the-
S3: yes/
T: would there be-
can you=
S3: =like in section three'
T: section three would be more what//
S3: ( ) higher i guess'
T: and so what would you- that make you want to feel more bouncing *off the floor'
or=
S1: well in the beginning i thought it was ( ) side to side' and the music goes
da da da #imitating the contour of the melody and rhythm# ( )
#other girls laughing in background#
M: [laughs]
T: am_ is there something really *funny that you want to *share with us?
S3: no' [giggling]
T: Allie' could you- need to step *out so that then she could talk? what's going on//=
S1: =no/ (it's not Allie's fault)//
T: ok//. but it's a *problem to have a conversation
when there's somebody laughing over about something else// unless we're-
are we laughing about something together?
J: yeah//
S2: yeah// #several voices#
T: well then can you *share what it is//
S2: [laughing] ( )
J: ( ) draw up her sk- her skirt//
T: ok/ it shouldn't be *in here then/ right? ok// ok// now/ let's go back to-

Section: 1   Paragraph: 153   Coding:

All Nodes Displayed

Vertical-2

Containment, Expressive Language-Containment, Container,

Vertical-2

Expressive Language-Containment

Personification

Vertical-2

Verticality, Verticality-Expressive Language,

Interpretative Movement-Expressive L

Expressive Language-Containment

Interpretative Movement, Expressive Language,

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tell me what you were hearing//
S1: ()
T: () ah_ *that's the kind of problem we get into isn't it? i mean'
it really changes our *direction doesn't it/ after- ok//
you were *saying' and we missed it//
S1: ()

T: mhm' mhm' () say that again//
S1: well/ at first it's like side to side' (music goes)
(na na na na #singing a third back and forth#)
in the beginning' then you ()
T: can you sing it? can we all sing it together
and will you kind of raise your hand when you hear what you're saying that's different? ready and
go//
#singing song#=
S1: () piano
T: excuse me/ pardon?
S1: (da ra' da na/ #singing#)
T: something that the *piano was doing//
S1: in the beginning it was (da na na na #singing in a third#)
then it goes (#singing# Tzena Tzena-)
T: want me to play the *piano then/ tell me when to stop//
#teacher plays piano and sings a few words and then stops#
ok/ what *about it//
S1: it makes you want to go down/
T: that makes you want to do *what/
S3: jump// #several voices#
J: jump//
T: Julia'
S2: going up and down/ ()
S1: (yeah) (*i should go up and down)
T: (ok/ so it's- the *quality of the- ok// #piano continues throughout#) ok//
J: () major// follow the leader//

All Nodes Displayed

Containment, Container, Expressive Language-Containment,
Expressive Language-Containment
Vertical-2
Vertical-2
Vertical-2
Expressive Language
Personification, Containment, Container,
Verticality-Expressive Language, Verticality,
Interpretative Movement-Expressive L
Interpretative Movement, Expressive Langu
Vertical-2
Vertical-2, Expressive Language,

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for appendix - Document Browser

Browser Document Edit View Format Tools

T: anybody felt like it needed to go *into the floor at all//..
who felt as though it wanted to go *into the floor//
S1: ()
T: in the beginning?
S3: yeah/
T: what about it//
S3: well like it was () i thought like Tzena/ Tzena/ Tzena/ Tzena/ i felt like dzool/ dzool/ dzool/ dzo
but then when/ we did am Tzena/Tzena/ everyone's () i felt like coming back up/
T: sing that far and see if any of you can see what-
help us decide why she might have *felt that way//
the *beginning she says is pounding *in'
stand *up as a matter of fact// stand up/... do something- do something where you feel as though
*are going into the floor/ and then see if.
T: *up/ *up/ ()
S1: ()
T: there's anything to change// #introduction on piano# ready? go//
#singing and playing#

T: ok/ *all of you/ something *into the floor at this point// ready' go//
#singing# ok/ now/ Cynthia what was rule one// it had to be what/
S1: ()
T: on the beat/ one- ok// ready? one movement for every beat/ ready go//
#singing and playing#
T: i guess maybe i should- ok// what does it *mean to be into the *floor//
S1: ()
M: () like you're ()
T: can you all- take your foot and put it into the floor for me//
#sound of stomping#
T: a ah/ thank you// ok/ what does it mean to be *off the floor/
take your foot and make it go *off the floor//
#sounds in the background#
T: has to *hit the floor at some point'
J: but not as *hard//

All Nodes Displayed

Expressive Language
Expressive Language-Containment
Expressive Language
Expressive Language-Containment
Interpretative Movement, Interpretative
Expressive Language
Expressive Language-Containment
Vertical-2
Expressive Language-Containment
Vertical-2
Expressive Language-Containment
Expressive Language-Containment, Personificatio
Expressive Language-Containment

Section: 1   Paragraph: 153   Coding

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Browser   Document   Edit   View   Format   Tools

T: it doesn't hit it as *hard//

what do you have to feel like the floor is *doing to you when you're off the floor//

S1: ()

S3: like a trampoline//

T: or- what- when you're *into the floor Cynthia//

J: pushing you *up//

S1: ()

T: it's a matter of *pushing or *pulling/ isn't it//

J: yeah=

T: ok//

J: i can push//

ok' here we go//

ready? #piano# here we go//

J: which line?

T: the first part i want you to do *something/

where you feel as though... do something where you feel that the floor is asking you to go down *

it//

S1: [laughing]

T: something- [#girl continues# laughing] Mattie' why don't you step out/

S1: (sounds) funny//

T: well honey/ you know' i know/ but it's really getting kind of hard to keep going/

ok' ok' #sound of piano# and the *second time should be a sense of lifting *off the floor/

ready' go// *in//

{#singing and playing# keep going *in// ... now *off...}

M: oh my God/

T: in the final analysis/ if you were going to choreograph a dance/.. for this//

S3: ()

T: which would *you choose/

S2: ()

T: May Chu?

M: well' am' when we really *doing the thing there was some ( ) it was like shaking ()

T: what was *causing that//

Section: 1   Paragraph: 153   Coding

All Nodes Displayed

Expressive Language-Containment

Expressive Language

Expressive Language, Vertical-2.

Expressive Language-Containment

Expressive Language

Verticality, Verticality-Expressive Langu

Personification

Expressive Language-Containment, Vertical-2.

Container, Containment, Expressive

Expressive Language-Containment

Expressive Language

Expressive Language-Containment

Expressive Language

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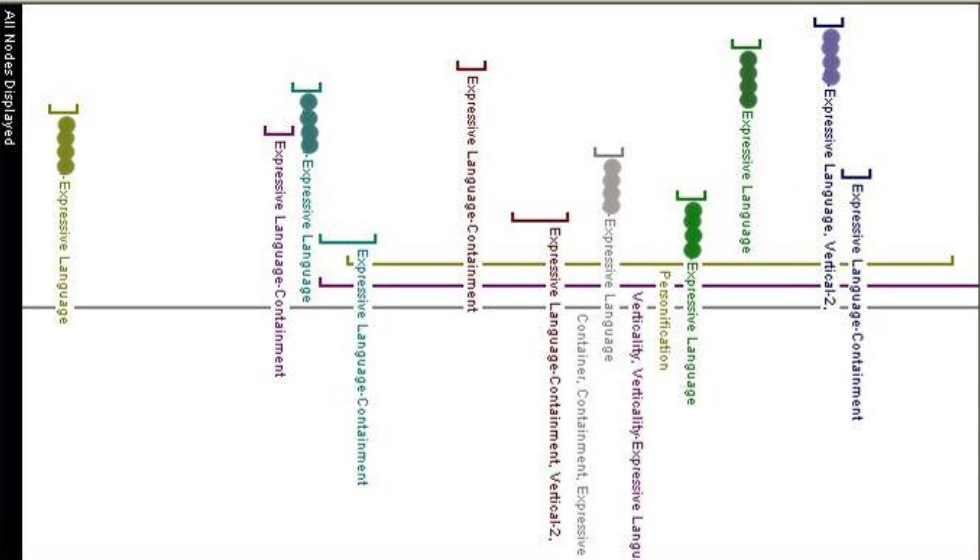
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