




Publicly Accessible Penn Dissertations

2001

Music and Embodied Imagining: Metaphor and Metonymy in Western Art Music

Deanna Kemler
University of Pennsylvania

Follow this and additional works at: <http://repository.upenn.edu/edissertations>

 Part of the [Communication Commons](#), [Ethnomusicology Commons](#), [Musicology Commons](#), [Other Music Commons](#), and the [Social and Cultural Anthropology Commons](#)

Recommended Citation

Kemler, Deanna, "Music and Embodied Imagining: Metaphor and Metonymy in Western Art Music" (2001). *Publicly Accessible Penn Dissertations*. 1184.
<http://repository.upenn.edu/edissertations/1184>

This paper is posted at ScholarlyCommons. <http://repository.upenn.edu/edissertations/1184>
For more information, please contact libraryrepository@pobox.upenn.edu.

Music and Embodied Imagining: Metaphor and Metonymy in Western Art Music

Abstract

This dissertation poses the question, "How does music mean?" If we acknowledge that music exists in the material world as a complex sound wave only, we must wonder how music, *as felt meaning*, arises. Scholars have often approached this question through considering music as a language. I do not employ this approach. In fact, I criticize this analogy and the epistemology on which it is based as reductive and inconsistent with musical experience. This analogy diminishes a whole-bodied experience to one that involves only the mind and ears and decreases resonant, lived meaning to "content"--metaphorically an object transferred by speaker to hearer through the representative and referential functions of symbolic forms.

Departing from this analogy, I develop a theory of whole-bodied, lived meaning based on Lakoff and Johnson's theory of conceptual metaphor and Polanyi's epistemology of tacit knowing (bodily-based, culturally-inflected knowing that one can feel, but cannot describe in full). Using this new theory, I analyze the speech of young musicians at the Curtis Institute of Music, taking it as descriptive of meaningful musical experience. I argue that enculturated listeners feel musical meaning when, employing metaphoric and metonymic processes, they use whole-bodied imagining and perceiving to integrate dimensions of tacit knowing with the sound wave. In so doing, they transform the sound wave's physical qualities (frequency, amplitude, complexity and duration) into music's felt dynamic qualities and events (e.g., motion, force, intensity, tension, relaxation, mood, gesture or momentum). In this way, musical meaning comes to life through the energetic mediumship of listeners' tacit knowing, resonating in and throughout felt reality. Listeners do not merely hear the music and thus grasp its meaning; rather, they *live* its meaning. Indeed, listeners may also, through participating bodily in live or recorded musical performances, live tacitly known, felt social meanings--such as a sense of identity or place--in intensified fashion. Thus, I suggest that symbolism involves a resonant level in which participatory, lived meaning effects a connection of participants with signs, and through signs, with each other and such transcendent social realities.

Degree Type

Dissertation

Degree Name

Doctor of Philosophy (PhD)

Graduate Group

Music

First Advisor

Christopher F. Hasty

Keywords

music, metaphor, metonymy, art music, western music

Subject Categories

Communication | Ethnomusicology | Musicology | Other Music | Social and Cultural Anthropology

**MUSIC AND EMBODIED IMAGINING:
METAPHOR AND METONYMY IN WESTERN ART MUSIC**

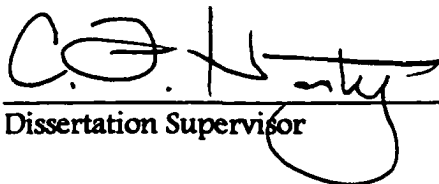
Deanna Kemler


A DISSERTATION

in

Music

**Presented to the Faculties of the University of Pennsylvania
in Partial Fulfillment of the Requirements for the Degree of Doctor of Philosophy
2001**


Dissertation Supervisor


Dissertation Reader


Graduate Group Chairperson

For Henrietta and Jonathan,

who taught me

that life is for learning

Acknowledgements

In writing this dissertation, as in life, I am indebted primarily to my parents, Henrietta and Jonathan Koontz, to whom I dedicate this work. From them, I learned to approach the world as a student and to live life as a grand and fascinating experiment. In them, I am genuinely blessed.

I am also fortunate in those who have guided me through the dissertation process. Chris Hasty is a mentor and advisor extraordinaire. He acted not only as a sounding board for ideas, but also as a resonator: his enchantment with the wondrous complexity of things, fascinating meanderings through the playground of ideas, attentive listening, guidance, and encouragement created a liminal space of potential for me to become more than I knew I could be. My gratitude exceeds my ability to express or reciprocate, but I do hope to pay the debt “forward,” as I model my own mentoring on his. I will miss our regular Thursday meetings very much.

Marina Roseman figured most prominently in the beginning and end of this project. In her “Music and Language,” “Fieldwork” and other classes, she prepared the soil — a rich ferment of ideas and a safe, experimental space — out of which the work grew. At harvest time, she patiently, but persistently and with great *sisu* (Finnish: “internal fortitude”) insisted that I weed out a great deal of dross, as well as reconnect my work to the ethnomusicological ground from which it sprang. The work is much stronger for her insistence. I am indebted to her for helping me to see my work from the point of view and in the time frame of the reader. Readers should also be indebted, since her guidance has lightened the task of reading considerably. Any remaining infelicities are my own.

I am grateful, also, to the people at the Curtis Institute of Music in Philadelphia, where I researched this dissertation. I thank Dean Robert Fitzpatrick for permitting and facilitating my research, Mary-Jean Hayden for helping me to make contact with many international students and Edward Aldwell, David Hayes, Mei-Mei Meng, and Otto-Werner Mueller for allowing me to sit in on classes and rehearsals. In particular, I thank the following Curtis students, especially those who talked with me at length on multiple occasions: Sara Bitloch, Laura Caramelino, Amy Cheng, Glen Fischbach, Jonathan Gandsman, Jason Gamer, Reza Jacobs, Amir Kats, Janet Miller, Inna Nassidze, Jim Nova, Min Sang Park, Anna Polonsky, Aaron Robertson, Deanne van Rooyen,

Mike Vreilink, Catherine Wang, Chen Zhao. That they are talented is a given, since they are Curtis students. What I found a delightful surprise was how warm, insightful and generous with their time and insights they were. I thank them warmly.

Elizabeth Tolbert acted as unofficial reader of this dissertation. If not for bureaucratic red tape, she would have been official. Her unflagging enthusiasm and anticipation of being able to cite me encouraged me when I most needed it. Marc Perlman and Larry Zbikowski have also shown interest in and enthusiasm for my ideas. The interest of established scholars can be a powerful incentive to slog on when the weight of one's first large work becomes unwieldy. I thank these scholars sincerely.

I would not have completed this project without the support of several fellowships. An American Association of University Women American Dissertation Fellowship, a Jacob K. Javits Graduate Fellowship, an Andrew W. Mellon Dissertation Fellowship, a Benjamin Franklin Graduate Fellowship, and a Chemicles Fellowship in the Teaching of Writing made possible the writing, as well as the classes out of which it grew. The nameless, faceless people who work behind the scenes to make scholarship financially possible are among the unsung heroes of academic life. Here, I sing my gratitude to them.

Also among academia's unsung heroes are the administrative and support personnel who make scholarship practically possible. Maryellen Malek, Margie Smith and Alfreda Frazier are the glue that holds the music department together. Having worked such a position in Penn's Department of Folklore and Folklife, I know the difficulty and importance of administrative work. If I were to sing my gratitude to them, it would have to be an oratorio. In that oratorio, I would also want to sing a chorus or two to the professors who guided me as graduate chair, particularly Lawrence Bernstein and Cristle Judd. Additionally, I'd sing an aria to Eugene Wolf, whose warm interest and encouragement saved my student career several times during its difficult first year, and to Eugene Lew, who assisted me many times with computer problems.

But for the following people, I'd sing a folk tune. Kenny Goldstein, Dan Ben-Amos and Roger Abrahams encouraged me to stretch myself beyond the safety of my administrative position in the Folklore department. Without their belief in me, I would not even have begun my student career. I thank (and remember) them fondly.

I'd also like to thank other members of the Music Department community. Elyse Carter Vosen, Jose Buenconsejo and Jeremy Wallach played starring roles in "The Young and The Professorless" with me, and buoyed my sense that all would work out well in the end. Carol Muller and her spring, 2001 graduate class read excerpts of this work sympathetically and gave me a forum for trying out developing ideas. And many fellow students provided me with collegial friendship when I needed it: Matt Butterfield, Maribeth Clark, Alfred Cramer, Dan DiCenso, Lloyd Frank, Elaine Hayes, Youyoung Kang, Laura Lohman, Mary Macklem, Eugene Montague, Daniel Party, Lex Rozin, Lucy Shanno, Leslie Sudock, Carol Whang, and Sheryl Zukowski.

The wealth of my support has been not only professional, but also personal. I thank my sister Erika Kotala-Bell, for anchoring me through many of life's difficulties and sharing its joys, and my brother Kris Koontz, for beefing up my computer so it could handle the demands of this dissertation. I thank my extended group of friends: my "sisters" Simone Waddell and Gisela Webb, especially, have been the best friends anyone could hope for, but so, too, have Bob Paige, Maggie Gilboy, Ed Kane, Rene and Richard Nelson, Roseline Cousin (who told me "Good is done!" which helped me through early perfectionism), Ophelia Hurst (who has a knack for calling to see how I'm doing right when I need such a call), and Sharon Kubik. These dear friends have, individually and collectively, helped me to see and feel the beauty and humor in life. With such friends, how could life be anything but beautiful and humorous? In addition, I thank the following group of friends for keeping me musical and thus reminding me of what this work is all about: Louie Asher, Becky Davidson, Franklin Evans, Judy Hussong, and Kathleen Smith. A special thanks to Anne Bies, my partner in kavaling and to Ruth Olson, who eats a warm-from-the-oven peach pie like no one else on this earth.

Finally, I extend gratitude to the members of my immediate family. Despite a professed dislike of "deep thoughts" my daughter Beth has, before my very eyes, grown into an awe-inspiring young adult with very deep thoughts and feelings of her own. She has kept me grounded in what really matters. My husband, Garrett, has been unfailing in his support of this work. I thank him, especially, for keeping me in food and dishes in the final, mad dash to the finish.

ABSTRACT

MUSIC AND EMBODIED IMAGINING: METAPHOR AND METONYMY IN WESTERN ART MUSIC

Deanna Kemler

Christopher F. Hasty

This dissertation poses the question, “How does music mean?” If we acknowledge that music exists in the material world as a complex sound wave only, we must wonder how music, *as felt meaning*, arises. Scholars have often approached this question through considering music as a language. I do not employ this approach. In fact, I criticize the analogy and the epistemology on which it is based as reductive and inconsistent with musical experience. This analogy diminishes a whole-bodied experience to one that involves only the mind and ears and decreases resonant, lived meaning to “content” — metaphorically an object transferred by speaker to hearer through the representative and referential functions of symbolic forms.

Departing from this analogy, I develop a theory of whole-bodied, lived meaning based on Lakoff and Johnson’s theory of conceptual metaphor and Polanyi’s epistemology of tacit knowing (bodily-based, culturally-inflected knowing that one can feel, but cannot describe in full). Using this new theory, I analyze the speech of young musicians at the Curtis Institute of Music, taking it as descriptive of meaningful experience with instrumental Western art music, on which I focus. I argue that enculturated listeners feel musical meaning when, employing metaphoric and metonymic processes, they use whole-bodied imagining and perceiving to integrate dimensions of tacit knowing with the sound wave. In so doing, they transform the sound wave’s

physical qualities (frequency, amplitude, complexity and duration) into music's felt dynamic qualities and events (e.g., motion, force, intensity, tension, relaxation, mood, gesture or momentum). In this way, musical meaning comes to life through the energetic mediumship of listeners' tacit knowing, resonating in and throughout felt reality.

Listeners do not merely hear the music and thus grasp its meaning; rather, they *live* its meaning. Indeed, listeners may also, through participating bodily in live or recorded musical performances, live tacitly known, felt social meanings — such as a sense of identity or place — in intensified fashion. Thus, I suggest that symbolism involves a resonant level in which participatory, lived meaning effects a connection of participants with signs, and through signs, with each other and such transcendent social realities.

Contents

Introduction	1
On the distinction between “notes” and “music”	4
On the nature of musical meaning	5
Resonance of this study with previous scholarship	10
Methods	16
On the relationship between language and experience	25
Metaphoric projection	33
Chapter summaries	41
1 Objectivism: Grasping Words, Seeing Meaning, Building Understanding	43
Convergence and Divergence in Existing Explanations	47
Relationship between Problem and Epistemology	48
Objectivism	52
<i>Objectivism Related to Visual/Manual Behavior</i>	52
<i>Lakoff and Johnson’s Description of Objectivism</i>	57
<i>The Conduit Metaphor</i>	62
<i>The Logical Construal of Parts, Processes, and Experiences in Objectivism</i>	63
<i>Summary</i>	76
Objectivist/Conduit Meaning Applied to Musical Meaning	77
<i>Objectivism in Writing about Musical Meaning</i>	79
<i>Aspects of Musical Experience Excluded by Objectivist Meaning</i>	84
<i>Negative Effects of Objectivism on Arguments</i>	92
The Presentation/Representation Tension (Hanslick, Langer & Addis)	93
Music as Referential (Meyer)	114
The Relationship between Listener & Music (Addis)	127
Contrast of Musical and Psychological Approaches	134
Conclusion: Problems that need to be addressed in a New Approach	141

2 “On the Hither Side of Words”: Tacit, Invoked Meaning	145
Philosophical Assumptions: Embodied Realism	147
<i>Grounding</i>	149
<i>Basic Level Categorization</i>	151
<i>Path of Investigation, Relationship of Parts to Wholes</i>	154
<i>Embodied Realist Models and Explanation</i>	157
<i>“Objectivity” and “Subjectivity” in Embodied Realism</i>	158
<i>The Nature of Human Beings in Embodied Realism</i>	160
<i>Meaning</i>	161
<i>Summary</i>	166
Bodily Imagining and Perceiving	167
<i>Embodied Imagining</i>	169
<i>Embodied Perception</i>	174
<i>Summary</i>	181
Embodied Perceiving/Imagining & Meaning “On the Hither Side of Words”	182
<i>Polanyi’s Structure of Tacit Knowing</i>	182
<i>Polanyi’s Tacit Knowing Related to Embodied Imagining/Perceiving</i>	187
Invoked Meaning	197
<i>Extending Polanyi’s Theory of Meaning</i>	197
<i>Symbolic Meaning</i>	204
<i>Focal Whole</i>	210
<i>Summary</i>	217
Conclusion	218
3 Musical Meaning: Resonance	220
Musical Meaning	220
<i>Polanyi’s Ontological Levels</i>	220
<i>Level One: Hearing Isolated Tones</i>	223
<i>Image Schemas, Embodied Perception and Experiential Gestalts</i>	228

<i>Level Two: Making Sense of the Musical Sound</i>	232
Making Sense with Embodied Perception: Metonymic Invocation	233
Making Sense with Embodied Perception: Expectation and Desire	239
Kinds of Tacit Knowing Brought to Bear on Making Sense of Music	251
<i>Level Three: Living the Music</i>	256
Comparison to Symbolic Meaning	266
Attending in Level Three Experience	268
Beauty and Ineffability	273
<i>Relationship of the Three Levels of Musical Experience</i>	276
<i>Music and Language Revisited</i>	279
Resonant Meaning	288
<i>The Nature of the Resonant Connection</i>	290
<i>The Resonance Analogy Applied to Semiosis</i>	293
<i>Human Reality as Energetic in Nature</i>	297
<i>The Power of Resonant Communication</i>	298
4 Musical Event Structure Metaphors	301
Pitch and Volume → Musical Event Structure Metaphors	303
The General Event Structure Metaphors	305
The Relationship of the Observer to the Observed in the Two MESMs	308
Musical Event Structure Metaphor — Location Dual	318
<i>Setting I: Extended-Static Musical Time-Space</i>	319
<i>Action I: Melodic Motion</i>	322
<i>Direction I: The Harmonic PATH Image Schema; Harmonic Locations</i>	323
<i>Direction II: The Extended-Static Musical Time-Space PATH Image Schema</i>	325
<i>Action II: Melodic FIGURE Contrasting with Harmonic/Rhythmic GROUND</i>	327
<i>Setting II: Regions of Musical Space, Terrain</i>	344
<i>Summary</i>	350
Musical Event Structure Metaphor — Substance Dual	350
<i>Setting</i>	353

<i>Interaction I: Tactile/Sensory Self and Musical SUBSTANCE</i>	354
<i>Interaction II: Kinesthetic/Proprioceptive Self and Musical FORCE</i>	358
<i>Interaction III: Emotional Senses and Patterns and Qualities of Mood</i>	367
<i>Summary</i>	378
Summary Comparisons of the Two MESMs	379
Conclusion	383
5 Metaphoric Blends	389
Relationship of the MESMs	391
Mental Spaces and Blending	396
<i>“Mental Space” Problematic as a Term</i>	398
<i>Blends</i>	400
Blends of Music Event Structure Metaphors	405
<i>Getting into the Music</i>	407
<i>Music is a Vehicle</i>	408
<i>Momentum</i>	426
<i>Direction</i>	439
<i>Scaling Effects</i>	444
Conclusion	445
Conclusion	450
Summary	450
Grounding Metaphors	461
Conclusion	467
Bibliography	478

List of Tables

Table 4.1	Showing the dichotomy of metaphoric expressions for the same musical phenomenon	303
Table 4.2	Contrasting the two general event structure metaphors	406
Table 4.3	Contrasting the two MESMs in terms of generic musical notions	379
Table 4.4	Contrasting the two MESMs in terms of generic event notions	381
Table 5.1	Contrasting the two MESMs in terms of OPPOSITION and COMPLEMENTARITY	393
Table 5.2	Showing MUSIC IS A VEHICLE as a blend of generic general event notions from the two MESMs	417
Table 5.3	Showing MUSIC IS A VEHICLE as a blend of generic musical event notions from the two MESMs	418
Table 5.4	Showing musical time-space and motion in MUSIC IS A VEHICLE to be a blend of the two MESMs	425

List of Examples, Diagrams, and Figures

Example .1	Handel's <i>Water Music Suite</i>, no. 6	1
Example 4.1	Speech illustrating the location MESM	309
Example 4.2	Speech illustrating the substance MESM	309
Example 4.3	Schubert's <i>String Quartet</i> "Death and the Maiden"	329
Example 4.4	Ravel's <i>Daphnis and Chloe</i>	332
Example 4.5	Hindemith's <i>Sonata for Trumpet and Piano</i>	343
Example 4.6	Beethoven's <i>Piano Concerto</i>, no. 4	347
Example 4.7	Mozart's <i>Flute Concerto in D major</i>	361
Example 4.8	Brahms' <i>Violin Sonata in D minor</i>, exposition	372
Example 4.9	Brahms' <i>Violin Sonata in D minor</i>, recapitulation	376
Example 5.1	Speech illustrating the blended MESM	409
Example 5.2	Mozart's <i>Oboe Quartet</i>, k. 370	427
Example 5.2	Beethoven's <i>Piano Sonata</i>, "Das Lebewohl"	428
Example 5.4	Chopin's <i>Ballade</i>, mm. 67-75	432
Example 5.5	Chopin's <i>Ballade</i>, mm. 109-130	435
Diagram 5.1	Bach's <i>Sonata for Unaccompanied Flute</i>	441
Figure 1	Border collie gestalt	402
Figure 2	Volkswagen Jetta gestalt	402
Figure 3	Generic gestalt shared by Border collies and Jettas	402
Figure 4	Blended gestalt — "Border collied" Jetta	403
Figure 5	Generic event notions, both musical and general	406

INTRODUCTION

I can remember the precise moment, when I was eleven years old, that music began to mean deeply for me. In my ballet class we had been rehearsing for weeks for our end-of-year performance, dancing to the regal horn fanfare from Handel's *Water Music Suite*, no. 6.



Example .1

As I performed my part to the music, I suddenly felt as if the music filled my body and, rather than me moving to the music, *the music moved me*. I felt *lifted* by the music, *possessed* by it, my movements full of and motivated by its noble feeling. I soared along on top of its warm, joyful energy. Whereas before this experience, I had enjoyed Western art music and thought it to be a pretty thing, after this experience, I began to feel deeply about and for it. Quite against my character, I began regularly to sneak into an empty, off-limits dance studio while my older sister took her classes to listen to music and allow it to move me. Eventually, I quit dance to concentrate on music.

This dissertation is, in part, my attempt to understand what happened to me that day. How could something that had merely seemed pretty come to mean so deeply? Nothing in my college music classes even approached an answer to this question. In

those classes, theorizing about music and its meaning seemed overly cerebral, as if engaging with music were a matter that involved only the ears and brain. With my visceral, bodily way of experiencing music, I felt at odds with the scholarly musical culture I encountered there. I did not just *hear* music and appreciate it intellectually, I *felt* it deeply. Indeed, I *lived* it bodily. When playing music was at its best, I did not play the music, it played me. My experience as a flute performance major deepened the growing gap I felt between what was said about music in classes and how I experienced it. The ideas I learned in my theory classes seemed to have little to do with my goals in the practice room, where I struggled to transform plain notes into dynamic music. Although I enjoyed analyzing pieces for theory class, ultimately, those analyses did not even come close to touching the real power and meaning that music held for me. As a performer, it seemed to me that music theory — its language and approach — was a world somehow separate from mine.

Much later, in graduate school, while reading Steven Feld's *Sound and Sentiment* I encountered the idea of a folk theory of music. Determined to overcome the then current ethnomusicological prejudice that nonliterate peoples have no music theory, Feld began to attend to the way that the Kaluli people of New Guinea, with whom he was living, spoke about their music. Eliciting this language through making calculated errors in his own compositions, he discovered that the Kaluli theorize about music through a system of water metaphors:

“Your waterfall ledge is too long before the water drops,” “There is not enough flow after the fall,” “The water stays in the pool too long,” “There is much splashing” (164).

Reading this, I wondered if an analysis of the metaphors Western art musicians use to speak about music would reveal a “folk” theory, or ethnotheory, that might somehow come closer to my experience with music than did the “official” theory I learned in college.

Shortly thereafter, I encountered newly emerging theories of conceptual metaphor, related to theories of embodiment, that demonstrate that understanding, reasoning and meaning *are based in bodily experience in the world*. Equipped with a theory that explains how meaning relates to body and suggests a methodology for exploring that body-meaning complex, I began my analysis. This dissertation is the result of that analysis. It resolves the dissonance I felt between theories of musical meaning and my experience of musical meaning. My basic question is “How does music mean?” As ethnotheories are culturally and historically situated, I approach this question within the context of a specific musical culture: Western art music as it is practiced within an American musical conservatory.¹ I focus my thoughts specifically on non-texted, instrumental music.²

¹ Recent musical ethnographies, such as Henry Kingsbury’s *Music, Talent and Performance* and Bruno Nettl’s *Heartland Excursions* have established American musical conservatories, both private and University-based, as complex and multifaceted musical cultures.

² I do not claim that the theory described in these pages applies universally in any way; however, I do *suspect* that some aspects of this theory may apply to other cultures, as well as other Western musics. I explore this question in my conclusion.

ON THE DISTINCTION BETWEEN “NOTES” AND “MUSIC”

In asking about “music,” I define the phenomenon under study using a distinction common among practicing Western art musicians. American musical conservatory culture marks a clear line between “mere notes” and “music.”³ Negotiating a shared musical conception intersubjectively in practice sessions, master classes, and group rehearsals, musicians wield the power of highly trained bodies, minds, and sensibilities to accomplish their primary goal: the transformation of an analyzable collection of sounds — “notes” — into “music,” something both more compelling and harder to analyze than mere notes.

The distinction between “notes” and “music” marks various important boundaries, both experiential and social. It signals a crucial boundary in musical engagement: if I hear, feel or play “notes,” I do not fully engage in the musical process; if I hear, feel or play “music,” I engage more fully and in so doing, achieve one of the highest goals of the culture. This distinction also marks the boundary between those musicians deemed “talented” and those deemed merely adequate. “Mediocre” performers and composers deal in “notes”; “talented” performers and composers do more: they create “music.” Based on the difference between “music” and “notes,” the distinction between talented and mediocre performers and composers can mark the boundary

³ Most of the time, when I use the word “music,” I am referring to instrumental Western art music. Occasionally, especially when I speak of music as it may act as a social symbol, the scope of reference for “music” broadens a bit. However, it never broadens beyond musics common in the Western world, such as popular music or jazz. In addition, I often use the term “musical sound” to mean “notes.”

between those students who fulfill their goals to become professional musicians and those who do not.⁴

As an experiential distinction, the difference between “notes” and “music” may seem insubstantial and thus unimportant. Although very distinct in experience, this difference cannot easily be described, just as the difference between the tastes of a peach and an apricot, though distinct, cannot easily be described. One must *feel* the distinction between “notes” and “music” in order to truly understand it. Once felt, however, the importance of this distinction becomes clear, as it did to me that day in ballet class when I first felt it.

As a member of the culture of Western art music, I take this distinction seriously. In this dissertation, I endeavor to theorize how “music” means. Of course, I must also account for “notes,” but I do not want to merely theorize “notes.” In the text, I will occasionally emphasize this distinction through the use of quotes.

ON THE NATURE OF MUSICAL MEANING

Because our understanding of *linguistic* meaning usually colors discussions of meaning in general, we commonly think of meaning as *transitive* in nature. If a thing or event *means*, it must be able to be glossed *as something else*: “the” means that a specific (not general) noun will follow in a sentence; “dog” means a furry mammal with four legs and a tail that behaves in specific, instinctual ways but is distinct from various other

⁴ For an interesting discussion of “talent,” see Kingsbury (1988), chapter three “Cream Rises.” Kingsbury also discusses how the term “music” is used in conservatory culture. Unfortunately, he does not give the distinction between “notes” and “music” its due importance.

similarly described creatures; “winning the seat of first flute in the all state orchestra” means being the best high school flutist in the state, and so on. The gloss answers the question “What does this mean?”

However, if we examine these examples more closely, we can see that besides the first one (“the”), these things or events can also mean much more than their glosses. In American culture, dogs generally mean loyalty, friendliness, and unconditional love. For specific people dogs may mean danger or the hassle of constantly cleaning shedding hair from furniture. Thus, in addition to its denotation, “dog” relates to cultural and individual connotations. However, for individuals, it can mean something that seems somehow beyond even individual connotations. For a dog lover whose pet has just died, that dog may have meant “the world” to her.⁵ For the high school flutist, winning first chair in the all state orchestra may mean more confidence in her ability, more respect from other students, and as the beginning of the realization of her dream of making a career in music, a radical change in her view of her world and her place in it. This, indeed, means “the world” to her.

This “meaning the world” points to a kind of meaning that does not easily answer the question “What does X mean?” This meaning resonates loudly in the lived feelings of the individual. The bereft dog-lover feels the loss of her pet — the loss of her world — with her whole self: in her feeling of sadness, in the way her heart, arms and hands feel as she aches to bend down to pet her missing dog, in her sense that the floor space

⁵ In this dissertation I have approached the problem of lack of gender-neutral pronouns in English by alternating the use of feminine and masculine pronouns in alternating chapters.

of her home is just too empty and dead without this lively creature wriggling around in it. The proud flutist feels her triumph — the gain of a new world — with her whole self as well: in the way she feels about herself and her relationship to other people, in the way she carries herself and moves through the physical and social world, in her expectations (both tacit and explicit) of the present and the future. These embodied experiences are not simply the *results* of the meaning of “My dog died” or “I got first chair in all state orchestra!” They are a large part of the meaning of these events as it resonates in the lives of the individuals involved.

This resonant kind of meaning connects us with life’s larger questions and concerns — questions and concerns that *transcend* ordinary reality: “Where did this lovely little furry spirit go? She was so ‘here’ and then so suddenly ‘not here.’” or “How can I live without her unconditional love?” or “Do I have talent?” or “Do I have a place in the musical world?” This meaning does not answer these questions, but raises them as a part of its resonance. For a time, these issues live vividly in and through the person’s body.

Resonant meaning means *intransitively*, through existing in human experience, not through reference to a “what.” Because of its felt effects and the connections it creates with larger issues, resonant meaning alters the quality of existence for a time. By connecting our lives with larger issues, thereby putting them into a larger context, resonant meaning *gives meaning to our lives*. Resonant meaning “strikes” us, as if we were a gong and we resonate with it, feeling full of it’s meaning until the resonance dies

away. It is not a meaning-object that can be gotten, as if finding a meaning in the dictionary, but a meaning process that permeates an individual's existence for a time — a meaning that lives her, that takes over her life or that she gives herself over to.

Musical meaning occurs in this intransitive, resonant manner; it does not necessarily mean *something*, it simply means. Through bodily experience, music resonates with and in the inner self of the individual listener. Striking like a gong or stroking like a feather, music permeates our existence for a time as a meaning process that we give ourselves over to, a meaning process that connects us to events and realities that transcend the scope of our ordinary lives like *Beauty* or *Spirit*, *Community* or *Nation*, *Being female in contemporary America* or *Being Native American in contemporary America*. Through this resonance and connection, music alters the quality of our existence at the same time that we give it its existence.

As we conceive of it in Western musical culture, music does not exist outside human experience. Outside human experience, music exists only as a complex sound wave, a purely physical phenomenon. Each of the aspects of what we think of as music — pitch, melody, harmony, rhythm, and so on — arises as the result of human involvement with the physical sound wave. Human beings, then, are the medium in which music, as “music,” exists.

Human beings are also the medium in which, through musical experience (and other kinds of peak experience), transcendent realities like *Beauty*, *Spirit*, *Community*, *Nation* or *Identity* might come into existence. These transcendent realities are not

concrete, physical realities, but realities defined and construed in a particular way through negotiation and consensus of a social group. Because of the social nature of the transcendent realities, connection with them connects us to society. When we live socially defined transcendent realities in musical experience, we *live* our group's most important values and beliefs in intensified fashion for a time. The experience of living these transcendent realities contextualizes the individual life and gives it meaning, a meaning socially defined. At the same time, the individual gives life to these social meanings.

Musical meaning, then, is a very complex phenomenon, involving at least three distinct entities: 1) in physical reality, the complex sound wave, 2) in social reality, socially defined transcendent realities, and 3) in individual, psychological reality, individual experience, in which both music and socially defined transcendent realities come into being and are maintained. Such a complex phenomenon *demand*s a comprehensive approach. For a complete understanding of musical meaning, we must understand the interaction of *all* of these entities. How do sound waves become "music" in human experience? How do transcendent realities live in human experience? How can musical experience connect the individual with socially defined transcendent realities? How do transcendent realities give meaning to individual lives through musical experience?

RESONANCE OF THIS STUDY WITH PREVIOUS SCHOLARSHIP

Given the above framing of musical meaning, we can rephrase the central question of this dissertation, “How does a sense of lived meaning emerge from whole-bodied participation in musical performances?” This question situates the work at the nexus of several theoretical streams: the emergence of meaningful lived social realities from performance, embodiment, and music theoretical concerns with meaning.

Disciplines concerned with the aesthetic dimension of social life (including but not limited to ethnomusicology, folklore and anthropology) traditionally located aesthetic meaning as the content of symbolic and textual forms (den Otter 1985, Densmore 1922, Merriam 1967, Moyle 1988, Nettl 1954, Tracey 1970). Understanding the *relatively fixed* meaning of these forms consisted of gaining access to the emic point of view and thus gaining access to their content. A fuller understanding could be had by knowing the various genres of a group, as well as how they related, their history, how they were made and transmitted, and how they functioned in the society. Such studies, however, did not reverberate with the fullness of lived reality, but sketched a reduced version of it.

Beginning in the 1970s, however, studies began to better evoke the fullness of lived reality. At that time, scholars broadened their view and began to see performances of aesthetic forms as nexuses of dynamic processes during which participants negotiate and construct *relatively fluid* social meanings. Resituating the aesthetic “text” in its “context” of performance (Ben-Amos 1971), scholars sought to understand not only the

form and content of the “text” but also the meta-level forms that tie text to context and meta-level contents that emerge from the dialectic and dialogic interplay of text and context.

Studies of meta-form — such as framing (Bateson 1972, Goffman 1974) and keying (Bauman 1984) — demonstrate how meta-communicative devices signal a “breakthrough into performance” (Hymes 1975). This “breakthrough” alters the conditions of the ongoing interaction in two ways. First, since the particular genre employed entails a social contract, it signals a change in mode of behavior of the participants. In this contract the performer assumes “responsibility to an audience for a display of communicative competence” (Bauman 1984, 11) while the audience assumes responsibility for interpreting and evaluating the performance according to the freedoms and constraints of the particular genre. Second, the breakthrough creates a shared psychological condition — a liminal “space” — that questions the boundary between the “real” and the “unreal” (Huizinga 1955, Bateson 1972, Turner 1967, 1969, 1977, 1988, Turnbull 1990). The paradoxical play of “real” with “unreal” creates a ludic space of performative potential (Austin 1962) in which normative dimensions of social life may be loosed from their everyday moorings and brought into symbolic relief.

In this ludic space, within the freedoms and constraints of social contracts entailed by specific genres, participants may symbolically play with, question, rearrange and negotiate meta-content — meanings concerned with normative dimensions of social life. In the process, they “construct social reality” (Schieffelin 1985), negotiating

personal identity and relationships of power related to age, gender, social class, and ethnicity (Auerbach 1989, Basso 1989, Briggs 1988, 1992, Chernoff 1979, Feld 1990, Kapchan 1996, Kingsbury 1988, Koskoff 1989, Mendoza-Walker 1994, Netti 1994, Roseman 1989, Seeger 1987, Sutton 1989, Toelken 1991, Washabaugh 1996) as well as a social, political, geographical and historical sense of place (Lewis 1988, Moulin 1994, Roseman 1991, 1996, 1998, 2000, Turino 1993, Vander 1988, Waterman 1990a, 1990b).⁶

While earlier studies of performance tended to take an objectified view of “text” and “context,” leaving little room for human agency, more recent studies consider the interaction between text and context as a process under control of individual actors. For example, studies of “contextualization” consider the

active process of negotiation in which participants reflexively examine the discourse as it is emerging, embedding assessments of its structure and significance in the speech itself. Performers extend such assessments to include predictions about how the communicative competence, personal histories, and social identities of their interlocutors will shape the reception of what is said (Bauman and Briggs 1990, 69).⁷

Also more easily understood as a process under control of an agent are the untexted performances of everyday life (Goffman 1974, Bourdieu 1977). Rather than an enactment shaped by the constraints and freedoms of a relatively fixed genre, these

⁶ The awareness of how power is negotiated in performance initiated a period in the later 1980s of greater self-awareness and reflexivity amongst scholars of performance in which they began to examine the political implications of their own “performed” texts. For more, see Clifford and Marcus (1986), and Marcus and Fischer (1986).

⁷ See Bauman and Briggs (1990) for a finely nuanced discussion of recent understandings of the processual interplay between “text” and “context,” including the concepts of contextualization, entextualization and recontextualization.

improvisations arise from an internal sense of the possibilities (and impossibilities) of the ways in which the particularities of a situation might serve self interest.

The concerns with the individual control of contextualization and the improvised performances of everyday life demonstrate a change in how scholars frame the performance situation. Rather than a spectacle to be observed, interpreted and thickly described (Geertz 1973), some scholars now frame performance as a *felt* process, whose efficacy arises, in part, through the medium of the lived body (Briggs 1994, 1996, Cowan 1990, Csordas 1994c, 1996, Desjarlais 1996, Kapchan 1994, 1995, Lewis 1995, Mason 1994, Ness 1992, Rappoport 1992, Rebhun 1994, Sklar 1991, Sugarman 1997, Williams 1994).⁸ A relatively new sub-field, sensory anthropology, directs our attention away from our tendency to know and understand through visual means and metaphors toward our other senses as they create a more immediate, less distanced engagement with the world (Howes 1991, Neustadt 1994, Stoller 1989, 1996, 1997). These scholars remind us that in many other cultures, vision is not the preferred way of knowing.

We are realizing that, because of our tendency to know through seeing, we must participate bodily in our field consultants' world in order to really understand it. Diedre Sklar suggests the method of "kinesthetic empathy," in which the ethnographer experiences "the interplay of corporeality and abstraction" where "cultural knowledge gathers conviction and force" (1994, 13). She describes the difference kinesthetic

⁸ For reviews of literature about the body and embodiment, see Lock (1993) and Farnell (1999). For dance and politics, see Reed (1998). For gesture, see Kendon (1997). Medical anthropology, in particular, has theorized embodiment in such a way as to allow us to see how it mediates the efficacy of performance. See Csordas (1989, 1993, 1994a, 1994b, 1994c), and Scheper-Hughes and Lock (1987).

empathy made in her understanding of the devotion to the Virgin Mary of the participants in the Dazante matachine dance in Tortugas, New Mexico. After a year of fieldwork, she thought she had come to a fairly full understanding of this devotion when she found herself caught in a group of people going to kneel, one by one, before the image of the Virgin.

[T]he physical act of getting down onto the ground before a feminine embodiment of compassion, wisdom, and availability was profoundly agreeable. At the same time, I was shocked by the sense of feeling her presence. It seemed as if I were melting into a deep connection with the being depicted in the image, meeting Our Lady of Guadalupe face to face. The other people in the Capilla dropped away, and for a brief moment, I felt as if she and I were conversing, but without the lengthy process of forming words. It seemed appropriate to be on my knees — a corporeal attitude toward a divinity that was entirely alien to me; humility replaced academic distance (1994, 17).

Thus Sklar's body, raised Jewish, becomes a medium for the transformative power of this performance, bringing her to feel both a personal relationship with the Virgin Mary and a more complete understanding of the Dazante genre and its participants.

The growing body of literature that frames performance as a felt process broadens the focus of our attention from external dimensions of performance to include human beings as living media for social meaning. As living media, we bring these social meanings to life and thus share in their realities. Dorothy Noyes discusses the shared reality created through intense bodily participation in the Patum festival in Berga:

Communal action creates a shared reality, and over time a fund of common experience: it makes mutual understanding at some level possible. Consensus, as James Fernandez has noted, is etymologically con-sensus, feeling together (1988, 1-2). The Patum's intensity of performance brings the individual's senses into concert to receive strong impressions. Near-universal Patum participation in Berga guides the

senses of the entire community in the same direction, obliges them to feel together in a way that their divided everyday experience can never foster (1993, 138).

Thus, we are coming to feel the importance of experience in the lived body to the creation and maintenance of social meaning.⁹

It is through the medium of the lived body that non-texted music can enter this stream of theory. Given that performance studies grew out of “readings” of text and symbol, it is not surprising that these scholars have not, in general, attended to non-texted music. Rather, they have treated music primarily as an accompaniment to text or dance, which can more easily be “read.” Non-texted, undanced music has been the purview of music theorists, who have dealt with it primarily in the form of reified notation.¹⁰ Music theoretical explorations of musical meaning have tended, on the whole, to draw on the analogy of music to language. This analogy maps structures of experience from language onto music that simply do not ring true, creating more problems than it solves.¹¹

In recent years, however, another theory borrowed from linguistics has held out greater promise: the theory of conceptual metaphor (discussed in detail below). In this theory, metaphor is not just a linguistic phenomenon, but can involve “mapping” the structures of concrete lived, bodily experience onto more abstract realms of existence. This theory provides a clear articulation of the relationship between bodily experience

⁹ For more on the relationship between the emotional body (emotional feeling) and the social body (social feeling) see Scheper-Hughes and Lock (1987) and Lyon and Barbalet (1994).

¹⁰ For notable exceptions, see Hasty (1997), Meyer (1956), and Narmour (1990 and 1992). I discuss Meyer’s work in chapters one and three and Hasty and Narmour’s work in chapter three.

¹¹ I explore some of the problems of this literature in detail in chapter one.

and making sense of music. Against the hegemony of linguistic (propositional) meaning, it suggests a non-propositional (or perhaps pre-propositional) dimension of the meaning process that does ring true to meaningful musical experience. Using this theory, some music scholars have begun to shed light on how music means through the medium of the lived body (Cox 1999, Saslaw 1996, Walser 1991, Zbikowski 1998).¹² In addition, several studies concerned with the embodied, kinesthetic dimension of the listener have recently appeared (Dura 1998 and Iyer 1998). My study enters into this stream of thought, along with that of the study of performance as a felt process through which meaning arises and is maintained in the medium of the lived body.

METHODS

Since musical meaning, as a complex phenomenon, exists in and through the medium of human experience, the theoretical framework used in understanding it must center on experience. Experience is a complex subject whose scope is too broad to be treated in depth in this dissertation. Rather than attempt a comprehensive overview, I limit my discussion to those aspects of experience relevant to developing a methodology designed to investigate musical meaning.

In the theoretical framework that underlies such a methodology, “experience” must be construed carefully and broadly, in a manner that includes all relevant aspects of being human: spirit, mind, body, intellect and feeling. “Experience” must also include

¹² Studies of metaphor in the discourse of Western art music existed previous to the theory of conceptual metaphor: Beckler (1981), Ferguson (1960), Glickman (1983), Guck (1981a and 1981b), Hansen (1974), Krantz (1987), Smith (1976), and Solie (1977 and 1980). Without the theory of conceptual metaphor, however, most of these make little connection between musical meaning and the lived body.

both those aspects of the meaning process of which we are focally aware *and* those that might be either in peripheral awareness or out of awareness altogether (e.g., in the act of listening, I am focally aware of the musical sound, peripherally aware of my body's kinesthetic involvement in that sound, and usually unaware of the neuro-biological transductive processes that translate sound wave into sound). "Experience" must be theorized in such a way that not only can music come to life in it, but transcendental realities can also come to life through the life of music in the individual.

Since music does not exist *as music* outside of human experience, an approach to musical meaning must take experiential reality as *just as real* as concrete physical reality. Any approach that suggests that experiential reality is *less real* because its "substance" is a matter of human energetic processes rather than concrete physical substance is inadequate. To begin with, the notion of "reality" is a human construction. Without human beings, the earth and its inhabitants would simply *be as they are*; questions of "reality" would not exist. Because of the hegemony of the scientific viewpoint, the prevailing Western epistemology has taken physical reality to be more real than psychological reality. However, to a human being experiencing a particular psychological reality, that reality is *just as real* as any physical reality. In fact, in the case of music, the psychological reality — the sounding music — seems *more* real to the listener than the associated physical reality — the sound wave. I know that sound waves exist primarily because I have been told they do by people who use instruments of observation that operate beyond the perceptual limits of those of the human body. To

me, from the viewpoint of my embodied experience, “sound waves” are even more insubstantial than “experiential reality” is thought to be from a scientific viewpoint. In contrast, from the viewpoint of my embodied experience, “music” is vividly real.¹³ Sound waves and music may be two different kinds of reality, but each is just as real *in its own way* as the other. Concomitantly, each is just as *insubstantial* in its own way as the other.

As experienced, “experience” may be very real. However, when one begins to examine it, it can become very slippery. Experience is “slippery” under examination because we cannot observe or measure it directly. We *can* directly observe and measure its *effects*, both physiological and behavioral. However, “experience” is not equivalent to its effects in the body.¹⁴ Those effects *index* experience, as a smoke indexes fire. However, just as the smoke is not the fire, a bodily effect is not the experience. Experience, rather, is a matter of *being in* the body, *living* an event *in* and *through* the body. For this central aspect of experience, we cannot directly observe the experiences of other people, but must rely on their reports. Observation and measurement of bodily effects of a person’s experience can be useful in corroborating the reliability of her reports.

The only way that we can observe experience *directly* is to observe our own. However, even then the problem of split attention arises. If I attend to my experience,

¹³ In fact, *because* the psychological reality of “the sounding music” is so vividly real, most scholarship about musical meaning makes the mistake of assuming that “music” exists *as music* in physical reality.

¹⁴ Observable and measurable bodily effects most often do closely parallel actual experience. However, they do not always. On occasion, I have been told that I looked or sounded as if I were experiencing one thing when I was actually experiencing something quite different.

part of me is involved in the experience while part of me is involved in observing myself involved in the experience. Because I am no longer *totally* involved in the experience, the splitting of attention *changes* the nature of the very event (the experience) that I am trying to observe. Of course, if this splitting of attention complicates *my* attempts to observe my experience, it also complicates the attempts of other people who might report their experiences to me. One answer to this methodological problem is to try to report from memory and then to check those reports by momentarily splitting attention in the midst of actual experience. Another answer is to look for a consensus among many people.

Experience is also difficult as a subject of study because it is a phenomenon whose substance is “human energetic processes.” By “human energetic processes,” I mean the processes of the inner life, such as understanding, thinking, intention, motivation, intuition, deciding, resolving, desiring, reacting, imagining, feeling, emoting, believing, remembering, expecting, perceiving and so on. These kinds of events make up the stuff of human experience. However, human beings do not experience the world *directly*. Rather, we experience it from particular “viewpoints,” which involve our attitudes, perspectives, values, beliefs, truths, philosophical bases, intuitions, feelings, and so on. Our “viewpoint” colors how we *construe* our experience and the kind of *logic* we see in it. “Experience” is not a given, but something that each individual has a hand in creating *as it occurs*.

The fact that each individual does not experience the world directly, but through “viewpoints” that construe that experience in a certain way and lend it a certain logic complicates the task of examining experience. It means that we must find and analyze evidence not only of an experience, but also of the manner in which the individual contributes to creating that experience. To make matters even more difficult, the individual may not be particularly aware of her viewpoint or of the way that it contributes to her experience. While one can ask someone about experience directly, the viewpoint may not be so accessible through direct questioning. It may need to be obtained through less direct means.

Not only is the *viewpoint* from which we experience generally out of reach of the mental faculty and its ability to explicitly define phenomena with words, to a certain extent, *experience* may be, as well. For example, in its most intense moments, musical experience is often felt to be *ineffable* — too large to be captured by mere words. We can *try* to describe the experience, but words simply feel inadequate to the task.

To summarize, two interrelated problems inhere in the task of gathering evidence about experience. First, since it is not directly observable in oneself or others, we must rely on verbal reports of memories of experience. Second, many facets of experience, including the ways that we contribute to creating it as well as the most intense levels of experience, seem out of reach of either mental awareness or the mind’s ability to grasp with verbal concepts. Thus the problem is that while we must rely on reports, those

reports may not be reliable, since they may not fully describe all important factors involved.

A method, then, must compensate in some way for this problem. One way to compensate for questionable reliability of reports is to look for a consensus among evidence. How many people report similar experiences? Do directly observable and measurable bodily effects parallel reports of experience?¹⁵ I have responded to these issues by relying not only on my own experience as a member of the culture of Western art music, but also on the experiences of other members of the same culture. In order to gain access to the experience of other members of this culture, I spent time with young instrumentalists at the Curtis Institute of Music in Philadelphia.¹⁶ I observed rehearsals (both the large orchestra and the lab orchestra where conducting students take their lessons), sat in on classes (theory and sight singing) and had twenty in-depth discussions with students.¹⁷ Inevitably, as I was thinking about aspects of musical experience less accessible to examination, I also relied on my own experience, as well as my ability to observe it. However, having found concord with the Curtis students, I feel confident

¹⁵ Similarly, the researcher can only know this “directly observable” evidence through her own experience of it. This fact means that she is viewing it through a perspective that construes it in a particular way — sees it in light of a particular logic. Therefore, her “direct experience of bodily effects” is as indirect as all experience is.

¹⁶ I limited myself to instrumentalists because I had limited the scope of my inquiry to non-texted music.

¹⁷ Readers will recognize my basic method as ethnographic participant-observation. However, since I was already a member of this culture, I began with a different problem than do ethnographers who study unfamiliar cultures. Rather than trying to become familiar with the strange, I had to make strange the familiar. I accomplished this primarily by hearing and observing through the filter of Lakoff and Johnson’s metaphor theory (discussed below). In so doing, I was able to become aware of ways of being so familiar to me as to be almost unobservable.

that my experience reasonably represents the experience of members of this culture.¹⁸ In addition, this dissertation and any publications that result from it will begin a discussion of these matters that will test these ideas further among a larger population.

A second way to compensate for the difficulty of observing experience is to look beyond *what* people say — the “content” of their utterance — to *how* they say it. The words that people use, the images they create with words, the ways that they situate themselves with respect to the experienced phenomenon — all these factors can give clues to not only *what* they experience, but *how* they experience it (their viewpoint). In this respect, the emerging theory of conceptual metaphor has been my guide. Briefly, this theory suggests that metaphor does not function merely as linguistic elaboration but also as a way to think about and conceptualize abstract experience by means of integrating the structure of more concrete experience. I will describe this theory in greater detail below. In addition to metaphor theory, I draw upon linguistic and paralinguistic theories, since linguistic clues like aspect and deixis can reveal a great deal about how the experiencer situates herself with respect to the experienced phenomenon.

Finally, in order to compensate for dimensions of experience out of reach of awareness or verbal concepts — *tacit* dimensions of being human, we can frame the situation theoretically in such a way as to be able to account for tacit phenomena. This dissertation is, in large part, an attempt to develop a theoretical framework that will account for the tacit dimension of musical meaning. Elaborating on Michael Polanyi’s

¹⁸ By “having found concord” I mean that almost all of the time I could not only understand but also relate to the experiences students reported to me. I had difficulty understanding a few times because English was the student’s second language.

theory of tacit knowing, along with Pierre Bourdieu's notion of *habitus*, I advance a theoretical framework that accounts for aspects of experience outside normal awareness. Along with the theory of conceptual metaphor, especially Mark Johnson's concept of *image schema*, these theories have the advantage of involving a knowing body, a body that gives rise to and maintains meaning. Experience occurs in and through the body. If we are to understand a meaning that resonates loudly in embodied experience, that connects us in concrete bodily fashion through that experience to abstract, transcendent issues that give meaning to our lives, we must theorize the meaning situation in such a way that involves a knowing body.

My method both agrees and disagrees with phenomenology. It agrees in the kinds of methods employed, but disagrees in the philosophical reasons for those methods. My work could be called phenomenological insofar as the following are true: 1) I try to make explicit the tacit ground of my knowing about musical meaning, 2) I examine the objects of *intentional acts*, 3) my own, largely tacit method of reflection on my experience corresponds with the phenomenological "bracketing of existence" and "free imaginative variation," 4) I try to discover the "criteria for coherence of those intentional acts in which the object (or its name or description) can figure" (Schmidt, 147), 5) I take fidelity to the phenomenon under study as the concern that trumps all others (i.e., philosophical or methodological concerns), and 6) I try to take "the phenomenon precisely as it presents itself without saying that it exists precisely as it presents itself" (Giorgi, 203).

However, although my actions and concerns may correspond those of phenomenology in many ways, I disagree with the philosophical concerns that gave rise to those phenomenological actions and concerns. This may seem an odd statement, since according to Schmidt phenomenology is “presuppositionless”:

The phenomenologist does not frame theories; he merely examines and then describes phenomena as they present themselves to his unprejudiced view. Having no theoretical commitment and only one practical one — to examine all phenomena carefully and to take none of them as familiar or understood until they have been carefully explicated and described — the phenomenologist says that his science is descriptive and presuppositionless (138).

As I read the Husserlian version of phenomenology, however, it accepts the premises of objectivist science, but where objectivist science works the “objective” side of the “subject/object” distinction, phenomenology works the “subjective” side. As held in objectivist science, the “subject/object” distinction assumes a fundamental discontinuity between consciousness and the world: consciousness is *in* the world, but not *of* it. In contrast, I assume that, since human beings evolved in this world, our conscious is *of* the world. This assumption would suggest that the fidelity of the connection between consciousness and the world is reasonably good, for the purposes under which it arose (which would subsume the purpose of my study). My position will become clearer in the first and second chapters.

In addition to ways to compensate for possibly problematic evidence, an examination of experience requires a test of results commensurate with the phenomenon under study. Since that phenomenon is experience, the test of the truth or plausibility of

the results should center on experiential reality. Rather than testing results in an objective fashion or by objective logic, we should test them by considering whether they ring true to past experience and whether they can be useful in shaping presently unfolding experience. My primary standards for this work have been the following: Do these ways of viewing musical meaning ring true to the experience and experiential logic of members of the culture? Will they help practicing musicians to understand how to transform simple notes into forceful music? Will they assist teachers in knowing how to guide students to a deeper understanding and experience of music? Of these two kinds of tests — the “rings true to experience” test and the test of usefulness — I have primarily used the first. Tests of usefulness will follow in the future.

ON THE RELATIONSHIP BETWEEN LANGUAGE AND EXPERIENCE

Using language as evidence of experience raises the question of the relationship between language and experience. This question is usually framed in terms of mental experience: Does language *influence* the way we think or does it merely *reflect* our thinking? Edward Sapir proposed question of linguistic relativity on theoretical grounds in his 1921 book, *Language*. However, Sapir’s student B.L. Whorf first examined it empirically. Whorf’s pivot article, “The relation of habitual thought and behavior to language” (1934) contrasts the temporal systems of “Standard Average European” (SAE) with that of the Hopi people through an examination of time-related terms and the temporal aspects of grammar. In brief, SAE both spatializes and objectifies time, so that each day is a separate day that can be “moved through” or a separate object that can be

possessed, lost, or counted, just like any other concrete object. In contrast, according to Whorf, the Hopi way of speaking about time suggests that they live in the now as it develops eventfully. Rather than conceiving of the sun's daily cycle as separate, multiple days, they conceive of the sun's daily cycle as the return of the *same* day. That day is a little bit different from yesterday because yesterday's activities still inhere in it. Whorf likens this to the reappearance of a single person; that person may be slightly different because of her experience since the last time she appeared, but she is fundamentally the same person. Days cannot be imaginatively gathered into the same place and counted as objects with cardinal numbers. Rather, as successive reappearances of the same thing, they must be counted by ordinals: the first appearance, the second appearance, the *first* day, the second day, and so on (just as we might count appearances of the sun since we are well aware that only one sun exists relative to our planetary system).

According to Whorf, an affinity exists between different ways of making abstract time concrete and different values, beliefs and behaviors. For instance, in SAE cultures, since each day is different, each day is gone when it is done. This relates to placing value on "spending" time wisely, keeping records, knowing our past, and so on. Because days are discrete entities we can think of them as objects that can be exactly sequenced, specifically indicated and kept track of through a system of dating and calendars. We prepare for the future by planning out a sequence of steps to be taken over sequential time periods. In contrast, for Hopi, time is a matter of the cyclical phasing of day to night to day, and so on, with the same day returning, "a little older but with all the

impresses of yesterday” (151). This relates to a lesser interest in records and linear history and a different notion of preparation. Rather than an emphasis on preparing for the future over the course of time, Hopi preparation stresses the accumulation of power through repetition in the now as it develops into later.

Hopi “preparing” activities ... show a result of their linguistic thought background in an emphasis on persistence and constant insistent repetition. A sense of the cumulative value of innumerable small momenta is dulled by an objectified, spatialized view of time like ours, enhanced by a way of thinking close to the subjective awareness of duration, of the ceaseless “latering” of events. To us, for whom time is a motion on a space, unvarying repetition seems to scatter its force along a row of units of that space, and be wasted. To the Hopi, for whom time is not a motion but a “getting later” of everything that has ever been done, unvarying repetition is not wasted but accumulated. It is storing up an invisible change that holds over into later events (151).

Whorf characterizes the relationship between language and other aspects of culture as “give-and-take,” but states clearly that he believes that in culture, there is “a vast amount that is not linguistic but yet shows the shaping influence of language” (147).

Still a debated question, linguistic relativity is not often tested empirically.¹⁹ This study of the language used to speak about music does not answer the question, but could add to the growing body of evidence. My working hypothesis is that the language used to speak about Western art music does not merely relate to the way that we *think* about it, it relates to the way that we *experience* it with the whole self.

In the language of Western art music, many musical concepts are metaphoric:
pitch, lines, textures, volume, sound streams, blends, force, intensity, direction,

¹⁹ For an overview of the issue, as well as a review of the related empirical research see Lucy (1996 and 1997).

momentum, gesture, etc. All of these terms relate to the movement of an object or a mass substance through physical space. Although all that exists of music in purely physical reality outside human experience is the complex sound wave, the listener *experiences* the sound wave as if it embodies the physical qualities suggested by the metaphors above.²⁰ I do not simply speak of the “height” of a note or “volume” of a sound, I experience “high” notes as “high,” and “big” sounds as “big.” In my experience, music *moves*, builds *momentum*, and strikes me with *forceful intensity*. These metaphors do not merely act as linguistic conveniences that refer to something that can’t otherwise be referred to; rather they describe actual experience. That experience may not exist in physical reality, but it does exist in psychological reality.²¹

The psychological reality of these terms particularly recommends them as evidence for addressing the question of linguistic relativity. People in various cultures speak of music using different sets of metaphors. For example, in regards to frequency, Temiar musicians speak of *small* and *large* tones (Roseman 1991) and ancient Greek texts of *sharp* and *heavy* tones (Zbikowski 1998). If most people within these groups experienced these metaphors as psychologically real, it would be a strong indication that the language does not merely *reflect* the experience, but *shapes* it. It would be highly

²⁰ Of course, music’s physical reality continues when it enters the listener and is transduced neurobiologically. At that point, however, it has entered the sphere of the listener’s *experience* and so it becomes more than a physical reality; it becomes a psychological reality, as well.

²¹ The degree of correlation between metaphors used to speak about music and musical experience varies. Some metaphors, like pitch, seem to be *physically* true, rather than merely psychologically true. The height of a very high note seems just as physically real to me as the height of a bird in the sky. Other metaphors do not correspond so closely to physical experience, but rather, correspond closely to *psychological* experience. When I feel *transported* by music, the music does not feel or even seem to physically take me anywhere. Rather, it transports me to another psychological reality.

unlikely for most people in the West to experience frequency as height and most Temiar people to experience it as size if language did not direct their experience in these ways.²²

Because of the psychological reality of metaphorical musical terminology, ethnomusicologists are in a strong position to contribute to the linguistic relativity debate.²³ However, cross-cultural analysis of single, Western-derived categories would produce only a crude indication that language influences experience. Indeed, in the case of pitch, it would be impossible to compare the category of pitch with all cultures. Not all cultures employ a comparable concept — a way to refer to frequency conceived of as a continuum of a single, specific quality. For instance, Suya Indians do not indicate pitch directly (Seeger 1987, 93), but do evaluate singers by the size of their throats. Older men, whose deep, resonant voices are admired, are said to have “big throats,” while children, with their higher voices, have “small throats” (100). One could surmise a

²² Tones of different frequencies can also suggest other qualities that might be used to refer to them: bright/dark, tense/relaxed, or light/heavy. All of these ways of terming frequency make sense to me, since tones can, in some contexts, suggest any of these qualities. Nevertheless, having been enculturated in a system that conceives of frequency as consisting of height, I experience tones as *primarily* high and low and only *secondarily* in these other ways. By this, I mean that, for me, tones are *always* either high or low and only *sometimes* embody these other qualities. If, in similar fashion, Temiar people experience different frequencies *primarily* as small and large and only *secondarily* as other qualities, it would suggest that language influences experience.

²³ Any analysis of the musical language system of other cultures would need to be accomplished with a thorough understanding of conceptual metaphor and the metaphoric system of the researcher’s own musical language. Writing at a time before conceptual metaphor was widely understood, Keil explores the musical terminology of the Tiv people in depth (1979). Although he carefully explains his methods for eliciting musical terms, it appears that he was not aware of the metaphors of his own musical language. (He recognizes metaphor only as the answer to questions like, “He sings like _____” [46].) He suggests that Tiv people conceive of pitch as high and low (41). In a discussion of adverbs to indicate dynamics, he describes clusters of Tiv terms that indicate, in varying degrees two semantic clusters: “slow, soft, smooth, low in pitch” and “low in volume, low pitch, and slow tempo.” However, it is not clear how he elicited this information. If he asked people to describe music that *he* characterized in the above metaphoric terms and then associated the Tiv terms with his own description of the music, it does not indicate the Tiv metaphorically conceive of frequency change as height. That metaphoric conceptualization could only be concluded if the Tiv also used these terms in other situations to indicate height.

conceptual relationship between "big" and slower frequencies or "small" and faster frequencies, but such a speculation would not be sound in a cross-cultural comparison, since the Suya simply do not refer to pitch, per se. Another contrast to the low to high continuum comes from Java. According to Lindsay, from slower to faster frequency, Javanese musicians call their scale degrees by a collection of metaphorical terms referring, in part, to the human body: 1) *pamonggul* (head), 2) *gulu* (neck), 3) *dada* (chest), 4) *pelog* ("fine"), 5) *lima* (five, referring to the five senses), 6) *enem* (six, referring to the Javanese sixth sense — *rasa* — a spiritual sense) and 7) *barang* ("unidentified thing") (1979, 29). The Javanese case suggests no association of slow frequencies with lowness and fast frequencies with highness, since the first three scale steps going from low to high travel *down* the body from head to chest. In addition, it includes metaphorical terms only indirectly related to each other — head/neck/chest and five/six, referring to human senses, as well as two seemingly unrelated terms — "fine" and "unidentified thing." This collection of terms seems inconsistent with one another. In fact, Lindsay says that these terms have philosophical significance. Their philosophical connection may reveal some consistency, but it seems safe to assume that they still would not easily compare with terms that suggest a continuum of a single quality.

A clearer indication that language influences musical experience would come from more in-depth analyses involving comprehensive systems of music terms. The Western term "pitch" does not mean in isolation, simply by direct reference to an

experienced phenomenon. Instead, it means in the context of a more complex metaphor, which consists of a comprehensive and consistent set of visio-spatial metaphors that liken the musical event to movement through varying locations in space (an analysis of which is presented in chapter four). It is likely that musical terms in some other cultures will mean in the context of such more complex metaphors. For example, Kaluli people also discuss music using terms suggested by motion through space. However, their terminology is specified as the motion of *water* through space. Even if tone “height” were consistent from the Western art music case to the Kaluli case (i.e., fast frequency = high, slow = low), as *experienced*, high and low tones might take on a different feel in the more specific context of music = motion of water over a fall than they do in the more general context of music = motion through space. In addition, Kaluli people do not only liken their music to water motion, they liken it to water *sound*. In contrast, Western art music terminology does not liken musical sound to the sound of motion in any consistent way. The Kaluli inclusion of water sound also indicates a possible difference in experience.²⁴

²⁴ The Shoshone system of musical metaphors might provide another interesting contrast to the Kaluli and Western cases. Vander (1988) characterizes the metaphoric system as “visual linear,” consisting of such characterizations of songs as curved, straight, zigzagged, and dipped (as in a dip in the road). She elaborates, “Songs, like necklaces in an overflowing jewelry box, are ‘strings’ that get intertwined and ‘tangled.’ It is hard to pull out a single strand. The use of linear figures of speech to describe music is consistent with Shoshone visual art, in general, where a linear style of representation, common to many tribes on the Plains, is characteristic” (80-81). Although Vander characterizes this metaphoric system as “visual linear” and connects it with visual art, I suspect that it may also be connected with embodied movement through space. Vander indicates this possible connection by saying how the Shoshone way of giving directions to a place differs from the way familiar to her: “City-bred, I depended on road signs and measurements by blocks and miles. But Shoshones gave me other kinds of directions, detailed topographical descriptions that faithfully recalled all the dips, curves, tree clumps, and stream crossing on the way to someone’s house. *Shoshones carefully observe and talk of songs much as they do of their*

Whorf has already contributed to the discussion of linguistic relativity and music/dance. As a part of his contrast between the influence of SAE and Hopi language forms on their “thought worlds,” he describes European forms of art and sport in general as “strongly kinesthetic” while Hopi art and sport are more symbolic and ceremonial:

The dance in our culture expresses delight in motion rather than symbolism or ceremonial and our music is greatly influenced by our dance forms. Our sports are strongly imbued with this element of “the poetry of motion.” Hopi races and games seem to emphasize rather the virtues of endurance and sustained intensity. Hopi dance is highly symbolic and is performed with great intensity and earnestness, but has not much movement or swing (155).

Rather than using dance for self-expression, Hopi people use dance to cyclically prepare the conditions of the macrocosm for good crops and rain (149). Instead of articulating time with the body by moving forward and through space, as the SAE conception of time would entail, Hopi dance intensely and earnestly prepares the now as it becomes later.

Even though the question of linguistic relativity is an open one, I *can* say with surety that the language used to speak about Western art music can be used as evidence of musical experience. Whether or not that language reflects or influences the experience, in varying degrees, it still *describes* the experience. If those varying degrees

landscape” (69, emphasis mine). Her discussion of the equivalences of motion in the music and dance for straight War dances and those for Fancy dances (79) confirms my suspicion that the Shoshone musical language system may be connected with embodied movement through space. In fact, I suspect that, rather than *one* complex metaphor involving either visual linear terms or embodied spatial terms, the Shoshone may very well be using *two* overlapping complex metaphors involving both visual and embodied motion. Indeed, as I will demonstrate in chapters four and five, the language of Western art music involves two, complementary complex metaphors.

are taken into account, a theory of musical meaning can still be developed using linguistic evidence as a basis.

METAPHORIC PROJECTION

The primary theoretical basis for the analyses presented in each chapter of this dissertation is the theory of metaphoric projection. In recent years, a growing body of literature has argued that, contrary to generally accepted truth, metaphor does not merely decorate the surface of our linguistic system but plays a deeper, more foundational role. Rather than considering only the figurative, poetic aspects of metaphor, these studies frame it as a conceptual process that underlies many aspects of cognitive functioning. Using this conception of metaphor, recent work in philosophy (Johnson 1987), cognitive semantics (Brugman 1990, Gibbs 1992, Kövecses 1986, 1990, 1991, Lakoff and Johnson 1980, 1999; Lakoff 1987, 1988, 1990, 1993, 1994, Langacker 1990, Reddy 1993, Sweetser 1990, Talmy 1975, 1988) and literary studies (Lakoff and Turner 1989; Turner 1990, 1991, 1994, 1996) suggest that metaphor plays a pervasive role in our lives. This work points to the ways that metaphoric processes bridge bodily experience and linguistic expression, orient us, structure our experience, create conceptual coherence through systemic interrelation, and permit the creation of new concepts.

Rather than defining “metaphor” as figurative speech, this work defines it as “a cross-domain mapping in the conceptual system,” with poetic metaphor considered a special case of metaphorical expression (Lakoff 1994, 43). Metaphor is a process that

maps the structure from one realm of human experience, usually a more concrete one, onto another realm, usually more abstract. For instance, a common conceptual metaphor used in everyday language is LIFE IS A JOURNEY.²⁵ This has a number of entailments, including

- 1) The person living the life is a traveler.
- 2) Life goals are destinations.
- 3) Progress toward a goal is moving along a path.
- 4) Progress in life is distance traveled.
- 5) Something that moves the person toward a goal is a vehicle.
- 6) Impediments to progress are impediments to travel.
- 7) Important life choices are made at crossroads.
- 8) Important life events are landmarks.

We use this conceptual metaphor in everyday language in the process of discussing and describing our experiences, mapping structure from the more concrete realm of a journey onto the more abstract realm “life”: “This job is a dead end. It will never get me where I want to go. I feel I am at a crossroads.” Or “Although I went down a few blind alleys when I first began this project, at this point, I’m moving along nicely. Getting to the end of this chapter will be an important landmark. However, after that, there are still many steps I have to take.”

This conceptual metaphor does not just provide an underlying unity to diverse figures of speech, it also plays a part in our understanding of and reasoning about life, since not only structural patterns, but inference patterns are mapped, as well. For example, what if, instead of LIFE IS A JOURNEY, the most prominent conceptual metaphor

²⁵ In this dissertation, I will follow formatting conventions used by cognitive linguistics scholars. Small capitals indicate conceptual metaphors: MOTION or PITCH; italics indicate linguistic expressions that stem from conceptual metaphors: “This *passage* wends its way from *low* to *high*.”

about life in our culture were LIFE IS A DANCE? While LIFE IS A JOURNEY emphasizes the importance of plugging on, meeting long-term goals through the course of linear time, LIFE IS A DANCE might emphasize having fun, making the most of every moment and having the stamina and vigor to last the course of the dance. LIFE IS A DANCE would emphasize the importance of a good partner (or a whole community, as in line dancing), cooperation, and the centrality of enjoyment in work. Consider the different meaning of the sentence “There are many steps yet to be taken” if it were framed by LIFE IS A DANCE. Rather than feeling a sense of tiredness and resolve, the person with steps left to be taken might feel a sense of joy and exhilaration. If we considered life to be a dance, we would understand, reason and perhaps feel about it quite differently than we do when thinking of it as a journey. Life’s journey tends to be a tedious one. Life’s dance might be more spirited.

Note that both LIFE IS A JOURNEY and LIFE IS A DANCE seem to make sense on an intuitive level in a way that LIFE IS A FISH does not. Although it is usual in this scholarship to speak of “journey” and “dance” as the concrete source domain and “life” as the abstract target domain, it is also recognized that the projection from source to target does not happen in random fashion. Instead, people recognize some similarity in structural patterns, thus making a connection between two domains and projecting further structure from concrete to abstract. If someone were to say “Life is a fish” or a metaphorical expression based on it, one might have fun finding similarities and drawing

interesting conclusions about life based on them, but it would not be an exercise in the obvious.

Lakoff suggests a hypothesis related to the above, which he calls the “invariance principle.” As he describes it,

Metaphorical mappings preserve the cognitive topology (that is, the image-schema structure) of the source domain, in a way consistent with the inherent structure of the target domain (1994, 54).²⁶

For example, in the LIFE IS A JOURNEY metaphor, the person living maps on to the traveler, not onto the destination, life’s goals map onto destination points, not a vehicle (unless buying a car is the goal), etc.

Later work by Mark Turner and Gilles Fauconnier (1996, 1998) further theorizes the reason why structure from “journeys” and “dances” can easily be project onto “life,” while structure from “fish” cannot. Turner and Fauconnier suggest that journeys, dances and life all share a certain abstract generic structure, which “fish” does not. That abstract generic structure includes such notions as states, process, change, action, causes, purposes, means, and difficulties. In understanding this, you can see why “life” can be linked metaphorically with some experiential realms, such as “chess games,” “weather,” or “a fishing trip,” while not as easily with others, like “chess pieces,” “clouds,” or “fish.” Chess games, weather, and fishing trips are all specific instances of the generic structure suggested by “states, process, change, action, causes, purposes, means, and difficulties,” while chess pieces, clouds, and fish are not.

²⁶For more on the invariance principle, see Brugman (1990), Lakoff, (1990), and Turner (1990).

Another kind of metaphoric mapping, involves the projection of the structure of *kinesthetic image schemas*. This kind of projection has been most fully explored by Mark Johnson in *The Body in the Mind*. As the title suggests, this process involves the projection of the structures of bodily experience in the world (or *image schemas*) onto mental processes. By “image schemas,” Johnson means gestalt patterns that we have learned through our interactions with the world, such as the CONTAINMENT or PATH schemas. Johnson clarifies:

[Image schemas] do not have the specificity of rich images or mental pictures. They operate at one level of generality and abstraction above concrete, rich images. A schema consists of a small number of parts and relations, by virtue of which it can structure indefinitely many perceptions, images, and events. In sum, image schemata operate at a level of mental organization that falls between abstract propositional structures, on the one side, and particular concrete images, on the other.

The view I am proposing is this: in order for us to have meaningful, connected experience that we can comprehend and reason about, there must be pattern and order to our actions, perceptions, and conceptions. *A schema is a recurrent pattern, shape, and regularity in, or of, these ongoing ordering activities.* These patterns emerge as meaningful structures for us chiefly at the level of our bodily movements through space, our manipulation of objects, and our perceptual interactions (29, emphasis in original).

Johnson stresses the fluidity of these patterns, which can be altered in different contexts.

They are not as much static forms that act as templates as they are *part of a dynamic process that forms and informs our understandings.*

(1) 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. (2) Unlike templates,

schemata are flexible in that they can take on any number of specific instantiations in varying contexts (29-30, emphasis in original).

Johnson illustrates with the CONTAINMENT schema, which structures, among other things, our in-out orientation. Our initial experience with containment occurs even before we are born. After nine months of boundedness that becomes more and more extreme, part of our initial experience in this world is an extreme sense of unboundedness. After birth, we experience our bodies as containers into which food is put and out of which wastes are retrieved. As we learn to move about, we experience rooms and vehicles as contained spaces. Gaining more skill with our hands, we begin to manipulate objects, putting one kind of thing into another. We learn the words, *in* and *out*, that correspond to containment, and learn to apply them not only to concrete experiences of containment, *but to abstract instances of it as well*.

Johnson emphasizes the gestalt nature of these schemas and the fact that, as gestalts, they are not mere outlines of wholeness, but have definite internal structure. He suggests five possible structural elements to the CONTAINMENT schema.

1) The experience of containment typically involves protection from, or resistance to, external forces. [...] 2) Containment also limits and restricts forces within the container. [...] 3) Because of this restraint of forces, the contained object gets a relative fixity of location. [...] 4) This relative fixing of location within the container means that the contained object becomes either accessible or inaccessible to the view of some observer. [...] 5) Finally, we experience transitivity of containment (22).

Not all five of these elements must be present in every case of *containment*. For instance, the following illustration exemplifies containment without involving elements one, two, or five.

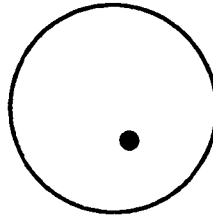


Figure 1

As I will illustrate later, containment is an important image schema in musical conceptualization.

Another important image schema in musical conceptualization is the PATH schema. Our earliest experience with this schema may, once again, be birth. After birth, we eventually learn to track moving objects with our eyes. Once we learn to move, we often move with some goal in mind: a toy, a drink of water, or to get away from mother who is drawing a bath. Our world is filled with physical paths that get us from one place to another.

The structural elements of this experiential gestalt are 1) a source, 2) a path (a series of contiguous locations), 3) a goal, and 4) directionality, elements which we can project onto more abstract aspects of life in order to give them structure. We have already seen one example of this above, in the entailments to LIFE IS A JOURNEY: “life goals are destinations,” and “progress toward a goal is moving along a path.” We also use the PATH schema in abstract reasoning by following *paths* of thought to their logical conclusions. The process of metaphoric projection follows a PATH schema, carrying structure along a mental path from a source domain to a target domain.

As the above examples of the PATH schema suggest, metaphoric projection accomplishes work in many different kinds of mental realms. It works in the realm of polysemy: word meanings can be extended metaphorically. For example, because it is based on the PATH schema, the word “line” can apply equally to a drawn line, a group of people ordered in a series of contiguous locations, a piece of fishing line, a group of water pipes connected in contiguous fashion, or a series of musical pitches. Metaphoric processes work in grammar (e.g. nominalizations that CONTAIN the conceptual flux of verbal process) and semantics. For example, different variations of the kinesthetic image schema for FORCE are projected from bodily experience to the meanings of modals such as “must,” “may,” and “can.”²⁷

This process of metaphoric projection does not only occur in English, but seems to be a general human cognitive strategy. Lakoff and his students have demonstrated some of the above processes in various languages.²⁸ Eve Sweetser, for instance, has shown how, over time, words for different perceptual senses tend to be metaphorically projected in the same way in different languages. She has demonstrated, for instance, that in many Indo-European languages, the word for vision comes to mean knowledge and intellection (1990, 32-33) and the word for hearing comes to mean heed or obey (41-42).

Lakoff and Johnson schematize the process of conceptual metaphor as one of “projection.” In chapter two, I integrate this theory with Polanyi’s theory of tacit

²⁷For more on projections of force dynamics to the semantic realm, see Johnson (1987) chapter 4, and Talmy (1989).

²⁸See Lakoff (1987).

knowing, altering the theoretical structure from one of “projection” to one of “integration.” For the purposes of the first chapter, however, the above explanation will suffice.

CHAPTER SUMMARIES

In chapters one through three I critique the philosophical basis common to most scholarship that concerns musical meaning (chapter one), present an alternative philosophy I believe is more suited to the question (chapter two), and develop a theory of musical meaning based in that philosophy (chapter three). That theory involves a notion of metonymically invoked, resonant meaning. In the musical situation, the physical sound wave invokes integrations in the listener on three different levels: 1) the neuro-biological level, 2) the level of making sense of the music through image-schematically informed musical senses and 3) the integration of the listener with the music, where the listener *lives* both the music and the transcendental realities associated with it. Although the sound wave *invokes* these integrations, the listener plays an active role, using different aspects of herself on each level to create musical experience. The process is metonymic: the sound wave provides *part* of the experience, while the listener integrates that part toward a bearing on the whole experience of *living* the music.²⁹

²⁹ Traditionally, metonymy has been thought of as a literary device whereby a part stands for a whole, e.g. “He’s a *skirt* chaser,” or “The *ham sandwich* needs more water.” However, as with metaphor, in recent years cognitive semanticists have realized that metonymy is a general cognitive phenomenon. For example, line drawings do not have to embody all of the features of a face for us to recognize the face as a particular person. The part stands for and invokes understanding of the whole. For more, see Dirven (1999), Fauconnier and Turner (1999), Gibbs (1999), Radden and Kövecses (1999a and 1999b).

In chapters one through three I show how the seeming metaphoric “projection” of concrete, physical reality onto abstract, musical reality is really a matter of basic, culturally inflected metaphors like PITCH and VOLUME metonymically invoking more complex metaphors like MUSICAL MOTION of pitches and MUSICAL SUBSTANCE that FLOWS. In chapters four and five, I examine more complex metaphors that relate to the eventfulness of music. These metaphors organize the simpler metaphors discussed in part one into groups and provide the experiential context in which those simpler metaphors make sense. Chapter four discusses two musical event structure metaphors while chapter five discusses the relationship of those event structure metaphors as well as metaphors that require a *blend* of both.

I

OBJECTIVISM: GRASPING WORDS, SEEING MEANING, BUILDING UNDERSTANDING

INTRODUCTION

In the following quote, Wittgenstein not only states the problem I address in this chapter quite clearly, his language also hints at my answer:

The aspects of things that are most important for us are hidden because of their simplicity and familiarity. (One is unable to notice something — because it is always before one's eyes.) The real foundations of his enquiry do not strike a man at all. Unless *that* fact has at some time struck him. — And this means: we fail to be struck by what, once seen, is most striking and most powerful (50).

Wittgenstein is quite correct. It *is* difficult to see the foundations of inquiry, the non-propositional assumptions that fashion our thoughts and arguments. In order to explain reality, we *must* take certain assumptions as axiomatic, as true in and of themselves — assumptions about the metaphysical nature of reality and how best to know it. These assumptions delimit our conventional terms, the way that we “carve up” reality into specific, concrete, contained categories that then serve as guides to our experience of that reality. Those terms and how they relate to one another define the logic of how we think about and explain reality. Both the terms and their logic then construe the nature of our evidence and constrain our arguments to specific, conventional issues.¹ While we may be aware of the *terms* and *logic* of our arguments

¹ One can see this constraint in action when someone speaks of seeing or thinking about a situation “in terms of _____.” The “in” of that phrase demonstrates that the “terms” *contain* the seeing or thinking in some fashion.

since, out of scholarly habit, we constantly examine them in an effort to better the quality of our thinking, we are less often aware of the assumptions that define them in the first place. If the terms and their logic are the means by which we think, the assumptions are the means by which we know. The assumptions, terms and logic create the *interpretive lens* through which we view reality and come to conclusions about it.

As an implicit means of accomplishing a task, unless these assumptions arrest our attention in some way, we cannot see them. Ingrained in our habits of thinking and being, they become a part of us — the heart of our thinking, no more visible to us than our physical hearts. We may feel vague discomfort or even outright frustration with the terms and logic that these assumptions define, but since we cannot see the assumptions themselves, we try to rework, once again, what we *can* see, that is to say, our terms and logic. However, as Wittgenstein suggests, every once in awhile we are struck by the intuition of something at the root of those terms and logic. We root it out and expose it to light.

In this chapter I bring to light the assumptions at the root of much, if not most, of the scholarship that addresses the question of how music means — the assumptions of objectivism. In order to expose those assumptions, I have closely examined the writing of a group of authors selected for the quality of their scholarship and the breadth of interest. Based in three disciplines concerned with musical meaning, each group varies from the others in its approach. Deryck Cooke, Eduard Hanslick, Leonard Meyer, and Victor Zuckerkandl are music theorists, who ground their work in the experience of

musical meaning.² Laird Addis and Susanne Langer are aesthetic philosophers, who ground their work in philosophical logic and reasoning. Finally, Jean Bamberger, Stephen Handel, and Mary Louise Serafine, are psychologists, who ground their work in the scientific psychological methodology.

Although ethnomusicology also studies musical meaning, I have not included any ethnomusicologists in the group of writings to be examined. In its focus, ethnomusicology differs from the disciplines I have examined. While those disciplines find the locus of meaning in the specific, individual act of music listening or making, with “culture” as a background informant to the process, ethnomusicology focuses on the cultural aspects of meaning. The ethnomusicological approach *complements* these other approaches and thus does not easily *compare* with them. Since my disciplinary background is the anthropology of music, my viewpoint always includes considerations of culture. Thus, even though I have not explicitly examined the ethnomusicological approach, it is implicit in my own approach to the question of musical meaning.³

In the first part of this chapter, I examine the terms that objectivist assumptions have defined and the logic of how they relate, as well as how these terms and logic construe the evidence and constrain the issues. In this part, I will only refer to the writings of the above authors only briefly and occasionally, to support a point. In the second part of the chapter, I will examine the writing in greater detail, showing how

² Hanslick was primarily a critic, but wrote theoretically, as well.

³ A critique of objectivism in ethnomusicological thought already exists in the work of Pierre Bourdieu. “The objective limits of objectivism” from *Outline of a Theory of Practice* critiques the use of objectivism by anthropologists, a critique that applies to ethnomusicologists as well.

basing arguments about musical meaning on these philosophical assumptions creates arguments that are implausible, overly complex and lacking in explanatory power. I conclude that the unsatisfactory quality of this scholarship does not relate to the quality of the thinking of the writers; their intelligence and logical rigor are plain to see. Rather, the problem relates to their unexamined fundamental assumptions, which do not suit the nature of the phenomenon being examined. Those assumptions create logical entailments that misconstrue the character of meaningful human experience from one that is *whole bodied* and formed in *relatively immediate engagement* with the world to one that is *mental* and formed in *relatively mediated encounters* with the world. Thus, when used to examine a phenomenon that *exists only in human experience*, like “music,” these assumptions distort the subject under study from the outset. These writers are disadvantaged by their own epistemological tools.

Objectivism bases its assumptions on an analogy to a particular human way of interacting with the world: that of seeing objects and manipulating them with the hands. All of the metaphors for knowing that this epistemology supports relate to this analogy, e.g. “Do you see how this works?” or “Do you grasp the fundamental ideas?” The visual aspect of this analogy appears in Wittgenstein’s quote:

The aspects of things that are most important for us are hidden because of their simplicity and familiarity. (One is unable to notice something — because it is always before one’s eyes.) The real foundations of his enquiry do not strike a man at all. Unless *that* fact has at some time struck him. — And this means: we fail to be struck by what, once seen, is most striking and most powerful (50).

It would be logically consistent and not change the meaning to add a “grasp” to this quote: “One is unable to notice *or grasp* something — because it is always before one’s eyes.”

However, when I first read this quote, a different way of knowing suggested by Wittgenstein’s language struck me — that of being struck by a particular fact, idea or event. The expression “being struck” points to an underlying epistemology based on an analogy to human interaction with the world. It suggests a way of interacting with, knowing, and experiencing the world different from that inherent in epistemologies suggested by “seeing” and “grasping.” In this chapter and the next, I will begin to develop a description of an epistemology metonymically suggested by the idea of being “struck” by some event in the world.

CONVERGENCE AND DIVERGENCE IN EXISTING EXPLANATIONS

Existing explorations of musical meaning converge and diverge from one another in a particular pattern. They agree in their more concrete aspects. Whether implicitly or explicitly, they all describe a model of musical communication that has specific, culturally situated parts: a composer/player, the musical sound, a listener, and meaning. In addition to these concrete parts, most of the writers agree on their experiential evidence: the emotional, sensuous and dynamic qualities of musical immersion, the intenseness and immediacy of the experience, and the expressiveness of the music.

However, in regard to their more abstract aspects, *those aspects most likely to be affected by the interpretive lens*, the explanations diverge. Although they agree on the

model and its parts, they do not agree on the nature of how those parts relate to one another and give rise to musical meaning. Does music refer? If so, to what do the notes refer? Each other? Something outside the music itself? Does music represent? If so, what does it represent? Does music express a meaning that comes directly from the mind of the composer? The player? Or is musical meaning more impersonal in nature? Does music have intellectual content? Emotional content? Intellectual content about emotions? Is music a language of the emotions or a language about emotions? Very little consensus exists on any of these questions, all of which are a matter of construal and interpretation of the evidence.

RELATIONSHIP BETWEEN PROBLEM AND EPISTEMOLOGY

The lack of consensus on interpretive aspects of the problem after at least 150 years of discussion (Hanslick, 1854-Addis, 1999) by intelligent and perceptive writers suggests a problem with the interpretive lens through which they view the evidence and the framework that undergirds their arguments. Two aspects of this interpretive lens and framework are germane to my argument: the epistemology and the specific model being used.

The nature of an epistemology should be consistent with the nature of the problem it addresses. Human lives have many different aspects that require many different ways of knowing: the way that I know about the desk I write on differs from the way that I know I love the people to whom I write. Objectivism bases its epistemology on an analogy to looking at and grasping things in the world, an analogy

that has brought great success to the Western world's quest for understanding and controlling material reality. However, just as it would be inappropriate to question knowledge of human love using objectivism, it is inappropriate to apply it to questions of meaning.⁴

Human meaning does not exist objectively in the physical world. Without a human being to interpret an event as meaningful, the event simply occurs, with no judgment or feeling of meaningfulness attached to it. As a phenomenon that arises in terms of human experience, the epistemology used to explore it should operate primarily in terms of human experience, not in terms of objective existence in the physical world.

An epistemology requires a set of standards for testing the explanations it gives rise to. In examining a human experience, the test of plausibility should be consistent with the epistemology used. As a phenomenon of human experience, we should test explanations of meaning not by whether they match objective truth, but by whether they match our experience. Since "objective truth" is itself a human experience, some aspects of explanations accomplished in terms of human experience will match objective truth.⁵ However, the primary test of plausibility should not be "Does this look like objective truth to you?" or "Is this true to the logic of objective reality?" Rather, it should be

⁴ In anticipation of possible objections, I will not be proposing that the proper epistemology with which to think about musical meaning is *subjectivism*. Although I believe that a distinction between *objective* and *subjective* can be useful, when it is turned into a strict *dichotomy*, it is false. The epistemology that I will be using proposes a third alternative.

⁵ We saw an example of this above, in the fact that the "objective" (concrete) parts of the listening model converge amongst many different accounts.

“Does this ring true to your experience?” or “Does this ring true to the logic of your experience.”⁶

Some kinds of meaning *may* be known and judged through the objectivist epistemology. For instance, if my husband asks me to pick up milk on the way home, spoken in an even tone, with no particular emotional tone, I see or grasp that the objective meaning that we need milk. However, if he says it with a particular emotional overtone — anger, for example — the meaning of what he says can no longer be known and judged solely by the objectivist epistemology. I may see what he is saying, but be struck by his tone of voice. The tone of his voice may resonate with aspects of our history and the nature of our relationship, which then may become the primary meaning of his communication for me.

I ask the reader at this point to consider the question, “Do you see or grasp musical meaning or does it strike and resonates in you?” For myself, I have always felt that music strikes me, resonates within me, and moves me. For me, any model of musical meaning worth considering (and therefore the epistemology at its base) must be consistent with this experiential fact.

The model used in most scholarly writing about musical meaning is that of communication as a conduit, which I will explain more fully below. Briefly, it involves

⁶ The logic of experience does not always match the logic of objective reality. For instance, consider the exaggerations that might be used in the midst of a heated argument. While exaggerations might not be true to the objective reality of the situation, they *are* true to the feelings of the individual who is exaggerating. If judged in terms of the logic of objective reality, they are false. If judged in terms of the emotional reality of that individual, they are true. They may not *be* true, but they *feel* true. They are a logical expression of feelings, but an illogical expression of objective reality.

the notion that meaning is a thing that exists in a person's mind that he can pack into words or musical sounds. The words or musical sounds are sent through a conduit (sound or writing) to a listener/reader, who mentally unpacks the meaning and sees or grasps the first person's meaning. In this way one person transfers "content" to another.⁷

This model may work to a limited degree as a way to think about the "objective" aspects of language. In the example above, it does seem as if my husband had a "meaning" about the absence of milk in his mind that he "transferred" to me via words. However, as a model of music that strikes and resonates within a listener, it simply does not ring true to experience. Although I *can* listen to music in a way that involves mentally naming some aspect of it — "Ah, there's the dominant going to the tonic" — I would not call this an *aesthetic* listening, but a *music-theoretical* listening. As the results of reflecting on experience, music-theoretical meanings differ from more direct, experiential aesthetic meaning. Aesthetic meaning resonates within me and moves me. This resonance cannot be explained by way of a schema that packs, transfers, and unpacks meaning objects.

In this section, I have described one of the basic assumptions on which my argument rests — the nature of an epistemology and the models it engenders should be consistent with the nature of the problem to be explained. I now turn to a more fully developed description of the objectivist epistemology.

⁷The scholars I examined varied in their awareness and acceptance of this model, as I will detail below.

OBJECTIVISM

A fully developed critique or description of objectivism is beyond the scope of my project. George Lakoff and Mark Johnson, whom I mentioned in the introduction in connection to conceptual metaphor, have written extensively on the subject.⁸ In addition, Pierre Bourdieu has critiqued objectivism in *Outline of a Theory of Practice* from a more anthropological viewpoint. For the purposes of my critique, I will quote extensively from Lakoff and Johnson (1987).

Objectivism Related to Visual/Manual Behavior

Objectivism is based on an analogy to visual and manual behavior in the world, specifically to the behavior of building larger structures from smaller parts. Some of our most common expressions for the process of understanding index this underlying analogy: “The way I *see* it...,” “I can’t quite *grasp* what is going on here,” “I’m trying to *wrap my mind around* it,” “I’m trying to *assemble* these ideas into a coherent thought.”⁹ In this analogy, the mind is like a little person, a homunculus, inside the head of the person that reaches out through the senses, sees aspects of reality, and pulls them inside the person through grasping.¹⁰ Since this homunculus has only two hands and can only deal with a few bits of reality at a time, a large part of understanding consists of assembling smaller bits into larger wholes.

⁸ See Lakoff and Johnson 1980, Lakoff 1987, Johnson 1987, and Lakoff and Johnson 1999.

⁹ The idea of grasping is also present in words like “comprehend” and “apprehend.” The morpheme “-prehend” relates to grasping, as in a prehensile tail. Grasping is also present in “concept,” which I will discuss below.

¹⁰ Although we do not usually consciously think of the mind as a homunculus, when the mind malfunctions we treat it as a separate entity: “My mind is playing tricks on me.”

Objectivism treats reality as if it were a complex object, like a building or a machine. Similar to understanding a structure or machine, the process of understanding reality consists of taking it apart until it consists of parts that can't be further subdivided, that themselves have no internal structure: the "elements."¹¹ Once the elements are determined, understanding that reality-object consists of finding out the nature of the elements, how they relate to one another, how they cohere, and how they form the whole. This process produces a working knowledge of reality-objects.

Explanation, then, consists of describing the nature of the elemental parts and how they fit together into the whole. An important tool in explanation is the use of visual diagrams, which make the parts and their relationships clear to see (literally and figuratively) and easily grasped by the student. As part of the learning process, students create hand-eye oriented mental representations of these parts and their relationships. Once students have grasped these parts and relationships and can represent them to the teacher in some fashion, it can be said that the student has gained an objective knowledge of the reality in question.

Note that, although the initial process of understanding begins with the whole, the process of teaching generally begins with the parts and proceeds to the whole.¹² This path of explanation suggests that in objectivism, the parts are logically prior to the whole. This can be seen in the fact that these explanations generally include ideas about

¹¹ The idea of elements presents itself in music-theoretical scholarship in the form of the "parameters of music."

¹² Of course, a teacher usually presents the whole first, so that the student understands where the process of understanding is aimed. However, the process of understanding itself begins in earnest with full descriptions of the parts and proceeds to the relationship of those parts and how they form the whole.

how the parts cohere. Coherence of the parts is only an issue if they exist before the whole and so must be “glued” together in some fashion.

These parts are often termed “basic” — the basic elements. Basic can be defined as “of, relating to, or forming the base or essence”: “basic elements” become the “building blocks” of the whole. However, “basic” can also be defined as “constituting or serving as the basis or starting point.” These basic elements not only form the building blocks of the whole, they serve as a starting point for objectivist arguments. Although scholars must determine these basic elements, that preliminary work goes on “behind the scenes” — in journals or at conferences. Textbooks, the “stages” that present understandings of reality, begin their stories with “the elements,” not with all of the work that went into defining those elements. The “real” (not preliminary) work of objectivism begins with an already established set of basic elements and proceeds to argue from there.

The preferred objectivist evidence also relates to the analogy to building structures. Objective evidence should be “hard” — able to be directly observed, “grasped” and “measured.” More qualitative evidence may be admitted, but is best converted to a form more consistent with physical measurement. “Purely subjective” evidence is the least reliable.

The visual/manual analogy shapes objectivist models, which tend to be mechanical in nature, with clearly defined (graspable) parts that relate to one another

through physically moving parts or forces.¹³ Using this kind of model makes the different parts and their relationships easy to see and grasp.¹⁴ Alternatively, objectivist models may be structural in nature, represented by static, two-dimensional drawings, like a blueprint. Mechanical models entail mechanical logic, while structural models entail geometric logic. When applied to real life, human situations, the mechanical or structural logic of these models may distort the logic of the situation under examination. For example, geometric logic, with its clearly defined boundaries, erases the fuzzy edges of categories made through and used in pragmatic, everyday interaction in human situations in the world.

Consider, for instance, calendars of different seasons. Bourdieu describes the impossibility of capturing in a synoptic, geometric diagram the varying accounts he heard from Kabyle people of their seasons (which are based mainly on environmental changes and agricultural concerns). Some of the people marked the beginning of a season by a particular date, others by agricultural activities, such as the first ploughing. The fuzzy edges of these seasonal periods did not concern the Kabyle people, since as categories, they functioned to guide the people in interactions with the environment and each other. As such, they worked well without clear boundaries. Bourdieu realized though, that his

¹³ In his critique of objectivism, "The objective limits of objectivism" from *Outline of a Theory of Practice*, Bourdieu recognizes the mechanical nature of at least one objectivist model. In his discussion of the practice of "gifting," he characterizes the objectivist model of gifting as a "mechanical interlocking of preregulated actions" (8). In *Knowing and Being*, Michael Polanyi also recognizes the objectivist tendency to create distance where none exists: "Dwelling in our body clearly enables us to attend *from* it to things outside, while an external observer will tend to look *at* things happening in the body, seeing it as an object or as a machine. He will miss the meaning these events have for the person dwelling in the body and fail to share the experience the person has of his body" (148).

¹⁴ Although we tend to relate the term "mechanical" to "machine," in the form "mechanic," it also relates to working with the hands.

diagram not only could not capture these seasonal categories, it distorted them through the application of its own geometric logic. The Kabyle people did not think about these categories as existing all at the same time, but applied them in practice successively. The diagram necessarily juxtaposed them simultaneously. As Bourdieu states it, the diagram effects a totalization

by juxtaposing in the simultaneity of a single space the complete series of the temporal oppositions applied successively by different agents at different times, which can never all be mobilized together in practice (because the necessities of existence never require this sort of synoptic apprehension, tending rather to discourage it by their urgency)... The establishment of a single series thus creates *ex nihilo* a whole host of relations (of simultaneity, succession, or symmetry, for example) between terms and guide-marks of different levels, which being produced and used in different situations, are never brought face to face in practice and are thus compatible practically even when logically contradictory. The synoptic diagram takes all the temporal oppositions which can be collected and assembled and distributes them in accordance with the laws of succession (i.e. (1) "y follows x" excludes "x follows y"; (2) if y follows x and z follows y, then z follows x; (3) either y follows x or x follows y). This makes it possible to apprehend at a glance, ... *monothetically*, as Husserl put it, meanings which are produced and used polythetically, that is to say, not only one after another, but one by one, step by step (106-07).

Because of the conversion from lived experience to synoptic diagram, Bourdieu necessarily took a fluid situation and made it static.

Objectivist models not only impose geometric logic on lived situations that have nothing to do with geometry, they also subtract temporality from situations in which time and the change it entails produce important meaning. In effect, this procedure skews the meaning of these situations. Since static structures do not change over time, it seems obvious that objectivist models based on static structures would have a detemporalizing

effect. But what about models based on machines? Machines accomplish processes, which *require* time. Simpler machines not involving feedback mechanisms accomplish tasks in linear fashion. More complex machines may involve feedback mechanisms, working in a nonlinear fashion. However, even with feedback mechanisms that allow for synchronic nonlinearity, machines do not allow for diachronic change. They accomplish predetermined tasks using predetermined parts, motions and forces. As a system, they are closed to change, temporally static and cannot cope with mutable events that unfold diachronically. In addition, since mechanical models represent predetermined motions, forces and tasks, any human being represented as a part of a mechanical model lacks agency.

Objectivist epistemology begins with a nonpropositional assumption that reality is a complex structure to be known. Therefore, the best path to knowing reality is through an analogy to understanding a structure. This analogy dictates the path of discovery, the kind of evidence that counts, the path of explanation, and the models used to explain reality.

Lakoff and Johnson's Description of Objectivism

If building a structure is the path to objective knowledge, then words are the way that human beings traverse and negotiate that path. In the objectivist system of logic, words carve reality into its elemental parts, allow those elements to cross the barrier between “out there” and “in here” in the form of mental representations, permit us to

mentally manipulate representations of the elements of reality in order to build more complex understandings, and assist in separating the true from the untrue.

Lakoff and Johnson's description of objectivism clarifies how words act to negotiate the path to understanding reality. Modeling their explanation of objectivism on objectivism, they begin with the basic elements: the objects in the world and their properties, divorced of human existence.

The world is made up of objects. They have properties independent of any people or other beings who experience them. For example, take a rock. It's a separate object and it's hard. Even if no people or other beings existed in the universe, it would still be a separate object and it would still be hard (186).

The objects in the world are the basic elements from which reality is built. Each object has an essential nature that defines its part in the whole.¹⁵ Note that the objectivist account begins with a reality that divorces human beings from reality proper: "Even if no people or other beings existed in the universe, [a rock] would still be a separate object and it would still be hard" (186). We are *in* reality, but not *of* it.

Given that human beings are in reality, but not of it, how do we obtain knowledge of the elements of reality?

We get our knowledge of the world by experiencing the objects in it and getting to know what properties the objects have and how these objects are related to one another. For example, we find out that a rock is a separate object by looking at it, feeling it, moving it around, etc. We find

¹⁵ It might be argued that the objectivist "building blocks" of reality are not the "objects" encountered in reality, but atoms and molecules and the like. Atoms and molecules are the building blocks of a special case of objectivism: scientific objectivism. They are the basic elements of scientific reality, and require special equipment to observe. Objectivism proper begins with ordinary objects as they can be observed with unenhanced senses.

out that it's hard by touching it, trying to squeeze it, kicking it, banging it against something softer, etc. (186).

Since understanding reality involves finding its elemental parts and assembling them, we must somehow get those elemental parts from "out there" into the mind. We begin this process by using our bodies to observe. From such observation, we get data from "out there" to "in here."¹⁶

If data enters the mind through the senses, then how do we understand that data?

We understand the objects in our world in terms of categories and concepts. These categories and concepts correspond to properties the objects have in themselves (inherently) and to the relationships among the objects. Thus, we have a word "rock," which corresponds to a concept ROCK. Given a rock, we can tell that it is in the category ROCK and that a piano, a tree, or a tiger would not be. Rocks have inherent properties independent of any beings: they're solid, hard, dense, occur in nature, etc. We understand what a "rock" is in terms of these properties (187).

The mind sorts data into categories and concepts, which are meaningful in a way that "raw" data is not. Raw data has no clear correspondence with the world, except for the fact that it originates in the world. Because they sort raw data into contained packages that refer back to the world, categories and concepts fashion experience of the world into "graspable" packages of meaning.

Categories and concepts are packages of meaning — meaning-things — used to re-present the external world in the mind-space. The mental homunculus uses them to bring the building blocks of the world into his workspace. As ways in which we, as a

¹⁶ A note about the term "data." I realize that the prescribed use of the term is as a countable noun, and that "data" is plural and "datum" singular. However, usage in American English has changed the term into a mass noun, so that "data" is a singular mass that needs to be packaged to be made countable, i.e. "bits of data." Since the prescribed usage sounds very awkward to me, I will follow current American English usage in this dissertation.

group, “carve up” reality into its “building blocks,” categories exist more in the external realm. The etymology of “category” shows its public nature: from Greek, kata- (in accordance with) + agora (public assembly). In contrast, concepts seem to exist more in the mind’s space: from Latin conceptus, from com (with) + capere (to take). Categories carve up the world, while concepts allow the homunculus to grasp the world.

Categories and concepts are encapsulated in words. What, then, is the nature of words?

Words have fixed meanings. That is, our language expresses the concepts and categories that we think in terms of. To describe reality correctly, we need words whose meanings are clear and precise, words that fit reality (187).

This is the theory of “classical categories,” which Lakoff describes in depth in later work (1987). This theory suggests that in order to define a category, one must describe the necessary and sufficient conditions for inclusion of an item in the category. This procedure produces categories with clearly defined membership and sharp boundaries, well contained and easily graspable. The homunculus mind may then grasp and manipulate these word-objects into larger, more complex meanings.

In order for a statement (a complex meaning-thing) to be objectively true, its words must re-present reality with as precise a “fit” as possible.

People can be objective and can speak objectively, but they can do so only if they use language that is clearly and precisely defined, that is straightforward and direct, and that can fit reality. Only by speaking in this way can people communicate precisely about the external world and make statements that can be judged objectively to be true or false (187).

The words of an objectively true statement match reality; those of an objectively false statement do not.

Given that some statements may be true and others may be false, we can see that although an objective world exists that we can know through words, we may, at times be in error. Therefore some method must exist in order to come to know ultimate truth.

[A]s human beings, we are subject to human error, that is illusions, errors of perception, errors of judgment, emotions, and personal and cultural biases. We cannot rely upon the subjective judgments of individual people. Science provides us with a methodology that allows us to rise above our subjective limitations and to achieve understanding from a universally valid and unbiased point of view. Science can ultimately give a correct, definitive, and general account of reality, and, through its methodology, it is constantly progressing toward that goal (187).

This aspect of objectivism places human subjectivity and individual human experience squarely in a questionable light when it comes to the question of truth. The objective scientific method factors out of ultimate truth the possible errors of individual subjectivity and experience. In this way, science and objectivism become allied with truth and individual experience and subjectivism with falsity.

In summary, words play an important role in objectivist epistemology. We can grasp the building blocks of reality through words, which symbolize those building blocks (re-present them) in our minds. Words refer to what they represent and therefore are forms that carry meaning-content. Through words, we may grasp particular meanings and assemble them into new, more complex meanings. True word representations match the world, false ones do not.

The Conduit Metaphor

The conduit metaphor, first written about by Michael Reddy (1979), models the objectivist communication process. It involves the transfer from one person to another of meaning-objects.¹⁷ The conduit metaphor gives meaning to such expressions as “I’m having trouble putting my meaning into words,” “I haven’t yet been able to convey my meaning very clearly,” or “I’m trying to unpack what this writer is saying.”

In this model, a speaker creates meaning in his mind and then packs it into words. Translated into sound or sight signals, the words travel through a conduit that bridges the gulf of space/time and subjective separation. The listener’s ears/eyes receive the “raw” sound/sight signals and the brain assembles them into word meaning-packages. It then unpacks the word meaning-packages and grasps the meaning. The unpacking of meaning involves knowing what object in the world the words refer to, as well as the rules of grammar.

As the image of a conveyor belt suggests, this metaphor is mechanical in nature — mechanical both in that it involves mechanical parts and actions and in that it involves working with the mind’s hands. The mechanisms of meaning are reference and representation.

¹⁷ Given the central act of conveyance in this schema, it might have better been named the “conveyor” metaphor.

The Logical Construal of Parts, Processes, and Experiences in Objectivism

Taken together, objectivism and the conduit metaphor form a system of logical possibilities and impossibilities. They constrain and construe the nature of the “building blocks” and processes of communication in particular ways. If a writer wants to go against the grain of the logical possibilities inherent in the system, he must justify that action with strong evidence.¹⁸ Conversely, an argument consistent with the grain of the logical possibilities of the system, does not required as much evidence, since in its consistency it seems self-evident. In my description below, I develop the logical construal of parts and processes as suggested by the objectivist system of thought, without taking an agreed upon exceptions into account. This operation produces a stereotyped and unnuanced picture. I do not mean to describe these parts and processes as they are used by any particular discipline at the present time, only to describe how the system logically constrains their interpretation.

In addition to being a system of logical possibilities and impossibilities, the objectivist/conduit system of knowing involves a specific set of terms, among which are representation, form/content, subject, object, meaning, mind/body, grasp (and related terms), see (and related terms), literal/figurative, expression, and reference. When used in a clearly objectivist context, these terms do not just mean by iconically matching their dictionary definitions. Rather, they mean in relation to one another and to the entire schema set up by the objectivist/conduit epistemology. Using one of these terms

¹⁸ Occasionally, over the course of scholarly debate, when certain exceptions to the logic become accepted as exceptions, they no longer require extra evidentiary force.

metonymically accesses the entire schema, with all of its logical possibilities and terminological relationships.

Writers sometimes work very hard to divorce a term from the whole by redefining it. Since the redefined term is part of a complex whole, and means in relation to that whole, in order to truly redefine a term, the whole should be redefined along with the part. However, most writers do not redefine the whole, but only the part. Given that fact, even if the writer has gone to great lengths to clearly define the term, that redefinition will likely fail. Since readers have experienced the term as a part of the whole system time and again, they have literally incorporated it as a part of the whole schema. Redefining a term cannot cut the reader's corporeal ties from the single term to the entire schema. When a reader encounters the term, the term will still mean, in part, in relation to and by invocation of the entire schema that constrains its logic. If the new definition logically contradicts the schema, the results will be confusion, not clarity.

Implicit in the objectivist set of terminological relationships and logical possibilities is a portrait of the nature of human beings, their relationship with the world and the kind of meaning they find in living.

The Nature of the People Involved

As the image of a mind-homunculus suggests, objectivism construes human beings as minds relatively independent of the bodies that carry them around. As the primary aspect of the mind/body system, the mind directs the activities of the body and remains relatively unaffected by those bodily activities. Most importantly, the mind

transmits messages, encoding and decoding them, performing the computations involved in communicating.

As secondary to the mind, the body figures in the processes of exploration and explanation only when it directly affects the work of the mind. When explaining communication, only the eyes and ears, as conduits or portals through which signals travel to reach the mind, may be considered.¹⁹ Given the relative independence of mind and body, no other part of the body is important to consider.

Objectivism models perception as mechanical in nature — as a conduit. Its three parts are linear in both space and time: 1) raw sense data enters the body through the “portals” of the ears or eyes, 2) travel up nerve conduits and finally 3) reach the brain, where it is sorted into percepts by the mind-homunculus. As a mechanical model with predetermined parts, motions, and tasks, this model of perception is synchronically dynamic, but diachronically static.²⁰ Furthermore, as just another mechanical part, human beings have no agency. This model of perception does not allow for more

¹⁹ With exceptions given for sign language.

²⁰ The expression “synchronically dynamic” may appear to be an oxymoron, but it is not. “Dynamic” can refer to continuous motion. That motion may follow a particular pattern that repeats over and over or the motion may describe a pattern that changes over time. “Synchronically dynamic” refers to a repeated pattern of motion; “diachronically dynamic” refers to a pattern of motion that changes over time. In their inner workings, machines are synchronically dynamic. They move, but the pattern of motion remains the same. Even sophisticated machines that might adjust to different tasks are still limited in their patterns of motion. They may have multiple sets of motions that can respond to different situations, but they cannot, of themselves, adapt to extremely varied conditions over time. (What *does* change in synchronically dynamic machines are the specific materials that are fed through them.) If you think of a car, its parts must interact with one another in a predetermined fashion in order for it to operate. In and of itself it is synchronically dynamic — if it were running while lying on its “back” it would stay in the same place. The action of a car becomes diachronically dynamic only when a human agent becomes involved in the mechanical system and drives it to varying places. However, *the car itself does not become diachronically dynamic* (except for the fact that it eventually wears out), *but its action in the world does.*

complex kinds of sensing of the world, as when a person senses another's emotional state by using his own emotional system as a sensory apparatus or when an observer entrains with a dancer on stage through using his whole body as a sensory apparatus. I will discuss a model that does allow for more complexity in the next chapter.

This model of perception isolates the process of perception to specific parts of the body, compartmentalizing it in an experientially unreal way. When I listen or observe actively, I bring my whole self to the situation, like a tennis player who bounces around, ready for action when the ball gets to his side. If I am prevented from listening with my whole self, I am not able to "get into" the music as well. My ears and brain may encounter sounds and translate them into notes, but I do not engage with music. If we want to know about "music" (as distinguished from "notes"), this model of perception/cognition is insufficient.

In addition to acting as a means for accomplishing encoding and decoding procedures, the mind-brain acts as a place where encoding and decoding procedures occur. The characterization of the mind-brain as a place can be seen in the notion of "states of consciousness." The phrase "states of consciousness" relates to the common conceptual metaphor STATES ARE CONTAINERS. Through this metaphor, a state becomes something to be "in," e.g. "I'm in a good mood today." As containers, states of consciousness, then, may "contain" something: "[S]tates of consciousness are or contain natural representation, that is, entities that by their intrinsic nature represent something else" (Addis 54). Projected onto consciousness, the static nature of the CONTAINMENT

schema hides the dynamic, interactive nature of consciousness. Consciousness becomes a static space in which the mind-homunculus works.

Calling the dynamic process of consciousness a “state” objectifies it so that it can mentally be pulled away from one’s own experience and viewed, as an object, from afar. Thus objectified and viewed from afar, the scholar can think, mistakenly, that a “state of consciousness” is a “thing” that can be argued about scientifically, as if it can exist independent of individual, subjective experience.

[W]e may conclude from the *scientific* argument that every state of consciousness has a property that specifies what that state of consciousness is a consciousness of, and another property that specifies what mode of awareness it is (Addis 51, emphasis mine).

As an object, the “state of consciousness” can “possess” (have) properties, rather than *being* one quality or another (as would a dynamic process).

Objectivism sees intelligence as an essential, inborn, mental trait of the individual person. It may be connected to the intelligence levels of their parents, but, logically speaking, its development does not relate to the person’s bodily interaction with the environment. Intelligence relates to the quickness of the brain in doing its computational work, as well as its capacity (the amount of available mental “space”) for memory. The body, dumb, brute and unreasoning, acts only as a vessel for holding and carrying the mind-brain. Its only intelligence lies in its ability to follow the directions of the brain.

Objectivism does not logically support the idea of bodily intelligence. Although a trained pianist’s “quick-witted” fingers demonstrate not only mere muscle memory, but sometimes novel movement in response to new situations, they only do so at the brain’s

direction. Intellect — “the power of knowing as distinguished from the power to feel and will” — is located solely in the brain. At best, quick-witted fingers constitute “body knowledge,” never real, creative intelligence.

Consistent with the location of creative intelligence in the brain, objectivism locates imagination purely in the mind, tying it logically to the process of mental representation. Even Mark Johnson, who champions the idea of an embodied mind in *The Body in the Mind*, does not escape the equation of imagination with mental representation:

Imagination is our capacity to organize *mental representations* (especially percepts, images, and image schemata) into meaningful, coherent unities (140).

Although I do believe that imagination sometimes involves mental representation, it often does not. Explanations of imagination usually involve an example like imagining something concrete, like a dog. I can imagine the concept “dog” and have the feeling of some sort of image in my brain (although I lack any ability, while awake, to actually, intentionally bring an image to my “mind’s eye”). However, in the course of my daily life, when a dog that I know occurs to me (as in “It occurred to me that...”), that occurrence is not isolated to a mental image or a feeling of a mental image. The image will resonate with my emotional and bodily systems as well.²¹

²¹ An “occurrence,” as in “It occurred to me that...,” *can* be glossed as “having a thought,” but *should not necessarily* be. It might be argued that the “it” of “It occurred to me...” is a thought. I would argue that “it” might be a thought, but it might also simply be a recollection. In fact, the “it” of “It occurred to me...” simply refers generally, not to anything specific. I want to distinguish “occurrence” from “thought” here, since the way that we use “thought” is so thoroughly mental in character. The etymology of “occur,” *ob-* in the way + *currere* to run, suggests that “experiencing an occurrence” is

For example, if my friend Simone's dog, Max, occurs to me, I may feel a relaxed and playful feeling. I may happily anticipate seeing him again. If my brother Kris' dog, Molly, occurs to me, I will feel a degree of tension and sadness, since Molly, who is getting old, blind and deaf, quite unexpectedly and uncharacteristically bit me the last time I visited her. Before she bit me, if asked whether or not Molly would ever bite me, I would have answered, "I can't imagine it!" It is not that my mind could not imagine this happening, but that my body-emotion system could not imagine it. Now that Molly has bitten me, the "image" of her biting me resonates throughout my body-emotion system and, that image being present and active in me the next time I visit her, I will behave with greater caution. The point is that images and imagination are not limited to mental representation but occur to and throughout the whole person, and occur in the course of interacting with the world.

In the objectivist system of logic people, and such faculties as perception, intelligence and imagination, are construed as mainly mental in nature. The most important part of a human being is his brain-mind, which is the central hub of bodily activity and the mediator between inner and outer worlds.

The Nature of the Relationship Between Person and World

The objectivist assumption that reality consists of "building blocks" that must be assembled to make a whole extends to the construal of the nature of the relationship

different from "having a thought." It suggests the image that when something "occurs" to us, in the course of our daily lives that "thing" (image or thought) is in the way and we run into it. When we run into it, it *strikes* us and *resonates* in us in various ways. I will discuss this further in the next chapter.

between a person and the world. Not only are mind and body, senses and brain compartmentalized, person and environment are as well. The way that the person is construed in objectivism — as a relatively passive mind that registers and manipulates representations of the world, a mind connected to the environment only through the “portals” of the senses — suggests a relative disconnect from the environment. The main interactions with the world occur through grasping and seeing of the mind’s hands and eyes. The bodily hands and eyes may interact with the world, but only at the direction of the mind and only to satisfy the mind.

Given the relative disconnect between body and mind in objectivism, the only possible constraint on meaningful individual experience is that received through the mind, usually in the form of words — “culture.” We pass on “culture” primarily through books and other word based education.²² Through the set of shared mental representations that we call “culture,” we share experience. If it were not for shared “culture,” individuals might experience the world in wildly different fashions. Concomitantly, individuals with different cultural backgrounds may experience the world in wildly different fashions, since they share nothing that constrains that experience. Since objectivism construes human beings as primarily mental in nature, and as experiencing the world primarily through mental representation of it, the rest of the body plays little part in constraining the nature of experience. In other words, the operation of

²² In the objectivist/subjectivist way of thinking, word-based education is the only way to ensure that we share similar, “true” mental representations of reality. If education were experience based, how would we know that the students’ experiences were similar enough to constitute a shared knowledge base?

individual minds cannot be constrained by the fact that human beings share a vast amount of experience interacting with the world through a similar medium — the human body.

The image that “cultural background” suggests accurately portrays the part that culture plays in objectivist explanations: a relatively passive backdrop, put in place by the process of education, against which the drama of individual meaning unfolds. At best, a relatively unchanging culture “informs” the meanings an individual derives from mental representations. The diachronically static nature of “culture” in the objectivist/conduit schema stems from the mechanical nature of the model. As parts in a mechanical system, the roles of both human beings and “cultural background” are predetermined and not open to change.

The objectivist “fact” of the probability of wide variation in individual experience relates to the objective/subjective divide. Since only “cultural background” constrains subjective experience (usually construed as the inner life of the individual), and since only the individual in question can observe subjective experience, it can never be reliably treated in an objective fashion. For instance, speaking of emotional response to music, Meyer states:

[T]he response with which we are concerned is profoundly and permanently subjective and hence of necessity concealed from the scrutiny of even the most scrupulous observers (12).

As “slippery,” varying enormously from person to person, unseeable and unmeasurable, subjective experience cannot be validly known. Since individuals vary a great deal in their ability to “put” subjective experience “into” words, personal reports are not to be

trusted. The strict divide between objective and subjective shows the severe compartmentalization between the inner and outer in objectivist logic.

In objectivist thought, “out there” and “in here” constitute two different “places.” Given that “places” are locations and, by a conceptual metaphor generally used in English, LOCATIONS ARE CONTAINERS, these “places” have boundaries around them that must be breached in some fashion. The senses act as a “portal” between the outer and inner worlds. Meaning enters the body through the senses in the form of “representations” that refer to the outer world. This logical system sets up levels of mediation that do not necessarily exist. Even if an experience feels immediate, like “getting into” music, immediacy is logically unlikely and explanations must include mediation.

Besides the fact that inner and outer worlds are two different “places,” objectivist logic spatializes the process of communication in a way that is experientially unreal. It posits a meaning in my interlocutor’s mind and a gap between us that needs to be “bridged.” The meaning leaves my interlocutor in the form of sounds that bridge that gap. I receive those sounds, reassemble them into words, and then unpack the meaning of the words. This spatialized model sets up levels of mediation that do not necessarily exist. No room exists for “getting into” what my interlocutor is saying, for entraining with his thoughts, for knowing through that entrainment what he will say next.

The compartmentalization of inner and outer worlds presents severe impediments to explaining experiences like “getting into” music and other expressive events and to

understanding the variation and similarity between the experiences of individuals. “Objective” experience does not vary from individual to individual; “subjective” experience varies wildly, constrained only by cultural similarity. No middle ground exists within cultures or between cultures.

The Nature of Meaning

In objectivist thought, meaning is first, and foremost, linguistic. Other kinds of meaning, like the meaning of a stock market drop that halves a person’s retirement account or the meaning of a child’s first kiss, cannot be considered. In addition, only certain kinds of linguistic meaning fit into the system and thus may be considered.

Literal meaning is admitted, figurative is not. Literal meaning acts in the manner prescribed by the conduit metaphor — a mental representation that refers to reality and models it exactly. Figurative meaning does not fit this model, referring to reality in ways that may approximate reality, but do not fit it exactly. Objectivist accounts of meaning do not consider figurative language and meaning. They are left to poets and humanities scholars.

Concomitant to the literal/figurative split is the true/untrue split. In the objectivist system of thought, meaning must be either “true” or “untrue”; meaning may not be neither true nor untrue. Since meaning consists of words mentally representing a state of affairs in the world, then true meaning consists of words that match the state of affairs, while false meaning consists of words that do not match the state of affairs.

Meanings may be partially true, if they partially match objective reality, but meaning may

not be divorced from objective truth and falsity. Objectivism does not admit meanings that are experientially true, but objectively false (like exaggerations). Nor does it admit meanings like the meaning of the fragrance of a flower, unless its meaning refers back to some memory the individual associates it with. If an individual smells a flower and simply feels a wonderful sense of well-being and gratitude for life, the meaning involved in the situation is neither “true” nor “untrue” (although beautiful) and thus cannot be explained objectively. Along with “figurative” meaning, meaning that is neither true nor untrue is left to poets, musicians and humanities scholars.

Objective meaning is an “object” transferred from speaker to listener. Although it ends in “-ing,” suggesting that it was originally a verb, the word “meaning” has come to be a noun. It is used in the gerund form, rather than in the present progressive, which also uses “-ing” and would suggest action on the part of the speaker or the listener. In the process of the communicative transfer, the meaning-object begins its life in subjective form, converts to objective, and then converts back to a subjective form. This conversion process makes the communication process unreliable. Because of human fallibility, problems may occur in either of the “subjective” phases of the process: “putting meaning into words” or “grasping and unpacking meaning.”

Meaning is also entirely mental in nature, arising in the form of thoughts, ideas or mental images and packed or unpacked through the mental processes of computation, representation and reference. The meaning of an utterance may have ramifications that play out in emotional or physical ways. However, these ramifications are not the

meaning proper of the utterance; the meaning proper is the idea or thought the utterance represents.

As we have seen above in descriptions of the conduit metaphor process, meaning involves a split between form and content. Since a word's meaning consists of its referential content, its sound form becomes insignificant, as easily discarded a gift box. Besides the form/content split, objectivism inextricably links meaning to the processes and logics of reference, representation and personal expression. These terms define the processes of meaning; any writer who does not want to be taken to task must address them in some fashion.²³

The objective system of logic and terms admits only literal meaning-objects that are either true or false and can be mentally packed, transferred, re-presented, grasped, unpacked and that refer exactly to reality. It does not admit meanings that strike a

²³ For example, Langer takes Hanslick and others to task for rejecting the form/content split. "(T)he most vehement critics of the emotive-content theory seem to have caught a germ from the doctrine they attacked: in denying the very possibility of any content of music, they have fallen into the way of thinking about it in terms of form and content. They are suddenly faced with the dichotomy: *significant or meaningless*. And while they fiercely repudiate the proposition that music is a semantic, they cannot assert that it is meaningless. It is the problem, not the doctrine, that has infected them. Consequently they try to eat their cake and have it too, by a logical trick that is usually accepted only among mathematicians — by a statement which has the form of an answer to the question in hand, and really commits them to nothing. Musical form, they reply, is its own content; it means itself. This evasion was suggested by Hanslick when he said, 'The theme of a musical composition is its essential content.' He knew that this was an evasion;* but his successors have found it harder and harder to resist the *question* of content, and the silly fiction of self-significance has been raised to the dignity of a doctrine" (668). At the asterisk, Langer inserts the following footnote. "See Hanslick, *op. cit.*, p. 133: 'In the art of music there is no content opposed to form, because music has no form over and above its content.' This is an effectual repudiation of the form-and-content dichotomy, a rejection of the problem, not of its answers." Langer simply accepts the objectivist terms and seems to believe that this is the *only* way to frame the problem. Hanslick, more loyal to musical experience than to this set of terms and logic, tries to find a way around them, but is taken to task.

Note that, because she perceives meaning from an objectivist standpoint, thereby equating meaning with linguistic, referential meaning, Langer cannot conceive of meaning that is *intransitive* in nature. By her logic, if something *means* it must mean *something else* (it must refer in some fashion).

person, like the occurrences of a falling stock market, a first kiss, a tone of voice, the beauty of a fragrance, or the beauty of a symphony.

Summary

Based on an analogy to seeing and manually manipulating objects in the world, objectivism treats reality as if it were a complex object to be understood. Thus the path of knowing involves finding the smallest parts of that complex object, discovering their individual natures, as well as how they relate and cohere. Consistent with the logic of humanly built structures, the parts of reality are logically prior to the wholes. Parts are “basic” in that they form the base of the more complex structural whole, as well as form the starting point for discovery and argument. Objectivism prefers measurable evidence and structural or mechanical models, which do not admit diachronic change or human agency.

If objective knowledge is gained by building complex structures from simple elements, then words are the primary building tools. Words corral possibly ambiguous aspects of reality into neatly contained categories that can easily be grasped and manipulated by the mental homunculus. Words allow aspects of reality to travel from objective reality to subjective reality in the form of mental representations. Necessary truth or falsity depends on how well mental representations match the situation they represent. Words allow us to communicate with one another by packaging ideas into meaning-objects we can send through aural or visual signals.

Objectivist logic construes the communication situation, its parts and processes in very specific ways that are logically consistent with one another. As people are primarily mental in nature, so are intelligence and imagination. The mind acts as both an homunculus that accomplishes encoding and decoding procedures and as a place where the homunculus accomplishes these procedures. Objectivism compartmentalizes perception and cognition to include only the sensory portals and the mind, ignoring any possible role that the body may play. In addition, it compartmentalizes the external and internal worlds, so that they are separate “parts” of the whole person/environment system. As mechanical, this system does not allow for diachronic change or for human agency. Thus, “culture” becomes static “background” or “context” that at best informs the system. Objectivism construes meaning as linguistic, an object with content, tied to the processes of reference, representation and personal expression.

OBJECTIVIST/CONDUIT MEANING APPLIED TO MUSICAL MEANING

Having developed a detailed account of the logic and terms of the objectivist system of meaning, I now turn to a close examination of the application of that system to the musical meaning situation. In varying levels of detail, I will examine the writing of music theorists Deryck Cooke, Eduard Hanslick, Leonard Meyer, and Victor Zuckerkandl, philosophers Laird Addis and Susanne Langer, and psychologists Jean Bamberger, Stephen Handel, and Mary Louise Serafine. Objectivism informs the work of each of these authors in some way. The philosophers base their arguments on objectivist assumptions and the psychologists base their studies on objectivist

methodologies (which are based on objectivist assumptions). The music theorists, as a group, vary most in their use of objectivism. Meyer accepts psychological methods and definitions, thereby defining his approach as at least partially objectivist. Cooke, Hanslick and Zuckerkandl all eschew some aspects of objectivism, while they accept other aspects without questioning them.

In certain respects, music seems like a communication system, so many authors apply theories of linguistic communication to it. Through this analogy, they map the conduit metaphor, with all of its terms and logic, onto musical meaning. In this mapping, the following set of equivalences arises. The speaker becomes the composer, who possesses musical content. He puts that content into a musical form, which, by the logic of the conduit metaphor, becomes less significant than the content.²⁴ From the written form, the player rediscovers the content in the process of learning the piece. In playing the piece, the player “expresses” the composer’s meaning-content through the musical form. The form then re-presents the meaning to the listener’s ears and mind, which decode and grasp the meaning, in part by discovering to what the musical sounds refer. This drama of meaning transfer plays out against the backdrop of or is informed by the cultural background of all the people involved.

When mapped onto the musical situation, the logic of the objectivism dictates the nature of the parts and processes in the same fashion as described in the previous section. Musical meaning becomes logically tied to personal expression (of either the composer

²⁴ That form is logically less significant than content can be seen in Langer’s term “significant form” (651). She needs to modify “form” with “significant” only because, by the default logic, form is insignificant.

or the player), the form/content split and the processes of representation and reference. When writers explore and explain the musical situation using this logic, the logic acts as a form into which they try to fit experiential evidence. The places where the experiential evidence “rubs” against the “form” that constrains it define some of the issues of greatest contention (the “sore spots”) in the discussion about musical meaning: Is musical meaning intellectual or emotional? Is it a personal or impersonal expression? Is it a matter of reference or representation? What is the content of musical meaning? Is its form significant?

Objectivism in Writing about Musical Meaning

The above authors vary in the use they make of this frame of reference. Some make explicit use of the terms and logic defined by the conduit metaphor; others confine their use mainly to the broader logic of objectivism. Of the authors who use the terms of the conduit metaphor, only Deryck Cooke accepts the analogy between musical communication and linguistic communication literally. In *The Language of Music*, Cooke presents a “glossary” of musical terms (defined as specific phrases characterized by series of particular melodic scale steps) that refer to specific emotions.

Although most of the authors do not accept the analogy between music and language literally, they still look to objectivist thought about linguistic communication for ways to think about musical meaning. For example, the psychologist Handel poses an explicit analogy between music and language: “[T]he understanding of music has the same arbitrariness between sound and content, and the same search for meaning, that

occurs in the understanding of speech” (183). However, he does not accept the analogy as naively as Cooke does, but uses it as a tool for exploration, carefully explaining what aspects of the analogy he accepts and what he rejects.

Langer makes use of the conduit model of communication, but places its action at a more abstract level than Cooke does. This can be seen the way that she conceptualizes the process of artistic symbolization. According to Langer, through the process of making a symbol, a symbol producer becomes aware of his experience and articulates it by objectifying it (similar to becoming aware of an idea and articulating it in words). That objectification produces the symbol (as putting ideas into words produces language). The symbol consumer, then, can witness the symbolic object and contemplate the experience it articulates, becoming aware of that experience, thereby gaining insight into it. Although the process seems to be more abstract than the process of literal linguistic communication modeled in the conduit metaphor, this formulation of the process of symbolization follows the logic of the conduit: experience-meaning is packaged, transmitted through the medium of the symbol, then unpacked and seen/grasped.

Langer continues with the analogy in more explicit terms, modeling her definition of the “structural requirements for a symbolism” on language:

Furthermore, there is no doubt that musical forms have certain properties to recommend them for symbolic use: they are composed of many separable items, easily produced, and easily combined in a great variety of ways; in themselves they play no important practical role which would overshadow their semantic function; they are readily distinguished, remembered and repeated; and finally, they have a remarkable tendency *to modify each other's characters in combination*, as words do, by serving

each as a context. The purely structural requirements for a symbolism are satisfied by the peculiar tonal phenomenon we call “music” (659-60).

By this description, symbolism has the same requirements as language: minimal units of meaning (phonemes/morphemes), “building blocks,” that can be combined and modify each other (syntax/grammar) in order to create larger meaning structures. However, she does object that music “is not, logically speaking, a language, for it has no vocabulary” (660), and that it “has no literal meaning” (663).

Even those authors like Zuckerkandl who, on the whole, reject the analogy between music and language are compelled to speak of this analogy due to its hegemonic force.

Music and language, then, have one thing in common—that tones, like words, have meaning and that the ‘being in’ of the meaning in the word, like that of the musical significance in the tone, is of a nonmaterial nature. But beyond that, the relations that connect the word with its meaning, the tone w/ its musical significance, are quite different (67).

However, even though he rejects the idea that the mechanisms of meaning are similar in music and language, Zuckerkandl does not reject every aspect of the analogy. He accepts the idea that music is a communication of personal “thoughts” from composers:

What creates difficulties for the uninitiated in the late Beethoven, in Bruckner, in Stravinski, is not the language but the person, the personal nature of the thoughts formulated in the language (41).

Like Zuckerkandl, most of the other authors use the analogy between music and language inconsistently, accepting parts that suit their argument but rejecting parts that do not.

On the whole, the music theorists accept the terms of the conduit metaphor as basic to their argument — as terms that must be included in some fashion. However, they do not automatically accept the validity of these terms, but try to stay true to musical experience and either alter the terms to suit their explanations of that experience or, if those terms cannot be thus altered, they argue against them. In contrast, the philosophers never argue against the validity of these terms, but *do* try to rework them to suit the experiential evidence. In contrast to both the music theorists and the philosophers, the psychologists do not attend to the terms dictated by the conduit metaphor, but *do* take care to stay true to objectivist methods of testing and thinking.

In this last regard, Meyer's writing is more like a psychologist than a music theorist. Although his writing is clearly informed by a concern for musical experience, the objectivist framework still dictates the issues he addresses and the theories he draws on. For instance, as he sifts through the different kinds of evidence available to him, he characterizes them as objective and subjective, a dichotomy central to objectivism. He takes objective evidence as self-evidently more valid, but suggests that subjective evidence is actually necessary. In order to counteract the unreliability of subjective evidence, he proposes that it be examined in the light of a scientific theory of emotion.

Meyer then presents what he calls the "psychological theory of emotion," whose central thesis is "Emotion or affect is aroused when a tendency to respond is arrested or inhibited" (14). This definition is central to Meyer's thinking, shaping it in an objectivist fashion. In his application of this theory, he frames the listening situation as "stimulus →

response,” which suggests a passive listener. He counteracts this suggestion by saying that the listener brings education and intention to the listening situation. However, his continued use of the basic “stimulus → response” frame works against him, since inherent in the frame is a passive listener who is being acted on by the music.

However, Meyer’s use of the “psychological theory of emotion” (emotion or affect is aroused when a tendency to respond is arrested or inhibited) creates a more important problem. When I test this theory in my experience, it falls short in its lack of comprehensiveness. In other words, it describes one kind of situation in which emotion or affect may be aroused, but does not describe many others. For instance, for me, emotion may be aroused simply by looking at a beautiful flower, empathizing with a character in a drama unfolding in a movie, or realizing that I forgot my wallet at home. None of these situations consists of a tendency to respond being arrested. The narrowness of Meyer’s psychological theory of emotion constrains his theory of music and emotion. The emotions it explains relate directly to a tendency to respond being arrested or inhibited: expectation, uncertainty, suspense and surprise — a rather short list of the feelings music may invoke. Although Meyer’s theory does ring true for me in many ways, its narrow focus limits its usefulness.

Whether directly affected by the terms of the conduit metaphor or indirectly affected by concerns for objective methodology and evidence, this scholarship about musical meaning has been thoroughly conditioned by objectivism. The objectivist

framework is problematic for music, in part, because simply has no place for certain important aspects of musical experience. I now turn to this problem.

Aspects of Musical Experience Excluded by Objectivist Meaning

Sensuality, emotion, dynamism, and the intensification of experience are all important aspects of musical experience — aspects that converge in its meaningfulness. The objectivist system of thought not only does not provide a way to understand these aspects, it logically excludes them. Given this exclusion, if the authors whose work I have examined for this chapter are employing this system of knowing, one could expect them to have trouble explaining these logically excluded aspects. At the very least, one might expect a definite lack of consensus on how these aspects fit into the system of meaning. And indeed, this is the case.

Sensuality

Given the mental nature of objectivist meaning, the sensual aspects of musical experience — by which I mean such experiences as the physically pleasurable enjoyment of a ravishing flute timbre or a jolly, bouncing horn passage — would logically be excluded. Not one of the authors I have examined commented on purely *sensual* aspects of the music. Instead, those who admitted sensuality did so in the form of *sensuousness* — aesthetic pleasure. For example,

Every art sets out from the sensuous and operates within its limits. [...] [O]ur imagination, which is so constituted as to be affected by auditory impressions [...], delights in the sounding forms and musical structures

and, conscious of their sensuous nature, lives in the immediate and free contemplation of the beautiful (Hanslick 290).

The locus of sensuousness is the imagination, which, in this system of thought, is mental in nature. The locus of sensuality is the body. Therefore, sensuousness falls within the boundaries of this system, while sensuality does not. I do not deny the validity of the sensual/sensuous distinction. Rather, I deny it as a strict dichotomy. In my experience, sensuousness necessarily involves a level of sensuality, since “getting into” music requires a certain level of pleasurable bodily involvement (real or imagined).²⁵

Emotion

The place of emotion in the objectivist system of logic is also problematic. Although linguistic utterances are often emotionally laden, this system would place the emotion as a *subject* of the words — a *mental* meaning unpacked from the words, while the emotional *feeling* becomes a *ramification* of the mental meaning. Those aspects of speech that carry emotional force — paralinguage and prosody (variations in intonation, stress, vocal timbre, volume, rhythm and quality of articulation) — do not logically fit in this system. Despite that fact, linguists do study these aspects of language. However, the amount of attention given to aspects of language that are included in the objectivist system of logic far outweighs the amount given to paralinguage and prosody. A recent search of the MLA database revealed 112,000 entries for those aspects of language

²⁵ The sensual/sensuous dichotomy also relates to the hegemonic set of values, consistent with objectivism, that dichotomizes and then evaluates mind over body, spirit over body, intellect over emotion and reason over imagination.

logically *included* in the objectivist framework (morphology, lexicology, grammar and syntax), but only 7,900 for prosody and paralinguistics.

That emotion has only an indirect place in the objectivist system of understanding may relate to the striking variation in explanations about emotional aspects of musical experience. Music is called, variously, the language *of* emotion (Cooke), the logical expression of feelings (Langer), the content of music (Handel) or the *symbolic* content of music (Langer). Music either expresses the emotions of the composer (Cooke) or it does not (Hanslick, Langer). Music represents feelings (Addis). Music does *not* represent feelings, but their dynamic properties — it awakens feelings (Hanslick). Music stimulates emotion in a listener through anticipation and surprise (Meyer).²⁶ Since emotion does at least fit the logical system indirectly, it *seems* as if a thoughtful scholar should be able to find a place for it. But since its place is not obvious, the results of these thoughtful “fittings” vary widely.

Dynamism

Another dimension of musical experience that does not fit easily into the objectivist system of logic is its dynamic quality — that quality of music analogous to physical motion: “speed, slowness, strength, weakness, increasing and decreasing intensity” (Hanslick 268-69), or “patterns of motion and rest, of tension and release, of agreement and disagreement, preparation, fulfillment, excitation, sudden change” (Langer 659). Although the dynamic quality of music has no obvious place (direct or

²⁶ Of these writers, only Meyer theorizes about “emotion.” The rest do not and easily conflate emotion, mood and feeling.

indirect) in this system of thought, it plays such an important and obvious part in musical experience that not one of these writers denies its reality. However, even though they do not exclude dynamism, the writers do not agree on its place in the process of musical meaning.

Hanslick reasons that, through its dynamic qualities, music can represent the dynamic properties of a feeling, but not the feeling itself. Langer agrees with this position, but added an extra level of abstraction, stating that through its dynamic qualities, music “reveals the *rationale* of feelings, the rhythm and pattern of their rise and decline and intertwining, to our minds” and so is “a force in our *mental* life, our awareness and understanding, and not only our affective experience” (669, emphasis mine). Both Hanslick and Langer locate these dynamic qualities outside of the listener, “in” the music “out there.”

Bamberger locates dynamic qualities inside the listener, in the realm of bodily experience and connects them with the act of perception and conceptualization:

I suspect that the processes through which we actively organize incoming pitch-time phenomena are closely linked w/ the very basic, sentient organizing of our bodies as we move through space and time — gestural direction (up-down; right-left), stance, sequences of periodic movements (breathing, sucking, walking), equilibrium, as well as vectors of tension and relaxation (9).

However, Bamberger’s philosophical framework constrains her idea of perception and conception to those aspects that fit the conduit metaphor — sound waves hitting the eardrum, changing to neurological signals, moving up the nerve conduit to the brain, which decodes them in the process of cognition. Nothing in this model admits the kinds

of “basic, sentient organizing of our bodies as we move through space and time” that Bamberger lists. Therefore, although she recognizes them, she cannot include them in her methods or her interpretation of evidence.

Serafine also locates dynamic qualities inside the listener, as a part of the process of musical thought (or cognition). She describes an example of a musical “thought path”:

The rhythm of vertical formulations creates areas of instability, movement, and tendencies toward change, as well as stability, repose, and closure. Rhythmic and dynamic activities also create patterns of movement and closure (72-3).

Although her description indexes qualities of the body that music embodies (instability, movement, etc.) her philosophy constrains her understanding to mental processes. Thus, she categorizes these bodily perceptions as “thought paths.”

The dynamic quality of music is at the heart of Zuckerkandl’s theory. Rather than simply recognizing and naming some of music’s dynamic qualities, as did Hanslick and Langer, Zuckerkandl locates dynamism as a quality of tones in the context of tonality. In that context, tones acquire a “dynamic quality”: “a state of disturbed equilibrium, as a tension, tendency, almost a will” (19). Each scale step has its own particular dynamic quality. For instance, the tonic has the quality of “perfect equilibrium, of relaxation of tension and satisfaction,...of self-affirmation” (20). Each scale step points toward the tonic, but in a way unique to that particular scale step (35).

What takes place here between the two tones is a sort of play of forces, comparable to that between magnetic needle and magnetic pole. The activity of the one is a placing itself in a direction, a pointing toward and

striving after a goal; the activity of the other is a dictating of direction, a drawing to itself" (20).

Zuckermandl equates the dynamic qualities with music's meaning:

It is this different gesture, which gives each tone its particular and distinctive dynamic quality, which sounds in it and which we hear in it, when we hear it as a tone in a melody. This and nothing else is the content, the meaning, of its utterance, its musical meaning (35).

In the course of his argument, Zuckermandl tries to locate these dynamic qualities exactly. His argument looks for them in the material world, but does not find them either as a quality of the sound wave or as a quality of the relations between sound waves. He then looks for them in the inner world — the psychological world — in the theory of associationism. This theory suggests that we learn, for example, that the supertonic moves to the tonic at cadence points simply through a process of association. Through this association, the supertonic acquires its dynamic quality of pointing toward the tonic for individual listeners. However, Zuckermandl argues against this notion effectively.

Having looked for and not found the dynamic qualities of musical tones in either the external material world or the internal psychic world, Zuckermandl proposes the existence of a third alternative — an "external psychic."

The 'external psychic' would then prove to be something purely dynamic, not feeling but force—a force for which the physical would be as it were transparent, which would work through the physical without touching it (63).

According to Zuckerkandl, the “external psychic” is a “nonmaterial, purely dynamic phenomena” (63). It does not appear to the eye, but the ear has a special capacity to perceive it.

Although he does not explicitly use the term “ether,” Zuckerkandl seems to be working with a notion of a forceful ether that is neither strictly “material” nor strictly “psychic.”

Tones...have completely absorbed their meaning [the dynamic quality] into themselves and *discharge it* upon the hearer directly in their sound. The non-material ‘being in’ of the meaning in the tone is no mere ‘being signified’; it is complete, actual presence (68, emphasis mine).

He suggests that religious symbols deal in this “forceful ether,” as well. “The symbol is the representation of a supermaterial — that is, physically indemonstrable — force in a material form” (69). He cautions that this “supermaterial” is *not* supersensual or supernatural.

Unable to locate the dynamic quality of musical experience in the external material world, where Hanslick and Langer locate it, or the internal psychological world, where Bamberger and Serafine locate it, Zuckerkandl posits the existence of a third alternative: an external psychic world of supermateriality. Positing the existence of a new aspect of reality that no one else has noticed and that relates to no other known phenomenon is a rather extravagant (and implausible) step to take in an argument. Zuckerkandl’s writing shows him to be a reasoning and intelligent individual, not one who would take such a step lightly or easily. These two facts, 1) that Zuckerkandl had to take this step and 2) the general lack of agreement amongst these authors as to where

these dynamic qualities are located, suggest a problem fitting the experiential evidence of dynamism into the model being used to explain it. If it had a logical “place,” it would be located there most of the time by most authors.

Intensification of Experience

The final aspect of musical experience that does not fit logically into this system is its intensity. Assuming that a listener listens actively, musical experience can be more intense than other, more ordinary forms of human experience. In fact, for many listeners, achieving an intensified experience — “getting into” the music — is the paramount goal of listening.

Musicians often link this experience to the difference between “notes” and “music.” As a subjective distinction, this difference has no place in the objectivist/conduit metaphor system of meaning. Almost all of these accounts of musical meaning do not even try to account for it. With his concept of “dynamic qualities,” Zuckerkandl tries to, but ends up positing the existence of an external psychic, supermaterial realm — a place somewhere between objective and subjective, outer and inner, material and spirit. The other accounts may mention the intensity of musical experience — mainly through discussions of aesthetic pleasure or beauty. However, these accounts tend to be descriptive or to attempt to define *what* is beautiful in music, rather than to explain how aesthetic pleasure or beauty may arise.²⁷

²⁷ If we take this argument to the extreme, not only does objectivism not admit the difference between music and notes, it does not logically admit “music,” either. Logically, the system admits sound waves, since they are a measurable, material reality. In contrast, as something that exists only in human

In addition, these authors do not mention, much less account for, the intensification of experience that may occur over repeated listening to the same piece. Because they are working within an epistemology that supports *mechanical* models, they account for music's synchronic temporality, but cannot fully account for *diachronic* temporality. The main way that they take diachronic change into consideration is to say that past education plays a part in musical understanding. However, they often add education almost as an afterthought, presenting it as a "back drop" that "informs" the current listening situation, more than an active part of the process. Additionally, they do not connect education with intensification of experience, only with musical understanding, usually defined as *grasping* the music in some fashion.

The objectivist system of logic either does not admit or does not *easily* admit certain vital aspects of musical experience: sensuality, emotion, dynamism and intensification of experience. The inadmissibility of this evidence contributes to arguments that are implausible and lacking in explanatory power.

Negative Effects of Objectivism on Arguments

The objectivist framework has not allowed the contributors to this discussion to come to a general consensus about the more abstract aspects of the problem of musical meaning. In addition, trying to fit the musical evidence into a framework ill suited to explaining it creates arguments that are overly complex, implausible, and lacking in

experience, "music" cannot be witnessed or measured by an objective observer. Objectively, only sound waves exist.

explanatory power. The objectivist framework shapes both the issues discussed and the logic used to discuss them.

The Presentation/Representation Tension

A thread of tension runs throughout many of these arguments that connects to the following questions: Does music represent? or does it simply present? Each of these terms suggests a different schema that, while sharing certain terms, logically excludes others.

Viewed morphemically, the term “represent” suggests a subsequent presentation of something that has been present or presented before: *re + present*. If the term were linked only to the meanings of its morphemes, then the sun rising in the morning would be a representation of the sun that rose the day before. However, “representation” means what it does not only by direct, iconic reference to its morphemes. It also means by metonymic access to the whole conduit metaphor schema. Given its entanglement with the conduit metaphor, the term logically requires reference to a pre-existing “subject” different from the “representation.”

If you consider only the dictionary definition of “subject” that applies to this situation (“something represented or indicated in a work of art”), no obvious reason exists why it could not be called “object” instead of “subject.” However, once again, “subject” means by metonymically accessing the whole conduit schema. Given that entanglement, the subject of a piece of music is of logical necessity located in the internal, subjective realm of the composer. It must connect to his subjective life —

emotions, ideas, insights, observations of the world, etc. “Subject,” then, involves not only the represented “thing,” but also the fact that that represented “thing” exists because of and under the control of an agent. If “representation” involves “subject” and “subject” involves an agent, then “representation” involves an agent (which is *one* of the reasons it is so odd to think of today’s sun as a representation of yesterday’s sun).

In addition, the representation itself is *not* a subject, but an object, because it has left the control of the agent who made it in the first place. Once it enters the mind of the audience, however, it becomes a “mental representation.” No longer the original subject, nor the public object, it has again entered the realm of the subjective and come under the control of a new agent, transforming it from an “objective” fact into a “subjective” one. Through its involvement in the conduit schema, representation is clearly more complex than its mere morphemes suggest.

In contrast, “presentation” is not entangled in the conduit metaphor. It is a simpler schema, using only two of the three terms of the representation schema. Unlike the representation schema, “presentation” requires no reference to an original subject. Nor does it *require* an agent who does the presenting.²⁸ Its time schema is also simpler, logically occurring entirely in the “now” and not referring to another time/space. The “presence” *fills* the present time/space, rather than referring to another. This schema

²⁸ It is true that some versions of the presentation schema, such as “making a presentation in a class or at work” require an agent doing the presenting. However, as it is used in this literature, the schema is divorced from the presenting agent so that the observer’s focus is on the “presence” itself. In fact, linguistically, the presentation schema is often used in the following fashion, “Music presents _____,” so that the music, “itself,” becomes an agent. Thus divorced from human agency, this schema *could* be called the “presence” schema, rather than the “presentation” schema.

consists simply of a present thing — or “presence” — gaining the attention of an observer by calling attention to itself, i.e., by being extraordinary in a field of ordinary.²⁹ Given that this schema is being applied to music, I will make a distinction here between presentations that involve “presence” and those that do not. In this way of thinking, music involves “presence,” while an ordinary object in its usual context, like a desk lamp, does not. The two differ in that a “presence” calls attention to itself in a way that an ordinary object does not, as when we say a person *has presence* or speak of “stage presence.”

The presentation and representation schemas share two terms, the present thing (called the “presence” in the presentation schema and the “sign” in the representation schema) and the observer. However, despite some shared structure, certain aspects of the presentation schema logically contradict the corresponding aspects of the representation schema. The primary relation in the presentation schema is between the presence and the observer, with the observer attending directly to the presence. In contrast, the primary relation in the representation schema is between the observer and the subject, with secondary relationships between observer and sign, sign and subject. The sign in the representation schema acts only to point toward the subject, which may not be present in time and space; it does not *primarily* act to draw attention to itself. The observer attends from the sign to the subject, not to the sign itself. In contrast, in

²⁹ With this definition, I am speaking of “art.” It is beyond the scope of this dissertation to delve into what artistic presence entails.

the presentation schema the presence is of intrinsic interest to the observer, opaque in its lack of reference.

The nature and direction of action differs in these two schemas, as well. *Reference*, which defines the representation schema, points the observer's attention away from himself, from the representation to its subject. In contrast, *attraction* defines the presentation schema. The presence brings itself to the attention of the observer, so that there is a dual direction: "calling forth" (from the presence to the observer) and attending (from the observer to the presence).³⁰ Thus, the nature and direction of these two schemas are logically incompatible. The sign points away attention from itself, while the presence calls forth and brings itself to our attention.

Depending on the context, i.e. how, when and where the music is heard, as well as how the observer attends, using these schemas as analytical tools, we could say that music can either bring itself to attention or point away from itself. For example, in a concert hall, if the observer attends directly to the music, it presents itself to attention. In an audition, the observer not only attends to the music, but from the music to the subject of the skill level of the performer, so that both schemas might apply, depending on what aspect of the situation is being explained. When a person walking down a street hears a particular kind of music coming out of a store, the music may represent the image that the store and its customers want to project. In that case, both schemas apply,

³⁰ The representation schema also involves a necessary level of attention to the sign by the observer. However, what is important here is the *defining* action of each schema that will determine which schema fits specific experiential evidence.

with the music calling attention not only to itself, but also calling attention and referring to the store/customer image.

In the literature on musical meaning, however, the examined context is one in which the listener attends directly to the music, not past it to the skill level of the performer or to an image. In terms of the experiential evidence, of these two schemas, the presentation schema fits better. Of the two groups that address this question — the music theorists and philosophers — the theorists, who show more loyalty to experiential evidence, choose the presentation schema as primary, while the philosophers, who show more loyalty to the objectivist/conduit frame of reference, choose the representation schema as primary. Zuckerkandl rejects the notion that music represents and does not discuss it. Cooke rejects it, with some exceptions, although he goes on to use a fairly literal analogy between music and language and thus uses it implicitly. Hanslick rejects representation, but still uses the term in his exploration of beauty in music. Langer and Addis use both schemas at the same time, building complex arguments to overcome their logical inconsistencies. Given Zuckerkandl and Cooke's lack of discussion of these concepts, I will confine my comparison to Hanslick, Langer and Addis.

HANSLICK ON PRESENTATION/REPRESENTATION

Hanslick makes pragmatic use of the representation schema for the sake of argument. However, he ultimately declares that the representation involved has nothing to do with aesthetic enjoyment or understanding of music, depriving the representation schema of any practical significance in the process of musical meaning.

Hanslick begins his discussion with the question, "Does music represent feelings?" He conceptualizes feelings/emotions as very complex, involving memories of contrasting emotions, as well as physiological and conceptual/intellectual aspects. However, he identifies the *intellectual* aspects of a feeling as the feeling proper. He first argues that feelings are connected with specific conceptions. For example, "The feeling of hope is inseparable from the conception of a happier state which is to come." He then states:

On excluding these conceptions from consciousness, nothing remains but a vague sense of motion which at best could not rise above a general feeling of satisfaction or discomfort. The feeling of love cannot be conceived apart from the image of the beloved being, or apart from the desire and the longing for the possession of the object of our affections. *It is not the kind of physical activity but the intellectual substratum, the subject underlying it, which constitutes it love* (267, emphasis mine).

Given this distinction between the bodily and intellectual aspects of emotions, and the identification of the emotion proper with the intellectual, Hanslick can conclude, "Definite feelings and emotions are unsusceptible of being embodied in music" (266).

Hanslick does not deny that the dynamic (or physical/physiological) properties of emotion can be represented in music:

[Music] may reproduce the motion accompanying physical action, according to its momentum: speed, slowness, strength, weakness, increasing and decreasing intensity (268).

He also states that, although music does not *represent* feelings, it nonetheless can *awaken* them in the listener (267).

Although Hanslick admits that music *can* represent the dynamic aspects of feelings, he continues by arguing that, as “subjects,” the dynamic aspects of feelings are not actually *in* the music. All that the music actually embodies is musical movement that plays out in various formal and rhythmic ways. For instance, part of his description of Beethoven’s *Overture to Prometheus*:

[T]he notes of the first bar, after a fall into the lower fourth, rise gently and in rapid succession, a movement repeated in the second bar. The third and fourth bars continue in wider limits. The jet propelled by the fountain comes trickling down in drops, but rises once more, only to repeat in the following four bars the figure of the preceding four (271).

Hanslick identifies this kind of musical motion as the true subject of music.

Any subject other than the one alluded to [the example above] we absolutely fail to find *in* the theme, and still less could we state what feeling it represents or *necessarily* arouses in the listener (271, emphasis mine).

He goes on to say that this is true for all examples of instrumental music.

To summarize Hanslick’s argument thus far, music *can* represent the dynamic, physical aspects of feelings, and arouse feelings in listeners. However, since a specific piece of music *does not necessarily* arouse the same feeling in different listeners, the subject of musical representation *is not* the actual feelings that listeners experience. Instead, the subject of musical representation is dynamic motion in sound.

Hanslick calls dynamic motion in sound “musical ideas,” which originate in the composer’s imagination:

The object of every art is to clothe in some material form an idea which has originated in the artist’s imagination. In music this idea is an acoustic

one; it cannot be expressed in words and subsequently translated into sounds (292).

This statement would suggest that Hanslick believes that the musical sound *re-presents* and therefore *refers the listener to* a specific musical idea that exists in the mind of the composer previous to the actual musical sound.

However, Hanslick rejects outright the notion of reference to the composer's state of mind.

[W]e shall find that the thrilling effect of a theme is owing, not to the supposed extreme grief of the composer, but to the extreme intervals; not to the beating of his heart, but to the beating of the drums; not to the craving of his soul, but to the chromatic progression of the music. [...] [W]e must remember that a scientific inquiry into the effect of a theme can deal only with such musical factors as have an enduring and objective existence, and not with the presumable state of mind in which the composer happened to be. The conclusion reached by arguing from the composer's state of mind directly to the effect of the music might, perchance, be correct; but the most important part of the syllogism, the middle term, i.e., the music itself, would thus be ignored (294).

Hanslick thus severs the *necessary* referential link between the musical sound and the composer's state of mind. Once he has severed this link, he shows the whole representation schema to be moot to the question of finding out how music affects listeners.

Although he does not use the terms, Hanslick seems to prefer the presentation schema.³¹

³¹ Since Hanslick does not give a specific term to his schema, except to say that it is *not* representation, a number of different terms might apply. However, for the sake of argument, since Langer *does* use "presentation" (below), I have chosen to use "presentation." Hanslick's argument could equally apply to the schema of embodiment, in which music embodies patterns of motion, which I will develop in the next two chapters.

Every art sets out from the sensuous and operates within its limits. [...] [O]ur imagination, which is so constituted as to be affected by auditory impressions [...], delights in the sounding forms and musical structures and, conscious of their sensuous nature, lives in the immediate and free contemplation of the beautiful (290).

“Presentation” does not inherently involve the levels of mediation involved in “representation.” Music that “presents” does not act as a medium for conveying something other than itself. It may be engaged with in and of itself. Hanslick recognizes that representation logically *requires* that music be a medium for re-presenting a subject, pointing the listener away from the music and toward the subject. As the above quote shows, he does not experience music as a sign that indexes something else more important. Rather, music’s importance lies in engaging with it in and of itself.

In the preface to the seventh edition of this book, Hanslick makes it clear that he thinks of music as something like an expressive presence, rather than a representation. He protests against critical characterizations of previous editions of the book that suggest that he believes that “music is absolutely destitute of feelings.” The main point of his book, according to Hanslick, was to protest the “widely accepted doctrine that the office of music is ‘to represent feelings.’” He explains with an analogy:

The rose smells sweet, yet its subject is surely not the representation of the odor; the forest is cool and shady, but it certainly does not represent “the feeling of coolness and shadiness” (4).

The rose *is* a presence of sweetness, the forest a presence of cool shadiness.³²

³² Or the rose embodies the quality of sweetness, the forest embodies the quality of shadiness.

Hanslick then takes a clear stand *against* the idea that representation has anything to do with “the beautiful in music.”

It is no mere fencing with words to protest most emphatically against the notion of “representation,” because this notion has given rise to the greatest errors of musical aesthetics. To “represent” something always involves the conception of two separate, distinct things, one of which must first be given, by a specific act, as explicit relation of reference to the other (Langer’s translation, 657).

LANGER ON PRESENTATION/REPRESENTATION

In her direct reply to the quote above, Langer protests:

His statement of the conditions for representation can, of course, be challenged in the light of a better knowledge of symbolism. What he says applies generally to literal, especially to scientific, expression; but it is not true of some other modes, which serve rather to formulate knowledge than to communicate its finished products (657).

Langer protests that Hanslick’s analysis of the representation schema states does not apply to her understanding of symbolic expression, which is more nuanced than mere literal referential representation:

[M]usic is ... *formulation and representation* of emotions, moods, mental tensions and resolutions – a “logical picture” of sentient, responsive life, a source of insight (654).

However, as I stated earlier, her explanation of the process of symbolism *does* involve the representation schema, exactly as Hanslick describes it, even though she raises it to a higher level of abstraction.

The first step of the conduit-representation schema is to pack meaning into a form. According to Langer, using his “artistic perspective,” a composer distances and

objectifies his own personal emotional experience and composes the distanced and objectified forms of emotion in music.

A composer not only *indicates*, but articulates subtle complexes of feeling that language cannot even name, let alone set forth; he knows the forms of emotion and can handle them, “compose” them (655, emphasis mine).

Music “indicates” (*refers to*) the non-personal forms of emotion that the composer has composed in the music. In this way, music becomes the “logical expression” of the forms of emotional life — “a ‘logical picture’ of sentient, responsive life....” Through the form of music, artistically distanced forms of feelings are “presented directly to our understanding, that we may *grasp*, realize, comprehend these feelings.” In this way, music becomes “a source of *insight*” into emotion for listeners (654, emphasis mine).

All of the logical requirements of the reference schema are present in this formulation — a presently existing object that refers to a pre-existing subject enters into the minds of listeners. Even though Langer seems unaware of it, as her protest of Hanslick’s analysis of the representation schema shows, she is still bound by that very same schema. She says that the schema does not apply to symbolic expression, but she clearly bases her exposition of symbolic expression in music on the very same schema.

However, all of that said, at the center of Langer’s formulation of the process of symbolic expression is an interesting inconsistency with the logic of the representation schema — the notion of direct presentation.

Feelings *revealed* in music are essentially not “the passion, love or longing of such-and-such an individual,” inviting us to put ourselves in that individual’s place, but are *presented directly* to our understanding,

that we may grasp, realize, comprehend these feelings, without pretending to have them or imputing them to anyone else (654, emphasis mine).

In direct opposition to her statement that “A composer ... *indicates* ... subtle complexes of feeling,” she describes the central moment of this experience as a direct presentation. Logically, *if* feelings can be “presented directly” to a listener, then those feelings must be *in* the music itself, not something that the music indicates. In direct presentation, no longer the medium for the message as required by the representation schema, the music becomes the message itself.

Langer’s use of the term “reveal” in the above quote points directly to the logical inconsistency of her argument. “Reveal” has a number of synonyms that she might have chosen: display, disclose, manifest, divulge, disclose, etc. However, she chose “reveal” in this case and consistently uses the same term to express the same idea. The etymology of “reveal” is *re-* (meaning back, backward as in “recall”) + *velare* to cover, veil. If the morphemes are taken literally, “reveal” means pulling back a veil. The biblical use of “revelation” employs this sense: made known through divine inspiration — the “veil” of mediation between human existence and divine draws back so that knowledge may be gained through direct, immediate presence of the divine. Thus, “reveal” indicates an engagement with “direct presence” in a way that none of its synonyms do.

And yet, at the same time, Langer’s formulation preserves the structures of the representation schema. If music “reveals” the logical forms of feelings, they must in some way already exist so that they can be seen when the veil is pulled away. The imagery of “reveal” suggests that the logical forms of feelings are not simply *in* the music

as it plays in real time. “Hidden” somewhere, perhaps in the composer’s mind, music, as a medium, reveals them.³³ Through her use of the term “reveal,” Langer herself reveals the tension in her argument between the representation and presentation schemas.

Langer seems aware of this tension on some level. In order to mediate it, she uses the concept “psychical distance.” At one and the same time, “psychical distance” unhinges the music from the personal realm of the composer and reattaches it to the personal realm of the listener. According to the concept of “psychical distance,” when composers objectify and distance their personal experiences, they *project* those emotions out of their personal, specific and concrete contexts. Although it removes the personal, thus making them non-personal, this projection from the ordinary does not make them general or *impersonal*, as the notion of “distancing” *might* imply.

The notion of “psychical distance” as the hall-mark of every artistic “projection” of experience, ... does not make the emotive contents typical, general, impersonal, or “static” (655).

Instead, by removing the distractions of the personal contexts, “distancing” makes these experiences more *directly* conceivable, more directly present:

[Distance] makes them *conceivable*, so that we can envisage and understand them without verbal helps, and without the scaffolding of an occasion wherein they figure (as all self-expression implies an occasion, a cause — true or imaginery [sic] — for the subject’s temporary feelings.) (655).

³³ Note the suggested connection between music as a medium and a psychic or spiritual medium.

Although Langer does not use these terms, she implies that rather than making personal experiences general, “distancing” in artistic perspective “purifies” the experiences to their essences.

Encountering these artistically conveyed essences, listeners (which includes the composer/player) can “grasp” them in a more direct manner. Because of that directness, the experience can feel, to the listener, extremely personal. Langer quotes Bullough:

[D]istance does not imply an impersonal purely intellectually interested relation.... On the contrary, it describes a *personal* relation, often highly emotionally colored, but *of a peculiar character*. Its peculiarity lies in that the personal character of the relation has been, so to speak, filtered. It has been cleared of the practical, concrete nature of its appeal... (655-56).

The concept of “psychical distance” is an ingenious solution to the problems caused by using both representation and presentation schemas at the same time. It detaches representational reference from the subjective, personal life of the composer (although Langer reattaches it to a hidden “content” that is “revealed”).³⁴ It nullifies the referential action of pointing away from music to a subject and allows the listener to bask in direct presence. It “purifies” personal experience to its “essence” (my terms) so that it can be experienced *more directly*, not mediated by specific context or by the structures

³⁴ “‘Psychical Distance’ is simply the experience of apprehending through a symbol what was not articulated before. The content of art is always real; the mode of its presentation, whereby it is at once revealed and “distanced,” may be a fiction’ (656). Langer’s use of “a fiction” is unclear, both out of context as I have presented it and in its original context. Given the first part of her sentence “The content of art is always *real*,” it would seem possible that she means that the mode of presentation may be *unreal* or *untrue* (fiction, as opposed to non-fiction). However, her next statement, “It may also be music, or, as in the dance, motion” makes it seem that she does not mean that the mode of presentation is unreal or untrue. She simply means that one mode of presenting the content of art is through fictional stories. Alternatively, she may mean that the mode of presentation is a “fiction” in the sense of “something invented by an imagination.”

of the representation schema. As a bonus, it manages to mitigate against the construal of meaning in the conduit metaphor as purely intellectual, since experiencing the directly meaningful essences of emotional experiences would be highly moving.

With the concept of psychological distance, Langer manages to preserve the terms of the conduit metaphor (she uses them freely, especially form and content) but seemingly escape their bounds at the same time. She has at her access all of the logic and terms of both the representation and the presentation schemas. However, even though she has both schemas at her disposal, in the final analysis, the presentation schema is primary. As much as she criticizes Hanslick, quite vehemently at times, *on a concrete level*, she seems to be saying very much the same thing: that music is not a personal expression of the composer, but that it *is* expressive in nature and it affects listeners in a very personal way.

ADDIS ON PRESENTATION/REPRESENTATION

In *Of Mind and Music* Laird Addis, who characterizes his work as an extension of Langer's, also displays the tension between the schemas of "presentation" and "representation." However, he mediates this tension differently than Langer does. Langer begins with a representation schema, nuances it with the notion of "psychical distancing," and in general characterizes music as a "presentational" symbol rather than "representational."³⁵ While Langer manages to circumvent the logical tension between

³⁵ Note, however, that, because Langer's understanding of "symbolization" is entangled with the representation schema, the term "presentation symbol" entails *both* the presentation and representation schemas.

the presentation and representation schemas with relative ease and elegance with a single mediating concept, Addis does not. He tries to negotiate between them by redefining “representation” so that it subsumes “presentation.” This strategy creates a very complex argument, since the distinction between the two schemas is simply blurred, rather than mediated with a clear structure or pivot concept. In my brief presentation of his argument, I can neither do justice to its complexity, nor to all of the nuances he displays in his discussions of specific key terms.³⁶

In his third chapter, “Representation,” Addis presents his rationale for choosing the language of “representation” over “presentation.” As he sees it, the word “representation”

has its disadvantages, especially in its suggestion that whatever is doing the representing somehow only “again” or “indirectly” brings before the mind something that could be simply presented. This is a disadvantage for two reasons...:

- 1) [I]n the fundamental form of representation, which is that of consciousness itself, there is of necessity no distinction between presentation and representation except in an altogether different sense. Indeed, to regard consciousness itself as a form of representation ... invites unfortunate associations with theories of perception known as representationalism ..., which are rightly discredited for positing some kind of intermediary, whether called an “idea” or a “sense” or “sense data,” between the act of awareness and its object.

³⁶ As I see it, due to the fact that he is working within a system of logic and terms that does not suit what he is trying to understand, despite his clear intelligence, Addis sometimes contradicts himself without even realizing he has done so. In addition, these conditions (the necessity of remodeling structures of thought that do not relate well to the subject of thought) create an argument that is overly complex, quite frankly frustrating to read and make sense of, and ultimately unsatisfying. Although it demonstrates his command of the philosophical concerns, it neither rings true to experience nor satisfactorily explains experience.

- 2) Langer herself characterizes symbols in the arts as “presentational,” contrasting them, to be sure, not with “representational” but with “discursive” symbols (33).

However, according to Addis, the term “representation” has two advantages that override its disadvantages:

- 1) The main advantage to the language of representation is its indifference to the notion of truth. Paintings represent people and ruins and bowls of fruit without thereby being either true or false. Representation as such is not assertion or affirmation, although ... one can assert that a certain representation is or is not faithful to its object or that its object does or does not exist.³⁷
- 2) The other relevant advantage is that, in anthropological fact, the language of representation is the broadest and most common (33-34).³⁸

Given the above recognition that “representation” is problematic, Addis must, of course, redefine it in order to overcome those problems. He describes three problems that must be overcome: 1) representation’s indirectness of reference — the fact that the representation schema is inherently three term, with a sign that represents a subject to a person — when a simple two term relation, like presence, might suffice; 2)

³⁷This concern with truth or falsity is probably connected to the fact that not everyone who hears a specific musical piece will characterize it in the same way. The same piece may seem sad to person A but not to person B. If we think that the music “presents” sadness, then person B can say that the statement “the music presents sadness” is false. If we think that the music “represents” sadness, person B can only say that it is a poor representation. This point of view, of course, totally disregards what person B actually *does* experience upon hearing that music. The strategy inherent in this concern with truth or falseness is not aimed toward explaining the experience of *everyone* who hears a particular piece, but toward *defending* a specific, individual interpretive experience of the piece. An adequate account of musical meaning would be able to explain multiple interpretations, so that persons A and B could better understand each other’s interpretation and each would be valid, within constraints made clear in the account. In addition, an adequate account of musical meaning would include a description of the *constraints* on the meaning process, so that it would be possible to explain why some interpretations ring true and others strike insiders to the system of meaning with a resounding thud.

³⁸ It probably goes without saying that while I agree that the language of representation is quite broad and common in this literature, in and of itself, this fact does not particularly recommend it as an epistemological tool.

representation's inherent repetition in time/space of something that has already existed in another time/space and 3) its inherent involvement in levels of mediation not apparent in presentation.

Addis solves these problems with his general definition of representation, which reverses the direction of the action of the representation schema, in which the sign points away from itself to its meaning, to a direction of action that is more like the presentation schema, in which the sign (or presence) calls the attention of the observer to itself.

A representation is anything whatsoever that serves to *bring to mind*, in either conscious or unconscious awareness, something (whether existent or not) other than itself (35).

Addis' action of the sign, described in the terms "brings to mind," is more like that of a presence which, in "calling forth" to an observer's attention, *does* bring itself to that observer's mind. The only difference in action between Addis' sign and that of a presence is that the sign brings something *other than itself* to the attention of the observer.

In addition, Addis' definition of representation remodels its schema to be more like presentation by creating a two-term relationship from a three term one.

"Presentation" involves two terms: 1) a thing and 2) a person's awareness of that thing, which in objectivist thinking would be cast as a "mental representation" of the thing present. "Representation" usually involves three terms: 1) a sign, which refers to 2) a subject/object, and 3) an awareness, *through the sign*, of the subject/object. By defining a representation as "anything that serves to *bring to mind* ... something other than itself,"

Addis conflates the subject/object with its mental representation (similar to Saussure's *signifiant* [signifier]-*signifié* [concept signified], and unlike Peirce's object-sign-interpretant). In other words, his schema accounts for the sign ("anything that serves") and interpretant ("to bring to mind something other than itself"), but not the object.

This conflation creates many problems. For example, if you interpret the schema in this definition literally, a representation of a cat can bring an *actual cat* into the mind of the observer. Additionally, it allows for the members of strings of free association to serve as representations of one another. For example, since cup → (brings to mind) saucer → milk → cat → dog → hair → brush → comb → cock → barnyard → barn → red → blue → sky, etc., each word would be the representation of the one following it, since the first brought the second to mind. In addition, this definition would allow the sensation of hunger to be a representation of a particular food, since the hunger brought the food to mind. Having read the rest of his argument, I doubt seriously that Addis intended to set up a definition of representation that would admit these kinds of examples. Presented with my analysis, he might protest that he did not intend the interpretation I have given. However, without giving voice to its problems, he takes full advantage of this definition.

The definition serves the purpose of overcoming the problems with representation noted earlier. The first problem he noted with "representation" is that "whatever is doing the representing somehow only 'again' or 'indirectly' brings [something else] before the mind...." By conflating the subject/object and the mental

representation, he solves both the problem of necessary repetition of one by the other *and* the problem of indirectness of reference. Since the subject/object “out there” is not explicitly a part of the schema, the representation can bring the mental representation directly to mind. With this definition, “anything that serves to *bring to mind ... something other than itself*,” Addis also manages to rid himself of unwanted levels of mediation, since the action of “bringing to mind” is direct in a way that referring outward in order to bring to mind is not.

In addition to allowing Addis to overcome his initial problems with “reference,” this definition allows him to create a typology of reference that includes two types that involve three terms (conventional and quasi-natural) and one that involves only two terms (natural). He does not explain how he can logically move from a two-termed general definition to three-termed specific types. He just does it, which suggests that he did not realize that his general definition is two-termed, because he generally is careful in his argument to address such problems. However, its unexplained nature is not the main problem with this move. The main problem is that, even though he proposes two different types of three-termed representation, they are based on the general definition, which suggests the presentation schema in all its directness. He simply conflates the two schemas, using the parts of each that are convenient to his argument and ignoring the logical contradictions involved.

Beyond this chapter on representation, however, in presenting the answers to the question that framed his whole argument, Addis uses the term “presentation.”

The quasi-natural signs that music contains on my account *present* to us those states of consciousness that are the having of emotions, the being in certain moods, the awareness of sensations and (possibly) other kinds of awarenesses. Music does so by having the forms and contents it does have and it *presents* both the forms and the contents of those kinds of states of consciousness (75, emphasis mine).

Although Addis insists on using the language of representation, in the final analysis the language of presentation prevails.

DISCUSSION OF PRESENTATION/REPRESENTATION

Both Langer and Addis manage, although in different ways, to mediate between two schemas that are logically incompatible. The logical tension central to these arguments requires a great deal of intelligence and creativity to overcome. This strategy of combining the incompatible creates very intricate arguments fraught with the possibility of logical inconsistency. The strategy requires redefining words that mean not only through iconic matching of their dictionary definition or their morphemes, but also through metonymic access to entire logical schemas. It asks too much of a reader to require them to keep in mind a new dictionary definition while at the same time, they are unable to erase the metonymic activation in themselves of familiar logical schemas. It is very confusing to keep in mind that $A = B$, when the experience that is recorded in you, body and mind, tells you that $A = A$. As the common phrase, "I've got a feeling in my gut that something is wrong with this argument," shows, the gut often knows the problems in an argument before the mind does. In the final analysis, combining the incompatible does not serve to explain to the reader, but rather to index the intelligence and creativity required to create the argument.

If combining the two schemas is not the answer, what is? Choosing one of these two schemas or finding another. Even though two of these three writers tried to incorporate the representation schema, they all ended up using presentation. It simply fits the experiential evidence better than does representation. Music *does* call forth to listeners. They attend to the music itself, not to something beyond it that it refers to.

Even so, I do not particularly like the presentation schema either. This schema paints music as a thing present in front of the listener that he then takes into himself. This portrait does not fit my experience particularly well, since it suggests both that music is a static object and that a spatial gap exists between the music and myself that must be overcome. To be sure, a spatial gap exists between the *source* of the music and myself, and that spatial gap inheres in the experience of hearing music in that I can locate the source outside myself in a particular place. But when I am “into” the music itself, I am not particularly aware of its source and the sonic experience of the music is entirely immediate. Music invades me and becomes a part of me in a way that a “present thing” could not. It is not a “thing” “out there”; rather, it lives *in* and *through* me.

The presentation schema is based on visual experience, more than aural experience. Seeing involves a gap between the seer and the seen. Indeed, if something is too close, it must be pulled away so that the eyes can focus properly. Stephen Handel describes the different relationships between world and person created by listening and seeing:

Listening puts me in the world. Listening gives me a sense of emotion, a sense of movement, and a sense of being there that is missing when I am looking. I am more frightened by thunder than by lightning, even though

I know that thunder is harmless and lightning is deadly. I feel far more isolation living with ear plugs than living with blinders. Listening is centripetal; it pulls you into the world. Looking is centrifugal; it separates you from the world (xi).

When I “get into” music, I feel a merging with the music, an immersion in it that does not match the “thing before oneself” aspect of the presentation schema. It is true that music calls for my attention, but once I give my attention over to the music, it no longer seems like a presence out there, but rather an internal activation of parts of myself that cannot be activated in the same way without music. In short, the music plays me.³⁹

In the next two chapters I will propose a schema with epistemological metaphors based on aural and tactile experience that accounts for the sense of being played by music. In addition to accounting for the prototypical listening situation — listening attentively to a concert or recording — this schema can also account for those situations in which music is background, but still affects mood.

Having shown the tension between presentation and representation, I now turn to reference, which is a logical entailment of representation.

³⁹ Gadamer (1982) relates the merging of self with a work of art with its mode of being, which he likens to the mode of being of play. He finds that the sense of “play” that stays consistent across its different uses (play of light and dark, play of forces, play on words) is a “to-and-fro movement which is not tied to any goal which would bring it to an end. ... The movement which is play has no goal which brings it to an end; rather it renews itself in constant repetition. The movement backwards and forwards is obviously so central for the definition of a game that it is not important who or what performs this movement” (93). Thus, Gadamer wrests agency from the players and gives it to the game. “The structure of play absorbs the player into itself, and thus takes from him the burden of the initiative” (94). “[A]ll playing is a being-played” (95). Csikszentmihalyi (1982) relates the merging of self with art to the psychological state he calls “flow,” in which an individual experiences a level of challenge roughly equal to his skills (17). This roughly equal ratio produces optimal experience in which action merges with awareness and self-awareness dissipates (22).

Music as Referential

Representation entails the notion that meaning arises through reference. However, as the above confusion between “representation” and “presentation” demonstrates, experientially, music does not *seem* to refer to something other than itself. Instead, it calls attention to itself. Nevertheless, scholars who write about music still sometimes raise the issue of reference in relation to musical meaning.

Given their positions on representation, the position of those writers whom I discussed above is fairly easy to predict. According to Hanslick, who does not believe music represents, music and other arts can *infer* wider realms of experience, but that those wider realms of experience are not the referred-to *subject* of the art, in the sense that they the art *represents* them (268). Through the process of symbolization, Langer believes that composers both indicate (refer to) and articulate “subtle complexes of feeling that language cannot even name” (655). Addis centers his discussion on representation and acknowledges that representation entails reference, since he refers to representation as “the domain of *reference*, symbolism, aboutness, intentionality, and ofness” (33, emphasis mine). However, he does not treat reference explicitly.

Cooke’s position is rather contradictory. Although he rejects, with some exceptions, the notion that music is a representative art, he also believes that it expresses the composer’s subjective experience, as well as universal emotion.

[M]usic is, in fact, ‘extra-musical’ in the sense that poetry is ‘extra-verbal’, since notes, like words, have emotional connotations; it is, let us repeat, the supreme expression of universal emotions, in an entirely personal way, by the great composers (210-11).

In the way that Cooke uses it, “expression” entails reference. If he only claimed that music expressed universal emotion, we might be able to see music as simply “expressive” of certain qualities that awaken emotion in listeners. That kind of “expressiveness” does not entail reference. However, since he insists at length (189-203) that this is a personal expression, logically, the music refers to the subjective lives of the composers.

MEYER ON REFERENCE

Of these authors, Meyer treats reference most directly and at greatest length. He uses it to distinguish between different kinds of musical meaning: music that refers outward to aspects of the extramusical realm and music that refers only to other aspects of the intramusical realm. He then constructs a complex schema of intramusical reference that consists of a musical stimulus, a listener’s expectation, and a musical consequent.

Meyer distinguishes between absolutists and referentialists. This distinction focuses on the boundary between intra- and extramusical, and the nature of musical reference within those systems. Absolutists believe the meaning of music lies totally within the musical realm, in the perception of musical relationships, i.e., that musical meaning is “purely” musical in nature. In contrast, referentialists believe that although musical meaning *may* be “purely” musical, it may *also* refer to the extra musical world of “concepts, actions, emotional states, and character” (1).

Meyer later clarifies the differences in the nature of *reference* (indication) in these two positions.

A stimulus may indicate events or consequences which are different from itself in kind, as when a word designates or points to an object or action which is not itself a word. Or a stimulus may indicate or imply events or consequences which are of the same kind as the stimulus itself, as when a dim light on the eastern horizon heralds the coming of day (35).

The referential position entails musical elements that indicate something different from other musical elements. The absolute position entails musical elements that indicate other musical elements.

Meyer states that he believes that both kinds of reference may occur. However, his theory only deals with intramusical reference. In speaking about intramusical reference he does not use the term “refer” but rather “indicate.” In fact, he uses no terms that suggest the representation schema. Instead, he uses terms borrowed from behaviorist psychology: stimulus-response.⁴⁰ The music becomes a stimulus, to which the listener responds.

What, then, is the nature of reference (or indication) in the stimulus-response schema? How can a stimulus indicate events? In a simple stimulus-response schema, the only way that the stimulus points is toward the person being stimulate. Central to the stimulus-response schema is the stimulus, which etymology links to “stylus.” In all of its meanings — writing or marking instrument, needle, or tool for cutting grooves in vinyl records — “stylus” relates to an object with a sharp point. Etymologically speaking, that sharp point of “stylus” metonymically transferred to “stimulus.” If a stimulus is, indeed, a sharp point, then it literally points at the person. In addition, even if not

⁴⁰ This language is not surprising, given the fact that behaviorism was in its prime while Meyer wrote this book.

literally a sharp point, it indicates a subsequent response from the person. In either case, the stimulus points toward the person, not toward a non-human event.

However, Meyer's stimulus seems to point not to the observer, but to musical events, which he calls the "consequent." His schema of indication is more complex than a simple stimulus-response schema. Even though he does not use terms from the representation schema, he melds the stimulus-response schema with Peirce's familiar semiotic triad, which is consistent with the representation schema: meaning is a triadic relationship between object, sign and interpretant (which occurs in a conscious observer).⁴¹

Meaning ... is not in either the stimulus, or what it points to, or the observer. Rather it arises out of ... the "triadic" relationship between (1) an object or stimulus; (2) *that to which the stimulus points — that which is its consequent*; and (e) the conscious observer (34, emphasis mine).

This complex formulation alters the temporal aspect of the representation schema and also appears to change the nature of the stimulus. Rather than being something that stimulates the observer directly, the stimulus is treated as if it were a sign that refers. However, that sign does not refer to something that exists *before* it in time (Peirce's object), but to something that will exist *after* it ceases to exist — the consequent. Temporally, the consequent is similar to the mental representation (or "interpretant") of the usual representation schema, since it occurs *after* the musical stimulus, just as the

⁴¹ Meyer does not attribute this schema to Peirce, but to Cohen and Mead. He does not provide a citation or a bibliography, so I do not know if there is a connection between Peirce and Cohen and Mead. However, Peirce writes extensively of triadic relationships of meaning.

mental representation occurs after the sign. Nevertheless, as stated above, it is not a mental representation but a musical sound.

However, with the introduction of “expectation,” it becomes apparent that Meyer’s schema is more complex than the above description suggests. “Expectation” makes it clear that what occurs consequently to the stimulus is not only a specific, concrete musical sound, but a mental representation of that possible sound, as well. Through conditioning, the listener learns to expect certain musical sounds to follow others.⁴² If Z very often follows Y, then the listener comes to expect Z after Y. When Y is heard, it stimulates an *expectation of Z: a mental representation* that suggests the strong possibility of Z. With the addition of expectation into the schema, its time-line becomes stimulus — expectation — consequent (which either satisfies the expectation or frustrates it).

Adding expectation into the schema clarifies Meyer’s use of “stimulus” above, where “sign” seemed more appropriate. In Meyer’s complex formulation, “stimulus” becomes multivalent. From the point of view of an objective observer, the musical stimulus excites in the mind of the listener the possibility of a certain musical relationship — an expectation. From the point of view of the listener, who attends more to the music than to his responses to it, the musical stimulus simply points to the possible consequent.

In summary, Meyer’s schema of intramusical meaning involves a triadic relationship between 1) the musical sound, which stimulates 2) the listener’s expectation,

⁴² Note again the connection to behaviorism in this definition of learning as conditioned response.

based on past experience that 3) a specific musical consequent will occur. As he states it,

If, on the basis of past experience, a present stimulus leads us to expect a more or less definite consequent musical event, then that stimulus has meaning.

From this it follows that a stimulus or gesture which does not point to or arouse expectations of a subsequent musical event or consequent is meaningless (35).

With this complex schema, Meyer explains how music means in the intramusical or, as he sometimes terms it, the “purely” musical realm.⁴³

DISCUSSION

The question now becomes how “pure” is this musical realm? What and where are the boundaries of the “purely” musical? Of the music “itself,” it might be relatively easy to draw the boundary at the particular playing that the listener hears. It is not so easy to draw boundaries around the listener, though. What is the nature of the listener and what parts of himself does he bring to the task of making music mean? Meyer sums up the listener’s part in the term “expectation,” which he says arises from past experience with music, experience that he casts as a conditioned response. He characterizes

⁴³ Zuckerkandl’s concept of “dynamic qualities” refers intramusically in a way that is coherent with Meyer’s account. Recall that, according to Zuckerkandl, in a tonal context, each scale step has its own particular dynamic quality in relation to the tonic: “a state of disturbed equilibrium, as a tension, tendency, almost a will” (19). In other words, each scale step points toward the tonic, but in a way unique to that particular scale step. “It is this different gesture, which gives each tone its particular and distinctive dynamic quality, which sounds in it and which we hear in it, when we hear it as a tone in a melody. This and nothing else is the content, the meaning, of its utterance, its musical meaning” (35). The difference between Meyer and Zuckerkandl is that Meyer’s schema locates the referring power in the interaction between the listener and the musical sound, while Zuckerkandl locates it in the “supermaterial” world.

expectation and learning as mental in nature. This characterization suggests that he would draw the boundary of the “purely musical” aspect of human beings between the mind and the body.

Meyer does raise the possibility of bodily involvement in the process of musical meaning, but ultimately rejects it.⁴⁴ Referring to the body’s part in musical meaning as “anticipatory motor attitudes,” he identifies a correlation between the kind of motor attitudes that a listener experiences and the kind of music being listened to.

Motor attitudes and responses involve the voluntary muscle system, and, aside from a general tensing of the muscles related to all feelings of effort, of which listening to music is a special kind, they are more or less specific to particular styles and forms and tend to change with changes in the stimulus conditions (79).

However, Meyer does *not* relate the correlation between music and motor response to any kind of *direct* connection between body and music, but to the following kinds of *clues*, which provide less direct means.

Anticipatory motor attitudes [...] are brought into play on the basis of: (a) information as to composer, style, or form which leads the listener to expect a repetition of past motor experience evoked by the particular type of work; (b) program notes or other statements as to tempo, volume, mode, mood, and so forth that supply information as to the appropriate motor attitude; and (c) visual clues provided by performers in the form of gestures and postures, which lead the listener to assume a like attitude... (79).

⁴⁴ Charles Keil (1994 [1966]) also critiques Meyer’s dismissal of the body’s part in musical meaning. He links Meyer’s dismissal of the body with theoretical notions of music as form and product and offers a complementary view gleaned from his experience with jazz. From the point of view of lived, bodily meaningful experience of jazz, Keil offers a complementary view of musical meaning — one that is more processual and feeling in nature. He argues that this embodied view of meaning from jazz is more likely to be applicable to many world musics, since they, too, tend to be more improvised and spontaneous than Western art music. I would suggest that much of Keil’s view applies to Western art music as well as it does to jazz, since it remedies the lack of body in Meyer’s work.

Meyer does not address what grounds these connections — how they can be made in first place. The third clue — visual entrainment with the performer’s gestures — does not need further grounding. Human beings are “wired” to entrain with people and other events around them, as the dance of entrainment that occurs between parents and their babies shows. However, in reference to a) expectations based on repetition of past motor experience evoked by the same style and b) program notes that suggest the appropriate motor attitude, I would ask, What grounds these clues to begin with? In the learning of style, how does one ever experience a motor response in the first place? If motor response is based solely on past learning, then it has no way to arise in the first place. In regards to program notes, how does one know what motor attitude is *appropriate* to a given program? What grounds the connection of appropriateness?

One might think that the two problematic “clues” are grounded in the one that is not: bodily entrainment with performers. Even if this is partially the case, I do not believe it can explain bodily involvement in musical meaning in its entirety. Most of the movements that performers make relate mainly to sound production and so are constrained by the physical act of playing their particular instrument. Some visual aspects of the sound production match the actual sound, others do not. If it were possible to turn off your hearing and predict what the music sounded like from visual clues only, certain aspects of the musical sound might be apparent, others would not. Most concretely, you can see the beat, and through it, the tempo. You can sometimes force and momentum through the specific kinds of movements made to produce tone and

body swaying, respectively. If you viewed force and momentum in combination, you might be able to see the general tenor of the music — if it is calm and soothing or fast and aggressive. However, a great deal of the musical “landscape” would be difficult to predict, especially aspects related to “up” and “down,” volume, line, texture, and harmony. In fact, instrumentalists sometimes produce “up” and “down” in music by moving sideways on their instrument or even in the opposite direction: down for “up,” etc. These aspects of music, especially “up” and “down” are a part of “anticipatory motor attitudes.” If they can’t be grounded by looking at performers, how are they grounded?

My answer to these questions, developed in the remainder of this dissertation, is that our understanding of music is grounded in metaphors based on aspects of bodily experience in the world, like motion through space and experience with fluid substances. These metaphors ground the connection between music and motor response. For instance, the bodily response to a high, fast, sparsely textured flute piece like the scherzo from Mendelssohn’s “Midsummer Night’s Dream” feels “light” and “airy” because we understand the flute sound to be moving in the higher levels of musical space and because, since its motion is fast and fluid, its “body” must be light and responsive.

Even though Meyer raises the issue of bodily engagement in the meaning process, he ultimately evaluates its importance as secondary to and uninvolved with mental engagement.

In conclusion we may say that there appears to be nothing autonomous and independent about the motor response to music. Everything which occurs as a motor response can be accounted for in terms of mental

activity and, since the converse of this is not true, music is best examined in terms of mental behavior (82).

Meyer's understanding of the relationship between body and mind is true to the objectivist frame. The body is not properly part of the equation and therefore is excluded from the "purely musical."

This exclusion of the body creates the conditions for the false dichotomy — between intra- and extramusical realms — on which Meyer bases the absolute/referential distinction. If, as I have suggested above and will argue in the remainder of this dissertation, embodied experience in the world grounds the understanding of intramusical meaning, then no clear line exists between intra- and extramusical. The "purely" musical simply does not exist. Absolute music may not refer directly to the outside world, but it is nonetheless inextricably linked to it through its grounding in listeners' embodied experience. If we recognize the bodily grounding of musical meaning, then the falseness of the intra-/extra- dichotomy becomes clear.

A stance that includes the link between musical meaning and embodied experience in the world does not require this false dichotomy. Briefly, because this music is grounded in metaphors of lived, bodily experience, it can embody patterns of that experience and evoke them in sound. Listeners may relate those patterns to a specific program, thereby allowing them to invoke that program in their memory. Or they may allow the patterns to invoke what they will, without links to anything specific. Although music may refer to a program, it does not *represent* that program, but rather

evokes it. This kind of meaning is not tied to reference, but to evocation of patterns of lived experience in the listener. I will develop this further in later chapters.

Although Meyer is still clearly thinking within the objectivist framework, with the notion of expectation he takes a major step outside that frame. It is a step toward an experiential account of meaning, in which meaning is characterized “in terms of *the nature and experience of the organisms doing the thinking*” or in this case, doing the listening (Lakoff 1987, 266, emphasis in original). Expectation takes into account the experience of the listener. However, since, as developed by Meyer, it excludes bodily aspects of experience, it does not take full account of the *nature* of the listener. Because of this exclusion, the only aspect of the listener that can resonate with musical meaning is the disembodied mind. I suggest that, although his account rings true to some degree, its disembodied nature is, in part, why Meyer’s account of musical meaning lacks the power to probe the great depths of the experience of musical meaning.

Objectivist thinking dictates that meaning is a matter of reference, an action that points attention away from the sign to its subject. As we saw in the section on representation above, a schema in which music points away from itself presents problems, since attention tends to be on the music itself. Meyer manages to create an account that is true to the experience of attending to music and not beyond it, but also maintains the idea that meaning is a matter of reference. Although his explanation rings true to some degree, since it is tied to reference, and reference that is entirely mental in nature, it accounts only for meaning related to feelings of satisfaction and surprise. He

does not account for reference that is bodily in nature, reference linked to its original meaning: *re + ferre* — to carry. Music can sometimes ferry a listener away to seemingly transcendental realms. Satisfaction and surprise do not sufficiently account for the intensity of this meaning. I will speak further of Meyer and the expectation schema in chapter three.

The Relationship between Listener & Music: Addis' "Timeless, Changeless Worlds"

The listener and music together form a system in which meaning arises. In the objectivist system of logic, the part is prior to the whole. Thus, good explanation requires an account of both how the parts *relate* to one another and how they *cohere* with one another in forming the whole. In the logic of objectivism, then, one might raise the issue of how listener and music *cohere* to form a single system.

The question of coherence is at the heart of Addis' argument. He explicitly locates "music" outside human minds: "Music is indubitably a *product* of minds; but, like most artifacts, it is ontologically independent of them" (57). In his preface, he states the main concern of his argument.

The main contribution of this study is to formulate and defend a theory about what might be called *the ontological affinity of mind and music*. Somewhat more precisely, it is sounds and conscious states that I assert to have the affinity, a kind of similarity that grounds the process whereby music represents to us certain emotions, moods, and other states of mind (xi).

Addis' concern with the coherence of listener and music can be seen in his use of the term "affinity" to relate mind and music. "Affinity" (*ad-* + *finis* end or border) suggests

the joining of two unlike things: a relationship by marriage (as contrasted with relationship by blood). It also refers to a force that attracts two things together. In his exploration of the affinity between mind and music, Addis follows the objectivist path of discovery — locate the building blocks, then find their essential natures thus discovering how they relate and cohere.

In order to answer the question of the relationship between listener and music, Addis redefines representation. Based on the general definition discussed above, he creates a typology of three kinds of representation. Note that, in this typology, he is most concerned with the natures of both the representation and its user. In other words, he is interested in what in their nature recommends them to each other so that they can relate to each other as representation-user.

A conventional representation is one in which there is nothing in the nature of the representation and nothing in the nature of its user that indicates or specifies or determines that it shall represent what it does represent. ... [A] *natural representation* is one in which the representation, by its inherent nature, determines both *that* and *what* it represents. Finally, “between” conventional and natural representation, a *quasi-natural* representation is one that, with respect to some species, is such that, given both the nature of the representation and the nature of the species, it does in *lawful* necessity represent what it does represent to the members of that species (35-6).

Addis calls music a “quasi-natural” representation, which means that “given both the nature of the representation and the nature of the species, it does in *lawful* necessity represent what it does represent to the members of that species.” His next move, as dictated by both this definition and the objectivist path of discovery, is to discover what

in the essential natures of music and listener (which he reduces to “states of consciousness”) creates this relationship of lawfully necessary representation.

In subsequent chapters, titled “Consciousness,” and “Time and Sound,” Addis explores the nature of both music and mind. In this exploration he tries to discover the *necessary* and *sufficient* conditions for the ontological existence of music and mind. Discovering necessary and sufficient conditions is the objectivist strategy for defining *categories*. According to Lakoff, “On the objectivist view, things are in the same category if and only if they have certain properties in common. Those properties are necessary and sufficient conditions for defining the category” (1987, xiv). Addis wants to find the ontological properties that mind and music have in common. He sets about discovering how they are in the same ontological category so that they are no longer separate components, but can be seen to relate and cohere. Thus, he looks for the *necessary* and *sufficient* ontological conditions for their existence.

Addis considers three conditions for existence: time, space, and change. Curiously, he does not consider any aspect of physical materiality to be a required condition for existence. He then makes various moves that question whether music and mind *require* these three conditions for their existence. In the process, he poses hypothetical worlds that are timeless and changeless and considers whether or not “sound” and “states of consciousness” (to which he reduces music and mind) can exist in them.

Having explored their necessary and sufficient ontological conditions, Addis argues that, ontologically speaking, both music and states of consciousness have an unusual relationship to time and change. First he reasons that “contrary to received opinion, *there can be time without change*. Change entails time, so to speak, but time does not entail change.” He suggests that this is so because sound can exist over time without change: “*(A)lone among physical phenomena known to us, sounds require duration but do not require change*” (68). He then notes that “[S]tates of consciousness too are such as to require time but not change” (69). According to Addis, this shared quality — to require duration but not change — creates the ontological affinity between states of consciousness and sounds that grounds their connection and the possibility of musical representation:

[S]tates of consciousness and sounds alone are such that, while they require time for their existence, they do not require change. This ontological affinity of consciousness and sound that sets them apart from everything else in this crucial regard suggests that, so to speak, consciousness might find in sound an “image” of itself not merely in the feature that we have just identified, but in more complicated ways as well (69).

Having thus placed sound and states of consciousness in the same ontological category, Addis continues his argument using that similarity as a philosophical base.

DISCUSSION

Setting aside a full discussion of the merits of this argument, my purpose is, rather, to show how the lack of fit between the experiential evidence and the objectivist framework both misconstrues the evidence and creates such roadblocks in the process of

discovery that arguments either become implausible or overly complex. In Addis' objectivist argument, in order to get at its *essential* nature, "music," which *embodies* change, is reduced to "sound," which Addis declares does not require change.⁴⁵ "Human beings," who also embody change, are reduced to "states of consciousness," which Addis declares do not require change.⁴⁶ In the process of making this argument, Addis poses the hypothetical existence of timeless and changeless worlds. He recognizes that neither of these conditions really exist on earth, yet he finds it necessary, in the course of an argument about a very earthly phenomenon, to take the argument "off world" to hypothetical worlds. This is a creative argument, but it reduces its subject beyond recognition and, in so doing, becomes overly complex and implausible.

In Addis' statement of purpose for his book, he promises to describe a similarity between mind and music, a "similarity that *grounds* the process whereby music represents to us certain emotions, moods, and other states of mind" (xi, emphasis mine). The question is, in this statement, what does he mean by the term "grounds?" As an intransitive verb, which is how Addis uses it, "ground" has three groups of meanings. 1) Members of the largest group relate to the actual, earthly ground: to bring to or place on the ground, to connect electrically with a ground, or to restrict to the ground. 2) A meaning clearly metaphorically related to these is "to instruct in fundamentals." Through the objectivist framework, this sense of "ground" means to give the foundations for subsequent structures of arguments or to instruct in how argument structures are tied to

⁴⁵ Of course, sound *does* require change, since air must vibrate in order for sound to exist.

⁴⁶ Although some experienced meditators may be able to reach an unchanging state of mental quietness, normal states of consciousness *do* entail change.

their logical bases. 3) The final sense of the term “ground” is “to provide a reason or justification for.” At first glance, this sense does not seem to relate to the more concrete senses. However, given the metaphor ARGUMENTS ARE STRUCTURES apparent in the second sense, it can be seen that “to provide a reason or justification for” means tracing an argument back to its logical bases. This is how Addis uses the term. He argues that the similarity between mind and music *provides a logical basis for the process of musical representation.*

However, in the process of looking for a basis, Addis grounds his own argument not in experience in physical reality, but in disembodied reason. In fact, on at least one occasion, he acknowledges that he ignores physical reality because that physical reality is “irrelevant” to his argument. He asks,

But can there really be time without change? Sounds that do not change their timbre or volume or pitch illustrate just that possibility. For a sound requires a duration yet may not involve any change (*except, again, in the irrelevant causal sense*) (68, emphasis mine).

The “again” of the last phrase above refers to the previous paragraph, where he dismisses as irrelevant the findings of physicists that the atoms and molecules of leaves move as the leaves change color.

Because he is looking for the necessary and sufficient conditions for the ontological existence of sound and states of consciousness, Addis feels justified in proposing hypothetical worlds and ignoring the real one. After reducing music and human beings to sound and states of consciousness, it does not seem such a stretch to ignore their fundamental material nature. Instead of *grounding* the connection between

music and human meaning in the world in which it exists and operates, he “grounds” it in the possibility of a non-existent world with duration, but without change. This argument may be grounded logically, although that is debatable, but it is utterly ungrounded existentially. The lack of existential grounding is ironic, given his goal of ontological grounding. In searching for the ground of their relationship, he has objectified music and human beings beyond their need to exist in the material world. It is a very odd and implausible turn, indeed. Although he is clearly intelligent, and uses his objectivist philosophical foundation and its epistemological tools in a creative manner, in the end, they lead him astray.

Conclusion

In this section, I have explored the effects of the objectivist framework on the ways that evidence is construed and arguments made. I have concentrated more in this section on the authors with more philosophical sophistication: the philosophers Langer and Addis, the music theorists Hanslick and Meyer. I did so because these authors apply the objectivist framework more rigorously and I wanted to show how the objectivist framework distorts both evidence and arguments, leading to unsatisfying results — implausible, overly complex, and without the power to account for much of meaningful musical experience.

I now turn to a group of authors who rely less on argument and more on experiential evidence and methodology. I want to explore what is effective in these approaches so that those elements might be adopted in a new approach.

Contrast of Musical and Psychological Approaches

The problems with Addis' ungrounded argument demonstrate the importance of choosing the ground of an argument, and the study it is based on, wisely. The ground of an argument/study constitutes both the starting point and the point to which the scholar may return again and again, to check and see if he is on the "right track" or if his work "rings true." The ground is an overriding concern that, when problems or contradictions arise, trumps other concerns. It is a point to be kept true to. For example, as is true of philosophers in general, Addis is concerned with logic and reason and so uses logic and reason as his touchstone. As we saw above, this ground made for an experientially and materially ungrounded argument.

What are, then, the different ways to ground an argument? What do scholarly arguments consist of? They begin with a phenomenon to be explained or accounted for. The phenomenon must be explored in some fashion and that exploration must begin from some point of view — a philosophical framework and its epistemology. As I have argued above, the framework and epistemology influence the way that evidence of the phenomenon is viewed — how it is construed, what is and is not acceptable. The framework and epistemology also influence the kind of logic used to view, interpret and

argue about the evidence. Allied with framework and epistemology is methodology, which dictates the way that evidence is gathered, interpreted and presented.⁴⁷

So where in all of this do we locate the ground of the study/argument? Certainly, all arguments have philosophical grounds, but as we saw with Addis, an argument based on the major concerns of philosophy — logic and reasoning — can easily become implausible. Should we ground the study/argument, then, in methodology or in the phenomenon to be explained? In the music theorists and the psychologists, we have good examples of both of these.

The music theorists — Cooke, Meyer, and Zuckerkandl — all ground their work in the phenomenon of music. They use many musical examples and in so doing, ask their readers to re-experience musical meaning, either through singing or playing the examples, or imaginatively. As a reader, I find this to be an extremely effective strategy. Even if I find problems with the logic, methodology or conclusions of their study/argument, if writers present examples that support their points well, it goes a long way toward convincing me that they have at least made some valid observations about musical meaning. I find these studies to be more interesting and enlivening to read.

⁴⁷ I am struck as I write this by how much of the language we use to speak of arguments is objectivist in origin. I have already noted the relationship of “framework” to objectivism, but even “evidence” is, as well: *evident* — *e-* out, on the outside + *vident-*, *videns*, prp. of *videre* to see. “Evidence,” the noun form of the adjective *evident*, cuts the flux of experience, what we “see” in our “exploration,” into something that can be grasped and gathered. What if instead of “evidence,” we spoke of “testimony,” which is given in the dictionary as a synonym for evidence? (Testimony: from *L. testis* witness.) For the phenomenon of musical meaning, we *are*, after all, dealing with “testimony” as evidence. “Testimony” actually situates the evidence we are dealing with in the voices of real, living people. It turns an objectified, visually oriented word into a subjective, aurally, bodily oriented one. Voices come from human beings with bodies, not from thin air.

Even if other aspects of their work are problematic, their observations ring true and provoke thought.

For example, even though Zuckerkandl's argument that dynamic qualities are located in a supermaterial world seems implausible to me, the idea of dynamic qualities rings true. As he explains it, the dynamic quality of a tone is "a state of disturbed equilibrium, as a tension, tendency, almost a will" (19). He gives the example of the tonic and supertonic. The tonic is a state of "perfect equilibrium, of relaxation of tension and satisfaction,...of self-affirmation."

What takes place here between the two tones is a sort of play of forces, comparable to that between magnetic needle and magnetic pole. The activity of the one is a placing itself in a direction, a pointing toward and striving after a goal; the activity of the other is a dictating of direction, a drawing to itself (20).

Although I would locate this dynamism in my experience of the tones rather than in the tones themselves or in a supermaterial world, each scale step does seem to me to have a particular dynamic quality.

Although Cooke's argument that music is a "language of the emotions" and that specific pitch sequences refer to specific emotions is quite problematic in many ways, his observations about music also do ring true. For instance, he says the following about the pitch sequence ascending major 1-3-5:

We have postulated that to rise in pitch is to express an outgoing emotion; we know that, purely technically speaking, the tonic is the point of repose, from which one sets out, and to which one returns; that the dominant is the note of intermediacy, towards which one sets out, and from which one returns; and we have established that the major third is the note which 'looks on the bright side of things', the note of pleasure, of joy. All of which would suggest that to rise from the tonic to the

dominant through the major third — or in other words to deploy the major triad as a melodic ascent 1-3-5 — is to express an outgoing, active, assertive emotion of joy (228-29).

He illustrates his point with a good number of examples, all of which, when I sing them, feel the way that he describes. I can, perhaps, think of counterexamples, as when this pitch sequence is framed as ironic. But in my recollection, it is often true that this pitch sequence relates in some way to “an outgoing, active, assertive emotion of joy.”

However, even though Zuckerkandl and Cooke’s observations ring true, their explanations of those observations do not. Their explanations are unsatisfactory for many reasons, but one they share they hold in common with many music theorists. Even though they make good observations about music, they begin their explanations of music by turning to *objectifications* of music — i.e., tones, scales, chords, etc. — to explain music. For instance, Zuckerkandl’s first question is: “What is it...that is meaningful *in tones*, that allows us to distinguish sense from nonsense *in successions of tones*?” (16, emphasis mine).⁴⁸ Cooke also begins his explanation with notes, making statements like “the major third is the note which ‘looks on the bright side of things.’” Beginning an exploration of musical meaning with the theoretical objectification of music, notes, posits meaning as a quality of the sound, rather than a product of the interaction between the sound and the listener. The idea that musical meaning is a quality of the notes does not

⁴⁸Interestingly, Zuckerkandl’s *first* question concerns notes, even though he states earlier that his *central* question concerns the a much larger field: “What must the world be like, what must I be like, if between me and the world the phenomenon of music can occur?” (7). I believe he began his exploration with notes because notes are often thought of as the basic elements of music. Although he explicitly rejects a positivistic or scientific approach to music, he implicitly uses the objectivist path of discovery: begin with the basic elements, discover their essential natures, and find out how they relate to one another.

ring true to my experience. If it were a quality of the notes, how could it be true that sometimes the same recording will fall flat, striking me as “just notes,” while at other times it engages me in a meaningful way? Since musical meaning is a product of listener and sound, it is methodologically unsound to begin the exploration of musical meaning in notes alone.

In contrast to the music theorists, the psychologists begin their explorations in a way that includes both the musical sound and the listener. Rather than objectified *physical* reality, they begin with observations about phenomena that are *psychologically* real — real in terms of human experience. For instance, Bamberger states the unifying question of her book: “What are the circumstances that generate fundamental ontological shifts associated w/ perceptual/conceptual restructuring — how do we ever come to see/hear in a new way?” Her central interest is with the psychologically real fact that the same recording of a set of notes or rhythms can be heard in multiple ways. Similarly, Serafine does *not* begin her study with notes, scales or chords, which she calls the results of reflection about music, not music themselves. Instead, she identifies the basic unit of her study as “generic cognitive processes,” such as succession (e.g. motivic chaining) or transformation (e.g. ornamentation).⁴⁹ Both Bamberger and Serafine, whatever other problems their studies may have, try to begin at a point that includes both musical sound and listener. As Bamberger states, it “a hearing ... is both creative and responsive — *a conversation back and forth between the music, as material, and the*

⁴⁹ Note that Serafine’s basic unit of study is problematic in that she is trying to identify pan-stylistic cognitive processes, which leaves out cultural aspects of the meaning process.

hearer as he or she shapes its meaning and form in some particular way” (9, emphasis mine). Since they begin with both of these aspects of the system, one might think that their conclusions are more valid than the music theorists, who begin with notes alone. It would seem that an approach that includes both notes and listener as fundamental to the equation would be able to explain the phenomenon of “music.”

However, the psychological approach presents a different set of problems that influence its conclusions negatively. Psychological understandings and methodology are thoroughly conditioned by objectivist interpretations of human beings. As I argued above, the concepts of perception and cognition are entirely consistent with the schemas of the conduit metaphor. In perception, raw sense data enters the person through the portals of the senses, travels up the nerve conduits and is “assembled” into percepts by the mind-homunculus. In cognition, the mind sorts perceptions algorithmically and makes sense of them. Given this set of schemas underlying its thought and methods, psychology characterizes human beings as mainly mental and looks to the disembodied mind for answers. For example, Serafine construes music as “the activity of *thinking* in or with sound” (69). Bamberger’s study concerns the organizing process of the mind during active listening.⁵⁰ Even though they begin with a stance that involves both sound

⁵⁰ Bamberger comes tantalizingly close to including the body in her thinking: “I suspect that the processes through which we actively organize incoming pitch-time phenomena are closely linked with the very basic, sentient organizing of our bodies as we move through space and time — gestural direction (up-down; right-let), stance, sequences of periodic movements (breathing, sucking, walking), equilibrium, as well as vectors of tension and relaxation” (9). However, she does not follow up on her suspicion in any substantial way. She also talks about “felt paths,” which are “sequences of actions that we internalize in learning to perform a piece on an instrument, sequences that we both *make and follow* with each new performance.” These are “our most intimate ways of knowing that piece” (10). However, neither of these comments seems to inform her methodology or conclusion.

and listener, their philosophical ground requires that they consider only the disembodied mind. Thus philosophically truncated, their studies cannot approach “music,” but only “notes.” Music requires the whole body in order to exist.

Their methodology also mitigates against studying “music.” Scientific methodology requires that the evidence gathered be measurable and directly observable. For instance, Bamberger’s methods require children to represent a rhythm in drawing, build a tune from “tune-blocks” (phrases), and understand name references to tune blocks. These methods produce data that is directly observable and quantifiable, but that is mental in nature, aimed more at finding out about mentally grasping notes than about experiencing meaningful music. Serafine’s evidence is similarly obtained through methods that make it quantifiable.

In my view, psychologists *ground* their study in their scientific methodology. It is their overriding concern, the aspect of study that trumps all others.⁵¹ Unfortunately, with the case of music, the methodological requirement that data be quantifiable and directly observable ends up excluding the subject of study before the study is even begun. Just as Addis’ grounding in reason required that music and mind be *reduced* to something that fit his philosophical methods, the psychological method requires *reduction* as well. While “notes” and brain waves or other aspects of human physiology may be quantifiable and observable, “music” is not. The effects of musical experience

⁵¹ The grounding aspect of these different disciplines can be seen in the apportionment of attention each aspect receives in the training of students. Psychology students spend an enormous amount of time learning methods to make their data quantifiable, just as music students spend time learning about the music “itself” and philosophy students about logic and reasoning.

can be observed by outsiders or reported on by listeners. The “music” cannot be directly observed or quantified, since it occurs in the inner lives of individual people. If we take the distinction between music and notes seriously, and it is a *psychologically real* distinction, the most direct way we have to get at “music” is the testimony of individuals who have experienced it. This fact is why the use of musical examples by the music scholars can be so effective. Through these examples, the authors obtain testimony for their own arguments directly from the readers themselves.

Since Meyer’s work fits neither the musical nor the psychological approach, I have not yet mentioned him in this section. His approach combines the positive aspects of both music and psychology. He grounds his work in musical experience, providing many musical examples and eliciting good testimony from his readers. He also begins with a schema that involves both musical sound and listener, treating musical meaning as a product of the two elements. Because his approach combined the best of both musical and psychological approaches, his study was a breakthrough in understanding.

CONCLUSION: PROBLEMS THAT NEED TO BE ADDRESSED IN A NEW APPROACH

In this chapter I have described objectivism and the conduit metaphor and examined the ways that they logically construe the parts and processes of communication. I have shown how the use of this philosophy in thinking about musical meaning distorts evidence and produces arguments and conclusions that are implausible, logically inconsistent, overly complex or lacking in explanatory power. In addition, I have argued that the most effective aspect of the musical approach is that it is grounded

in musical experience. The most effective dimension of the psychological approach is that it begins its argument with a schema that includes both musical sound and listener. In addition, we have learned from the philosophical approach to be very careful of the epistemological metaphors we choose, since they construe evidence and constrain logic and reasoning.

An effective theory of musical meaning would include the following factors. The nature of the epistemology would be consistent with the nature of the question of musical meaning. Since musical meaning exists only in human experience, the epistemology used to investigate it should be consistent with the best ways to know about human experience. Additionally, the primary standard used to test it should be consistent with human experience: "Does this ring true to experience?" The theory should take into account the findings of the physical sciences, but not be guided by their epistemology, methodology or standards.

Concomitant to making the epistemology consistent with the problem, the nature of the specific model should be consistent with the nature of the phenomenon it is used to explain. Meaningful musical experience is primarily aural and involves the body a great deal. A model like the conduit metaphor, based on seeing and manipulating objects and involving a mind packing, unpacking, and grasping, is simply inconsistent and should be replaced with a model more based in aural, tactile, and kinesthetic experience.

The philosophical base of the theory should allow for human beings to function in their entirety, including the role of the body in perception, cognition, imagination and

intelligent processes in general. It should allow for the following: 1) an active part for both bodies and cultural influences, 2) a reciprocal influence between individuals and social groups, 3) the diachronically temporal aspect of meaning, and 4) the logical possibility that wholes are prior to parts, along with an understanding of parts that are not mechanical in nature. Methodologically, the approach should begin with a schema that includes both musical sound and listener and allow the listener to be an entire, complex human being. It should be grounded in musical experience and the evidence that comes closest to that experience: the testimony of individual, enculturated listeners.

A theory of musical meaning should be able to account for all kinds of music and musical experiences: program music, abstract music, various responses to music, including intellectual, physical and emotional, music's dynamic quality, the intensification of experience in music. In addition, it needs to be able to account for the social meanings of music, like the meaning of Elvis Presley to his fans, the meaning of the Star Spangled Banner to American prisoners of war, and the meaning of music in religious settings, shopping malls and auditions. Clearly, such a theory has a great deal to account for.

I was driving my car recently when Rossini's "Overture" to "The Barber of Seville" came on the radio. I had a grand time listening to it, such a good time that I momentarily wondered what other drivers might think of my physical expressions of the musical gestures — bouncing body and waving head. This piece resonates in me in multiple modes: as abstract music, as program music, as a cultural connection to the use

of Rossini's music in cartoons, and as a personal connection to playing the flute in the all-county band in high school. I hear the overture primarily as abstract music, since I am not familiar with "The Barber of Seville." And yet, it strikes me secondarily as program music, since it has an Italian flavor and the title suggests the antics of a humorous barber. The image of a humorous barber blends with the general feeling I have about Rossini's music that can be rather caricature like, a feeling gotten from its association with the Saturday morning cartoons I watched on television as a child. Even without a caricature of a barber, parts of the music feel somewhat hyperbolic to me. In addition, having had the facility to play all of the little flute riffs with ease during my high school and college performing days, but being unable to play them so easily now, a feeling of wonder at the players' facility blends into the mix of musical meaning. A theory of musical meaning should be able to account for how I resonate with this music in all of these multiple modes.

II

“ON THE HITHER SIDE OF WORDS”: TACIT, INVOKED MEANING

INTRODUCTION

If we cannot frame problem of artistic meaning usefully with objectivism, how can we better frame it? Weighing in on using a language-based epistemology to understand art, Husserl indicates a way:

To treat a work of plastic art as a discourse intended to be interpreted, decoded, by reference to a transcendent code analogous to the Saussurian “*langue*” is to forget that ... the work of art always contains something *ineffable*, not by excess, as hagiography would have it, but by default, something which communicates, so to speak, from body to body, i.e. on the hither side of words or concepts, and which pleases (or displeases) without concepts (quoted in Bourdieu 1977, 1-2).

Husserl guides our attention to art’s ineffability — meaningful qualities that cannot be expressed in words. Interestingly, he distinguishes between two different *kinds* of ineffability — one “by excess, as hagiography would have it,” the other “by default, something which communicates ... from body to body.” Placing ineffability in the realm of hagiography, we usual assume it to be something “excessive” — transcendent of human reality and therefore insusceptible of being “captured” and “put” into words. Husserl rejects this assumption and points to a different kind of ineffability, one that may be partially, although perhaps not entirely, in human control. He places this ineffability squarely and concretely in the realm of being human — “from body to body, ... on the hither side of words” — and suggests that this kind of ineffability occurs “by default.”

Events that happen “by default” occur because of a failure of *explicit* action. For example, a computer operates by default settings unless the user changes them. The default settings work silently, outside the user’s awareness. By saying that the ineffability of art occurs “by default,” Husserl suggests that it occurs silently, behind the scenes, or “from body to body” as he states it, in the realm of the *tacit*.

The realm of tacit epistemology involves meaning that “strikes” a person and “resonates” or “rings true” to experience. In contrast to objectivist knowing, this kind of knowing reverses the agent/patient relationship: rather than the person-agent grasping the meaning-patient, the meaning-agent “occurs to,” “strikes” or even “grabs” the person-patient. Occurring without the benefit of the clarity of words and the seeing mental homunculus; this knowing “gropes” toward understanding and meaning instead of seeing it clearly and grasping it.¹

That this way of knowing relates to aesthetic experience can be seen in terms that might be used to describe its results: struck dumb, awe struck, thunderstruck, wonderstruck, staggered, bowled over, speechless, breathless, gasping, open-mouthed, agape, gaping, wide-eyed, gazing, transfixed, rooted to the spot, lost in wonder, lost in the music, rapt (L, pp. of *rapere* to seize — being seized by the experience). These terms

¹ In the attempt to communicate clearly, writers usually eliminate this “groping” from those well-lit objectivist stages — textbooks — presenting knowledge clearly and with precise beauty, as if the knowledge-structure sprang from the earth in full flower with no untidy or confused labor by its producer. Thus, many students misunderstand the process of producing understanding and have little tolerance for the floundering around it sometimes entails. What they miss, and what our educational system tends to obscure, is the pure *fun* and ultimate productivity of exploring in liminal realms of possibility.

suggest both the *disconnection* of aesthetic meaning with words and its fully *embodied* nature.

In this chapter I will explore this tacit, embodied way of knowing. I will argue that meaning located “on the hither side of words” occurs by metaphoric and metonymic transfer and activation of patterns and schemas. This transfer and activation occurs in the tacit realm of human existence, through bodily imagining and perceiving. I begin by describing the philosophical foundation of the study, a philosophy that endeavors to correct the problems found in objectivism. This philosophy centers on the idea of a human being who has evolved in the earthly environment for meaningful action in that environment. Thus, meaning does not occur only in the mind, but in the whole body. Elaborating on Polanyi’s theory of tacit knowing, the latter part of the chapter develops a theory of meaning as tacit and rooted in bodily knowing, imagining and perceiving. This approach posits the individual person as a maker of meaning and the process of meaning making as one that metonymically connects the individual as a part of her whole socio-psychological environment.

PHILOSOPHICAL ASSUMPTIONS: EMBODIED REALISM

Rather than grounding this exploration of musical meaning in a particular set of philosophical assumptions (as did the philosophers in chapter one) or a particular methodology (as did the scientists in chapter one), I ground it in the meaningful

experience of music (as did the musicians in chapter one).² However, although I do not ground this exploration in a set of philosophical assumptions, clear thought requires them nonetheless.

I do not view the musical situation as an objective process of communication, but as a *communing* both personal and sociocultural in nature. I do this in an effort, in part, to divorce communication from the conduit/representation schema. The etymology of “communicate” (L pp. of *communicare* to impart, participate) suggests that the image of communication as a *communing* may have existed prior to any association with the conduit/representation schema. As John Dewey states it,

Communication is the process of creating participation, of making common what had been isolated and singular; and part of the miracle it achieves is that, in being communicated, the conveyance of meaning gives body and definitiveness to the experience of the one who utters as well as to that of those who listen (244).

This participatory *communing* creates meaning tied to the fullness of experience — a meaningful integration with present circumstances rather than an existence and transfer of meaningful “presence.”

I base my philosophical assumptions on that of “embodied realism,” a version of Putnam’s internal realism developed by Lakoff and Johnson (Lakoff and Johnson 1980 & 1999, Lakoff 1987, Johnson 1987). The assumptions Lakoff and Johnson make explicit in their exposition of this philosophy are implicit in the work of Polanyi and Bourdieu,

² I am using “ground” here as I did toward the end of the last chapter (see p.134). A ground is the concern that trumps all others, the touch point that must be returned to again and again, the concern to which the exploration must remain true.

whose work I will draw on in this chapter. What follows is my own elaboration of the terms and logic suggested by Lakoff and Johnson's work. After discussing the grounding of embodied realism, I will elaborate the natures of the relationship of parts to whole, the concomitant path of investigation, models and explanations, objectivity and subjectivity, human beings, and meaning.

Grounding

The idea of human engagement with the world grounds embodied realism. In this context, "world" and "environment" refer broadly, not only to the physical, but also to aspects created by and for human beings, such as social, emotional, educational, artistic, spiritual, culinary, etc.³ Similarly, "experience" refers broadly, not only to individual experience, but also to experience within and through a group.

Embodied realism takes seriously the notion that human beings evolved in the earthly environment. Rather than being compartmentalized from the world, we were, in a sense, created by it, through environmental conditions that favored specific adaptations; we evolved in order to take adaptive action in the environment we are adapted to. Thus created by and for the environment, we are already at one with it. As Lakoff and Johnson state it,

³ By including the spiritual in this list of aspects of the human environment created by and for human beings, I do not mean to suggest that spiritual aspects of human life exist *only* as human creations and have no reality or existence beyond human life. Here, and throughout this dissertation, I discuss the spiritual and other transcendent realities *as aspects of human life only*. In so doing, I am not taking a stand on their reality or existence as seen from a God's eye view; I am simply limiting my thinking to the way that they appear and operate in human life.

Embodied realism ... rejects a strict subject-object dichotomy. Disembodied scientific realism [objectivism] creates an unbridgeable ontological chasm between “objects,” which are “out there,” and subjectivity, which is “in here.” Once the separation is made there are then only two possible, and equally erroneous, conceptions of objectivity: Objectivity is either given by the “things themselves” (the objects) or by the intersubjective structures of consciousness shared by all the people (the subjects).

The first is erroneous because the subject-object split is a mistake; there are no objects-with-descriptions-and-categorizations existing in themselves. The second is erroneous because mere intersubjectivity, if it is nothing more than social or communal agreement, leaves out contact with the world. The alternative we propose, embodied realism, relies on the fact that we are coupled to the world through our embodied interactions. ...

The problem with classical disembodied scientific realism is that it takes two intertwined and inseparable dimensions of all experience — the awareness of the experiencing organism and the stable entities and structures it encounters — and erects them as separate and distinct entities called subjects and objects. What disembodied realism ... misses is that, as embodied, imaginative creatures, *we never were separated or divorced from reality in the first place* (1999, 93).

The commitment to the ground of human engagement with the world suggests that meaning, and associated concepts — truth, understanding, categories, concepts, etc. — relate to human experience in interacting with the environment. In the course of everyday living, human beings make and use meaning and truth as parts of the energetic matrix of understanding and motivation in and through which we conduct our lives. As matter of human engagement with the world, we must understand and characterize meaning in terms of the nature and experience of human beings, not as an objective relationship between words and things in the world or as a meaning-object packaged and

conveyed in words. Rather than asking, “How does meaning work?” we need to ask, “How do we create meaning in our lives?”

Basic Level Categorization

Lakoff’s work on basic level categories (1987) exemplifies scholarship that understands and characterizes an aspect of meaning in terms of the nature and experience of human beings. Words often relate to one another through nesting taxonomic hierarchies, which involve varying levels of specificity or generality. Lakoff locates basic terms in the *middle* of these hierarchies, so that the levels from “bottom” to “top” become subordinate, basic and superordinate. For instance, while the subordinate categories of jonquil and rose specify types of “flowers,” the basic level category “flower” generalizes to the superordinate category “vegetative reproductive organ.” This view does not define “basic” as structurally simple as objectivism might; rather it defines basic as *psychologically* simple. Basic level concepts have the kind of structure that, in the context of interaction with the world, human beings find easiest to learn, remember, process and use.

For instance, the objectivist view defines basic musical concepts as structural primitives like the musical parameters (pitch, rhythm, timbre, harmony, texture, etc.) or the compositional primitives reflected in our notation system (notes, chords, harmonic progressions, rhythms, scales, keys, dynamics, etc.). In contrast, the embodied realist view would define basic musical concepts as those that are easiest to learn, remember, process and use — melody, gesture, momentum, mood, dynamic motion, and rhythm (in

the uncomplicated sense that people untrained in music tend to use it, to indicate the musical articulation of the beat and how it invites the body to participate in the music).

Recent work in psychology (summarized in Lakoff 1987, 31-57) indicates that basic level categories arise from human interaction with the world. Lakoff and Johnson (1999, 27-28) suggest four conditions that define basic level categories: 1) “the highest level at which a single mental image can represent the entire category”: although many different kinds of flowers exist, they can all be represented by an image that involves petals clustered around a center, with a stem projecting from the bottom; 2) “the highest level at which category members have similarly perceived overall shapes”: in the human view of shape, flowers consists of a head and a stem; 3) “the highest level at which a person uses similar motor actions for interacting w/ category members”: we interact with flowers by bending over and sniffing, by gazing admiringly or by cutting the stem and arranging them; and 4) “the level at which most of our knowledge is organized”: we know more about “flowers” than we know about “roses” or “vegetative reproductive organs.”

As characterized in the above list of conditions provided by Lakoff and Johnson, human nature and experience in the world seem very objective and concrete, stemming from the interaction of human bodies and minds with concrete objects in the world. Their list of conditions does *not* include aspects of human interaction with the world that we think of as “subjective” — emotions, moods, motivations and aspects of human agency in general — and “social.” I would add some conditions to the above list in

recognition of the fact that some aspects of basic level categorization are mediated not just by mind and body, but by human purpose and emotion. Lakoff provides one example, the purpose of economic exchange, but does not include it in his list of conditions:

When something is categorized it is regarded as equivalent to certain other things. For what purposes equivalent? How are all dimes equivalent or all flowers or all cats? ... Dimes are equivalent in that they can be exchanged for certain newspapers, or cigars or ice cream cones or for any two nickels. In fact, they are equivalent for all purposes of economic exchange (Brown 1965, 318-19, quoted in Lakoff 1987, 31).

Lakoff and Johnson tend to exemplify their thought processes with nouns. The inclusion of adjectival categories, such as the basic level distinctions good/bad and clean/unclean (in the biblical sense), demonstrates that, in addition to motor routines, the use of similar emotional routines (or reactions) will determine inclusion or exclusion in a category. We know that something is “good” or “bad” based, in part, on our emotional reaction to it (which relates to social value systems). However, similar emotional routines can also determine some basic level nouns, e.g. “boss.” Although specific bosses employ many different styles of managing, their employees all relate to them through the same power structure of subordinate to superordinate. This power structure and the similarity of the feelings it engenders across varying instances categorize certain human relationships as “boss” to “employee.” Whether the world is the world of concrete objects, subjective emotional situations or abstract social conditions, however, the point remains that basic level categorization is a matter of human interaction with the world.

The mutability of “basic level” also demonstrates the dependence of basic level categorization on human interaction with the world. People in specialized training programs change undergo a transformation in basic level. For example, even if they don’t know the words for them, most people entering a college music class have a working familiarity with the basic level concepts of melody, gesture, momentum, mood, and rhythm. However, in order to use the objectivist categories (the parameters or compositional categories) intelligently and appropriately, in order for them to *feel* easy and basic, people need to undergo a specialized training environment: years of classes in music theory and listening skills. The point here is that “basicness” resides in the relationship of the individual to the concept, as that relationship arises from interaction with the environment; “basicness” does not reside in the relationship of the concept to the physical reality.

Path of Investigation, Relationship of Parts to Wholes

Lakoff and Johnson’s definition of basic as grounded in human interaction with the world suggests a path of investigation different from that prescribed by objectivism. As we saw in the last chapter, the objectivist path of discovery mandates that one find the elemental parts, discover their essential natures, and explore how they relate to and cohere with one another. Objectivism considers parts as logically prior to wholes. In contrast, embodied realism treats wholes as logically prior to parts. This difference suggests a different path of discovery, one that is dependent upon the nature of parts in relation to each other and to the whole.

As logically prior to the whole, objectivist parts relate to one another *mechanically* — each separate in and unto itself until it is added up with other parts to form a larger, more complex structure. As logically already part of the whole, embodied realist parts relate to one another differently: part of their essential natures consists of their relationship and coherence with each other and with the whole. Rather than mechanical, these parts are *metonymic* in nature. Zuckerkandl's description of dynamic qualities of scale steps and their relation to the tonal context exemplifies metonymic parts. In his theory, each scale step has a different dynamic quality, which it receives from its place in the whole tonal system. In his view, tonality is

[a] system in which the whole is present and operative in each individual locus, in which each individual locus knows, so to speak, its position in the whole, its relation to a center ... (36).

In this view, within a context of systematic stability provided by both parts and whole, the interactive parts stand in co-creative relationship to each other and to the whole rather than simply being added together as essentially discrete elements to form a composite whole. For instance, tonality involves both stable factors and co-creative factors. As the parts of the tonal whole, scale steps lend stability through relating to one another by stable proportions. If sounds do not consist of those stable proportions, listeners will not hear them as scale steps. As the whole, tonality lends stability through specific predictive possibilities (more commonly thought of as "rules") for the use of scale steps: tonal music tends to include certain tones and use others sparingly; it tends to employ specific harmonic progressions, but not others. Within these forces of

stability, scale steps and tonality actively co-create each other. Without the holistic context of tonality, tones are no longer scale steps; without scale steps of specific frequencies, tonality cannot exist.⁴

The reciprocally creative action of parts and whole suggests a path of discovery different from that of objectivism. Logically, one would need to begin with the whole, but tack back and forth between the different parts and between parts and whole in order to understand their complex, co-creative relationship. In addition, because the different aspects of reality stand in co-creative relationship to one another, one would need to realize that the relationship between “part” and “whole” is not always clear and simple. At first glance, we see human beings simply as a part of a large, complex environment. Upon closer examination, we can see that the human environment also becomes part of individual people, as well. As individuals, we take the environment into ourselves and make it a part of us: we eat, drink, breathe and take in our social environment in the form of attitudes and feelings. In co-creative relationship, we are a part of our environment, but it is also a part of us.

Objectivism has handled the co-creative relationship between parts and wholes through the notion of “context”: parts add up to the whole and in so doing, acquire meaning in the context of the whole. The problem with “context” is that seems to entail the use of geometric or mechanical models. Given the totally static quality of geometric models and the diachronically static quality of mechanical models discussed in the last

⁴ This explanation of tonality presupposes the existence of an enculturated person in whose experience the tonality exists. Without such a person, tones are simply vibrations of air. More precisely, without a hearing person, “tones,” as meaningful entities within a coherent system, do not exist.

chapter, context cannot change in response either to outside forces or the forces of any of its parts. The lack of diachronic change makes clear why “cultural context” so easily slips into “cultural background.” While “cultural context” may suggest three dimensions (as in mechanical models) and “cultural background” two (as in geometric models), they are both diachronically static and thus equivalent in terms the way that they obscure the action of change over time.

Embodied Realist Models and Explanation

In contrast, embodied realist models center on dynamic human beings who stand in co-creative relationship with their environments, rather than merely existing within them. Since reality and meaning are explained in terms of the nature and experience of human interaction with the world, all models must include one or more hypothetical persons, with all the possibilities for diachronic change that human adaptation entails. In addition, as open systems, embodied realist models accommodate stresses from both inside and outside the system.

Since they are centered on human experience, explanations based in embodied realism demand a reading different in kind from that given to objectivist explanations. Rather than holding the models away from themselves, trying to grasp and internalize their meanings, readers should imagine themselves at the center of the explanation or model. Rather than looking to see if explanations and models seem logically correct, they should ask if it is true to their experience — does it “ring true”? Would their personal testimony support or impugn the argument?

“Objectivity” and “Subjectivity” in Embodied Realism

This way of reading does not entail discarding “objectivity” and applying purely “subjective” standards. Rather, it recognizes the logical impossibility of the “God’s eye view” standard of objectivity and the logical necessity that *any possible objectivity must be a matter of human behavior and experience*. As Lakoff states the case,

Objectivity cannot be a matter of conforming to a God’s eye point of view, since the very existence of such a point of view is impossible on logical grounds. But that does not mean that there is no objectivity. Objectivity involves rising above prejudices, and that begins by being aware that we have those prejudices. The primal prejudice is our own conceptual system. To be objective, we must be aware that we have a particular conceptual system, we must know what it is like, and we must be able to entertain alternatives. Practical standards of objectivity are possible in a great many domains of human endeavor. Acknowledging alternative conceptual schemes does not abandon objectivity; on the contrary, it makes objectivity possible (Lakoff 1987, 264).

Just like truth and meaning, “objectivity” relates to the epistemology and conceptual system used to arrive at it. Lakoff suggests that we may compensate for the biases of our thinking by being aware of them, bringing us closer to *relative* objectivity.

In a complementary fashion, just as “objectivity” in embodied realism is *relative*, “subjectivity” is *constrained*. As we saw in the discussion of objectivism in the last chapter, the epistemology and philosophy we learn from the people around us and from our experiences constrains the way we construe evidence and the kind of logic we use to explain it. In addition, the use of language in everyday interaction constrains subjective meaning. This statement contrasts directly with many post-structuralist theorists, who suggest that linguistic meaning consists of words referring to other words. The endless

chain of reference paints an image of meaning as a giant hot-air balloon, moored to the earth by only a few tenuous tethers. This schema has the tendency to make tenuous the connections between people, who use language to communicate their inner, subjective lives. If words are unhinged from everyday, lived, reality, how can people know that their subjective reality is anything like that of other people? How can we know that we are actually communicating? The fact that we *do* communicate successfully suggests that language does not consist simply of words referring to other words. Rather, it involves people interacting with each other as they negotiate their lives in the world. Our words, and the schemas to which they belong, shape the way we view the world and think about it. While individual variation in subjective experience exists, a shared language places constraints on that variation.

Shared epistemology and language explain *intracultural* constraints on subjectivity, but do not suggest *intercultural* constraints. As the ground of human meaning, embodied experience constrains subjectivity intraculturally. According to the theory of kinesthetic image schemas described in the introduction, structures understood through bodily experience in the world (“image schemas” e.g., CONTAINMENT or FORCE) participate in mental processes, forming and informing our understandings. Barring unusual physical disabilities, human beings encounter the world with similar bodies and, in so doing, learn a similar set of kinesthetic image schemas that inform the meaning they make. They also have similar brain structures and so have a tendency to make sense of

the world in similar fashions. This embodied grounding constrains the kinds of meaning that can be made by human beings both within and across cultures.

The Nature of Human Beings in Embodied Realism

The understanding of the relationship between wholes and parts described above extends to human beings. As Johnson's kinesthetic image schemas clearly illustrate, embodied realism entails no problematic splits between body and mind. Nor does it entail the splits between emotion and intellect, body and intellect, or imagination and rationality that emerge within the objectivist framework. Rather, the terms that make up these "splits" describe parts that stand in co-creative relationship to each other and the whole.

However, simply because embodied realism does not *entail* the mind/body split does not mean that vestiges of it do not exist in scholarship associated with it. For instance, consider Johnson's characterization of imagination as a matter of mental representation. In this view, the body *informs* the workings of the mentally located imagination. Contrast the view of Maxine Sheets-Johnstone, whose position seems more in line with a fully developed version of embodied realism. She suggests that the body does not just *inform* the imagination, but physically *participates* in imaginative processes, as well. Bodily participation in imagination can be seen in the slight conducting actions of conductors as they imagine the music before beginning a piece.

These movements create a more vivid and sustained sound image, showing that mental imagination requires not only a functioning brain, but a participating body, as well.⁵

Because human beings evolved for action in the environment, the various aspects of our being *must* work in tandem. Speaking of the relationship between body and brain, Kelso states

It is important to keep in mind ... that the brain did not evolve merely to register representation of the world; rather, it evolved for adaptive action and behavior. Musculoskeletal structures coevolved with appropriate brain structures so that the entire unit functions together ... [I]t is the entire system of muscles, joints, and proprioceptive and kinesthetic functions plus appropriate parts of the brain that evolves and functions together in a unitary way (Kelso, 1995, 268).

All parts evolved in a situation that required the adaptive action of the whole. Thus, all parts evolved to participate together in the whole.

Meaning

Similarly, human meaning and truth have evolved in the course of and are relative to whole-bodied, adaptive interaction with the environment. As human constructions made and used in the course of everyday living, meaning and truth relate to many different dimensions of being human constructed in the same fashion: understandings, thoughts, intentions, motivations, attitudes, philosophical bases, perspectives, decisions, resolutions, desires, actions, intuitions, impulses, values, beliefs, perceptions, imaginings,

⁵ The reader may be more convinced by this idea by trying the following experiment. Try imagining a piece you know well as vividly as you can in the following two ways. First, allow your body to move in whatever way feels natural to the task. Second, place your body in a situation in which your muscles are quite relaxed, such as lying down. Do not allow your body to move while you imagine the piece. Can you imagine the piece as vividly without movement as with? Can you sustain the imagination as long without movement as with?

emotions, feelings, interests, expectations and memories. These dimensions of human life stand in co-creative relationship to each other and form the energetic matrix in and through which we conduct our lives.⁶ Subsidiary aspects of being human, they converge focally in both who we are and what we do.

If we are to understand meaning as an aspect of the energetic matrix in and through which we conduct our lives in a fully embodied fashion, we need to understand it as both a linguistic and a non-linguistic phenomenon. Thus, we require a theory of embodied meaning that encompasses both the linguistic and the non-linguistic. Lakoff and Johnson have contributed a great deal toward this goal, showing us how structures learned in bodily experience may participate in both linguistic and non-linguistic meaning. Their work points us away from long-standing, problematic dichotomies (such as body/mind, imagination/rationality, relativism/absolutism, and objectivism/subjectivism) toward a path that incorporates these dichotomies into a co-creative whole. By locating meaning in the body lived in interaction with the environment, they create a theoretical

⁶ The term “energetic matrix” should be understood in distinction to “biological matrix,” in which it is rooted. Aspects of the energetic matrix have physical components, but are only sometimes *experienced* as primarily physical in form. Examples of aspects of the energetic matrix are understandings, thoughts, intentions, motivations, attitudes, philosophical bases, perspectives, decisions, resolutions, desires, actions, intuitions, impulses, reactions, values, beliefs, truths, perceptions, imaginings, emotions, feelings, interests, expectations and memories. These aspects of a person direct her physical energy in the course of everyday living. They also immediately cease to exist when the person dies (although traces of them will be left in the environment). (In saying that the energetic matrix “ceases to exist when the person dies,” I do not mean to take a stand on any metaphysical issue, such as the existence of an afterlife. I simply mean to indicate those aspects of a person that are no longer perceptible in material reality when she dies.) Note that the different aspects of the energetic matrix may be experienced as occurring primarily in one part of the person or another — e.g., attitudes in the mind, emotions in the body. However, as aspects of the whole that stand in co-creative relationship to one another, while they may be felt to occur focally in one part of the person, they cannot be isolated to that part of the person.

Largely tacit, the energetic matrix is only partially within our control. We operate in and through it, but in a sense, it also operates in and through us, seemingly with a will of its own.

space for non-linguistic phenomena to be meaningful and lay the foundation for understanding meaning that occurs “from body to body.” However, although they lay the foundation for a theory of “body to body” meaning, they do not develop such a theory because they concentrate on examples of meaning that seem to be primarily mental in nature: Johnson on imagination as mental representation and Lakoff on mental categories and concepts.

For example, after a thorough identification of the problems with Putnam’s internal realism, Lakoff states

Mark Johnson and I have developed a strategy for expanding internal realism to deal w/ these issues. We have taken *meaning* to be the central issue. The central question, as we see it, is how *linguistic expressions* and the *concepts* they express can be meaningful (Lakoff 1987, 266, emphasis mine).

Although Lakoff brings embodied experience into his consideration of linguistic meaning, meaning is still primarily linguistic and mental in nature. He lays an excellent foundation for understanding the meaning communicated “from body to body,” but his theory does not extend far enough to accomplish the task.

Likewise, Johnson’s theory of meaning still seems primarily mental in nature. He argues for a “non-Objectivist *semantics of understanding*” in which the three central notions are understanding, imagination, and embodiment (1987, 173), conceiving of imagination as “mental representation.”

Imagination is our capacity to organize *mental representations* (especially percepts, images, and image schemata) into meaningful, coherent unities (140).

Image schemas learned from the lived body inform the mental process of imagination, but imagination, itself, is still primarily mental in nature.

Likewise, Johnson's discussion of understanding indicates that he conceives of it as mental in nature. He considers understanding to be central to a non-objectivist semantics:

For the non-Objectivist, meaning is always a matter of human understanding, which constitutes our experience of a common world that we can make some sense of. A theory of meaning is a theory of understanding (174, emphasis in original).

To sum up: a non-Objectivist theory of meaning is a semantics of understanding. Understanding is treated as a historically and culturally embedded, humanly embodied, imaginatively structured event. (176).

Johnson's use of "humanly embodied" suggests the schema of the vital aspect of understanding as *contained by* the body, not as permeating and functioning within the body. He does make clear elsewhere that this is no mere containment, but that the body informs the understanding. And yet he does not give the body credit for understanding on its own. This does not ring true to my experience. For instance, my fingers understand the keyboard on which I type much better than my mind does. If I had to produce a diagram of where each letter is placed on the keyboard, without visual reference to an actual keyboard, my mind would have to consult my fingers, which understand exactly where each letter is. The focal point of Johnson's understanding and imagination, embodied though they may be, is mental.

While I agree completely that mental understanding can be an important aspect of meaning, mental understanding cannot always explain life's most meaningful events. For

a parent, the meaning of a child's death does not equal an understanding of what caused it, but would transcend any mental understanding by far. Less dramatically, music may be understood mentally through analysis, but its meaning exceeds the analysis. Although meaning may relate in many ways to mental understanding, the two cannot be equated. Therefore, the statement, "A theory of meaning is a theory of understanding" misstates the relationship between meaning and understanding. Given the pervasive notion that understanding is a mental phenomenon, this theory of meaning does not allow for meaning communicated "from body to body." If we accept the possibility of a bodily understanding, ineffable and able to be only approximated in words, then perhaps the statement would be more accurate.

And yet, not all meaningful situations may be understood, even in an ineffable fashion. A parent whose child dies might never understand it in any fashion, but the death would continue to be quite meaningful, reverberating broadly and deeply throughout her life. In that reverberation, the death might greatly affect other aspects of her lived energetic matrix: understandings, thoughts, intentions, motivations, attitudes, philosophical bases, perspectives, decisions, resolutions, desires, actions, intuitions, impulses, reactions, values, beliefs, truths, perceptions, imaginings, emotions, feelings, interests, expectations, and memories. Meaning relates not only to *understanding*, but to all of these dimensions of being human.

As an aspect of the energetic matrix in and through which we conduct our lives, meaning cannot be located primarily in the mental field. It stands in co-creative

relationship to aspects of being human that are related to language (i.e., propositional in nature, such as beliefs and understandings), to embodiment (e.g., actions, impulses), and to emotions (values, resolutions). Although these we may feel these dimensions of living *primarily* in one part of the body, *subsidiarily* they function in the whole body. A comprehensive theory of meaning — one that includes not only linguistic meaning, but meaning that occurs “from body to body” — cannot discard or ignore that subsidiary function.

Summary

I base my philosophical assumptions on Lakoff and Johnson’s embodied realism, a philosophy grounded in the idea that human beings evolved in the earthly (and later social) environment for the purpose of adaptive interaction with the environment. This ground places human interaction with the world at the heart of all philosophical concerns: models and explanations, the path of investigation, and truth and meaning.

Given their grounding in human interaction with the world, embodied realist models and explanations are not geometrical, mechanical or primarily visual in their orientation. They do not require the reader to take a mental view of the phenomenon into the mind through mental representation. Instead, they center on human interaction with the environment, and so require the imaginative placing of the self in the model. With adaptable human beings at their center, they are diachronically dynamic.

Rather than beginning with the elemental, mechanical parts, as does objectivism, the path of investigation suggested by embodied realism begins with basic as defined by

psychological simplicity. As we interact with the environment, we generally encounter the world as phenomenon of wholeness. Objects and experiences seem whole and seamless and can only be parsed into parts in retrospect. (Even the experience of parsing is seamless, unless reviewed in hindsight.) This suggests that wholes be treated as logically prior to parts, with parts imaged as metonymic in nature — participating with one another and the whole in co-creative fashion. This image of logically prior wholes extends to human beings, whose different dimensions are seen as participating co-creatively with one another and the whole through their relationship in the energetic matrix.

Having made explicit the philosophical ground of my thinking, I now turn to two aspects of the human energetic matrix important to making meaning in our lives: imagining and perceiving. I will re-center the theoretical ground of these processes from the mental field to the whole self.

BODILY IMAGINING AND PERCEIVING

According to a recent survey of theories of imagination, current theories are “narrowly preoccupied w/ *imagistic* notions like imagery (mental & figurative images), imaging (image making), and imagistic thought (thinking dominated by images).” They tend to be “theories of imagery, not of imagination” (Jones 1995, 313). Consistent with the objectivist representation schema, the central notion of “image” focuses these theories on the mimetic, mental representation of states of affairs in the world. Imagination is also often associated with the “unreal” (fantasy), the not yet real

(possibility), and creativity (defined as *novel*, not merely a matter of creating something from parts).

The above set of theoretical associations with imagination all serve to define it as a special realm, apart from everyday, lived reality. Since imagination occupies our minds with mimetic images, it cannot be a part of everyday, lived reality (unless that reality calls for creativity). Everyday, lived reality tends to require that our minds be occupied in ways other than imagery. If imagery enters the mind during the day, it is called “day dreaming” and thought to be unproductive and thus avoided. Likewise, imagination as the not (yet) real has little place in everyday reality, which tends to be mostly concerned with the currently real and concrete. Only creative novelty has a place in everyday reality, a place marked as “special.” Some situations require creative novelty, but they are generally the province of specialized professions (e.g., artists, marketing specialists, etc.).

Thus set aside from everyday, stable, lived reality, imagination is not theorized as a quotidian function of normal, stable, adult human beings, but as a function of people in certain stages of life (e.g. children) or unstable situations of life (e.g. mentally ill people), people who are often considered to be liminal in some fashion. Current theories of imagination posit it as a liminal function, not as a function of normal, stable adults in everyday reality. Rather, they “visit” the “space” of imagination as a temporary break from everyday reality, “escaping” the everyday grind with a hobby, an engrossing work of fiction or a movie. Thus marginalized from the flow of everyday reality, the

objectivist imagination is theoretically rendered relatively powerless to affect people's lives. Although we recognize that experiences in the imaginative realm can be quite powerful, a theoretical path to understanding how that power might be brought to bear on everyday life does not exist in objectivist logic.

If, as embodied realism suggests, human faculties evolved as a function of and in order to function in daily interaction with the world, and if, as current performance theory suggests, the power of imaginative activities extends beyond the set aside space and time of performance, we need to rethink our theory of imagination. We need to theorize imagining as part of the on-going, immediate interaction between self and world. Amongst other things, this would involve showing the constraints that objectivism places on imagination — limitation or containment to the process of mental representation, to the realm of fantasy or unreal, and to the creation of novelty — to be false.

Embodied Imagining

Although official theories of imagination do not recognize the place of imagining in everyday life, folk theory does. According to this theory, the way a person imagines the world to be creates a “lens” that guides the way she perceives and thus reacts to the behavior of others and events in the world. I suggest that the guiding image may not be located primarily in the mental field, but in the bodily and emotional systems. For example, I once knew a woman at work who had been abused as a child and was in an abusive marriage. She seemed to imagine every person she met as a potential abuser.

She habitually sat or stood in a pose that was very close to a full body cringe, wringing her hands together in front of her chest. With her chin pulled in toward her chest, she had to look up at whomever she spoke with.

Although I did not learn of her history of abuse until later, she behaved so much like an abused dog that I suspected she had such a history. In my interactions with her, I consciously tried to be gentle and encouraging. However, most of the time she still adopted her habitual cringing posture when she spoke with me.⁷ I doubt very seriously that her image of me as threatening played out as a mental representation. Rather, I suspect that it played out as an emotional and bodily feeling — a sense that I was threatening. Thus, the way that she imagined the world to be — threatening — created a “lens” that distorted the way that she perceived me. I never behaved in a threatening manner, but she nonetheless found little clues in my behavior to support her continuing image of me as threatening. I can think of only two such possible clues: 1) I was about 5 inches taller than she and 2) I was in a social position of slight, but indirect authority over her. For someone who did *not* imagine the world to be threatening, these clues would not be enough to cause such an extreme defensive posture.

The image of the world as threatening affected this woman’s perception of the world; that image seemed to be located more in her bodily and emotional systems than in her mental field. As such, although she was probably aware of the image of threat as a *feeling*, she probably had no awareness of it *as* an image. The *feeling* of threat was quite

⁷ On the rare occasions when she did not behave in a threatened manner, she overcompensated and adopted an officious, almost pompous tone.

real to her, even if observers might have told her that no actual threat existed. If told that she was imagining the threat, she would probably have objected to the characterization of that threat as imagined or “unreal.” And in fact, although it did not correspond to my behavior, *the image itself was quite real* in two ways. 1) Her past history had lodged this image of the world as threatening in her bodily and emotional systems and that *image* was real — just as real as a photographic image. Although a photograph does not equal the reality it copies, *as an image*, it is real. This woman’s body and emotions had recorded and stored her past history into itself, as if it were a digital camera. Her body and emotional system had been molded by and to threat. Looking at her, one could literally *see* an image of the quality of “threatened,” a quality made concrete by her body. 2) As I later found out, there was nothing unreal about her past and current history with abusive family members. These bodily and emotional images of “threat” had been created by very real circumstances.

And yet, to see *me* as threatening *was not* related to real circumstances. I had no intentions of harming this woman, nor did I behave in a manner that might suggest such intentions. The grand majority, if not all, of the other people in this work situation did not experience me as threatening. The image, as formed in the past but applied in the present, was paradoxical — real, yet not real at the same time. This paradoxical quality of images stored in the body and emotional systems would suggest that reality or lack thereof, truth or falsity, may not really be at issue when theorizing imagining. The

question of reality, of the true or false, may perhaps be a red herring created by the objectivist framework.

Certainly, the reality of threat was so very strong in this woman, that on one occasion in my dealings with her, her behavior almost elicited the very behavior that she imagined was already occurring. One day, when I had had a particularly trying day and she approached my desk in her habitual cringing posture, I felt an impulse to strike her and yell, "Straighten up and stop being so scared of me!" Of course, I did not follow through on that impulse. However, her imagination of me nearly elicited a behavior that would have been quite uncharacteristic of me, but totally characteristic of the way that she imagined everyone to be. Bodily and emotional imagining can be just as creative as mental imagining. However, that creativity is not necessarily linked with novelty. If I had followed through on my impulse, although the situation would have been totally novel for me, it would not have been novel for her.⁸

I have dwelled at length on the story of this unfortunate woman because it vividly exemplifies the bodily and emotional imagining of an individual as she interacts with the world. It may seem to be a relatively unusual case and for this reason suspect as an example for arguing that imagining occurs on a bodily and emotional level in most people on a daily basis. However, the unusual intensity of this example does not negate the proposition that human beings operate in and through a system of bodily and emotional images. It simply demonstrates a maladaptation of that system, thus putting

⁸ In fact, just feeling the impulse was totally novel to me. This episode, unusual and striking for me, made a big impact on my understanding of how people can elicit the very behaviors they fear.

the system itself into sharp relief. With most systems of human meaning, especially those that operate outside focal awareness, we can often observe and understand them more easily when they fail.

Expectation

Through an analysis of expectation, we can see the operation of a more adaptive bodily and emotional imagining. Expectations are ways of imagining people or situations based on past experience with those people or situations. That past experience may be direct, but it may also be indirect, in the form of cultural myths and stereotypes. Whether gained directly or indirectly, expectations are *embodied* images that influence the present situation as it unfolds into the future. They inform our understanding of the trajectory of present events and therefore guide our actions, which tend to create the imagined trajectory. In this way, expectations *do* create, because they focus attention and intention and affect motivation and understanding.

Generally, expectations unfold without our conscious awareness of them. If a situation goes as expected, or a person behaves as expected, we generally have no awareness of the expectations; we simply live in and through them in the moment. Awareness arises when events do not occur as expected. In that situation, we may not be able to explicitly identify the thwarted expectations, but through a gut feeling of frustration, can clearly identify that things are not going as expected. However, lack of awareness of expectations does not mean they do not exist and operate in a productive manner. It simply means that their productive capacity is not *novel*, as they reproduce

the past in the present. We are not necessarily aware of this kind of imagining; rather, it is generally tacit, usually out of focal awareness and often difficult, if not impossible, to articulate.

Summary

I have suggested that imagination is not limited to special times and places or to the process of mental representation, but functions in everyday reality in the form of bodily expectations and images of “how the world is.” These expectations and images affect how we perceive and respond to the actions of others. They serve, in part, to help us make sense of the world. If true, this idea suggests a strong link between imagination and perception. In order to understand how imagination and perception function co-creatively, we must first look at how objectivist logic separates them.

Embodied Perception

Since objectivism conditions a view of human beings as compartmentalized from their environment, the sensation-perception-cognition process answers the question of how the environment breaches the boundaries of the individual. The constraints of the conduit metaphor appear in models of this boundary breaching function. The logic of the conduit metaphor limits sensation-perception-cognition process to senses, nerve pathways, and the brain. The five senses (sight, hearing, taste, smell and touch) act as

“portals” where the boundaries of the individual may be breached.⁹ This model preserves the basic objectivist notion of grasping and building larger structures from smaller mechanical parts: particles of sensation travel over nerve conduits to the brain, which sorts and combines them into percepts. For example, Handel states,

Today we know that acoustic and visual energy stimulate nerves and that it is the nerve firings that are *transmitted* to the brain. Each nerve responds to one type of energy, and the firing of that nerve is presumed to result in one sensory quality, regardless of the way it was stimulated. These qualities are the sensation, the simple conscious experiences like red, salty, or high pitch. The sensations are the *bits* and *pieces* of the perceptions. ... Perception is the necessary second stage, the process by which these elements are *bound* into objects and events. During perception, the conception of an external event is *constructed* (3, emphasis mine).

Objectivist thought sees perception as a technical function of the human senses and brain — a way to get particles of reality past the boundary of the individual, into the inner life and reassembled. It is, literally, the technical act of “making sense.”

Although we use “perceive” in a broader manner, e.g. “how one perceives the world,” objectivist thought would categorize the broader use of the term as metaphorical, extending the idea of “making sense through the senses” to “making sense” in general. Remember that objectivist thought opposes “metaphoric” to “literal.” Thus metaphoric extension of words suggests a tenuous connection between the original word and its extension. While the original “perceive” is technical, its metaphoric

⁹ Science recognizes other senses, such as the kinesthetic sense. However, these senses are primarily concerned with information internal to the person — they detect information about the internal environment, such as hunger, thirst and tiredness, and relay that information to the brain. Some of these senses may also give information about the environment, such as when the sense of balance alerts a person to unstable ground. In that case, these internal senses become “portals” that relay outside information to the brain.

extension is not. Rather, it conveniently describes a process that could be called many other things: viewpoint, worldview, perspective, philosophy, belief system, bias, etc.¹⁰

I propose that the broader use of the term “perceive” is not “merely” metaphorical. Rather, if we readjust the frame to include the whole person in interaction with the world, it describes a process just as “technical” as the objectivist definition does. A higher level process that incorporates lower level perception by the five senses, it can be observed linguistically in the phrase the/a “sense of x.”

“Sense of X”

Bourdieu suggests the term “a sense of x” to describe dispositions culturally inculcated into the body, mind and emotions, and gives the following examples:

the sense of necessity and the sense of duty, the sense of direction and the sense of reality, the sense of balance and the sense of beauty, common sense and the sense of the sacred, tactical sense and the sense of responsibility, business sense and the sense of propriety, the sense of humour and the sense of absurdity, moral sense and the sense of practicality, and so on (124).

He argues that the objective conditions a person grows up in creates in her a set of dispositions, “senses of x,” which tend, in turn to recreate the objective conditions that created them in the first place.

For instance, Bourdieu describes at length the Kabylean peasant world, to which a sense of *honor* is central. The adult Kabylean has a well-developed sense of honor,

¹⁰ In this use of “technical,” technical:metaphorical::literal:figurative. Since cognitive linguistics has debunked the literal/figurative distinction (Gibbs 1989, Lakoff 1986), I suspect that in the cognitive linguistics framework, the technical/metaphorical distinction might dissolve, as well.

which gives her a tendency to feel certain emotions and feelings, think certain thoughts, carry her body in certain manners, behave in certain ways, and interpret the behavior of others in certain ways. In other words, Kabylisians live life in terms of the sense of honor and in so doing, inculcate the sense of honor in their children, as well. In the terms that I am developing, the sense of honor involves embodied perceiving and imagining. The sense of honor, an inculcated trait in Kabylisians, guides how they imagine, perceive and react to the world.

Does "Sense of" Equal "Sense"?

It might be argued at this point that a "sense of" does not equal a sense. A "sense of" is a feeling people have about themselves and their world that cannot be equated in any way with the sense of hearing or the sense of smell. A sense of humor does not breach the boundary between the outer and inner worlds. It is simply an internal feeling of readiness to laugh.

I would argue that we must relocate the idea of "sense" from the objectivist framework to the embodied realist framework. In that framework, senses would not be defined as portals that breach the boundary between outer and inner worlds, but rather, as organs of *awareness*, *alertness*, and *attention* — faculties used in the process of directing our energy (mental, physical, emotional and spiritual) as we interact with the world. For instance, a person with a well-developed sense of humor *attends* to clues of humor in the world with greater frequency and energy than does a person with a poorly developed sense of humor.

As organs of awareness, alertness and attention, the “senses of” connect us with events outside our bodies, as do the “portal” senses. They accomplish this through imaginative entrainment. We entrain imaginatively with many different kinds of events in the world: another person’s thoughts or emotions, the movements and strategies of a tennis opponent, or the development of a sonata-allegro form. We dwell in and live these events by imaginatively matching our inner selves with them. However, we do not accomplish that matching randomly, but through the mediation of the “sense of” the situation. We can best imaginatively entrain with another person’s thoughts or emotions when we have a well-developed “sense of” that person.

Similar to the “portal” senses, imaginative entrainment not only connects us to the outer world it also tracks developing events. A “sense of” a situation provides expectation(s) — a sense of the developmental tendencies of the situation. Through those expectations, imaginative entrainment channels the energy of awareness, keeping the observing person engaged in the event. For example, the sense of Baroque musical style engenders engagement in a never-before-heard Bach piece, since the listener embodies the developmental tendencies of the music and thus becomes personally involved as those tendencies manifest in the musical moment. In this way, the embodied sense of Baroque style tracks the music, just as eyes track a cat running across the street or ears track the sound of a siren moving closer.

“Senses of” also resemble “portal” senses in that they help us to make sense of the world. In the objectivist explanation, when the brain sorts sensations into percepts

they become *patterned* so that they “make sense.” Not merely a matter of sorting, this process selects which bits of data to emphasize or de-emphasize. For instance, a listener can hear a polymetric piece in 3/4 or 6/8, depending on how she patterns the sounds into successive beats. An objectivist explanation of the perceptual shift would involve primarily the sense of hearing (including the ears, nerves and brain), with the actual perceptual difference created by a change in the way that the brain “sorts” and thus emphasizes the data. In contrast, an embodied realist viewpoint would also include the embodied sense of rhythm. Thus, the way to facilitate the perceptual shift from 3/4 to 6/8 is not to appeal directly to the brain, but to appeal to the whole body, reorienting the whole embodied perceptual apparatus in the process. In fact, as practical teaching experience has shown, most students need to visually entrain with clapping hands and clap the different meters before they can actually hear the metric shift on their own without clapping. Through the sense of rhythm, the whole body (not just the brain) makes sense of this perceptual puzzle.

As human beings live in their environment, they come into contact with various levels of data, both elementary (material) and more complex (emotional, behavioral, intellectual, artistic, social, political, and so on). While detecting and making sense of elementary material data like sound and light waves involve the “portal” senses, detecting and making sense of these more complex kinds of data involve the embodied “senses of.” However, these two levels of complexity are not separate, but work together, as we saw above when the senses of hearing and rhythm worked in concert.

As these more complex kinds of data (emotional, intellectual, artistic, etc.) are culturally inflected, the “senses of x” will be culturally inflected. To the extent that the culturally inflected “senses of x” work in concert with the “portal” senses, the “portal” senses will be culturally inflected, as well.¹¹ For example, since I have been enculturated in the discipline of ethnomusicology and have incorporated a feeling for polymeter into my sense of rhythm, I now hear it in music that I probably would not have noticed it in before.

In contrast with the “portal” senses, rather than concentrating function in a particular sensory organ, the “senses of x” function by way of the entire self. Different aspects of the self may come to the fore in different kinds of situations — the body in sensing the moves of a tennis partner, the emotions in sensing the mood of a class, the thoughts in sensing the philosophical framework of a writer. However, even if the function seems focused in one dimension, the entire self functions subsidiarily to that focal dimension. We are usually not aware of these senses, just as we are not usually aware of the working of our “portal” senses. We only become aware of them when they malfunction.

For example, as I watched swimming in the last Olympics, I began to note a pattern of reaction amongst the men who won that differed from the women. In general, the women, and some of the men, seemed very happy, sometimes surprised — an understandable reaction. However, I could not, for a while, fathom the reaction of some

¹¹ For sensory anthropologists, the relationship between the culturally inflected “senses of” and the “portal” senses argues for the inclusion of the “senses of” in the concept of the *sensorium*.

of the other men: they looked *angry* to me. After puzzling over this reaction for a while, I finally made sense of their reaction by imaginatively entraining with their bodies, actually physically formed my face into an image of theirs. Once I did that, I realized that what they were feeling was *triumph* — a mixture of extreme happiness *and* aggression — which did make emotional sense. The point is that in this situation, my sense of empathy (which is what draws us to situations where people win or lose) failed me. Because of that failure, I had to go consciously through normally unconscious steps— entraining imaginatively and making sense through that entrainment. I even had to add the extra step of actually forming a triumphant face, because purely imaginative entrainment did not work. But note that the act of moving my facial muscles into a particular shape is what clinched the process of making sense. I made the face, felt a glimmer of the feeling of triumph and finally understood what these men were feeling.

Summary

In this section, I have introduced the notion of the “sense of x” as a higher-level perceptual interface between the individual and her environment. In and through the “sense of x,” the individual’s embodied imagination and perception work in tandem to sense and make sense of higher-level patterns in the environment. Like the five “portal” senses, the “senses of” are organs of awareness that direct energy and track events in the world. Unlike the “portal” senses, the “senses of” cannot easily be isolated to a specific set of bodily parts. Rather, they require the whole self.

EMBODIED PERCEIVING/IMAGINING & MEANING “ON THE HITHER SIDE OF WORDS”

The objectivist view of imagining and perceiving sees human beings as objects, divides them into elemental parts — body/mind, rationality/ imagination, emotion/intellect, etc. — locates these faculties in those parts, and shows how those parts accomplish these tasks. In the process of objectification, the *structure of the human being* becomes the issue. In contrast, embodied realism does not objectify human beings, but sees human experience in interaction with the world as the central issue to be understood. Therefore, the relevant structure would be *the structure of human experience*, rather than the structure of human beings as objects.

Polanyi’s Structure of Tacit Knowing

Michael Polanyi provides a theory of the structure of human experience as it relates to knowing. He theorizes a distinction between *tacit* knowledge — things we know but cannot verbalize — and *explicit* knowledge — things we know and can verbalize. Examples of tacit knowledge are how to ride a bike (or any other kind of body based skill), how to see (hear, smell, etc.) how to read an x-ray, how to predict a tennis partner’s next move, or how to recognize the music of a particular composer. For tacit knowing, we can try to describe how we accomplish a skill or know something, and may be successful in describing some aspects of the knowing, but cannot impart its sum total in words. The sum total of the knowing lies out of the reach of words: it is *tacit*.

Rather than basing his epistemology on an analogy to a mental homunculus who sees, grasps and manipulates mechanical objects into larger systems, Polanyi begins with

the experience of interacting with the environment with the lived body. From this experience, he abstracts two kinds of awareness: *subsidiary* and *focal*. As we interact with our environment, we attend focally to things outside ourselves, but with a subsidiary awareness of the workings of the body. For instance, if I am chopping onions for a dish, I attend *focally* to the act of cutting the onion with the knife, but am *subsidiarily* aware of the relationship of the fingers of my left hand (which holds the onion) to the blade of the knife, my right hand and arm as it executes the chopping motion, my body as it stands next to the counter, my eyes as they tear up, and so on.

In the task of chopping an onion, focal awareness is a greater level of awareness — a focused attention on the larger meaning of the situation (i.e., getting the onions chopped). At the same time, subsidiary awareness is a lesser level of awareness — a more diffuse attention in peripheral vision and body awareness to the particular objects and motions involved in the task. *However*, although Polanyi acknowledges that the two kinds of awareness vary in intensity, he distinguishes between them not as a matter of *intensity* but of *function* in the process of tacit knowing.

Polanyi argues that the functional relationship between subsidiary and focal awareness rests on a co-creative relationship between the two that produces *meaning*. Like chopping an onion, the execution of any skill requires the integration of many different particulars into a coordinated whole. The particulars are subsidiary not only in awareness, but to the functioning of the whole. As Polanyi terms it, the integration of subsidiary particulars *bears on* the focal whole. At the same time, the whole creates the

meaning of the subsidiary particulars; each of these subsidiary particulars means exactly what it does because it functions in a particular way as a part of that particular whole. For instance, when chopping onions, one of the subsidiary particulars involved is an intent stare. This stare means one thing if it functions as subsidiary to the act of chopping an onion, but would mean something entirely different if it functioned as subsidiary to the act of flirting. Thus, the distinction between subsidiary and focal rests on the co-creative relationship between parts and whole: the integration of subsidiary particulars creates a meaningful focal whole, while the whole determines the meaning of the subsidiary particulars.

Polanyi notes a spatial structure in the relationship between subsidiary and focal: we attend *from* subsidiary particulars as they integrate in our bodies *to* the focal whole. For instance, a blind person using a cane attends from the subsidiary feelings in her hand to the features of the terrain she traverses. Her focal attention on the terrain extends outward from the matrix of her subsidiary awareness: the feeling of her hand on the cane as well as how the terrain feels underneath her feet. She attends *from* her body *to* the terrain. This same from-to structure can be seen in verbal communication: we attend from the subsidiary particulars of the words to the focal whole of the idea they jointly create.¹²

¹² The meaning structure of language clearly is more complex than simply attending subsidiarily from words to the ideas that they communicate. If this were the case, we could understand any language we heard. However, while the particulars of linguistic meaning appear to be more complex than the particulars of meaningful skills, the overall general structure still applies. This general meaning structure can be seen in the case of homonyms, where the idea context clearly determines the meaning of the specific word. I will further discuss how words mean later in this chapter.

Up till this point, I have connected “subsidiary” with “part” and “focal” with “whole.” It might be objected that it is quite possible to be focally aware of parts. This objection can be answered in two ways. First, whether I attend to a whole or to one of its parts, *some sort of integration of subsidiary particulars must occur for that attending to be meaningful.* If I attend only to the first note of a symphony, I am still integrating the complex sound wave with my culturally inflected sense of music toward a bearing on hearing timbre, duration, volume, pitch and location.

Second, although it is true that one can attend to a part of a whole focally, that fact cannot be used to impeach the validity of Polanyi’s theory. Rather, it can be used to further support its validity. In this theory, meaning emerges from the integration of subsidiary particulars into a bearing on a meaningful focal whole, which determines the meaning of the subsidiary particulars — a complex, seemingly circular relationship. If this idea is true, then one would expect that if anything disturbs the relationship, meaning would disintegrate. And in fact, when one attends focally to the subsidiary particulars of a whole, meaning does dissipate, if not disintegrate totally. For instance, on a homemade card, I recently saw pictures of an ear and a pair of eyes cropped in rectangular shapes from a photograph. They meant nothing to me, except in the context of the text that accompanied them. Only when I was shown the whole picture they were taken from did I recognize them as my own.

Polanyi places this possible disintegration of meaning in the context of the lived body and its from-to relationship with the external world. Recall that we attend to the

focal whole from the subsidiary particulars as they integrate in the lived body. As when I could not recognize my own eye and ear, focusing on a subsidiary particular *externalizes* it imaginatively from the integration lived in, by and through the body. Thus, meaningful integration entails *imaginative interiorization* of subsidiary particulars. As Polanyi states the case,

[T]o attend *from* a thing to its meaning is to *interiorize* it, and that to look instead *at* the thing is to *exteriorize* or *alienate* it. [...] [W]e *endow a thing with meaning by interiorizing it and destroy its meaning by alienating it* (146).

The recognition that meaningful integration occurs in, by and through a living body suggests a very different relationship between internal and external realities than the compartmentalized schema suggested by objectivism. The subsidiary particulars that we integrate to a bearing on a focal whole are not only located physically within the body, they are also located outside it. *Interiorization* is the process of bringing those subsidiary particulars located outside the body into the internal integrative process.

The process of interiorization suggests that as we dwell in the world, aspects of the world dwell in us. Not only do these aspects of the world dwell in us, we live our lives in and through them. Subsidiary body awareness extends into the world and *incorporates* aspects of the external world into the internal meaning process. As Polanyi explains it,

I have shown how our subsidiary awareness of our body is extended to include a stick, when we feel our way by means of the stick. To use language in speech, reading and writing, is to extend our bodily equipment and become intelligent human beings. We may say that when we learn to use language, or a probe, or a tool, and thus make ourselves

aware of these things as we are of our body, we *interiorize* these things and *make ourselves dwell in them* (148).

With this understanding of the relationship of human being to world, it is difficult to tell where human being leaves off and world begins.¹³

The process of interiorization should not be considered merely part of a formal schema — a matter of getting subsidiary particulars from “out there” to “in here.” To consider it as such would be to objectify the human meaning process. Rather, it should be understood as a *lived process*:

Such indwelling is not merely formal; it causes us to participate feelingly in that which we understand. Certain things can puzzle us; a situation may intrigue us — and when our understanding removes our perplexity, we feel relieved. Such intellectual success gives us a sense of mastery which enhances our existence (148-49).

I might add that “things that puzzle us” occur not only in the intellectual realm of life, but other realms as well, e.g., emotional and physical.

Polanyi’s Tacit Knowing Related to Embodied Imagining/Perceiving

In *Knowing and Being*, Polanyi presents his ideas about tacit knowing in a relatively detemporalized fashion. He does occasionally tackle processes that occur over time, like language acquisition, but he describes the elements of the structure of tacit knowing in a fashion that emphasizes synchronic processes over diachronic ones. If we relate Polanyi’s structure of tacit knowing to some of the ideas I introduced in the last

¹³ Note the resonance of this idea with the embodied realist stance that human beings were created in and by the earthly environment for adaptive action in it.

section — imaginative entrainment, expectations and “senses of x” — we can begin to better understand the diachronic operations of tacit knowing.

Imaginative entrainment is another way to speak of the interiorization of subsidiary particulars in the external environment. However, while “interiorization” does not suggest any particular time frame, “imaginative entrainment” involves both synchronic and diachronic processes. In and of itself, “imaginative entrainment” indicates the individual’s present engagement with an unfolding event. In addition, as a process, it entails those aspects of the individual created over time through multiple exposures to like events: an embodied sense of the situation she entrains with, as well as feelings of expectation and desire that arise from that embodied sense. The diachronically interiorized embodied sense of a situation, and the feelings it gives rise to, engender the individual’s engagement with the present event. For example, if I entrain imaginatively with a Bach concerto grosso that I have not heard before, I am integrating a multiplicity of clues: those already internal to me from past experiences with Baroque concerti grossi, as well as those I am interiorizing from the present concerto grosso as it unfolds. The already interiorized clues are in me as a sense of the concerto grosso style, which I experience as bodily feelings of expectation and desire. This sense of style has arisen in me diachronically, as I have integrated various hearings of concerti grossi. Thus, the process of imaginative entrainment involves an individual who interiorizes events over time, not just in the moment.

The interiorization that bears on imaginative entrainment creates physical changes in the human body over time. Having a sense of the concerto grosso style changes not only structures in my brain, but the coordination of brain with bodily and emotional systems (especially if I am playing or conducting the style). Because each interaction with the environment is a new subsidiary particular that integrates with like subsidiary particulars already encountered, human beings constantly evolve to become better adapted to functioning in their particular environment. In a sense, the environment molds us to its demands.¹⁴ This molding occurs as a result of diachronic interiorization.

The relationship between synchronic and diachronic interiorization can be seen clearly in language. In language, general concepts result from diachronic interiorization, while referential use of those general terms results from synchronic interiorization. (Of course, each synchronic use of a term feeds into the diachronic interiorization, either maintaining it or changing it.) In the diachronic process of concept formation, a new quality emerges from the integration of parts, similar to stereoscopic vision:

We fuse the two different pictures of an object cast on the retina of our eyes by forming its stereoscopic image. Here perception resolves a contradiction by revealing a *joint meaning* of conflicting clues in terms of a *new quality*. A similar synthesis is achieved when we hear a sound as coming from a definite direction by combining its impacts that reach the first one ear and then the other. This is also what happens in the formation of a general conception (167-68).

As we acquire language, we encounter objects or acts of specific types over time, interiorized them, and integrate them toward general concepts or a sense of the

¹⁴ More accurately, we mold ourselves to the demands of the environment.

predictive possibilities of language use. As we use language in the moment we integrate these dimensions of language acquired over time with aspects of the specific situation toward a bearing on understand or acting in the specific situation.

One final point important to Polanyi's structure of tacit knowing also relates to diachronic interiorization: "the questing imagination." The questing imagination answers the question of grammar acquisition. While an analogy between stereoscopic vision and general concept formation may be valid, grammar is too complex to be entirely explained in this manner. Polanyi quotes Chomsky's description of grammar's complexity:

It seems plain ... that language acquisition is based on the child's discovery of what from a formal point of view is a deep and abstract theory — a generative grammar of his language — many of the concepts and principles of which are only remotely related to experience by long and intricate chains of unconscious quasi-inferential steps (196).

Polanyi sets about answering the question of grammar acquisition through analogy. He describes an experiment with an optical device that inverts the field of vision. After a period of time in which subjects try to move about the environment, and manage to do so only with great effort and clumsiness, a new tacit integration occurs and subjects can once again make their way about the environment with relative ease. Their vision does not reinvert; rather they reintegrate the visual clues with kinesthetic and proprioceptive clues toward a bearing on a new sense of navigation. It is absolutely essential that these subjects *try* to move about; without stumbling attempts to navigate the environment they do not experience the reintegration.

Polanyi explains this reintegration by way of the *questing imagination*.

We must conclude then that it is the effort of our imagination, seeking to re-interpret our vision in a way that will control the scene before us, which produces the right way of seeing inverted images. This is *the dynamics of tacit knowing: the questing imagination vaguely anticipating experiences not yet grounded in subsidiary particulars evokes these subsidiaries and thus implements the experience the imagination has sought to achieve* (199-200).

Readers may be able to relate to this better by casting their imaginations back to a time when they learned a skill, riding a bicycle, perhaps. The physical subsidiary particulars of riding a bike are extremely complex. As the body tries to ride through trial and error, using the knowledge of how it looks to ride a bike as a focal whole, the questing imagination keeps those movements that work and discards those that do not. Eventually, it finds the right combination of movements and the body achieves balance. Note that the questing imagination can occur mentally, as in learning grammar, bodily, as in learning to ride a bike, or emotionally, as in learning the emotional motivations of a friend.

In conclusion, I would like to describe the relationship between Polanyi's structure of tacit knowing, the energetic matrix, and Bourdieu's *habitus*. Bourdieu's writing about *habitus* has been criticized for the impression it gives of lack of agency.¹⁵ With "*habitus*," he clearly points to the tacit, bodily, subsidiary aspect of Polanyi's

¹⁵In the first chapter of *Outline of a Theory of Practice*, Bourdieu gives the impression that his model gives agency to individuals: "[O]nly a virtuoso with a perfect command of his 'art of living' can play on all the resources inherent in the ambiguities and uncertainties of behaviour and situation in order to produce the actions appropriate to each case, to do that of which people will say, 'There was nothing else to be done', and do it the right way" (8). However, as he develops his argument in later chapters, that impression fades and one of relatively agentless, unthinking people emerges.

structure of tacit knowing.¹⁶ However, he does not utilize the entire structure of tacit knowing (in which meaning emerges from the integration of subsidiary particulars into a bearing on a meaningful focal whole, which determines the meaning of the subsidiary particulars.) Rather, he includes only the ineffable, bodily aspects. It is true that, to some extent, we are at the mercy of the *habitus*, since it can be so difficult to bring to focal awareness (as we saw with some of the writing in the last chapter). However, even though difficult, it is possible, when an aspect of the *habitus* is not serving well, to bring it to focal awareness and work to change it. Had Bourdieu been aware of and included the whole structure of tacit knowing, he might have solved the problem of agency.

The “energetic matrix” is similar to “*habitus*,” but includes both subsidiary and focal aspects, and also utilizes the structure of tacit knowing. The events that occur as dimensions of the energetic matrix — understanding, thinking, perceiving, remembering, feeling, believing, etc. — can occur subsidiarily or focally and can be experienced tacitly in peripheral bodily awareness or explicitly in central mental awareness. When one aspect is in the mental foreground, the other aspects constitute some of the subsidiary particulars that integrate toward a bearing on the foregrounded aspect. Thus, they co-create one another.

¹⁶ Since “*habitus*” is so resonant with “tacit knowing,” and since Bourdieu wrote relatively shortly after Polanyi and spoke of “tacitness,” I thoroughly expected to see Bourdieu cite Polanyi. Surprisingly, he doesn’t.

Summary and Discussion

Polanyi resituates knowing as an active, interactive aspect of embodied living in and adapting to an environment. In so doing, he solves many of the problems of objectivism. Unlike the objectivist epistemology, Polanyi's epistemology is not based on an analogy, but on lived, embodied experience. His thinking rests on the special character of how we know our bodies and how the body interacts with the environment:

Our body is the only assembly of things known almost exclusively by relying on our awareness of them for attending to something else. Parts of our body serve as tools for observing objects outside and for manipulating them. Every time we make sense of the world, we rely on our tacit knowledge of impacts made by the world on our body and the complex responses of our body to these impacts. Such is the exceptional position of our body in the universe (147-48).

From this observation, he abstracts the structure of tacit knowing, suggesting that all knowing proceeds similarly to the knowing of the environment by the body.

The logical relation that links life in our body to our knowledge of things outside us can be generalized to further instances in which we rely on our awareness of things for attending to another thing. When we attend from a set of particulars to the whole which they form, we establish a logical relation between the particulars and the whole, similar to that which exists between our body and the things outside it. In view of this, we may be prepared to consider the act of comprehending a whole *as an interiorization of its parts*, which makes us dwell in the parts. We may be said to live in the particulars which we comprehend, in the same sense as we live in the tools and probes which we use and in the culture in which we are brought up (148).

He terms this embodied knowing — a knowing that proceeds without words, and sometimes in spite of words — *tacit knowing*. He demonstrates that tacit knowing does

not oppose or even complement explicit knowing. Rather, *all explicit knowledge is rooted in tacit knowing.*

From a position of familiarity with the theory of tacit knowing, we can recast some of the problematic aspects of objectivism in a way that shows that, while it misses the mark, it aimed at something real. This is most evident in the *structural* aspects: 1) the spatial structure of tacit knowing and 2) the distinction between subsidiary and focal awareness.

Since all knowing is rooted in the relationship of subsidiary awareness of the body with focal awareness of the outside world, knowing has a from-to spatial structure.¹⁷ Stated as an abstraction, subsidiary awareness forms a dynamic matrix out of which focal awareness extends. Objectivism indexes this from-to structure with the notion of the mental homunculus, analogous to the subsidiary matrix, and “seeing” or “grasping” parts of the outside world, analogous to the extension of focal attention from the subsidiary matrix. The relationship of mental homunculus to the actions of seeing and grasping is iconic with the relationship of subsidiary awareness and focal awareness. “Grasping” also indexes the process of synchronic interiorization of subsidiary particulars. If Polanyi’s theory of tacit knowing is valid, objectivism correctly assigns a spatial structure to the knowing process that extends from the body to the outside world. However, it characterizes that spatial structure incorrectly.

¹⁷ This structure is not necessarily concrete, but may be abstract, as when we attend to our thoughts.

From the viewpoint of tacit knowing, we can see that the objectivist split between mind and body also indexes a real aspect of the knowing process. The mind/body split is analogous to the distinction between subsidiary and focal awareness. Rather than indexing and theorizing them as two different but interdependent epistemological functions, objectivist terminology (and its underlying schema) indexes and theorizes the *locations* of those two kinds of awareness: body based subsidiary awareness and mind based focal awareness. Aware only of focal awareness and unaware of its basis in the matrix of subsidiary awareness, objectivism places all activities of knowing (including imagination, perception, intelligence and meaning) in the mental field and focuses on the bright, visible products of focal awareness. In so doing it proceeds to overlook the subsidiary, creating a skewed understanding of knowing and meaning.

Objectivist theories of imagination, perception, and intelligence are based on how we experience these faculties in their *focal* aspect. However, as I argued earlier, these human faculties occur in *bodies* as well as *minds*, occurring in a subsidiary aspect as well as a focal one. Thus, in addition to subsidiary awareness, we may speak of subsidiary imagination, perception, and intellect. Operating in the tacit realm of human experience, they may be harder to observe than their focal aspects; however, even if difficult to examine, they still exist and operate during the process of living meaningful lives.

Given its dependence on an interaction between the seemingly intangible subsidiary and the apparently more tangible focal, meaning suffers great harm when forced into the objectivist schema. Since that schema does not recognize the subsidiary

realm, meaning becomes a “tangible” object packaged by word-forms and passed from mind to mind. Objectivism thus dismisses aspects of the meaning process directly connected with the elusive tacit realm as irrelevant, unreal, or unreliable: an insight or intuition bubbling up into focal awareness from places unknown, a fleeting sense that you’ve almost figured out the solution to a problem, or the necessity of groping in the dark for answers to problems before they come.

Through his perceptive insights into the experience of knowing, Polanyi has clearly outlined a new schema with which to think about knowing and meaning. While aspects of the objectivist schema may be *structurally* analogous to aspects of Polanyi’s schema, he does not base his thinking on them, but begins anew, creating a new terminology that accesses a new schema. In so doing, he has freed us from the constraints of objectivism and laid the ground for a new understanding of meaning.

Still, more work remains to be done. Like Lakoff, when Polanyi writes most explicitly about meaning (in *Knowing and Being*) he bases his thinking on a consideration of language. Although he creates his general epistemological theory without reference to the objectivist schema, when he speaks specifically of *meaning*, he refers to a schema that metonymically accesses the objectivist representation schema. Integrating his structure of tacit knowing with Peirce’s semiotic triad — A stands for B to C — he arrives at a semantic triad — “The person A can integrate the word B into a bearing on C.”

While this formulation may work well enough for words, it falls short when applied to music: “The person A can integrate the musical phrase (musical figure, musical gesture) B into a bearing on C.” Music may invoke other meanings, such as a feeling or memory, but it does not become subsidiary to them. Experientially, particulars that become subsidiary to focal wholes seem transparent — unnoticed in the meaning process, unless something goes awry. Music does not become transparent; indeed, as the meaning process deepens, it can become more vividly present. Clearly, Polanyi’s schema of meaning must be expanded if it is to help us understand how music means.

INVOKED MEANING

Extending Polanyi’s Theory of Meaning

Although Polanyi’s theory relates to adaptive human interaction with the environment, he tends to limit his thinking to events abstracted from the unfolding of everyday life and time: vision, riding a bike, playing chess, or feeling the terrain with a cane as conceived generally, without a bearing on specific people, places or times. In feeling tone, these examples are analogous to a general term, e.g., the concept “dog” as contrasted with the concrete, grounded feeling of “dog” when it bears on guiding attention to a specific dog. As Polanyi points out, terms are experienced with a different quality when they are used generally than when they are used specifically.

[T]here is ... an important difference which faces us It lies in the curiously *unsubstantial character* of the joint meaning ascribed to a group of objects by a general term. Compared with optical illusions or stereoscopic images, general conceptions are abstract, featureless. The

focus in terms of which we are aware of the members of a class appears vague and almost empty (168).

The focus of the events Polanyi describes as examples of meaningful integration are similarly vague and empty: riding a bike, speaking a sentence. He does not consider how these acts arise, who accomplishes them and for what purpose, even though all meaningful integrations always involve very specific situations and purposes. Rethinking Polanyi's model in light of specifics may extend it in a way that makes it more powerful. The first question to address in resituating meaning in lived experience is how does meaning arise in the first place? What *invokes* the meaning process?

Invoking the Meaning Process through Intention and External Occurrences

Polanyi's decontextualized version of riding a bike pertains only to the physical act of learning to ride a bike. In real world contexts, once one *can* ride a bike one *may* ride for many different purposes: to get somewhere particular or to enjoy a beautiful day. The skill of riding a bike becomes a subsidiary particular to other intents and occurrences.

An intention is an internal occurrence, itself the focal outcome of a meaning process. As an invocation to meaning, it accomplishes several important processes. It establishes the focal whole toward which subsidiary particulars are integrated: the goal of getting somewhere particular on a bike or taking in a beautiful day. Since intention establishes the focal whole, it must also establish the specific subsidiary particulars that must be integrated toward that focal whole: the particular roads one takes and dress one

wears while riding. Intention also guides attention — what kind of attention and the manner in which it extends: focused attention toward rushing to get to a meeting on time or diffuse attention toward a beautiful outdoor setting and one's joyful response to it. Finally, intention acts as an impulse to meaningful action in the first place.

External occurrences may also act as an impulse to meaningful action: if a pack of feral dogs chases me while I am riding my bike it changes the meaning of my ride. I begin to ride to get away from the dogs, attending in a very focused manner to the goal of getting away safely, pumping my legs faster and harder, with a tremendous adrenaline rush. External occurrence may, too, invoke a focal whole and the subsidiary particulars necessary for integration, including a particular kind of attention.

As an invocation to meaning, intention parallels Polanyi's function of the questing imagination in situations where the focal whole is known, but the subsidiary particulars and how to integrate them are not.

This is the dynamics of tacit knowing: the questing imagination vaguely anticipating experiences not yet grounded in subsidiary particulars evokes these subsidiaries and thus implements the experience the imagination has sought to achieve (199-200).

In general, intention anticipates subsidiary particulars *already grounded in experience* and thus implements the experience the intention seeks to achieve. Occasionally, however, we have an intention we do not know how to achieve, in which case, intention is equivalent to the questing imagination. Like the questing imagination, intention *invokes* the process of meaning.

Extending Polanyi's Schema to Include both Intentional and Occurrent Meaning

For intentional actions, Polanyi's meaning schema (the person A can integrate the word B into a bearing on C) might be restated, "The person A (hereafter, Bob) integrates a set of subsidiary particulars B as a means to focal whole C." Bob rides a bike as a means to going to the store. One could also use this formulation for actions where an outside occurrence invokes the event: Bob rides a bike as a means to getting away from a snarling dog. However, stating the case in that manner seems rather inaccurate, sounding as if Bob controls the situation. It misstates the agent/patient relationship of the situation; in reality, the dog-agent controls Bob-patient. A more accurate description of this situation might be "a snarling dog invokes in Bob the integration of a set of subsidiary particulars B into a bearing on getting away from the dog." Abstracted, this would be "event X invokes the integration in person A of a set of subsidiary particulars B into a bearing on (or as a means to) focal whole C." This statement of the event corrects the agent/patient relationship, but does so in a way that Bob seems curiously uninvolved in the situation — he is a puppet in whom subsidiary particulars bear on a focal whole. We know that Bob is much more in control and involved than this statement makes out. In order to understand the problem, we need to examine the notion of "subsidiary particulars bearing on a focal whole."

We have an idea in this situation of some of the specific subsidiary particulars: the snarling sound and menacing look of the dog, fear flooding Bob's system with adrenaline, putting his body and mind in high gear, his desperate search for a means of

escape, the sight of and flight to the bike, his mind racing to think of the best escape route, scrambling on the bike and riding. The notion “integration of subsidiary particulars” seems quite well grounded at this point. But what does it mean for these particulars to “bear on a focal whole?” We know that the whole in question is the goal of getting away from the dog. But how do the particulars *bear* on that whole and how is the whole *focal*?

From Polanyi’s structure of tacit knowing, we are already familiar with one kind of focus — focal awareness — that places the power of focusing in the mental field of the individual in question. I alluded to focal awareness earlier when I said that intention focuses attention. In this case it is the attacking dog that focuses attention. However, if we look at the list of subsidiary particulars, we can see that attention is not the only thing that is focused in Bob’s flight from the dog. Bob’s very *being* is focused by the attacking dog — perceptions, emotional and physical systems, instincts, imagination, mental acuity, and decisions — all aspects of what I earlier termed the “energetic matrix.” This observation locates the focus not just as a matter of attending to a whole, but of attaining the whole through the focus of subsidiary particulars. We may *mentally* be focused on the whole we wish to attain, but we are also *bodily* focused in that manner, as well, with mental focus in focal awareness and bodily focus in subsidiary awareness. We may not be *as* aware of the bodily focus *as focus*, yet it exists.

Taking this fact into account, we can now restate Bob’s situation: a dog menaces Bob, invoking and focusing the integration of a set of subsidiary aspects of his

energetic matrix, B, toward the goal of getting away from the dog. Stated abstractly, this would be “event X occurs to person A, invoking and focusing the integration of a set of subsidiary aspects of her energetic matrix B toward a focal whole C.” This formulation makes clearer that the focus does not reside only in the ultimate whole, but occurs as part of the process of reaching that whole and in so doing, *creates the bearing of the subsidiary particulars on the focal whole*; “focuses B toward C” states the relationship of *bearing*.

This statement of the expanded meaning schema — “event X occurs to person A, invoking and focusing the integration of a set of subsidiary aspects of her energetic matrix B toward a focal whole C” — can apply to *intentional* situations as well as those situations that are focused by something outside ourselves. “Event X” can be an intention. Therefore, the invocation to meaning (event X) can occur either internally or externally.

Linguistic Meaning

We must consider whether or not the extended version of Polanyi’s meaning schema is general enough to apply to most meaning situations. We have seen that it applies to non-linguistic meanings. Let us consider language now, starting with a simple, non-volitional case of language.

Imagine that Bob, walking down the street, was alerted to the dog by hearing someone shout, “Watch out for the dog!” Hearing these words invokes in Bob the integration of the following subsidiary aspects of his energetic matrix: his ability to

recognize these particular words from the stream of sounds around him and his knowledge of the *general* meaning of these particular words and how they integrate through English syntax. In addition, the urgent tone with which they are spoken invokes in Bob the desire to attend to the words. These subsidiary particulars integrate in such a manner that they focus Bob's attention and physical behavior so that he quickly scans the visual environment for a specific dog. Thus, the event (hearing "Watch out for the dog!") has invoked and focused the integration of a set of subsidiary aspects of Bob's energetic matrix toward the focal whole of the dog's presence and specific condition. This illustrates a case in which language has been interpreted.¹⁸

Will the schema work for cases in which we "put an idea into words?" Let us consider Gisela, who yelled to warn Bob about the dog. Sitting in her study, she happened to look out of her window at just the right time to warn Bob. In this case, the sight of the dog invokes the focusing and integration of a different set of subsidiary particulars: her concern for her fellow human beings, her desire to help Bob, her knowledge of the general terms involved and her understanding of English syntax, her vocal cords and the other aspects of her linguistic apparatus. The sight of the dog, then, occurs to Gisela and invokes and focuses her integration of this set of subsidiary aspects of her energetic matrix toward the focal whole of warning Bob.¹⁹

It appears, then, that the extended schema — event X occurs to person A, invoking and focusing the integration of a set of subsidiary aspects of her energetic

¹⁸ This process is the same as Polanyi's "sense-reading," although I have theorized it differently.

¹⁹ This process is the same as Polanyi's "sense-giving," although again, I have theorized it differently.

matrix B toward a focal whole C — applies both to situations where a person interprets language and where she puts a focal whole into language. Will it apply to other kinds of meaning, such as symbolic meaning?

Symbolic Meaning

In *Meaning*, Polanyi and Prosch theorize symbolic meaning. Building on Polanyi's schema, they characterize symbolic meaning in terms of intrinsic interest. In the new schema, the subsidiary clues are of lesser intrinsic interest to the individual and the focal whole is of greater intrinsic interest. (This is easily exemplified by a prose sentence, in which the words are of lesser interest, but the idea they express are of greater interest.) They diagram this structure of meaning in the following way:

-ii +ii (“ii” = intrinsic interest)

S → F

Because this meaning schema begins as internal to the individual, they call it “self-centered.”

Polanyi and Prosch contrast “self-centered” meaning with “self-giving” (or symbolic) meaning, in which “it is the subsidiary clues that are of intrinsic interest to us, and they enter into meanings in such a way that we are *carried away* by these meanings”

(71). They explain:

Suppose we look at a flag, or a medal, or the tombstone of a great man. As objects, these things have substantially no interest to us; but what functions subsidiarily in bearing on, say, a flag *is* of great intrinsic interest to us, for it includes our total awareness of our membership in a nation. When we look at our country's flag on a solemn occasion, this otherwise meaningless piece of cloth becomes for us a moving spectacle and to

some people even a sacred object. Recall how linguistic from-to relationships are similar to the integration of parts to a whole. A name becomes attached to its object to some extent and comes to form part of it. There is a similar link between a nation and its solemnly unfolded flag: the nation's existence, our diffuse and boundless memories of it and our life in it, become embodied in the flag — become part of it. The structure of meaning found in medals, tombstones, and other things of this kind is quite the same. Such intrinsically uninteresting objects of our focal attention do not *indicate* something, as other intrinsically uninteresting things do, for example sounds used subsidiarily as words for denoting an interesting object. Flags and tombstones *denote* a country or a great man but they do not bear upon them as words bear upon their objects; they rather *stand for* such interesting objects, which is to say they *symbolize* them (71-72).

They diagram this structure of meaning

+ii -ii

S → F

and continue:

The focal object in symbolization, in contrast to the focal object in indication, is of interest to us only because of its symbolic connection with the subsidiary clues through which it became a focal object. What bears upon the flag, as a word bears upon its meaning, is the integration of our whole existence as lived in our country. But this means that the meaning of the flag (object of our focal attention) is what it is because we have put our whole existence into it. We have surrendered ourselves into that “piece of cloth” (which would be all that the flag could be perceived to be were we to try to view it in the *indication* way of recognizing meaning). It is only by virtue of our surrender to it that this piece of cloth *becomes* a flag and therefore becomes a symbol of our country (72-73).

Some of the subsidiaries, then, that bear upon the flag and give it meaning are our nation's existence and our diffuse and boundless memories of our life in it. These, however, not only bear upon the flag as other subsidiary clues bear upon their focal objects, but they also, in our surrender to the flag, become *embodied in it*. The flag thus reflects back upon its subsidiaries, fusing our diffuse memories. ... This is how the symbol can

be said to “carry us away.” In surrendering ourselves, we, as selves, are picked up into the meaning of the symbol (73).

Their final diagram of symbolic meaning is

+ii -ii
S $\leftarrow \circ \rightarrow$ F (where “ $\leftarrow \circ \rightarrow$ ” indicates the embodiment of the self in the flag).

Although I have felt a meaningful integration of self with flag on patriotic occasions, characterizing it in terms of “surrendering” aspects of myself to the flag, which then “embodies” those aspects, does not ring true to my experience. According to the logic of SURRENDER, if I gave aspects of myself over to the flag, patriotism would feel like a process of emptying. In this situation, I do not feel empty, but rather, full. In addition, while the image schema of surrender suggests a direction of meaning extending from internal to external, the experience feels more like the external flag strikes me and I resonate internally

In Polanyi and Prosch’s schema, “surrender” is consistent with being “carried away”:

This is how the symbol can be said to “carry us away.” In surrendering ourselves, we, as selves, are picked up into the meaning of the symbol (73).

Although I do sometimes have a sense of being carried away by a symbol, am I carried away by the *symbol* itself or by the transcendent reality the symbol stands for? Polanyi and Prosch do say that we are picked up into the *meaning* of the symbol, but in keeping the direction of the meaning process from internal subsidiary particulars to external symbol, they do not allow that symbol to *stand for* anything. The meaning process as

they describe it involves only person and symbol, with no mention of the place of the transcendent reality. They do suggest “total awareness of ... membership in a nation” as one subsidiary particular internal to the viewing individual. But does that awareness bear on the meaning of the flag, or does the sight of the flag activate that awareness, bringing our attention to the feeling of being a part of the transcendent reality for which the flag stands?

These problems can be solved by considering the flag example in terms of the extended version of Polanyi’s structure of meaning: event X occurs to person A, invoking and focusing the integration of a set of subsidiary aspects of her energetic matrix B toward a focal whole C. The sight of the flag invokes and focuses a set of memories and associated feelings toward an awareness of one’s membership in a nation.

And yet, a patriotic feeling, a sense of being “carried away,” does not simply arise at the sight of the flag in stimulus → response fashion. I sometimes look at the flag and experience nothing but its factual association with patriotism. In order for this deeper response to occur, we must allow the flag to activate subsidiary particulars in such a way that they bear on the experience of feeling patriotic. Rather than surrendering aspects of ourselves over to the flag, we *open* ourselves to its ability to invoke a sense of connection with our nation.

It is not the flag, but that sense of connection that carries us away. We can understand this case more easily if we view it in terms of metonymic processes, which occur on at least two levels of this meaning process. On a lower level, the embodied

sense of patriotism has developed as an experiential gestalt over time through in integration of various associated experiences: the sight of the flag, the sound of the national anthem, fireworks on a national holiday, or the sight of a military vehicle in wartime. As an experiential whole, an *understanding* of “patriotism” may be metonymically invoked by any of its parts. However, simply invoking the sense of patriotism does not necessarily create a feeling of patriotism. Creating that feeling involves a higher-level metonymic integration.

The higher-level metonymic integration occurs when we, as parts, participate feelingly in the whole for which the symbol stands. The flag stands for dimensions of the external world that we have interiorized as the patriotism schema. When the sight of the flag invokes the sense of patriotism and we permit ourselves to be further “carried away,” we merge with what the flag stands for — we feel ourselves a metonymic part of the larger external whole. For that brief moment in our lives, we actually *live* our “part” in the larger patriotic scheme of our nation because we have momentarily lost our sense of self to the larger whole. *The focal whole at this point is not the larger external schema of patriotism, or the internal sense of patriotism, but the merging of self with that larger schema.* In other words, the meaningful integration is between the individual and the transcendent reality of patriotism, not between the individual and the flag.²⁰

²⁰ This integration actually occurs both internally to the individual and externally, in the world. As the individual experiences it, she feels a part of the larger whole as she imagines it to be. From an outer perspective, this individual *is* at that moment one of the aspects of the larger patriotism schema to which *all* members of the schema have access individually.

The following diagram summarizes these relationships: patriotic aspects of the world > flag → internal, embodied patriotism schema $M \ominus$ patriotic aspects of the world. This would read “Patriotic aspects of the world *are stood for by* the flag, which *invokes the integration of* the internal, embodied patriotism schema, which *creates a metonymic integration of the individual with* patriotic aspects of the world. Note the similarity of this schema with the expanded version of Polanyi’s meaning schema — event X occurs to person A, invoking and focusing the integration of a set of subsidiary aspects of her energetic matrix B toward a focal whole C. In this case, the only major addition is the aspect of the world being stood for. And in fact, a general schema of symbolic meaning does not even need to include that element. The symbol does not actually stand for an aspect of the world, but for our understanding of an aspect of the world. That understanding of the symbolized aspect is what integrates in the initial sight and recognition of the flag. The chain of meaning, then, would be the sight of the flag invokes and focuses the integration of the “patriotism” set of subsidiary aspects of the energetic matrix toward the recognition of the flag; the recognition of the flag invokes and focuses the “patriotism” set of subsidiary aspects of the energetic matrix toward the metonymic integration of self with patriotic aspects of the world.²¹ Thus, the symbolic meaning process is not different in overall structure from the kinds of meaning we examined earlier.

²¹ We can see here how meaning becomes a flow of integrations toward a series of focal wholes. In addition to the two meaning links I have suggested here, one more can easily be seen — the meaningful integration of subsidiary particulars leading to the initial sight of the flag. In fact, within each individual, multiple meaning processes are occurring all the time, as our bodies function to keep us alive, as we move, think and feel.

Symbolic meaning and the kinds of meaning discussed earlier, then, differ primarily in the kind of final outcome. Symbolic meaning involves the usual integration of subsidiary aspects of the energetic matrix toward a focal whole. However, in the case of symbolic meaning, the focal whole is an integration in and of itself, a meta-level integration: the integration of self with some reality that transcends the individual.

It would appear, then, that just as the invoking event varies in kind (either internal or external) and the from-to direction varies in kind (either internal to external or external to internal), the “focal whole” varies in kind. Let us examine the notion of “focal whole.”

Focal Whole

If you recall the tale of Bob and the attacking dog, you will remember that Bob focused his very *being* — involving multiple aspects of his energetic matrix — in the attempt to flee the dog. We noticed at that point that “subsidiary particulars” could be rephrased “subsidiary aspects of the energetic matrix,” since everything that was pulled together and focused in the get-away was an aspect of the energetic matrix.²² I would like to suggest now that “focal whole” can also be experienced and thought of as an integrated whole of one or a few aspects of the energetic matrix.

Please recall the list of examples of aspects of the energetic matrix:
understandings, thoughts, intentions, motivations, attitudes, philosophical bases,
perspectives, decisions, resolutions, desires, actions, intuitions, impulses, reactions,

²² Actually, all meaning processes are also a matter of integrating aspects of the *biological* matrix in which the energetic matrix originates.

values, beliefs, truths, perceptions, imaginings, emotions, feelings, interests, expectations, and memories. If you think about each of these examples, you will find that each one can be the outcome of a meaning process that involves the subsidiary integration of some set of the others. In the flag example, the focal outcome of a *feeling* of patriotism combined with a larger *perspective* of oneself as a part of a larger whole was the result of the integration of a patriotic *attitude*, a *philosophy* that supports patriotism, a *decision* or *impulse* to open oneself to the experience, an *image* of oneself as a part of the larger whole, and *memories* of patriotic occasions in the past. The fact that these aspects of being human relate to one another in this fashion in the meaning process is what makes them a matrix, a matrix that converges focally in who we are.²³

Thinking again about these examples of aspects of the energetic matrix, we can see that they may manifest in different levels of awareness. Some of them *do* generally occur in focal awareness: actions, thoughts, intentions, decisions, and resolutions. Some generally function either in very low levels of subsidiary awareness or out of awareness altogether: perspectives, and philosophical bases. Most of the remaining aspects generally function in subsidiary awareness, but can be brought to focal awareness with varying degrees of ease: understandings, motivations, attitudes, desires, intuitions,

²³ That “who we are” is a focal convergence of aspects of the energetic matrix can be seen in the following ways. If you ask someone to describe a person they know, John, making clear that you are interested in a description of them as a person, not as a physical specimen, you will elicit a long list of aspects of the energetic matrix. E.g., John works hard and is determined, understands people well, etc. That these subsidiary aspects of ourselves converge *focally* in the *sense of self* can be seen by the fact that, when focal attention is lost momentarily, we ask ourselves “where was I?” When we lose focal attention, we lose our selves. For an analysis of metaphors used to conceptualize the self, see Lakoff 1996.

impulses, reactions, values, beliefs, truths, perceptions, imaginings, emotions, feelings, interests, expectations, and memories. Thus, if the focal outcome of a meaning process can be any of these aspects of being human, and if some of these aspects of being human occur regularly outside of focal awareness, then “focal outcome” does not necessarily occur within focal awareness.

For example, occasionally, if we are open to such experiences, we might experience an event that changes our perspective in a brief moment. This kind of experience can feel very full of meaning, even though that meaning does not easily present itself in focal awareness. Such an experience recently occurred to me when my daughter, Beth, who was home on a visit from college, said something to me. Formerly a very messy teenager who had kept a sign on her door that said “A clean room is a sign of a sick mind,” Beth offered to clean up some piles of books and other items that I, in the midst of great momentum in writing my dissertation, had put off dealing with. When I heard her offer, I felt tremendously happy and a feeling of meaningfulness. Her offer struck me, resonating within me, and I occasionally replayed it pleurably in my mind for some time afterward. It was not until I was doing some free writing for my dissertation, thinking about meaning that strikes and resonates, that I pulled the focal outcome of this meaning process out of subsidiary awareness and into focal awareness. At that point, I wrote that this offer “means that she is generous, has internalized good standards of neatness, has grown up, is loving, thoughtful and helpful, that she loves and understands me.” Before her offer, although I *had* noticed some changes in her that

indicated that she was maturing, I still thought of her as that teenager who preferred a messy room. When she made her offer, my *perspective* of her changed radically from that of a teenager to that of a mature, young adult.²⁴ As this occurred, I felt a feeling of happiness and a sense of awe at the wonderful young adult she was becoming, but I did not realize that it was my *perspective* of her that was being reintegrated. The fact and details of my reintegrated perspective did not come to focal awareness until I made the effort to bring it there.

That the focal outcome of a meaning process can occur largely in subsidiary awareness suggests the necessity of theoretically severing *function* in the meaning process from *levels of awareness*. Although Polanyi makes clear that the distinction of subsidiary from focal rests on function and not on levels of awareness, he still melds function and awareness in his statements describing how meaning proceeds. For example,

It is our subsidiary awareness of a thing that endows it with meaning: with a meaning that bears on an object of which we are focally aware (182).

In this description of the meaning process, which is typical of the descriptions in *Knowing and Being*, we can see that the subsidiary function is melded with peripheral awareness and the focal function with central attention.

²⁴ Although “perspective” is a single concept, I’d like to point out that it involves multiple aspects of the energetic matrix. One’s perspective on a person or situation involves understandings, attitudes, values, beliefs, truths, imaginings, emotions, and feelings. A changed perspective can alter other aspects of the energetic matrix, such as perceptions and desires. Therefore, an event that changes one’s perspective changes many aspects of the energetic matrix and their relationships at the same time. It is a radical restructuring that can thus feel very full of meaning, and yet is not easily available to focal awareness.

The equation of kind of function with levels of awareness also incorporates the notion of particulars and whole, which can be seen in Polanyi's statement, "the appearance of a thing [the focal whole] at the centre of my attention depends on clues [the subsidiary particulars] to which I am not directly attending" (139). Further evidence that Polanyi melds the function of subsidiary particulars with levels of awareness is the fact that he suggests a typology of subsidiary particulars that depends on levels of awareness. Of subsidiary particulars, he recognizes two kinds: 1) *subliminal* — clues we cannot observe directly, like our bodies working to see or hear and 2) *marginal* — clues we can observe peripherally.

As I have explored understanding meaningful situations in my life by using Polanyi's schema and my extended version of it, I have found that, thus far, the links between subsidiary function with particulars and between focal function with wholes are valid (if we recognize that a focal whole from one meaning process can become the subsidiary particular for the next or that focusing on a subsidiary particular can make it a focal whole).²⁵ However, as with the change in perspective that occurred when my daughter offered to clean for me, the link between subsidiary particulars and lower levels of awareness and focal whole and higher levels of awareness does not stand up to scrutiny. Sometimes focal wholes occur in lower levels of awareness and subsidiary particulars occur in the center of our attention. For instance, if I pour too much hot

²⁵ The way that Polanyi uses it, "whole" is not based in materiality, but in experience. The usual way of imaging parts and wholes is through a diagram of material objects whose connection forms a single whole. Polanyi uses the term to indicate an experiential whole, which is the result of the *integration* of subsidiary particulars. Those subsidiary particulars may not be evident in the focal whole, as in vision, but the focal whole is the result of their integration by the individual person.

coffee into a cup and I want to carry it across the room (and I have no way to pour out a bit of the coffee), I need to attend centrally to movements subsidiary to my focal goal.

If function and awareness are to be severed, it will be helpful to have terminology to clarify the distinction. I will continue to use “subsidiary” and “focal” to refer to function.²⁶ For awareness, I suggest the following terms, in order of higher to lower: central attention, peripheral awareness and subliminal awareness.

The idea that subsidiary particulars can be attended to centrally opposes one of Polanyi’s main ideas: that of interiorization. As Polanyi explains it, we interiorize particulars when we attend from them to a focal whole, in whose meaning they participate. If we attend focally to subsidiary particulars, they lose their meaning in terms of the whole. In the case of the hot coffee, this idea would mean that attending centrally to each movement involved in getting the coffee across the room would dis-integrate their meaning in terms of the whole. In reality, however, no such event *necessarily* occurs.

That subsidiary particulars *can* be attended to focally without loss of their meaning in terms of the focal whole does *not* invalidate Polanyi’s notion that exteriorization of subsidiary particulars (i.e., attending centrally subsidiary particulars) tends to disintegrate their meaning in terms of the whole. Rather, this is another instance

²⁶ Although it might seem a good idea to use “focal” as a level of awareness, since attention is commonly associated with “focus,” I believe that it is better kept with the notion of function. “Focal point” also relates to a force image schema in which diffuse particulars converge on a smaller, more focused area, as when a wide river narrows. The narrowing of the river creates greater force in the water as it reaches the constrained area. The subsidiary particulars of the water bear on the focal point. This force image schema can also be seen in the use of a lever, where the far end of a lever (used without a fulcrum) is the focal point of its force.

in which Polanyi's attention to synchronic events and lack of attention to diachronic events limits his thinking. If we have, over time, interiorized and integrated a specific set of subsidiary particulars very well, like those necessary to carry liquid across a room, we can attend to them centrally without causing their disintegration in terms of the focal whole. Through diachronic interiorization, these subsidiary particulars have been literally incorporated — integrated with the bodily matter. Their dis-incorporation would also require time. Only when we are first learning a task are subsidiary particulars so tenuously interiorized that they easily lose their meaning in terms of the whole if we attend to them centrally.

In addition to distinguishing between function and awareness and the three different levels of awareness, I would like to distinguish between internal and external awareness. Both central attention and peripheral awareness may occur internal to the person or external or some combination of the two. This means that focal outcomes of meaning processes may occur not only in internal peripheral awareness, as when the inconsistency between what someone says and how they say it produces a feeling of unease, they may also occur in external peripheral awareness, as when my mind is on my writing at the same time that I complete the task of washing dishes.

Distinguishing between function and awareness does not alter the extended version of Polanyi's meaning schema. "Event X occurs to person A, invoking and focusing the integration of a set of subsidiary aspects of her energetic matrix B toward a focal whole C" still describes the important aspects and functions of the meaning

process. It is necessary, however, to keep in mind that the invoking event may occur internally or externally, and both the integration of subsidiary aspects and the focal outcome may occur at any level of awareness.

Once we see that the meaning process is less limited in its structure than Polanyi suggested, it is easy to see that individual human beings perform continuous, overlapping, multi-leveled, nested streams of meaningful integrations. I may perform one kind of streaming meaningful integration with my body (walking) while at the same time perform a different kind of streaming meaningful integration with my mind (thinking through a problem). This, of course, is in addition to (and made possible by) the meaningful integrations my body continuously performs biologically. If we accept Polanyi's understanding of meaning then, since human beings are the creators of meaning, we live lives permeated by meaning.

Summary

In this section, I have examined symbolic meaning in light of the extended version of Polanyi's theory of meaning, finding that symbols invoke the metonymic integration of self with a transcendent reality. When we open ourselves to the action of the symbol, we vividly *live* our part in that transcendent reality for a period of time. Living one's part in a reality that transcends one's normal felt boundaries of self creates a change in perspective, a focal outcome that occurs in the tacit realm, more than the explicit

realm.²⁷ From a different perspective, alterations and new connections may be made in and between many aspects of the energetic matrix, e.g. understandings, perceptions, attitudes, values, beliefs, truths, desires, imaginings, emotions and feelings. We experience a radical restructuring that can feel very full of meaning, yet is out of bounds or too large for the mind to grasp it. We *feel* this meaning *deeply* with our whole selves yet cannot speak adequately of it. We are *struck* by meaning and it *resonates* deeply.

CONCLUSION

In this chapter, I have developed a philosophical foundation and theory of meaning suitable to the task of understanding musical meaning. Musical meaning is not transitive in nature; one cannot reasonably ask, “What does this music mean?”²⁸ Rather, musical meaning resonates through our whole selves; it is meaning that *lives* in and through us. Music calls forth in the listener the integration of a set of subsidiary particulars that bear on the focal outcome of transcending normal felt boundaries of the self. In that transcendence, we merge with the music itself and/or a transcendent reality for which the music stands. Through its power to connect us with transcendent realities and thus alter our perspective, music gives meaning to our lives.

In the next chapter, I will explore musical meaning in more detail. That exploration will set the stage for me to propose the idea of *resonant meaning*, a semiotic

²⁷ Of course, every experience of symbolic meaning does not necessarily *change* one’s perspective from the point of view of a transcendent reality. It may merely reinforce an existing perspective, as when a patriotic person lives patriotism while hearing their national anthem. However, if the person is really involved in that experience of symbolic meaning, her perspective *will* be changed for that period of time from one of dealing with ordinary, everyday life, to one of living a transcendent reality.

²⁸ One *might* ask “What does this music mean *to you?*” This, however, is an entirely different question.

process in which an energetic meta-medium effects the unity of people with signs, and through signs, with each other.

III

MUSICAL MEANING: RESONANCE

INTRODUCTION

In this chapter, I explore musical meaning in detail, recognizing three levels of the meaning process: 1) the neuro-biological integration of sound waves toward a bearing on hearing musical sound, 2) the integration of the embodied musical senses toward a bearing on making sense of the musical sound and 3) the symbolic integration in which the listener becomes the medium in which the music lives. This discussion will set the stage for me to propose the idea of resonant meaning, a semiotic process in which an energetic meta-medium effects the unity of people with signs, and through signs, with each other. The idea of resonant meaning expands the idea of “communication” beyond the schemas of expression, representation, and reference to a model of meaning capable of bringing people together through common experience.

MUSICAL MEANING

Polanyi’s Ontological Levels

Meaningful musical integrations occur on multiple levels. If you recall, one can interact with a nation’s flag in a way that the meaning process invoked *recognition* of the flag as a patriotic symbol. This meaning process involved the integration of the sight of the flag with the patriotic experiential gestalt toward the focal outcome of recognition of

the flag. One could also interact with the flag in a way that the meaning process involved more of the self: one could open oneself to the possibility of actually living one's part in the larger patriotic scheme for which the flag stands, with the feelings and change of perspective entailed by such an experience.

Polanyi calls these different levels of experience "ontological levels" and suggests that they involve principles of control that occur on multiple levels of complexity.¹ The subsidiary particulars of any meaning process are controlled by their own natures but when integrated toward a focal whole, they also become controlled by the more complex principles that serve to integrate them. Polanyi illustrates with the levels of a machine.

Viewed in themselves, the parts of a machine are meaningless; the machine is comprehended by attending *from* its parts to their joint function, which operates the machine. To this structure of knowing there correspond two levels controlled by different principles. The particulars viewed in themselves are controlled by the laws of inanimate nature; while viewed jointly, they are controlled by the operational principles of the machine (Polanyi 153-54).

Meaningful integrations take place at each of these levels, under a nesting system of control.²

Musical experience involves at least three different levels of meaningful integration, each of which I will discuss in detail below. First, the act of hearing tones integrates the sound waves hitting each ear with the body's neuro-biological principles of perceptions. In a tonal context, we are not normally aware of this level as an isolated

¹ Concerning the image schema of "levels": What I mean here is levels of complexity, from simple to complex, with complex involving more factors in varying relations to one another than simple. No other associated valuation is implied.

² Polanyi suggests the notion of *dual* levels of control, emphasizing the relationship between successive levels.

level. We *can* be aware of it in the context of a psychological experiment involving isolated tones, a hearing test, or in an atonal context in which no pulse can be discerned. In a tonal context, we normally become aware of hearing in terms of the *second* level, which involves making musical sense of tones. Making musical sense integrates the results of the first level (tones) with the higher principles of basic level musical concepts such as melody, gesture, momentum, mood, dynamic quality of motion, and rhythm *as they operate in embodied perception* toward a bearing on experiencing the musical sound as “notes.” The third level, experiencing “music,” integrates the results of level two (“notes”) with the higher principle of an intent to be moved, with its concomitant opening of self to integration with music.

The levels involved in musical experience are not merely a matter of a nesting system of greater complexity, as might be the case with a mechanical model. They are also a matter of level of *involvement of self*. As such, they are better thought of as a continuum of changes in a human experiential state, which places a human agent at the center of the model. If we think of the situation as nesting, hierarchical levels, the agent-patient relationship is reversed: in order to change from one level to the next, the listener must “climb” a “ladder” from one level to the next. The experiential context is static, while the person moves through it. If we think of the situation as a continuum of changes in human experiential state, the agent-patient relationship rings true to experiential evidence: although the listener is intimately involved in creating the change from one level to the next, it is still an experience that *occurs to him*.

However, this continuum of states should not be imagined as “an uninterrupted ordered sequence” (Merriam-Webster, 181). Such an image would suggest that each person must progress through the exact same, minute incremental changes of state on his way from hearing tones to experiencing music. Rather, three prototypical levels of this continuum may be defined: 1) hearing tones, 2) hearing “notes” and 3) experiencing “music.” However, within limits, individuals will vary in the ways that they experience each of these states and move from one to another. In addition, although we can define three prototypical levels, it must be kept in mind that these levels are not discrete, but interactive: as one experiences higher levels, lower levels can gain greater meaning in the higher level context (as when really being “into” the music allows you to hear sounds you had not noticed before).

Level One: Hearing Isolated Tones

In the terms I developed in chapter three, the process of hearing isolated tones involves the following: sound vibrations invoke and engage with our neuro-biological hearing mechanism in an integration that bears on hearing tones. We attend *from* this integration *to* hearing specific tones.

That tones are an integration of physical sound waves with human beings can be seen from the fact that the properties of sound waves and the properties of tones are similar and related, but not the same. Physical sound waves have the properties of frequency, duration, amplitude, and complexity. In contrast, tones (sound waves as heard by a person) have a related, but somewhat different set of properties: pitch,

duration, volume, and timbre/consonance/dissonance/location correspondingly.³ Of these two lists, the only property in common is that of duration.⁴ The three remaining properties differ and therefore the human experience of them must be a result of an integration of the sound wave with some aspect of the human being hearing it.

The change in one of the properties of sound waves — complexity — results from an integration of the sound wave with only the neuro-biological hearing mechanism. With one exception — dissonance — it is not culturally inflected. Sounds reach our ears as a single, continuous, complex wave. From that single, complex wave, the hearing system determines location through the slight time delay from one ear to the other. Through that sense of location, the hearing system distinguishes the number of sound sources that make up the single, complex wave. The complex wave also creates timbre through both the harmonics present and how those harmonics vary over the course of the duration of the note. (Thus, timbre results from the integration of aspects of the complexity of the sound wave with duration.) Psycho-acoustic dissonance is created when two or more tones are played together in which the harmonics do not match creating acoustical beats, which are experienced as unpleasant and thus may create

³ Consonance and dissonance are obviously not characteristics of tones that are totally isolated, but of tones in combination. By “isolated tones,” I mean musical tones heard outside the context of music.

⁴ Clearly, the duration of a tone as experienced and the physical duration of a tone are not one and exactly the same thing. The physical duration of a tone might be described as “onset → steady state → decay → offset,” while the duration of a tone as experienced might be described as “articulation → steady state → decay.” (The hearing mechanism does not tend to note exact offsets, but does hear the decay.) However, they do not differ in a way that I understand to be germane to my argument, so I will not discuss them here.

tension in the body.⁵ These properties are all matters of the processing of the single, continuous complex sound wave by the human hearing mechanism.

The ability to process that complex wave into location, separate sound streams, and timbre is learned in the course of interacting with the ordinary hearing environment. Even in a music-free environment, an ability to discern these properties is adaptive. Any human being with ordinary hearing, in any culture, will learn these abilities in the course of maturing physically in their environment. In other words, they are not in themselves culturally inflected. They *are* sensitive to training and thus may be improved by either environments humanly structured to improve them or natural environments that demand more of them.⁶ But the meaningful integrations that produce these abilities are not in and of themselves culturally inflected.⁷

In contrast, the integrations that produce the experiences of “pitch” and “volume” *are* culturally inflected. This is because the integrations that bear on the

⁵ I am using “dissonance” more as it is used by psychologists more than as it is used by musicologists — simply combinations of sounds that do not sound good together and thus can cause muscular tension in the body. I do not speak here of anything more musically complex, such as large-scale harmonic dissonance.

⁶ In terms of cultural inflection, the matter of consonance and dissonance is somewhat different. It would seem that, since this ability is a matter of discerning harmonics that either match or do not (and therefore create beats), this would be a “natural” and “unlearned” part of our hearing ability, as natural and unlearned as discerning location, separating sound streams, and identifying timbre. However, the sense that something is dissonant or “out of tune” is clearly learned culturally, since acceptable scale steps and judgments of consonance and dissonance vary from culture to culture. An interval that is not dissonant or out of tune to an Indonesian person may seem so to me, and vice-versa. I would surmise that, since it is the presence of acoustical beats that creates the sensation of dissonance (and any accompanying muscular tension), human beings have the ability to become accustomed to varying levels of beats.

⁷ Timbre preferences vary from culture to culture and with those preferences a special timbral environment arises. A person in a particular culture may become better at distinguishing variations in timbre in their particular sound environment, but this is a matter of specialized training, not basic ability.

experience of pitch and volume involve culturally determined metaphorical concepts. “Pitch” involves the metaphor of musical height, while “volume” involves the metaphor of musical substance that can be present in varying amounts. In other musical cultures, tones with faster and slower frequencies may be understood not as *high* and *low*, but in different manners: Temiar musicians speak of *small* and *large* tones (Roseman 1991), ancient Greek texts of *sharp* and *heavy* tones (Zbikowski 1998). Suya Indians do not indicate frequency directly, but speak of the small and large throats necessary to produce them (Seeger 1987). It is true that faster frequencies *do* seem “higher” than slower frequencies, but they *can* also seem small, sharp, narrow, tense or even light in brightness or weight.⁸ In certain musical contexts, high notes *do* suggest any of these qualities: musical experience exceeds the technical terms we use to speak of musical sound.⁹ However, despite the different experiential qualities that fast frequencies suggest, we choose to call them “high” and “low.” Similarly, loud and soft sounds could reasonably be spoken of in a number of ways. The most obvious alternative to volume (big or small) is distance (near or far), but in an analogy to human behavior, one might also experience louder sounds as more aggressive or dynamic and softer sounds as less so. However, in the culture of Western art music, we call loud and soft “volume.”¹⁰

⁸ Some of these qualities, such as “bright,” are a matter of frequency as it varies with timbre.

⁹ Thus, in these other cultures that call differing frequency rates by names other than high or low, experience may sometimes exceed those terms.

¹⁰ It is true that in listening to music, we might *experience* loud and soft as near/far or aggressive/passive. However, the fact that we *speak* of it as “volume” is significant in that it relates in a coherent manner to a whole set of other metaphors used to conceive of the sound of Western art music. The same can be said of “pitch.” I will discuss this further in the next chapter.

We do not only *speak* of these aspects of sound waves as having height and volume, we *experience* them as having height and volume. This suggests that these metaphors are not just a convenient way to speak of “frequency” or “amplitude”; rather, they are each one of the subsidiary particulars integrated toward a bearing on hearing pitch and volume. And in this way, although it may be theoretically convenient to speak of them as metaphors, one might argue that they are not really metaphors. *In experience, the tones really are high or the sounds big.* We do not “map” height or volume onto the sound, as metaphors are usually thought to operate. It is simply there in our experience of the tones because we integrate it in the very act of hearing them.¹¹ Experientially, musical tones embody the qualities of pitch and volume.

The lowest level of musical experience — a level that does not normally occur in isolation from the second level (hearing “notes”) — involves the integration of the physical sound wave with the human neuro-biological hearing system. Hearing is not simply a “mechanical” neuro-biological operation that can occur without learning. Rather, it involves the integration of culturally based, learned concepts, such as “pitch” and “volume.” As a part of the *tacit* integrations involved in hearing, we are not aware of pitch and volume as something we “add” to the sound wave. Rather, we simply experience the tones as high or large.

The notion that fast frequencies are high and slow frequencies low, large amplitudes large in volume and small amplitudes small in volume is a part of our

¹¹ This fact suggests that perhaps recent metaphor theory should be rethought in light of Polanyi’s theory of meaning.

culturally based tacit knowing system from which we attend to sound. That tacit knowing system involves what I earlier called embodied perception and imagining. We hear music not just with our ears, but with embodied perception and imagining, which are informed by what Mark Johnson calls “image schemas.” In order to clarify terminology, it would be useful at this point to discuss image schemas and their relationship to embodied perception (“senses of X”) and experiential gestalts, all of which are aspects of tacit knowing.

Image Schemas, Embodied Perception and Experiential Gestalts

As I explained in the introduction to this dissertation, kinesthetic image schemas are gestalt patterns (such as CONTAINMENT, FORCE, or SOURCE-PATH-GOAL) learned through bodily interaction with the world. They can be seen as the “general terms” formed by the integration of like physical experiences in the world, similar to the way that the general term “dog” is an integration of experiences with animals of like kind. We can make the analogy image schemas:rich, concrete images::general terms:specific experiences with what the terms refer to. Like general terms, image schemas are not concrete, but are more abstract in nature. Just as we attend from general terms to specific situations in the world, we attend from image schemas to specific situations in the world. Just as general terms direct our attention toward specific stimuli and away from others, image schemas can direct attention toward specific stimuli and away from others. In other words, like the “senses of” in embodied perception, image schemas help us to construct order in perception. As Johnson states the case,

(1) 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. (2) Unlike templates, schemata are flexible in that they can take on any number of specific instantiations in varying contexts (29-30, emphasis in original).

Formed from the diachronic integration of the generalities of physical experience, image schemas are a kind of experiential gestalt. As generalities, they are not reducible to any one specific instantiation, or to the sum of all of the specific instances that were integrated to make them (although they can be *exemplified* by a single instantiation). They are *more than* the sum of their parts. They are also experiential gestalts in that, as simple as they may seem, they all have specific structures that may be brought to bear on a focal whole through *metonymic invocation*. Consider, for instance, the simple CONTAINMENT schema, which involves a bounded space with implied *in* and *out* orientation, or with an implied ability to withstand a force that is *in* pushing *outwards* (or vice-versa). One can understand this whole schema from a simple line drawing:



Or from the words: “Okay, so you’ve got a bounded space...” or “Then I went in.” One need indicate only one part of this schema to invoke the whole. Thus, image schemas are experiential gestalts not only in how they are constructed in the first place but in the way that they construct experience and our understanding of it.

“Senses of X,” too, are experiential gestalts, formed diachronically through experiences of like category, such as “honor” or “things to expect from an opponent when playing tennis.” As experiential gestalts, and like image schemas, “senses of X”

can be invoked into a meaningful integration *metonymically*. For example, if you recall the story I related earlier about the fearful woman, her sense of fear was so salient in her being that it was invoked by very weak evidence that I was someone who ought to be feared: my greater height and a position of slight, but indirect authority (which I never exercised over her or any other people in her position). Kabylean adults, viewing the world through their sense of honor, require very few clues to recognize another adult as honorable or not. One part of the schema can invoke the whole in an integration toward a focal outcome.

If image schemas and “senses of X” are both diachronically formed experiential gestalts from which we attend in creating meaningful integrations, how do they differ? “Senses of X” are experiential gestalts of like *category* — e.g. “patriotism” or “honor” — but not necessarily like *kind* — e.g., intellectual, emotional or physical. In contrast, image schemas are experiential gestalts of like category — e.g. “height” — *and* like kind — physical. This would suggest that a “sense of X” might *involve* but not be *limited to* one or more image schemas. The sense of height, for example, includes the image schema of height, but is not limited to it. It also includes cultural and emotional associations with height. To see how this occurs in a specific example of perception, consider a photograph of a very tall man taken from a camera angle that begins below his knees and looks upward. Attending from our sense of height to the photograph, our perception of it will involve image schemas of height, creating an understanding that the photograph emphasizes the man’s height because it was taken from such a low level.

However, viewing this photograph from the sense of height, our understanding of it may also involve emotional or cultural associations with height — an emotional association of looking up at a young age at one’s father or a cultural association of height with authority and power. Thus, the term “image schema” can be useful in isolating those aspects of embodied perception that relate to integrating the generalities of physical experience in a meaning process.

In addition to “image schema” and “senses of X,” I will be using the term “experiential gestalt.” Although image schemas and “senses of X” *are* experiential gestalts, I will not use “experiential gestalt” to refer to them. “Image schema” and “senses of X” are involved with embodied perception. We attend from them to events in the world and they help us to make sense of those events. In contrast, I will not use “experiential gestalt” to refer to aspects of the self integrated toward a bearing on *making sense* of the things we attend to. Rather, I will use it to refer aspects of the self integrated toward a bearing on *experiencing* the things we attend to. By “experiential gestalt,” I mean gestalt-like aspects of the self integrated toward *experiencing* the world that are not simply those used in making sense of it. These gestalts may be an *extension* of those used to make sense, but they are not coextensive with them. For instance, if, in looking at the photograph of the man taken from below, one experiences a feeling of looking up at one’s own father and the concomitant emotions involved, then a personal experiential gestalt has been integrated into a bearing on the meaning of the photograph. When this experiential gestalt is integrated into the meaning of the photograph, one does

not report, “It’s like looking up at my father”; rather, one reports, “It *feels like* looking up at my father.” That personal experiential gestalt may include other memories and feelings as well, memories and feelings associated with one’s father at a young age. In this case, the simple image schema invoked by looking up at a man from below has metonymically invoked a whole experiential gestalt.

To summarize, all three of these terms refer to experiential gestalts and thus, those experiential gestalts may be invoked metonymically. I will use “image schema” and “sense of X” when I want to invoke the idea of bodily perceiving and imagining, but will save “image schema” for referring specifically to generalized gestalts of physical experience. I will use “experiential gestalt” to invoke the idea of richer schemas of experience, schemas that may include memories of specific feelings and experiences.

Level Two: Making Sense of the Musical Sound

Earlier, in “Hearing Isolated Tones,” I discussed the physical properties of isolated musical tones and how those properties changed in the listener’s experience due to the integration of two aspects of tacit knowing: 1) hearing skills developed in the course of normal maturing, such as finding location and distinguishing sound sources and 2) culturally acquired tacit knowing about the HEIGHT or VOLUME of musical sounds. I also noted that, although musical height and volume can be theorized as metaphors “mapped onto” the musical sound, since these notions are part of the integration that produces the tone as actually heard, *experientially* the tones really are high or the sounds

big.¹² In our hearing of them, these qualities seem *embodied* by the musical tones. HEIGHT and VOLUME involve the image schematic understandings of UP/DOWN and LARGE/SMALL, respectively. Thus, image schematic understandings acquired through embodied experience in the world operate at even at the lowest level of musical hearing.

In terms of Polanyi's "ontological levels," in the lowest level of musical experience, the single complex sound wave integrates with both *neurobiological* and *cultural* principles of hearing to produce the experience of sounds that embody certain qualities: pitch, duration, volume, location, timbre, consonance and dissonance. These principles operate at the level of what we would consider our "ordinary" hearing. Moving up a level, then, in a musical context, these qualities would integrate with some other principle or set of principles in a bearing on making sense of the music. These principles operate at a higher level of perception than the neurobiological involved in hearing isolated tones — what I earlier termed "embodied perception."

Making Sense with Embodied Perception: Metonymic Invocation

Embodied perception involves "senses of X." In a musical context, these senses would include the senses of melody, rhythm, gesture, momentum, dynamic motion and

¹² In my experience, however, the association between frequency and height is stronger than that between amplitude and amount. Amplitude often seems simply what it is — soft and loud. Only in certain contexts does it seem small or large (those contexts that emphasize the feeling of music as a flowing substance). In contrast, faster frequencies always seem high and slower frequencies low. High and low notes may also embody other qualities, such as lightness or heaviness respectively, but they do not stop seeming high and low because they also embody those other qualities.

mood.¹³ This would mean that, at this, the second ontological level of musical experience, the tones perceived in the first, neurobiological level invoke and engage with the embodied senses of melody, rhythm, gesture, momentum, dynamic motion and mood in an integration that bears on making musical sense.

Note that, since “making sense” proceeds *from* embodied perception, it is always rooted in tacit knowing and the “sense” made, while always beginning as tacit and embodied in nature, may or may not be made explicit and intellectual in nature. This fact means that any intellectual action operates on information obtained through bodily feeling. In this way *recognition* of a musical event or quality is a matter of distinguishing *through the body*. Recognizing through the body may be accomplished by individuals with no training in music theoretical language as well as it is by those with training. *Naming* and *discussing* musical events and qualities require training in theoretical language; feeling and recognizing do not. Music may make complete sense to a listener even if that listener has no training in the language needed to make that sense explicit. Training in music theoretical language can allow us to communicate the sense that we

¹³ Note that these senses are the same as what I earlier termed basic level musical categories. If you recall, in this way of thinking, which stems from Lakoff’s work on basic level categorization, “basic” refers not to physically primitive building blocks, but to *psychological simplicity*. In the context of interaction with the world, basic level categories are those categories at the level that human beings find easiest to learn, process, remember and use. Melody, rhythm, gesture, momentum, dynamic motion and mood are aspects of musical experience that human beings find easiest to learn, process, remember and use. Thus, they are basic as categories. In addition, the relationship of these basic level categories to the “senses of” used to make sense of musical sound suggests that, in musical perception, the level of embodied perception is psychologically more basic than the level of “ordinary” hearing.

However, even though these basic level categories or “senses of” are simple psychologically, they can be very complex intellectually. These are the musical concepts that I find most difficult to “put into words” when I teach. Fortunately, I can usually say “Melody. Well, you know what melody is. It’s the *tune* that you feel like humming along with.” With notions like gesture and momentum, it is generally easiest to define them by example. The students then recognize a kind of event that they have already experienced and note the association of word with event.

make of the music with one another thereby enriching our experience, but musical sense must first be rooted in tacit, embodied experience.

The invocation and operation of each of the musical senses is *metonymic* in nature. In other words, the properties of musical tones (as experienced) — pitch, duration, volume, location, timbre, consonance and dissonance (first level phenomena) — act as clues that invoke these second level meaningful integrations, similar to the way that a series of dots placed in a circular arrangement can metonymically invoke the CIRCLE image schema in an integration that bears on the perception of a circle.

For example, consider the quality of musical motion. This quality can occur in varying degrees of complexity. As the complexity of the kind of musical motion increases, the metonymic invocation of that motion involves more of the first level heard properties. In the most simple of these, musical motion is a matter of musical “lines” metonymically invoked by the first level property of HEIGHT. Just as discrete visual points can be integrated toward an understanding of a visual line, first level pitches (discrete “points” in an image schematically structure UP/DOWN continuum) integrate with our understanding of visual “lines” in a bearing on the second level experience of hearing musical lines moving through musical space.

In a more complex version of musical motion, one in which the seemingly insubstantial moving pitches discussed above manifest SUBSTANCE and FORCE, the integration involves not only the first level property of HEIGHT, but that of VOLUME as well. As embodied creatures, we have all had experience with moving substances of

various masses (volumes). We have felt that moving masses have kinetic force (or require our force in order to move them). We know, for instance, that when a large object hits the body, it does so with a greater force than when a smaller object hits the body. Thus it is with music. A single tone that varies in volume from soft to loud will metonymically invoke a feeling of growing musical force. Sounds with greater volume will generally be more forceful (depending also on timbre and other aspects of the musical context) and vice-versa.¹⁴

In an even more complex kind of musical motion, if the first level experiential property of duration is integrated with PITCH and VOLUME (as they integrate to FORCE), the second level quality MOMENTUM can be invoked. However, before I discuss that, I must consider musical PULSE, which is an image schematic phenomenon that involves first level duration and VOLUME and integrates on the second level with FORCE toward a bearing on a feeling of musical momentum. We are formed in an environment that includes the sound and physical feeling of regularly reoccurring pulses: our mother's heartbeat and concomitant circulatory sounds, as well as our own. In other words, we are born already tuned to the beat of a heart.¹⁵ As we grow, we learn other physical motions that embody PULSE, such as walking and running. Because of the association with walking and running, when it is integrated with musical motion (either UP/DOWN and/or FORCEful motion), musical PULSE can create a sense of *forward* motion. Musical

¹⁴ I will discuss musical force further in chapter four.

¹⁵ I would guess that the PULSE image schema is the first one that we learn, even before we become aware of CONTAINMENT, since an awareness of containment may be predicated on an awareness of the sudden lack of containment that occurs at birth.

PULSE involves the first level properties of duration and volume as they occur in a series of tones, which integrate with the sense of pulse into a bearing on feeling the pulse in the musical sound.

PULSE, then, becomes an integral part of the more complex musical motion MOMENTUM. Part of our embodied knowledge of PULSE is that it can occur at varying tempos and can thus accelerate or decelerate. The varying musical PULSE can integrate with forceful musical motion (PITCH integrated with VOLUME) into a bearing on experiencing musical MOMENTUM. Musical momentum varies with the amount of speed and volume. As the tempo or volume increase, generally, so does the momentum. If the volume remains the same while the tempo increases, momentum is created, and vice-versa. If a sense of momentum is desired while the tempo *decreases*, the volume must *increase* a great deal more than if the tempo remained the same or increased along with the volume. These are the same kinds of variations in volume and speed that we have experienced with moving objects or substances (water or wind, for instance). From those experiences, we learn the sense of momentum. When we attend to music from that image schematic sense it integrates with the first level phenomena of PITCH, VOLUME, and PULSE, in a bearing on the experience of musical momentum. Thus, musical motion can occur in varying degrees of complexity, depending on the number of image schemas integrated in creating the experience.

The same could be argued of PULSE, which occurs in simpler degrees of complexity, such as the simple level of the beat (integrating duration, volume, and

timbre), to the more complex levels of meter (integrating the basic PULSE schema with time/space and CONTAINMENT schemas or, alternatively, the basic PULSE schema with SUBSTANCE and FORCE schemas) and harmonic rhythm. While metered pulse integrates in a bearing toward a sense of forward motion that moves from beat to beat, harmonic rhythm is an integration of many qualities experientially embodied by the music toward a larger scale sense of forward motion. Those qualities include (but are not limited to) the tension of harmonic dissonance as it moves to the relaxation of consonance, the sense of harmonic/metric points of rest and their particular quality (open or closed),¹⁶ and the melodic line as it interacts with the harmony and meter.¹⁷ The enculturated listener integrates these qualities with his sense of large-scale expectation of form to produce an experience in which the music does not just *go*, as in simple forward motion, but goes *somewhere*, toward a goal. In this way many, if not almost all, of the second level image schemas that can possibly be invoked by the simple first level properties of pitch, duration, volume, location, timbre, consonance and dissonance are brought into the experience of making sense of the musical sound.

Although it explains how we can hear a complex, physical phenomenon such as momentum in a varying sound wave, the notion of metonymic invocation presents a model of making musical sense in which the listener passively reacts to active music. This may ring true to experience, as far as it goes. However, it is also true to experience

¹⁶ The image schemas of OPEN and CLOSED in an aural context probably relate to hearing linguistic statements that are open or closed.

¹⁷ All of this assumes a tonal context. I suspect that tonality is sensed and constructed image schematically, but have yet to decipher it in any conclusive way.

that making sense of music requires an active listener. That activity involves expectation, which works in tandem with metonymic invocation to create the listener's entrainment with the music.

Making Sense with Embodied Perception: Expectation and Desire

As I discussed earlier, expectations are embodied images based on past experience with similar situations that help to create coherence in the perceptual cues we receive from the environment. Unless expectations are thwarted, they generally operate in tacit knowing — without our conscious awareness of them. Thus we live in and through expectations as the present moment unfolds into the future. Expectations are our sense of what will happen next and thus direct our attention accordingly. In an art form in which time is integral to meaning, embodied expectations are integral to attending and making sense.

A concern for the place of expectation in musical experience is not new. Music students learn about expected harmonic progressions in beginning theory classes. Recent theories have involved expectation, notably those of Meyer, Narmour and Hasty. Narmour bases his theory on Meyer's work and thus adopts his theory of expectation, which involves a spatialized, linear model of time. Hasty's model of time emphasizes experience in the now, as it is conditioned by the past. Although a thorough discussion of these theories is beyond the scope of this dissertation, I would like to discuss them briefly.

If you recall from the first chapter, Meyer binds his view of expectation with the objectivist schema of *reference*, which implies the three termed representation schema.¹⁸ Meyer's referentially based model of intramusical meaning involves a triadic relationship between 1) the presently sounding music, which stimulates 2) the listener's expectation, based on past experience that 3) a specific musical consequent will occur. As he states it,

If, on the basis of past experience, a present stimulus leads us to expect a more or less definite consequent musical event, then that stimulus has meaning.

From this it follows that a stimulus or gesture which does not point to or arouse expectations of a subsequent musical event or consequent is meaningless (35).

Meaning involves realization or denial of expectation. When expectation is realized, we are satisfied, when denied, surprised. Unexpected events create interest, while too many expected events create boredom. The stuff of musical experience, then, is satisfaction and surprise, interest or boredom. A good composition gives us enough of what we expect to create coherence, but also enough surprise to create interest.

Since it is based on a theory of expectation, Meyer's explanation of musical meaning, along with Narmour's development of it, is a major step toward an experiential account. This step is made possible since meaning, rather than being a matter of a

¹⁸ The terms are 1) object represented, 2) representation, and 3) result of representation in the observer. This three-termed schema is also present in more general semiotic schemas in which the nature of the relationship between the terms varies, but the general structure (1, thing in the external world, 2, thing that stands for that thing and 3, results in inner world of observer) is maintained. The most often used such schema is Peirce's 1) object, 2) sign, and 3) interpretant (in all of its many permutations).

mechanical set of operations performed by a human being, is characterized in terms of the nature and experience of the listener. Expectation is a human experience, not something that is mechanical in nature.

Nevertheless, although Meyer attempts to base his theory on human experience, since he is working in the objectivist framework, he distorts that experience in order to fit the framework. As noted in the first chapter, Meyer characterizes expectation and meaning as mental in nature. He can thus only make a credible claim to explaining intellectually oriented feeling responses such as surprise or interest. This limitation discounts more bodily oriented feeling responses to music, such as mirth, melancholy or desire as less important and not worthy of consideration. In my experience, while I sometimes feel satisfaction, surprise, interest and boredom while listening to music, they are only a few of a gamut of responses I might feel.

Additionally, because of the limitation of experience to the mental field, expectation becomes a matter of mentally matching a mental representation of an implied musical event with an actual musical event. This, too, does not ring true to experience. For me, expectation in the musical situation is quite bodily in character. More than *thinking* that the present sounding musical event implies a specific musical consequent, I *feel* that the present musical event will or should go to another. In order to bring that to thought, I must first feel it bodily and then make the effort to bring it to mind. While it is true that I sometimes anticipate a favorite section in a piece I know well, looking ahead mentally when the section is coming up, that is not the kind of low level event-to-event

framework that Meyer and Narmour work in. Anticipating a favorite section can only occur in an already known piece. Meyer and Narmour's theories are built on expectation in new musical contexts, expectations built on both past experience and human psychological nature.

As theories based on a version of expectation that centers on not knowing exactly what will happen next, Meyer and Narmour's theories do not apply quite as well in cases where one feels meaning and pleasure in listening to a piece that one already knows well. When one listens to a piece one knows very well, as when a pianist listens to a piece he has memorized, one knows exactly what musical event will occur next at all times. Unless one happens to hear a sound or a relationship that one has not heard before, no real surprise occurs. And yet, it is still possible to both delight in those events that one found surprising at first and to continue to feel the music as meaningful.¹⁹

The problems with the Meyer/Narmour theory of expectation discussed above are all fairly obvious. My final problem — the linear, spatial metaphor of time at its base — is not as apparent. In this metaphor time is a line or path, with the present moment being a point on the line or path that moves forward. The past is behind that point, the future in front. Time is a territory and the present moment is our temporal "location." One logical entailment of this metaphor is that, just as every location in a physical territory actually exists, every location in the temporal territory actually exists. Due to

¹⁹ An additional logical problem arises if we interpret Meyer's definition of musical meaning strictly. According to that definition, if a now sounding musical event does not create expectation of a future one, it is meaningless. By this definition, the final chord of pieces that end with a sense of finality is meaningless.

the natures of the human capacities of observing, remembering and imagining, each of the temporal territories may exist with a different character: the present may have a more solid existence than the past, the past a somewhat hazier existence than the present, and the future may still be forming in front of us. Nevertheless, even given their different characters, this metaphor lends credence to the feeling that all of these times actually exist. That past and future *actually* exist is not true to fact. All that actually exists is now. Of the past, only traces actually exist in the now; of the future, only possibilities actually exist in the now. Nevertheless, because of our pervasive use of this metaphor, we speak and act as though the past and future actually exist. In this way we can speak of “the past stretching out behind us” or “the future unfolding in front of us.”

This characterization of the three temporal “realms” — a solid, actual present, a determined, but partially forgotten past, and a still-forming future in front of us — creates a tendency to locate the quality of *potential* totally in the future, leaving little possibility for potential to occur in the present. The future, as unformed, seems full of possibility. The present, as solid and “not absent,” tends to seem more actual than potential. Since we are “there” now and can see how things are, the present often takes on a fully determinate character. Only in unusual situations such as emergencies do we tend to be fully aware of the indeterminate character of the present. Emergency situations can make clear that the future does not actually exist, but that our experience of future “nows” is contingent upon the choices that we make in the current now. When we become aware that the future does not actually exist, we can see that *actual* potential

exists only in the present. Possibilities for future potential exists in the present as well, but actual potential exists in the now.²⁰ Although under normal circumstances the now may appear to be determinate in character, it is actually the now that unfolds, not the future before us.

The Meyer/Narmour theory of expectation characterizes the future as potential and the now as actual. The listener attends to determinate music sounding in the present, responds with a mental representation of potential in a future moment, and then attends to how that representation compares or contrasts with the actual music sounding when that future moment becomes present. This schema not only does not take into account the indeterminacy of the present, it defers attention away from the present moment toward a future moment. Even if you think of it as a chained structure (event A refers to representation b, which either does or does not match event B, which refers to representation c, which either does or does not match event C, and so on) the listener must constantly *split* his attention between the presently sounding event and the possible future event. If we believe that actual potential exists only in the now, we can create a model of expectation that is truer to experience — one that involves the entire listener and rivets his attention to the now-sounding music.

In response to the spatial metaphor of time employed by most music theorists, in *Meter as Rhythm*, Hasty develops a finely nuanced description of musical temporality

²⁰ As we envision it in the future “potential” takes on a substantial quality, almost as if it were a hazy substance out of which the future appears in front of us, like an mirage in the desert. As it is in the now, I mean to indicate the possibility, due to forces both within and out of our control, inherent in a current event for it to unfold in varying manners.

from the point of view of an unfolding now. Rather than treat meter as a structure or template he regards it as process, a course of thought fraught with difficulty.

The difficulty lies in standing outside process to distinguish parts, take measurements, and draw comparisons. Since we must freeze the flow of rhythm to treat it as an object for analysis, we may be inclined to conceive of time itself as something arrestable (68).

Theorists usually overcome this difficulty by characterizing time as space, which, while it may pin down the slippery “now,” also creates other problems, as I have been discussing.

In contrast, Hasty characterizes past and future from the point of view of their effects on an ever present now.

If there is to be anything approaching an analysis of rhythmic process, there must be found some way of speaking of future and past as they contribute to a presently evolving situation — a future that is potential rather than actual, undetermined rather than already determined (and thus, in effect, past); a past that, *in its effects*, is not fixed and immutable but that, in itself, is dead and gone and cannot be returned to (as if present) (69).

Hasty characterizes the now not as a place, but as an awareness of the becoming of present events.

To avoid equating now with the event itself and to avoid calling now a time point, I suggest that now might be regarded as a continually changing perspective on becoming. Now is continually changing and ever new, because becoming is ever new and never fixed or arrested (76).

This perspective on time and the now makes it a matter of human experience and capacity. The now is not a instantaneous point on a line, but is more like a bubble of

awareness conditioned by the human capacity for memory and embodied imagining.²¹ In this way, while an event in the past is already determined, its potential may still be unfolding in the now. Through memory, the past is still present in the unfolding now. While the future does not yet exist, its possibilities are also present the unfolding now as embodied imagining entrains with the musical sound. Human experience of the now is conditioned by our fully embodied perceptual capacity.

In this version of time, rather than referring me to unfolding in the future, expectation keeps me riveted as I participate in the process of potential becoming actual in the now unfolding event. *I am no mere bystander or mental matcher in this process, but a fully active participant in creating the event in the now.* As I described above, in the physical world, music is only part of the single, complex sound wave that exists in the physical environment at any one geographical location. Any other quality that music has (including eventfulness) is a result of its encounter with an active, enculturated listener. Expectation is a matter of the listener meeting the sound wave in the now in active and fully embodied anticipation of supplying his part in the integration with the sound wave toward the experience of music. That anticipation is based on how he has been conditioned as a listener both diachronically and synchronically by experience. From that tacit conditioning, he *feels* where or how the music might go.

²¹ I hesitate to use the metaphor of "bubble" because it invokes an idea of space. However, a better metaphor has not yet occurred to me. Just keep in mind that this is a bubble *of awareness*, which *is not spatial* in the way that it is experienced. Awareness may be of an object or event *in space*, but awareness is not itself spatial.

More than feeling like a mental matching of possible to actual, this expectation feels more like how one feels in the midst of an emergency (assuming one feels very present and fully functional, not panicked). If we are very present and fully functional in the midst of an emergency, without planning we integrate ourselves with the needs of the moment toward a beneficial outcome. We are “on our toes,” ready for whatever occurs, *living in the potential of the moment*. With music, that potential relates to such events as the particular sounds and relationships we attend to, the coherences that we create from them, the way that we allow them to invoke experiential gestalts in us (both musical and non-musical), and so on.

This kind of expectation is not consistent with the kind of expectation suggested by the Meyer/Narmour schema. Rather than involving the future, it occurs in the now. Since “future” is a fiction, it requires mental involvement. An expectation that occurs in the now is more felt in the body than thought by the mind. I *feel* the present event as it unfolds in the ongoing stream of nows, my body entrained with what feels to me like the forward motion of the music. Rather than referring attention from the present event to a possible future event, bodily expectation keeps us riveted to the event as it unfolds in the now.²² Since it is no longer a matter of mental knowledge of what comes next, but a matter of supplying parts of the self toward meaningful integration, understanding how compositions we know well can feel meaningful is no longer a problem. Even if we know a composition well, so that what happens next is not a guess but secure

²² One could even consider this “riveting” literal, rather than metaphorical. Through expectation, we integrate parts of ourselves with the sound wave, thereby creating our musical experience.

knowledge, we still need to “keep on our toes” in order to effectively supply our part in the integration.²³ We can also try to attend to the music with a different approach, or allow it to invoke novel experiential gestalts — both of which require a present, fully functioning listener.

If we place expectation in the now, we do not need to eliminate the future from the equation. It simply means we work with a different notion of future. The future becomes part of the potential of now, as it operates in embodied imagining. Listening to the music from my musical senses, I have a bodily sense, a bodily prediction, in the now of where the music might go or what it might do next. I am not looking for or imaging an event in the next moment, but feeling in the now, how the music *might* go. The potential musical event actually exists in the now in my bodily sense of what will occur next. It does not exist in a non-existent future moment.

Despite my misgivings concerning certain dimensions of the Meyer/Narmour theory of expectation, I have found Narmour’s method of melodic analysis useful in understanding how particular pieces of music makes me feel. Even though I believe that his philosophical framework has faults, Narmour draws on his own tacit knowledge in his explicit theorizing and thus compensates for those faults.²⁴ Although Narmour limits his thinking to the mental field of the listener and such associated feelings as surprise and interest, his method can also reveal how music might create *desire* in a listener. This

²³ In addition, even if we know explicitly (mentally) what will happen next, the expectations we feel are so rooted in our bodies that we can still feel them regardless of what our minds tell us.

²⁴ Musicians using his theory will also draw on their own tacit knowledge in applying it, thus helping to correct for philosophical errors.

potential is demonstrated by one of his key terms: denial. If his theory were truly limited to mental expectation and not rooted in tacit bodily knowing, the term “surprise” would be sufficient in order to describe the experience of not getting what was expected. In contrast, “denial” implies desire, a much more bodily feeling. If I don’t get what I expect, I feel surprised; if I don’t get what I desire, I feel denied.

Narmour speaks of strong or weak implication or implication that builds from weak to strong over the course of a musical event (as in, “the music strongly implies x”). This locates implication as an inherent quality of the music, rather than something that involves the listener. “Implication” masquerades as a substance or energy that interacts forcefully with the listener. His theory might be more accurate if, instead of “implication” he spoke of “inference.” Rather than locating the action “out there” in “the music itself,” “inference” locates it inside the listener, where he integrates the complex sound wave with parts of himself toward a bearing on the experience of music. Inference and expectation are the same process seen from different points of view; if we feel that A infers B, we *expect* B to follow A. If we locate the action in the listener, we can more easily see that it is not some inherent quality of the music “out there” that is weak or strong or builds. Rather, these qualities are located in the listener’s involvement with the musical sound. The force that builds is not implication, but desire. Having the benefit of working within a theoretical framework that makes possible a discussion of desire, I would support a greater attention to the role of desire in musical meaning.

Expectation and desire are closely related experiences. Expectation consists of being aware (either tacitly as a bodily feeling or explicitly in central awareness) of something (an event, object, quality, etc.) that might exist (based on what has already occurred), but does not exist now. Desire consists of both being aware and *feeling the lack* of something that might exist but does not exist now. If music invokes our involvement metonymically, desire may arise because it combines expectation with feeling lack. Because of diachronic and synchronic conditioning, both tacit and explicit, a listener feels expectation. That expectation invokes the experiential gestalt of desire — we not only are aware of something that might be, we feel the lack of it, too.

While mental expectation splits attention between the current now and one or more future nows, desire keeps listeners rooted in the now. As a mind-made fiction, only the mind can “visit” the future, the body cannot. The body is rooted in the now. As a feeling grounded in the body, desire keeps us fixed in the now. We may mentally imagine from desire to a future time when the object of the desire is present, but the desire itself is clearly present and in present time. It is from desire, rooted in embodied expectation in the now, that we entrain with musical sound. When desire is denied, its force builds. Rather than simply being a matter of cognitive interest and surprise, good composition creates a balance between giving us what we expect and denying what we desire. Getting what you expect creates coherence; being denied what you desire creates a context in which building desire roots you in the now, actively anticipating the pleasure of finally getting what you want. This pleasurable anticipation exerts a force that draws

the listener forward toward that future now when desire will be satisfied. A good composition not only surprises and interests, it tantalizes and teases, as well.

Music is an ephemeral, insubstantial phenomenon, yet it exerts such force! That force is felt as bodily and in the now. In order to fully understand that force, we must work from a philosophical basis that rings true to experience, one that includes the whole, involved person and occurs in the only time that really exists — the now.

Kinds of Tacit Knowing Brought to Bear on Making Sense of Music

The tacit knowing brought to bear on making sense of music consists of at least 5 different kinds: 1) the systems of metaphors that ground the understanding of music, 2) the image schemas learned through embodied experience in the world, 3) expectations and desires based on past experience with similar music, 4) the metaphoric system of the culture, and 5) personal experience with emotions and mood.

Western art music is grounded semiotically by a culturally defined system of metaphors. All signs have multiple aspects, any of which might serve to convey information. In Peircean terms, the ground is the *particular* aspect of the sign that is attended to as it functions as a sign.

The sign always presents its object as that object in some regard or respect, and so serves to present its object aspectively and partially. [...] However, it presents these qualities or characteristics of the object in the sign in an abstract form. The ground of the sign is an abstract quality or form of the sign, somewhat in a quasi-Platonic sense of form. [...] The ground, as the presentation of the object, thus serves as the basis upon which the sign can represent its object (Liszka, 20).

For instance, as I explained in “Hearing Isolated Tones,” as listeners hear them, sound waves of different frequency and amplitude have multiple aspects, any of which might function semiotically. In the case of frequency, faster frequency tones might seem high, small, narrow, sharp, or light in weight or brightness. Of these possibilities, our culture has chosen HEIGHT as the semiotic ground of music, while other cultures have chosen other aspects. In the case of amplitude, sounds with larger amplitude might seem large, near or aggressive. We chose to speak of them as large (although in certain musical contexts, they can also seem near or aggressive).

These two basic culturally chosen metaphors — PITCH and VOLUME are the metonymic seeds for two complex metaphors that I will explore in detail in chapters four and five of this dissertation: 1) MUSIC AS PITCHES MOVING THROUGH MUSICAL SPACE AND LOCATIONS and 2) MUSIC AS FLOWING SOUND SUBSTANCE. “PITCH” and “VOLUME” can be seen as giving rise to whole sets of logically consistent metaphors, such as “DISCRETE MUSICAL FIGURES MOVING THROUGH MUSICAL SPACE or LOCATION” and “FLOWING MUSICAL SUBSTANCE CREATING FORCE AND INSTABILITY” respectively. In level two integrations, these two complex metaphors create the musical context in which isolated metaphors, such as MOTION, FORCE, INSTABILITY, and REST make sense. I will explore this further in the next chapter.

For my purposes here, the point is that these metaphorical systems, which ground our understanding and experience of the music do so through embodied expectation. Someone from another culture who hears Western art music without knowledge of these

metaphoric systems will have a very different understanding and experience of it. They will use expectations based on the musical metaphors learned from experience with the music of their own culture and thus will make a very different kind of sense than someone enculturated in Western art music. While listening to a slowly ascending scale, someone whose understanding of rising frequencies is of broader to narrower sounds may feel an expectation and sense of narrowing, while a Western musician will expect and feel a sense of ascension. In this way, musical expectations are based on these metaphoric semiotic grounds.

With the grounding of the basic metaphors, musical expectations stem from simple image schemas learned through embodied experience in the world, as well as from past experience with similar musics. For instance, even if listeners had never heard music before, once they were oriented to the sense of the beat, they might reasonably be expected to be able to follow the beat because they had had many other experiences with steady pulse phenomena before. If the tempo began to accelerate, they might even be able to follow the *accelerando* because they had had experience with other kinds of accelerating pulses. This ability stems from the simple sense of pulse. In contrast, more complex musical pulse phenomena, such as metered pulse or harmonic rhythm require experience with musical sound in order to create a sense of expectation. Although these more complex pulse phenomena integrate image schemas learned through normal, everyday embodied experience, *as complex experiential phenomena* they originate in the musical realm and thus must be learned there.

In addition to relating to the musical grounding metaphors, making sense of music can relate to other cultural metaphors that are part of the general cultural system of tacit knowing. For instance, in our culture, we have a metaphor that IMPORTANT IS BIG. This is a value-based metaphor that may play out in the choice of car or house, or when actors' agents attempt to get their client's name put in larger letters on a movie poster. In certain musical contexts, this metaphor can be integrated with a "big" musical sound (based on the first level VOLUME image schema) into a bearing on creating a sense of importance in the music. In another example, the cultural metaphor HEAVEN IS UP/MORTAL IS DOWN might play out in music through the "higher" tones of an angelic choir hovering over lower, more earthly music. In addition, making sense of music integrates more complex cultural metaphors, such as the EVENT STRUCTURE metaphors that I will explore in chapter four. These cultural metaphors are all a part of the tacit knowing system that we integrate toward making sense of and understanding our world, including music.

Finally, making sense of music integrates personal experience with embodied emotions and moods. Emotions and moods manifest in the body in ways that relate to image schemas. For instance, cheerfulness manifests through a high level of positive, relaxed energy, which creates a feeling of UPness or BRIGHTness, an outward-looking viewpoint (i.e., extroversion), and movements that are expansive, relaxed and of a moderate tempo. In contrast, sadness manifests through a low level of energy that is negative in character, which creates a feeling of DOWNness or DARKness, an inward-

looking viewpoint (i.e., oriented toward self), and slower movements that are not expansive in nature. Some of these image schemas — tempo, range of movement, general level of energy, kinds of movements — and qualities — brightness or darkness — can be embodied by musical sound. If a listener hears some of those image schemas or qualities in the music, they can integrate them with their own embodied experience of these moods toward a feeling that the music *is* the mood, i.e., “The music is sad.” Of course, the attribution of a mood to a piece of music does not indicate a belief that the music actually *feels* that mood. Rather, it indicates the recognition that the music embodies patterns or qualities of that mood. The point is that moods and emotions involve image schemas and qualities that can be embodied by musical sound. Thus, when a listener hears those image schemas and qualities he can allow them to metonymically invoke either a recognition of the mood or an actual feeling of the mood. Embodied experience with moods and emotions, then, are part of the tacit knowing we bring to bear on making sense of musical sound.

Summary

Making sense of musical sound is the second of the three ontological levels of musical experience. As such it involves integrating the outcomes of the first level integration — the heard properties of pitch, duration, volume, location, timbre, consonance and dissonance — with higher-level principles. Those higher-level principles involve the metonymic processes of embodied perception: metonymic invocation of more complex image schemas and musical senses, as well as metonymic invocation of

expectations. In addition to image schemas, the higher level embodied perceptual system brings to bear at least four other different kinds of tacit knowing: 1) the metaphorical semiotic ground of music, 2) expectations based on past experience with similar music, 3) the cultural metaphoric system, and 4) embodied experience with emotions and moods.

Level Three: Living the Music

Each ontological level is more complex than the last; each level integrates more aspects of the listener with the sound wave and thus creates a greater number of meaningful relationships between different aspects of the music and between the music and listener. On the first level, only neuro-biological and simple cultural aspects of the listener are integrated with the sound wave to create the perception of tones.

Theoretically, tones are isolated, so they do not relate to one another.²⁵ On the second level, image schematic aspects of embodied perception, as organized by the musical senses, are integrated with the sound wave to make sense of the notes. Isolated tones become related to one another in varying ways and with varying degrees of complexity by metonymically invoking and integrating with image schematic aspects of the embodied musical senses. On the third level, experiential gestalts related to more complex aspects of the energetic matrix integrate with the sound wave in a bearing on

²⁵ In a tonal context, the separate existence of this first level is hypothetical only. If the listener is enculturated, he cannot help but make some sense of what is heard, showing that second level integrations are already occurring. Something like an experience of this first level of hearing might occur in an atonal context, especially if the rhythm is particularly free so that not even a sense of pulse can be discerned.

the experience of music. Unlike the second level, where the primary engagement is with image schematic perception, the third level engages broader aspects of the energetic matrix, including (but not limited to or necessarily) emotions, feelings, memories, understandings, values, beliefs, imaginings, and desires. On this level, the musical image schemas created by metonymic invocation on the second level go on to metonymically invoke these more complex experiential gestalts.

Experientially, on the third level, the sounds of the music do not simply relate to one another as they do on the second level, they relate to and invoke the participation of the inner life of the listener, as well. It is this invocation of the listener's inner life that creates the most salient experiential difference between hearing "notes" and hearing "music" — the sense (in hearing "music") that one is *immersed* in the musical sound. When the musical sound is experienced as "just notes," it is experienced as more external to the self than internal.²⁶ It is true that we must integrate aspects of our inner selves (the musical senses) with sound waves in order to hear notes. However, these are parts of our selves that are normally tacit and of which we are peripherally aware, if at all. The parts of our inner selves that integrate with the music on the third level — such as emotions, imaginings, and desires — are parts that we are more likely to experience in central awareness.²⁷ Thus, on the third level, since the musical sound integrates with

²⁶ This difference is particularly noticeable when one would *like* to "get into" the music but, because of mood or mental distraction, cannot.

²⁷ The experience of merging with the music can involve what Csordas (1996) calls "imaginal performances": internally experienced imagery that is not only visual in character but may involve any of the senses, including the kinesthetic sense. He argues that the imaginal performances of Catholic

aspects of our inner lives that we are often centrally aware of, it seems as if the music is no longer “out there” but “in here.”²⁸

From the point of view of the music, the difference between second and third level can be described in the following manner. Non-musical qualities whose patterns are embodied by the musical form, such as melancholy, only exist *in potential form* on the second level. Melancholy does not *actually* exist until a listener *feels* melancholy while listening. The listener can *hear* the potential melancholy “in” the music and identify it when listening at the second level. Musical events, such as melody, harmony, and rhythm *do* actually exist on the second level, but *only in the sound medium* (as made coherent by the listener). On the third level, these musical events *exist also in the living medium of the listener* and thus, through that medium, come to life.

To demonstrate the differences between these three levels I will illustrate with a piece by the Finnish accordionist Maria Kalaniemi, who plays on this particular recording with the Finnish group “Aldargaz.”²⁹ If I were able to listen to this particular track, “Iho,” only at the first level, I would hear a series of tones in various combinations and timbres — tones that did not relate to one another and thus did not make sense. At the

Charismatic patients (which are guided by healing practitioners) effect a resolution of problematic aspects of self through positively transforming memories of the experiences that gave rise to them.
²⁸ Note, however, that since these “levels” only describe prototypical experiential states on a *relative* continuum of experiential states, it is quite possible to be *somewhat* “into” the music. In other words, this is not an all or nothing situation. In addition, since making sense of the music involves feeling with the body, the body must get “into” the music to some degree in the process of making sense. The distinction I am making here involves those parts of ourselves that we usually refer to as our “inner lives” — primarily emotions, imaginings, and desires. Nevertheless, it is entirely possible to feel really “into” the music in a primarily bodily fashion. Bodily involvement *creates* the continuum from level two to level three, making sense of the musical sound on level two while metonymically invoking emotions, imaginings, and desires on level three.

²⁹ *Maria Kalaniemi: Iho*. Hannibal/Rykodisc LC 7433. 1997.

second level, with all of my embodied musical senses engaged, I hear particular instruments — acoustic guitar, bass, accordion, flugelhorn, trumpet, electric guitar, and saxophone — playing particular melodic patterns in particular meters. I can hear/feel the piece alternating between different, distinct sections, sections that make up the overall form (which I can recognize as the form ABABCAB). In each section, I hear particular rhythmic/melodic gestures repeated and sense specific mood qualities: A feels intense, brooding and conflicted, B feels more resolute, C feels dreamy and moody. I feel the tension in momentum and dynamic motion created by the alternating complex and sometimes conflicting metric patterns. In the A section, the melody (accordion) and accompaniment both play an asymmetrical 9/8 pattern, but each divides the measure differently.³⁰ In contrast, in the B and C sections, the meters are asymmetrical and complex, but not conflicting, leading to a greater sense of unity and less tension. All of these are observations that I can make without being “into” the music, that I could have made after the first few times that I listened to it casually.³¹

At the third level of musical experience, I engage with this piece in a much more personal manner. I not only recognize the varying moods of the different sections, I *feel*

³⁰ As I hear the A section, the accompaniment divides the measure into 5 beats: quarter note, eighth, quarter, quarter, quarter. The melody divides the measure into 4 beats: quarter note, quarter, quarter, dotted quarter. In listening to the piece, you can either entrain with the accompaniment (which sets its pattern in the introduction before the melody enters) or with the melody, leading to a sense of conflicting meters. Alternatively, you can entrain with the eighth note as a beat, leading to a somewhat frenetic feeling, due to the speed of the eighth note (m.m. = 152) and a sense that, even though the beat is constant, larger aspects of the meter do not come together. Either way, the meter lends to the sense of intense, brooding conflict.

³¹ After a few casual listenings, I could *not* have described the conflicting meters in section A with specificity, but could have said, “It sounds like the pulses in the melody and accompaniment conflict.” I also could not have described the complete instrumentation with great confidence, since the instruments blend quite well in places and must be listened to carefully for a full identification.

them emotionally and physically. I am *with* the melody of A, as it worries the same melodic phrase over and over in an indistinctly minor mode, the accompaniment pulling at it with its different meter. I *live* the resolute quality of the B section — the resolution of metric tension and the brightness that comes with the change to a more major sounding (yet still not quite distinctly major) mode. The C section takes me to a dreamy state, where the reverberant, sliding melodic gestures of the electric guitar suggest images of the Aurora Borealis to me. I imagine myself in the cold night air experiencing the beauty of the northern lights. Beyond these more direct experiences, I experience this music as distinctly Finnish and feel a connection to it because my mother is Finnish. In its moods and moodiness, I recognize and experience some of the Finn in myself. As a flute player, I am also often aware when Maria Kalaniemi is playing her accordion as a wind instrument, rather than as a keyboard instrument. Having experienced the expressiveness of my own lungs and breathing apparatus many times as I played my flute, I entrain with the wonderfully expressive, sensual way that she uses her accordion's huge lung-like bellows. In this the "highest" ontological level of musical experience, I open more of myself to the music. I am most involved and in so being, I create the greatest number of relationships between aspects of the music and between aspects of the music and myself.

Another way to understand the difference in complexity between these different levels is through the notion of "higher organizing principles." At each successive level, the higher organizing principle involves more of the listener's self. On the first level, it

involves the neurobiological principles of hearing (which are more complex than a sound wave and thus “higher”). On the second level, it involves the principles of embodied perception, as they occur in the musical senses. Those principles involve expectation, metonymic creation of whole gestalts from partial clues, and imaginative entrainment. On the third level, the higher principle involves an intention or desire to be moved by the music, a conscious choice by the listener to not just *make sense* of the patterns and qualities embodied by the musical sound, but to actually *live* them as the music unfolds in the now. In this way, what might be understood as “an ascending line” in level two mode might be experienced as “a feeling of ascension” or “a feeling like when the wind whooshes upward” in level three mode. What might be understood as very soft, high, fast pizzicato notes in level two mode (creating image schemas of swift lightness) might be experienced as “a feeling of light rapidity” or “a feeling/image of fairies” in level three.

As level two principles involve metonymic invocation and imagination, so do level three principles, but with a difference. On level two, we saw that aspects of isolated tones (heard on level one) could be used as partial clues in the invocation of image schematic wholes. On level three, those image schematic wholes invoke larger experiential gestalts that may be of varying natures: physical or emotional feelings; sonic, visual, or narrative imagery or associations; physical actions; or even a memory associated with a particular piece or style. Because of the intention or desire to be moved, these experiential gestalts are invoked in such a way that we not only recognize the patterns and qualities the music embodies, we actually *dwell in* or *live* those patterns

and qualities as the music plays. Rooted in level two imagination, which is more tacit and embodied in character, level three imagination can be more focal in character, as when a listener associates sounds with visual or narrative imagery or with personal memory. This kind of imagination does not merely *entrain* with the musical sound, it *amplifies* it.

In this way, when a listener experiences music (in contrast to hearing notes), the music actually plays him, in a sense. This idea can be seen in an analogy to the process of sound production on a violin. The sound of a violin arises from the interaction of several properties: 1) a vibration is initiated by exciting the strings with either a bow or through plucking, 2) the energy of that vibration is transferred through the bridge to the body of the violin, which acts as an resonator or amplifier, 3) the body of the violin has its own acoustic properties, which are transferred to the vibratory pattern, and 4) the acoustic environment further modifies the vibration.³² It is this third factor that is of special interest here. Each individual violin has its own individual acoustic properties, depending on the kind of wood it is made of, the nature of the finish, its shape and thickness, etc. The vibration from the string passes through the bridge, driving the body to begin to vibrate in its own particular way. The two vibratory patterns, one from the string and one from the body, join one another and resonate together. In the process, the

³² This simplified description makes it appear that the vibration moves and is influenced in linear fashion. In reality, the vibration does not move linearly from the strings across the bridge to the violin body and then out into the environment. Rather, the bridge unites the strings and body in such a way that they are interdependent and produce the vibration in a non-linear manner. In addition, environmental conditions will affect the condition of the violin, thereby affecting the sound they produce.

body both amplifies (increases the amplitude) and modifies (changes the pattern of) the vibration initially produced by the friction of the bow on the string.

Transferring the sound production schema to the listening situation, gives rise to the following set of equivalencies: 1) the musical sound (as produced at level two) is the initial excitement of energy on the strings, 2) the energy is transferred through the bridge of the listener's attention and corresponding perceptual abilities (both the "portal" senses and the musical "senses of"), 3) the listener is the body of the violin, and 4) the individual vibratory tendencies of violins correspond to the individual experiential gestalts of listeners. Just as the friction of a bow on violin strings invokes a resonating response in the body of the violin, when musical sound and listener are coupled through the listener's attention, the musical sound may invoke a resonating response in the experiential gestalts of the listener. Just as each individual violin, through the way that its history (experiences in the world) have shaped it, will resonate in its own individual manner, each individual listener, through the way that his history (experiences in the world) have shaped him, will resonate in his own individual manner. Just as the production of a violin sound is driven by the person playing the violin, the production of musical experience is driven by the music. The player plays the violin; the music plays the listener.

At the third level of musical experience, just as each individual violin differs from all others in the way that it resonates and amplifies the sound wave, each individual will differ from all others in the way that they resonate with and amplify the musical sound. Because of the different ways that experience has shaped him, not every listener or even

every wind player will feel the lung-like expressiveness of Maria Kalaniemi's accordion playing.³³ In other words, because interpretation is a matter of individually and differently formed resonating entities, on this level, interpretation will differ to varying extents. At level two, with its more concrete image schematic principles of organization and coherence, interpretation will differ less than on level three. It is easy to agree that a set of pitches coheres as a specific image schema — a gathering of momentum as a line descends rapidly, for instance. But that image schema can invoke many different experiential gestalts: a sense of flying downward on a roller coaster, a narrative about children rolling down a hill, a comparison to a similar passage in another piece of music, or a memory of how difficult it is to play the particular passage in question. The

³³ An interesting example of the way that different experiences shape individuals to resonate differently occurred to me recently. I went with my sister, who was a professional dancer for about 15 years, to a dance performance. I took dance lessons for about 10 years, until I was 15 and decided to quit dance to concentrate my time and attention on music. I am primarily a musician, but one who enjoys and experiences music in a very bodily fashion. My sister is primarily a dancer, but she also loves music. For me to enjoy it, dance must be *musical*, that is, express the movement evoked by the music. My sister enjoys dance that is musical, but can also resonate with dance that is accomplished in silence. One of the numbers in the *avant-garde* performance consisted of a single woman dancing without music. For me, it was torture to sit still and not fidget. My sister, however, found the number quite engaging. I could not understand her response, since the dance had been incoherent for me, given its lack of musical coherence. The dancer did not even move to a consistent beat. (In other words, the dance failed at level two for me.) My sister explained that she entrained with the woman's body, the way it moved, the way she used her weight and balance. I can and do entrain with a dancer's body when the dance is musical, but need the music as a bridge of coherence between myself and the body. My sister, with her more fully developed dance experience, does not need the musical bridge.

Another striking example of the way that people's experience shapes their listening differently occurred to me when I was talking with Laura Caramelino, a harpist from Curtis. She spoke of really feeling and resonating with the resonance of the music. It had never really occurred to me to attend specifically to resonance. Being a harpist, who feels the resonance of the harp in her chest through physical contact with the resonating chamber, she felt it to be a natural aspect of the music to attend to. As a dancer and flutist first, and later gaining some skill on the piano, I had been conditioned to attend to motion, force, momentum, melody and rhythm, and later, harmony. Although it occasionally came to my attention, it had never occurred to me to listen *for* resonance. However, once Laura's comment pointed out this gap in my listening habits, I began to listen for resonance and now find it to be a wonderful part of my listening experience.

particular interpretation will depend on the specific listener and how they have been shaped as a listener and interpreter by their own nature and past experiences. However, since level three experience-interpretations often relate to the more concrete level two image schematic perceptions, even though they may differ, they will relate to one another image schematically. Even though I may experience a descending musical rush as simple a musical “whoosh” downward, I can easily understand someone who says it feels like a roller coaster ride.

The musical senses function in an expanded fashion on level three. On level two, they function to make sense of the sound — to create coherence. On level three, they facilitate the integration of the listener with the musical sound so that the listener lives the qualities and events embodied by the musical sound. For example, on the second level, the sense of rhythm creates rhythmic coherence in the music and plays a part in recognizing meters and rhythms.³⁴ On the third level, the sense of rhythm facilitates the listener’s entrance into the “musical realm” that the rhythm helps to create. It is similar to the experience of jumping rope when other people are turning the rope for you. You can stand outside the rope and entrain with its rhythm, or you can use the coherence gained by that entrainment to enter into interaction with the rope and actually live its rhythm in whole-bodied fashion. In addition, on the third level, emotional sensibilities do not simply help us to recognize the sense of a particular emotion “in” the music, they

³⁴ Remember that this recognition occurs first and foremost on a bodily level, through bodily feeling. It may or may not occur mentally, depending on the training and intent of the listener.

facilitate the actual living of that emotion.³⁵ In this way, recalling the analogy between the resonating system of a violin and that of a listener, on the third level, the musical and emotional senses function as the “bridge” that connects the coherent musical sound with the listener’s experiential gestalts that then resonate along with the musical sound.

Comparison to Symbolic Meaning

On the third level of musical experience, in an experientially real sense, musical sound and listener actually integrate to become one. This is similar to what occurs in symbolic meaning, as illustrated by the case of the flag earlier in this chapter. If you recall, at that point I argued that symbolic meaning was of a specific kind. The basic meaning schema is of the following structure: event X occurs to person A and invokes and focuses the integration of a set of subsidiary aspects of their energetic matrix B toward a focal whole C. I stated that symbolic meaning followed this general structure, but with two specifications: 1) event X involves a *part* of a larger experiential gestalt (such as patriotism) standing in for the *whole* and 2) the focal whole of the meaningful integration is a matter of metonymic integration of self with that larger experiential gestalt, with a concomitant *living* of one’s part in that larger experiential gestalt. In other words, the flag stands for the larger patriotic schema in the world. A person who

³⁵ Unless a listener is listening for therapeutic reasons (and even sometimes in that situation), the living of emotions tends to be qualitatively different when they are invoked by music and when they are invoked by a situation in ordinary life. Emotions invoked by ordinary life have a highly *personal* quality about them, whereas emotions invoked by music tend to be more *impersonal*. I will write more on this subject later in the chapter.

opens themselves to the action of the flag metonymically integrates with that larger patriotic schema in the world and actually intensely *lives* their part in the whole.

Musical meaning on the third level is both similar and dissimilar to symbolic meaning of the kind that the flag exemplifies. It is dissimilar in that the music does not *necessarily* stand for something in the world other than itself. It *may relate* to something in the world other than itself, as when a composer writes program music or listeners relate music to their own programs or impressions (such as an impression of “Finnishness” or witnessing the Aurora Borealis). But it does not necessarily *stand for* that thing in the world.³⁶ The sounds of the music do not *necessarily* have to be integrated with that thing in the world in order for listeners to create lived musical meaning in the same way that the flag must *necessarily* be integrated with the larger patriotism schema in order for viewers to create lived patriotic meaning. One can still live qualities, images or narratives evoked and invoked by a piece of program music even if one does not know the program. The qualities, images or narratives invoked in a particular listener may not be the specific ones intended by the composer’s program, but they will relate to the program through their image schematic structure.

Third level musical meaning is *similar* to symbolic meaning in that it, too, involves the integration of self with something outside of, and in a sense, larger than self.

³⁶ Typically, when Western art music relates to something in the world, it is to a program, either explicitly stated or provided by the listener himself. However, Western music (art or other) can also relate *symbolically* to transcendent social realities, as when a singing woman performs the female gender. In this case, she may stand symbolically for “woman.” If the listener experiences her singing as a symbol of “woman,” he will metonymically *live* his part in the transcendent social reality of gender, experiencing a heightened feeling of himself as a male in relation to “woman.”

The focal outcome of both symbolic meaning and musical meaning on the third level involves a shift in the participant's *perspective* in which the participant becomes and lives for the duration as a metonymic part of a larger whole. In the case of the flag, at the moment of being moved by the sight of it, the participant *lives* his part in the larger patriotic scheme in the world. Internally, he feels a sense of connection with that larger scheme. In addition, he *exists for that moment* as a part of the larger patriotic scheme for external viewers. Similarly, on the third level of musical experience, experientially, the meaningful integration that occurs is between music and listener, with the focal outcome of that integration being a shift in perspective in which the listener *enters into* ("gets into" or is "immersed in") the music as an integral part of it.

Third level musical and symbolic meaning are both examples of what I call *resonant* meaning, of which I will write more shortly. Being examples of the same kind of meaning, musical and symbolic meaning might be better thought of as existing on a single continuum, rather than being different in kind.

Attending in Level Three Experience

As in the case of the flag, the focal outcome of third level musical experience does not occur in central awareness, but in peripheral awareness. In fact, when I am "into" the music, if I shift my central attention to my integration with the music for any length of time but a brief moment, i.e., if I become too aware that I am "into" the music and focus my attention on that quality of being, the integration falls apart. I am no longer into the music, but just hearing notes. Attending to music must occur on multiple

levels. Level three experience depends on attending at level two to the music itself. If I attend too much to the level three integration, the level two integration disintegrates and therefore, so does level three. In other words, the level three integration disintegrates because a vital subsidiary particular (the focal outcome of level two integration) disappears from the mix. So most of the time, central attention must be with the music itself (the focal outcome of level two), while being into the music stays in peripheral attention. *Experientially, we integrate with the music — become a part of it — but must allow that integration to exist as a tacit aspect of the experience.*

For me, the integration tends to fall apart when I try to engage with it *mentally*. In other words, if I label, judge or analyze that state, the state will surely dissolve. If I want to label, judge or analyze the state, I can do so only in hindsight. In contrast, such mental activity can be entirely appropriate and beneficial for the creation of level two integrations. However, once the experience changes to level three (the musical sound is no longer merely “notes” and is now “music”), mental labeling, evaluation, and analysis tend to go to the background of experience, if not cease altogether. Some small measure of such mental activity operating on level two may be a subsidiary particular to the focal outcome of integrating the self with the music, but it must remain subsidiary and not become an aspect of the focal outcome.

And yet, if mental activities like labeling, judging and analyzing do not interfere, it is possible to *briefly notice* the feeling of being into the music without the integration with it falling apart. This experience indicates the existence of a non-mental observing

self that is the aspect of awareness most involved in peak level three musical experience. In *The Observing Self*, Arthur Deikman posits the existence of two types of human selves: the object self and the observing self.³⁷ The object self is made up of the thinking self, the feeling self, and the functional self. The observing self is that impersonal part of awareness that can observe thoughts and feelings without identifying with them. In my experience, during ordinary experience, the observing self tends to be obscured by the activities of the object self (thoughts, feelings, practical matters). However, during peak experiences of various kinds (most obviously physical, emotional, artistic, or spiritual) the object self may become quiet, allowing the unfettered operation of the observing self. When we speak of "losing ourselves" to or in the music (or to any peak activity) we speak of momentarily losing awareness of the activities of the object self (especially its mental and emotional aspects), which is usually our constant companion and with which we identify.³⁸

Deikman terms mental, emotional, and functional aspects of self "object" because they can be observed, described and measured to a certain extent. As he describes it, they are the *contents* of our consciousness. In contrast, the observing self is that which can *observe* those contents. The observing self cannot itself be observed, because as it

³⁷ For more on the observing self, see Epstein (1995 and 1998) and Tolle (1999).

³⁸ This loss of mental and emotional activity is not an all or nothing affair; it is an experiential continuum, especially in regards to mental activity. In my experience, a totally quiet mind is a rather unusual occurrence, tending to occur only in the midst of truly intense experiences or through disciplined practice of a spiritual exercise such as meditation. However, it is possible to *quiet* the activity of the mind, without stopping it altogether, through engaging in an activity that distracts attention from mental activity, such as watching television or listening to music that is soothing, but not engrossing.

tries to observe itself, it must step away from itself, thereby removing itself from its “field of vision.” Since it cannot be observed, its limits are unknown; it transcends the contents of consciousness. *It is consciousness itself, the ground of our experience.* Deikman goes so far as to say that awareness is limitless and, having no boundaries, is ultimately connected with the awareness of some larger purpose. Depending on one’s perspective, that larger purpose might be understood as a supernatural phenomenon, like God, or it might be a wholly natural phenomenon, like Life, in all its myriad manifestations on the earthly plane.

Deikman makes an analogy to demonstrate the relationship between these two types of selves. Awareness, the observing self, is likened to the surface of an ocean. The individual consciousness is a tidal pool whose surface (awareness) is connected with the ocean but whose depth is discontinuous with that of the ocean. The object self is represented by disturbances in the pool. When there are a lot of disturbances on the surface, the surface tension is less and therefore the connection with the larger awareness is less perceptible. When the pond is calm, the surface coheres and seems more connected with the larger ocean of which it is a part.

The two selves manifest themselves in two different modes of consciousness: the object self in the object mode and the observing self in the receptive mode. The purpose of the object mode is to *act in* the environment. It perceives the world in terms of sharp perceptual and cognitive boundaries, absolute time, linear causality, logical thought and reasoning. The perception of the world in terms of absolute time and linear causality

lead to the perception of past and future. The purpose of the receptive mode is to *receive* the environment. It perceives the world in terms of blurred boundaries and diffuse attention, process, relative time, simultaneity, intuition and imagination. Time emphasis in this mode is "now."

In the shift from level two to level three musical experience, when we open ourselves to *integrating with musical sound*, we shift from the object mode to the receptive mode. This is the shift in which we "open" ourselves to be moved by the music. The evidence of being emotionally moved, however, seems to present a logical problem. Deikman aligns the emotional self with the mental self in the object mode, *not* with the observing self in the receptive mode. This problem can easily be addressed by noting the difference in *nature* of emotional responses in object mode and those in receptive mode. As I noted earlier, the emotions felt in level three musical experience tend to be *not* of a *personal* nature, but of an *impersonal* nature. Personal emotions are a response to an individual's thought-filled perspective on a situation in the world. Two people might have very different emotional reactions to the same situation, depending on their perspectives and attitudes. The impersonal emotions felt in third level musical experience have nothing to do with thoughts on a personal situation. They are invoked directly in the integration with the music and thus are not necessarily connected with

personal situations or thoughts.³⁹ The impersonal quality of emotions experienced during third level musical experience relates to the beauty and ineffability of music.

Beauty and Ineffability

In this dissertation, I am not writing about *what* music means (the focal outcomes of musical meaning processes), but about *how* it means. Beauty and ineffability are two possible focal outcomes of musical meaning processes on the third level. Even though, as focal outcomes, they are not the main subject of this dissertation, I want to address them briefly to suggest how they might be investigated from the perspective I have been developing.

In my experience, feeling beauty is intimately bound up with being in the receptive mode (as defined by Deikman). The shift from object mode to receptive mode is the difference between seeing that a flower is pretty and feeling its beauty. In that shift, we open ourselves to the qualities of the flower — its colors, shapes, textures, aroma, the way its petals sparkle in sunlight. Experiencing those qualities through the embodied and culturally inflected *sense of beauty*, we do not experience them as we do with ordinary senses — as outside of ourselves. Rather, we *live* them *vividly*. Through living its qualities vividly, we become one with the flower. Thus, beauty is not a quality inherent to particular objects, but a quality individuals create in meaningful relationship to those objects.

³⁹ Except, of course, if the listener listens with a therapeutic intention. By this, I mean listening to something that makes one sad in order to bring up sad emotions about a particular life situation that need to be processed.

Recalling Deikman's analogy between aspects of awareness and aspects of an ocean, becoming one with a flower or any other experience of beauty may facilitate the extension of self from the individual tidal pool to the larger ocean. It is true that we must make the effort to shift from object self to observing self (we must "open" ourselves to feeling beauty). However, the integration of the presence of a pleasant object with the memory of the experience of beauty is a powerful enticement to effect that shift in consciousness. In the shift from our own individual tidal pool of awareness to that of the undivided ocean, we become alive to a greater magnitude and depth of experience than we ordinarily feel. The magnitude and depth seem to exist not only outside ourselves — in the greater purpose Deikman speaks of (perhaps God or Life). They also exist inside ourselves — in a seemingly greater capacity for awareness than we ordinarily have. Feeling beauty is a matter of living for a time *from* this greater capacity *to* an awareness both one's own place and the place of the object of beauty in that greater purpose. In this way, a flower becomes not just a vegetative reproductive organ that looks and smells pleasant, but also a bridge to connection with both a greater purpose and the profundity of one's own part in it.

This connection with greater magnitude and depth demonstrates why experiences of beauty are often ineffable. Ineffability occurs when the depth and magnitude of an experience are beyond the reach of the grasping mind. The problem in describing ineffable experiences is not so much that, in the terms of the conduit metaphor, we cannot "put it into words." Rather, we *can* generally put it into words, but the words

lack sufficient capacity to convey the depth and magnitude of the experience. If we consider ineffability from Polanyi's position and think of words as guides to experience, we can point with words in the general direction of ineffable experiences, but their magnitude is too vast for a simple verbal arrow to hit any but a small portion of it. The more we try to describe the ineffable, the more language's inadequacy becomes apparent. This profundity is simply too great to "contain" in words or mind; it can only be felt with the whole, greater capacity of the observing self. Again, Deikman's ocean analogy is useful. If the object self (in this case, the mental ability) is contained within the tidal pool and has access to the magnitude and depth of the ocean only through the surface tension of the water, it simply has no way to directly glimpse or indicate its depth. Only when the tidal pool is still is the surface tension great enough that a good connection can be made with the larger awareness (the surface of the ocean), which is more capable of sensing the greater depth.

The perspectival shift involved in level three musical experience — integrating with the music, as well as connecting with both larger awareness and purpose — creates a situation in which even experiences normally considered negative can be experienced as beautiful. For instance, people who normally would *avoid* feeling melancholy or desolation in ordinary experience might *seek out* feeling them in musical experience, if the feelings are invoked by a piece they particularly love. In the musical context, these feelings become part of something beautiful and, indeed, can be felt to be beautiful themselves. As I stated earlier, these feelings are experienced as *impersonal* in nature.

That is, they do not belong to the tidal pool, but to the greater ocean. If an emotion churns the waters of the tidal pool causing a lessening of surface tension with the greater ocean; the observing self cannot operate as easily. Without the connection to larger awareness, the emotion is threatening, experienced as overwhelming and unpleasant. In contrast, if the same now relatively small emotion churns the waters of the vast ocean, the observing self can remain still and observe. With the connection to the larger awareness in place, the emotion does not threatened and can easily be experienced for what it is — a part of the larger phenomenon of living a human life. I cannot say why this situation makes something that is not pretty into something that is beautiful. I can only surmise that the perspectival shift reveals a beauty that is always there, but is normally covered over by personal reactions to negative emotions, such as fear and anxiety. In the impersonal, musical context, melancholy is beautiful because it is revealed to be a part of *living*, which, in the larger perspective, is overpoweringly beautiful.⁴⁰ And we are always a part of living, which we feel in intensified fashion through the connection with the beautiful melancholy music.

Relationship of the Three Levels of Musical Experience

The three levels of musical experience I have described are not three distinct levels, but a continuum of experience. As I stated earlier, only under very special conditions, such as an atonal context with very little indication of a pulse, will listeners hear tones as isolated. They will almost always experience them as a part of level two.

⁴⁰ We can sometimes glimpse the beauty of life in peak experiences such as birth, death, or deep suffering. At times like these, even “negative” emotions can be felt to be beautiful.

In contrast, an experiential difference *does* occur between levels two and three, however, which is what the distinction between hearing “notes” and “music” indicates. However, even though it is possible to distinguish between these levels experientially, the line between them is not at all clear.

For instance, I often listen to music as I write. In so doing, most of my attention is still on the writing and not on the music. The music is background, although I occasionally attend to it primarily, especially if I am anticipating some part of the music that has moved me in the past. Even though I am not really attending to it, I find that the presence of the music frees me up to write when I am having trouble doing so. It puts me in a state in which I *can* write. In Deikman’s terms, I find that I do my best writing when I am using my mental abilities (labeling, judging, analyzing, etc.), but still somewhat in touch with my observing self. If my mental self is too prominent in the process, its *judging* faculty dominates the situation and shuts down my creative faculty. I can’t get the ideas out if I criticize them as they flow. If I put on music and check in with it now and then, I am more in touch with my observing self, which allows the creativity to flow unfettered. If my analysis is correct, this would mean that I am experiencing this unattended to music in a manner consistent with level three, in which it is the observing self that is most engaged. This level three experience is nowhere near a peak musical experience, and yet, in helping me to be in my observing self, it draws on past peak musical experiences I have had. It is lower on the continuum between levels two and three than those peak musical experiences.

I would not liken this continuum to a line on which one could locate a musical experience at an exact point. Instead, as I stated in the introduction to this section, it is a relative continuum of experiential states. In order to better understand those states, however, it is useful to image the continuum as nesting levels, with the smallest level being the first. Higher levels of experience involve all levels underneath them. In addition, the level of awareness expands as the levels progress, from no awareness or control on the first level, to active mental awareness and participation on the second, to the greater awareness of the observing self on the third. Not only does awareness expand, access to the individual listener expands as well, from the involuntary participation of the neurobiology at the first level to the voluntary opening of the inner self on the third level. The expansion from level one to level three creates a condition in which the lower levels, when experienced from a higher level, can be magnified. For example, when I listen to a new piece, especially if that piece is complex, I often need to listen to it multiple times before I can relate to it on level three. I need to listen repeatedly on level two so that I can create the level of coherence necessary to “get into” the music. Once I *do* reach a level three relationship with the music, I can then begin to hear even more coherences and qualities of the music. The ability to hear new things in the music occurs in part because if I am “into” the music, I tend to attend more closely than if I am not; my attention is less likely to wander. However, it also stems from the greater perspective I bring. For instance, I can attend to multiple melodies at once and feel the passage of harmonies in a way that I cannot if they seem like “just notes.” As

Deikman explained, the observing self perceives the world in terms of blurred boundaries, diffuse attention, and process. If “pure” level two involvement operates from the mental self, with its preference for sharp boundaries and focused attention, then that operation omits important aspects of coherence that can then be received by the observing self when the listener enters into the music. These levels of musical experience, then, operate as a whole, interactive system.

In order to complete my discussion of musical meaning, I would like to turn attention back to the comparison between language and music, examining it from the perspective of the extended version of Polanyi’s theory of meaning.

Music and Language Revisited

Comparing music and language in light of the extended version of Polanyi’s theory of meaning can help us to understand some important experiential distinctions between music and language. These distinctions are 1) the lack in music of anything that is experienced like a linguistic general term, 2) differences in attention (the sounds of language direct attention *away* from themselves, while the sounds of music direct attention *toward* themselves), and 3) differences in experiential results of repeated listening (whereas listening to the same linguistic phrase repeatedly tends to *disintegrate* the meaningful integration, listening to the same musical phrase repeatedly tends to *deepen* it).⁴¹

⁴¹ In this statement, I do not mean to assert an exact equivalence between linguistic and musical phrases. I do believe that they are similar in certain relatively superficial ways. For instance, they are both elements of communicative media and share a length and sense of completeness *relative to other*

Polanyi explains that general terms result from diachronically integrating specific experiences that associate a sound with its referent, similar to the stereoscopic picture that is produced in the integration of information from two eyes. He indicates a curious quality of general terms:

[T]here is ... an important difference ... to which we must attend. It lies in the curiously *unsubstantial character* of the joint meaning ascribed to a group of objects by a general term. Compared with optical illusions or stereoscopic images, general conceptions are abstract, featureless. The focus in terms of which we are aware of the members of a class appears vague and almost empty (168).

Music does not create an analogous experience. Certain intervals, such as fifths and octaves, may feel hollow to a listener, but not in a way that is abstract, featureless or vague. Rather these intervals feel vividly and definitely hollow. The only analogy that might be drawn to Polanyi's observation about general terms is to the concept of a particular piece — thinking about "Prokofiev's *Classical Symphony*" as a general class rather than a specific performance has a similar feeling of abstract vagueness. However, "Prokofiev's *Classical Symphony*" is a general term about music, not music itself.

Does music involve a level of generality that is in some way analogous to general terms? Earlier, I made an explicit analogy between image schemas and general terms — image schemas:rich, concrete images::general terms:specific experiences with what the

aspects of their respective communicative media. However, they are very different in ways that matter most to how they mean, which I will elaborate on in this section. The truth is, since music and language are *not* equivalent in most ways, it is difficult to choose a unit in each to make a comparison. One might choose by minimal meaningful unit, in which case the language unit might be words (or perhaps morphemes) and the musical unit a motive. Or one might choose by the smallest unit that has a sense of completion — a linguistic sentence or a musical period. Whatever one chooses, even if the units could not be argued to be equivalent, the points that I will make remain the same.

terms refer to. In the context of the earlier section, in which I was arguing that image schemas are experiential gestalts, that analogy still pertains. However, in this context, it is problematic. If it pertained here, then the musical sound would direct our attention away from itself toward something else, one possibility of which might be an image schema. We would experience that image schema like we experience a general term, as vague and empty. In contrast, in the context of musical experience, I do not experience image schemas directly, as I can a general term, and even if I *try* to experience image schemas directly as I listen, they are in no way vague and empty feeling.

Both general terms and image schemas are experiential gestalts formed over time by integrating experiences with specific instances. As such, they have been *abstracted* in some way away from those specific instances. However, because they do not *function* in the same way, we can see that the way that they have been abstracted is probably different. In order to unravel this problem, I will make use of Peirce's ontological modes.

Peirce suggests that there are "three modes of being. [...] They are the being of positive qualitative possibility, the being of actual fact, and the being of law that will govern facts in the future" (Buchler, 75). He calls these modes of being *Firstness*, *Secondness*, and *Thirdness*, respectively. *Secondness* is the mode of actual being — of specific instances of living beings, events or objects.

Both *Firstness* and *Thirdness* exist in the realm of possibility, a realm abstracted from specific instances. However, they do so in different manners. *Firstness* relates to

the abstraction of general *qualities* from specific instances of living beings, events or objects. Those qualities might be the qualities of objects (blueness, softness, smallness, or containability), of events (lateness, acceleration, invigoratingness, or swiftness), or of living beings (vitality, intelligence, even-temperedness, or calmness). These qualities are generalizations abstracted from specific instances. They do not exist in and of themselves, but only in the form of examples of Secondness.

In contrast, Thirdness relates to the abstraction of general *rules* from specific instances of living being, events, or objects. In Peirce's words, a rule is a prediction "to which future events have a tendency to conform" (76). Thirdness "consists [...] in the fact that future facts of Secondness will take on a determinate general character" (77). For example, as a rule, compact discs are of a metallic color on at least one side, 12 centimeters in diameter, and circular with a hole in their center. As a rule, a concert by the Philadelphia Orchestra will begin at 8:00 p.m., will last until approximately 10 or 10:30 p.m. with at least one intermission, and will involve multiple pieces taken from the repertoire of Western art music. These are predictions to which compact discs and Philadelphia Orchestra concerts generally conform. They are generalizations abstracted from specific instances.

Generality, then, can be of more than one kind: positive or negative. According to Peirce,

Generality is either of that *negative* sort which belongs to the merely potential, as such, and this is peculiar to the category of *quality*; or it is of that *positive* kind which belongs to *conditional necessity*, and this is peculiar to the category of law (90, emphasis mine).

Firstness, or qualitative possibility, consists of *negatively* abstracted generalities while Thirdness, or predictive possibility, consists of *positively* abstracted generalities. In addition, Thirds *necessarily* involve Firsts, but Firsts *do not* involve Thirds. For example, the general rule about compact discs stated above involves the qualities of metallic color and circularness. However, the qualities exemplified above (blueness, vitality, etc.) do not involve rules of any sort.

To return to the question at hand, both image schemas and general terms exist on a general level. However, image schemas are *qualities* abstracted *negatively* (a Firstness) and general terms are *predictions* abstracted *positively* (a Thirdness). This distinction accounts for their differences in both function and the way that we experience them. That image schemas are qualities (and not rules) can be seen relatively easily, especially when one considers a partial list of possible image schemas: CONTAINMENT, BLOCKAGE, FULL-EMPTY, PART-WHOLE, BALANCE, FORCE, ATTRACTION, SOURCE-PATH-GOAL, PROCESS, LINK, etc. Each of these terms could easily fit into a discussion in the following sentence, “If you look at the quality of _____ in this situation....”⁴²

That general terms are *rules*, however, is not as evident. Remember that Peirce defines a rule as a prediction “to which future events have a tendency to conform.” If I hear a sentence that uses the word “dog,” the word comes to me in the form of a general term. As I hear it, the sound of the word functions as a general term that *directs my*

⁴² Although image schemas in and of themselves are qualitative possibilities, our embodied use of them involves predictive possibility, as well. For example, the quality of balance may come into play in a game that involves building a structure with cards. In this game, balance is an important quality to achieve. In achieving that quality, players would invoke predictive possibilities learned in embodied experiences of balance toward a bearing on creating a balanced structure.

attention to either the general idea of “dog” or to a specific instance of “dog,” depending on the context in which it is used. In *directing my attention*, the general term functions as a rule. That is, when he utters the word, the speaker intends for it to function in a rule-like fashion, in which case he would predict that my behavior would conform to his expectation that I either attend to the general idea of “dog” or to a specific instance of “dog.”

As an experienced *quality*, the difference in feeling tone between image schemas and general terms cannot be argued but merely indicated. Considering the examples of qualities mentioned above — blueness, smallness, lateness, swiftness, vitality, or calmness — creates no feeling of vagueness or emptiness. Rather, they seem distinctly *full* of the qualities they indicate, as do image schemas. In contrast, considering examples of rules *does* create the same sense of vague emptiness that Polanyi describes in association with general terms. “As a rule, compact discs are of a metallic color on at least one side, twelve centimeters in diameter, and circular with a hole in their center.” Or “For much of the United States, the school year begins in September.” These statements have the same vague, empty feeling tone as the general terms “dog,” or “flower.”

Although music does not involve Thirdness through image schemas, it *does* involve it in other ways. Tonality, for instance, is a complex set of predictions “to which future events have a tendency to conform” that play out in the listener through expectation and desire. Expectation and desire play out through the musical senses,

which exist in the realm of thirds. The musical senses *involve* image schemas of various sorts, but are not merely image schematic in character. Consider, for instance the image schema of PULSE and the sense of rhythm. PULSE is a general qualitative pattern learned in various situations, both non-musical and musical, which the listener integrates with the sound wave to create musical coherence. The sense of rhythm is a set of expectations learned in various *musical* situations that *involves* pulse but is not *limited to* pulse. Those expectations are *stylistic* in part, having to do with the specific kinds of rhythms and meters that articulate the pulse, as well as the specific kinds of interactions one might expect between rhythm and other musical aspects, such as melody and harmony. The sense of rhythm a listener brings to and uses from moment to moment within a ragtime piece differs greatly from that of a Brahms piano piece.

The Thirds operative in music are qualitatively different from general terms. General terms are in the form of a single, ordinarily short sound that is, in turn, usually a combination of shorter sounds. General terms are normally used in combination, but occasionally are spoken singly (“Dog!”). They act as general rules that direct the hearer’s attention away from themselves. Nothing analogous occurs in music.⁴³ The Thirds that occur in music are a matter of combining sounds as they are played together and in succession. These rule-governed combinations of sounds create qualities of sound and musical motion that attract the listener’s attention to themselves. They do not direct attention away from themselves. To be sure, syntactic rules operate in language in order

⁴³ Except, of course, a musical sound that imitates a non-musical sound, as when a piece involves animal noises. In that case, the sound functions like an onomatopoeic word.

to create coherent combinations of sound. However, the focal outcome of meaningful linguistic syntactic integrations is not the creation of qualities of sound and motion, but a specific coherence that can direct attention to specified general ideas or situations in the world. While one focal outcome of linguistic Thirds is to direct the hearer's attention away from sound, a focal outcome of musical Thirds is keeping the listener's attention focused on sound.

In addition to differences in attention, musical and linguistic experience evince differences in repeated listening. Words in a linguistic phrase become subsidiary particulars in the hearer's peripheral attention, while he attends centrally to the situation or idea. In other words, the words become transparent as their integration reveals whatever they are indicating.⁴⁴ If we repeat the same phrase over and over again, focusing attention on the sound of the words, the sound becomes the focal outcome of the integration we are performing. No longer subsidiary to a more complex integration, the word sounds lose their connection with the usual focal outcome of their integration. They become meaningless, except as sounds in and of themselves.

In contrast, rather than *losing* meaningful integration through repeated hearing and attending to particulars focally, music can *gain* in meaning under such conditions. As a phrase is heard repeatedly, the interiorization deepens: more qualities embodied by the music can be heard and more relationships between already heard qualities can be made. If the listener makes the switch to third level observation (opens himself to *living*

⁴⁴ This is clearly a description of linguistic communication as it occurs *on the second level* (as analogized to musical experience). I will write about linguistic communication on the third level shortly.

the qualities and events embodied by the music), more qualities and events are available to be lived; the experience deepens and intensifies. Of course, if a listener overdoes the repeated listening, either over-stimulation or boredom will result, leading to a lack of meaningful integration with the music.⁴⁵ These conditions, however, are not analogous to what happens when we repeat a word and destroy its connection with its meaning. They are, rather, limits of the human nervous system.

Conclusion

I have compared music and language from the viewpoint of a general theory of meaning — a theory that is based in bodily interaction with the environment and principles of evolution — rather than a theory of meaning based on mental manipulation of linguistic packages. The comparison looks rather different from this viewpoint. While it is apt in that music and language are both examples of *communicative* meaning (as Dewey defines communication — as “the process of creating participation, of making common what had been isolated and singular”), it is not apt in many other ways. It is clear from experiential evidence that the details of the processes of musical and linguistic meaning do not match one another. Music has nothing analogous to the general terms that are so central to linguistic meaning. Although both have syntactical functions, the

⁴⁵ By “leading to a lack of meaningful integration” I mean the integration of the person with the music. I do *not* mean the integration of isolated sounds into coherent musical sound. Once a piece makes sense to me, it does not lose its coherence. The only situation where I can imagine a piece losing coherence would be if I had not heard in some time a particular atonal piece that I had to originally struggle to make sense of. Since atonal music does not make use of tonality in its manner of coherence, we have to create coherence for each piece. This coherence created for each individual musical context is more easily forgotten.

syntaxes integrate toward very different focal outcomes. Although poetry *does* adopt some concerns of music (the beauty of the sounds involved, their rhythm, etc.), it has nothing analogous to the qualities of dynamic motion we experience in music. A more extensive comparison from this viewpoint would reveal other important differences. However, such a comparison is beyond the scope of this work.

Having revisited the music/language analogy, and in conclusion to this chapter, I'd like now to further develop the notion of resonance. In so doing, I will suggest how the understanding of musical meaning I have developed in this chapter can enrich our understanding of communicative meaning in general.

RESONANT MEANING

The three basic ontological levels of musical experience are not necessarily exclusive to the realm of music, but may hold true for communicative experience in general. Level one would involve the neuro-biological act of perception, level two the fully embodied act of making sense, and level three the energetic *resonance* of the system created between the observer and the communicative sign, person generating the sign, or transcendent reality for which the sign stands.

If we view communication as the creation of participation, an act of making common, a schema very different from that of the conduit metaphor arises. This definition suggests a schema where separate parts (people i.e., relevant aspects of their energetic matrices) are merged together into a participatory whole. The question, then, is what is the nature of the connection? All communicative acts involve a *physical*

connection, through one or more of the “portal” senses. As portrayed by the conduit metaphor, linguistic communication also makes use of an *intellectual* connection: the transfer and matching of “content” from the mind of one person to another. Musical communication on level three also shows that communicative acts connect us in ways other than transfer of intellectual content. Both linguistic and musical communication can involve *emotional* connections.

The connection created in effective communication can involve *all* of these aspects of self: physical, intellectual and emotional. However, in peak communicative experiences, such as those that can be created in an artistic situation, the connection transcends these aspects of *self* to something that seems *beyond self*. These kinds of experiences can take us beyond the boundaries of our individual “tidal pools” into the greater “ocean” that we all share. I think of this level as being *energetic* in nature, because I have observed that peak communicative experiences create energy in the people who participate fully in them. In addition, in these kinds of communicative experiences, a particular *quality* of energy (cheerful, sad, high, or low) can be passed from person to person. These experiences are not necessarily artistic in nature; they can range from a great conversation with a friend, to a really good class discussion, to an exciting basketball game, to a wonderful walk on a fine day when one “communes with nature.” Peak communicative experiences can create a level of participation that leaves the participants with more energy than when they started. They may be *physically* depleted (as at the end of a basketball game), but they are energized psychologically.

Experientially, in contrast to the more “normal” occurrences of everyday life in which the self *feels separate from* the situation, these kinds of circumstances create a sense that the self *resonates with* the situation.

The Nature of the Resonant Connection

The process of resonance involves the coupling of two or more bodies, each with their own vibratory characteristics, into a more complex energetic system. By themselves, the separate bodies of a sound system may be very limited in the amount of sound energy they can produce. For instance, when struck or bowed as separate parts, the two sound bodies of the violin (the strings and the body) create very little sound energy. However, once united by neck, pegs, tailpiece, bridge, and sound post, these parts become a single system capable of creating greater amounts and kinds of sound energy. In this system, by allowing sound vibrations to move from one sound body to the other, the bridge acts as the primary structural medium between the two sounding bodies.

However, once the string is excited, another medium arises that behaves differently from the structural medium. That is the medium of *energy*, which creates different relationships between the parts than that created by the bridge alone. The energetic pattern (sound vibration) is begun in the string and passes through the bridge to the sound body, which then vibrates sympathetically with the patterns of energy transferred from the strings. However, the vibration does not move through the system in a purely linear fashion, but in a more complex manner. Because the strings are

structurally coupled with the body through the bridge, the vibration not only moves from string to bridge to body, but also moves back across the bridge from the body to the strings.⁴⁶ The final effect of the system — the complex sound vibration that reaches our ears through the air — results from energetic patterns echoing from one part to the other. In their echoing, the sound vibrations link all parts of the system into a single, larger system that is not only *structural* in nature, but *energetic*, as well.

Thus, as a system, the violin exists on two ontological levels: that of physical structure and that of physical energy. *Each of these levels creates different kinds of relationships between the parts of the violin.* On the level of physical energy, through the dynamic medium of the energetic pattern, each part is “in touch” with all other parts — “in touch” because through the action of the vibration, each part has a *forceful effect* on the other through the whole. On the level of physical structure, without the action of sound vibrations, when a violin is at rest, only parts adjacent to each other touch each other. That touch is merely an aspect of adjacency, a structural relationship of passive force, not an effect of dynamic force. Through the action of the vibration, all parts of the violin are brought into relationships of dynamic force. The violin is no longer merely *structurally* united; it is *energetically* united as well. Through the medium of the sound energy, instead of only those parts of the system that are adjacent to each other being in contact, *all parts of the system are effectively in contact with all other parts.* Set into

⁴⁶ The degree of coupling between the driving vibrator and the driven vibrator constitutes a variable in the system. A system may be tightly coupled, in which case the pattern of the driving vibration dominates the system. Or it may be loosely coupled, in which case the driving vibration is less dominant and the driven vibrator affects the system more. For more, see Handel, p. 45.

resonance with one another, each part does not merely *exist* as a part of the violin.

Rather each part *behaves* in a coordinated fashion with all other parts, thereby producing more energy than both the energy that began the sound and the energy that each part might produce on its own.

The nature of the *structural* connection in the violin is different from the nature of the *energetic* connection. As I said above, the structural connection is the bridge, which acts as a *link* between two sound bodies. Structurally, the bridge, *as a medium*, comes *between* the two sound bodies and acts to *link* them in such a manner that they may act as one. The energetic connection is the sound vibration. *As a medium*, this connection is more analogous to the media used by biologists to grow bacteria: once the sound vibration is set in motion (assuming the player is capable of making a solid, resonant tone), the entire violin is *awash* in the vibrating medium. As media, the bridge connects the parts of the violin by spanning a separation while the vibration connects the parts of the violin by creating an energetic medium through which all parts of the violin affect each other. Another way to think of this is that at the *structural* level, the violin is the medium for the vibration, while at the *energetic* level, the vibration is the medium in which the violin, *as a united sound body*, comes into existence. Without the vibration, the violin *does not exist as a sound body*, but only as a structural body. Thus, the bridge connects two separate entities while the vibration creates and envelops a united entity. Despite their differences, these two media work in tandem. The bridge is a structural medium through which an energetic meta-medium can be created. The bridge does not

act merely as a structural medium for the two parts of the violin; it also acts as an ontological medium, so that the vibrational unity of the instrument can come into existence.

The Resonance Analogy Applied to Semiosis

The semiotic process is usually modeled along the lines of the structural level of the violin, with the sign acting as a link between two separate entities. The semiotic situation has been mapped out in various ways, with perhaps the best developed being Peirce's object-sign-interpretant (with all of its complex permutations). In my recent reading, I have seen this triad called "thing/event/reality-form-concept" (Radden and Kövecses 1999) and "thought-symbol-referent" (Ogden and Richards 1923, cited by Radden and Kövecses 1999). Whatever the semiotic triad is called, the middle term (the sign) is mapped and analyzed as a *structural link* between two *separate* things. The structural nature of this relationship can be seen in the typical statement made to explain the relationship between the terms, such as "A *stands for* B to C," which describes a linear geometric relationship.⁴⁷ The relationship between the two terms (usually a person and some aspect of the outer world) is always already mediated, with no possibility for the creation of a more immediate relationship between them. This model limits the potential of the sign to acting as a *bridge* between two terms. It does not take the further step toward recognizing that the sign can also act as an *ontological* medium that

⁴⁷ In Polanyi's restatement of the relationship between semiotic terms — "The person A can integrate the word B into a bearing on C" — we can see an energetic aspect added.

creates the possibility for an energetic meta-medium might arise that unites the two terms in a more immediate manner.⁴⁸

I propose that semiosis involves a resonant level in which an energetic meta-medium effects the unity of people with signs, and through signs, with each other. The “energy” involved in this process is not just physical energy we take in through our “portal” senses, such as sound or light waves. Rather, because it is a human process, it primarily involves the energetic matrix as it is accessed and affected by the embodied “senses of.” Through the ontological mediumship of signs and the energetic meta-medium they make possible, we can access and resonate with each other’s energetic matrices, creating a sense of participatory connectedness.⁴⁹ We can also access and resonate with transcendent social realities. This process occurs through the transfer of patterns of energy, which metonymically access, activate and/or affect aspects of the energetic matrix.

Although at first glance, the term “energetic meta-medium” may invoke the idea of some sort of mysterious “ether,” that is not what I mean. Rather, by “energetic meta-medium” I simply mean a *patterned energy* that can access a whole system at once, thus uniting it through acting similarly on all parts simultaneously. In the violin, the energetic

⁴⁸ At this point, a distinction between Peirce and those who use his thought must be made. *Peirce* does not speak of the semiotic process as if it were only a structural in nature. Rather, he speaks of it as dynamic. However, as Peirce’s thought is applied, it very often seems to emphasize this structural level to the detriment of the dynamic level. In either case, as far as I have been able to determine, although he spoke of semiosis as dynamic, Peirce did not speak of an energetic medium at work in the semiotic process. His semiotic process was always directly mediated by the sign, never making the leap to a more immediate connection.

⁴⁹ The process of communicative resonance is not always successful. Thus, it can create a feeling of extreme *disunity* when different people try to resonate with one another, but cannot coordinate.

meta-medium is the patterned vibration — a patterned energy that begins with the friction of the bow on the strings, crosses the bridge, creates sympathetic vibrations in the sound body and then, changed by its encounter with the sound body, echoes throughout the whole system. In a musical situation, the patterned energy (the energetic meta-medium) begins as sound waves, which, on the first level, undergo neuro-biological transduction to become tones. On the second level, the patterned energy (as tones) is transformed by the embodied musical senses and other aspects of embodied perception to become musical sound. On the third level, the patterned energy (as musical sound) is transformed into actual *felt* (or *lived*) qualities and events. In this way, through the ontological mediumship of the musical sign and the energetic medium it makes possible, the listener resonates with the musical “sign.” When he shares this “musicking” with other people, they resonate with each other through the shared musical event.

I will not attempt a detailed analysis of the energetic patterns (energetic meta-media) of other kinds of communicative signing, except to suggest parallels between musical experience and experience in shared conversation. In language, energetic qualities and events are most often shared through paralanguage as much as or more than by actual words. Through word choice and especially the way words are spoken, through body stance and other visually sensed aspects of muscular tension, qualities of energy are passed back and forth between interlocutors. Just as a listener entrains with musical sound, interlocutors entrain with each other physically (mirroring muscular tension and facial expressions), emotionally (detecting emotions and empathizing with

them) and intellectually (sensing where the speaker is going with a particular thought). In a good conversation or a good class discussion, the level of involvement is especially high. The participants have opened themselves in a manner similar to the way that listeners open themselves to *living* the qualities embodied in musical events, as well as the musical events themselves. Just as we can become the living medium for an emotion whose patterns are embodied by music, we can live feelings and thoughts along with the people with whom they originate. Through the ontological mediumship of signs (which, in a conversation includes *everything* we can sense, not just words), an energetic meta-medium can arise and echo throughout the whole linguistic situation, uniting those involved and creating a resonant energy.

As in the musical situation, this patterned energy operates through metonymic access of aspects of the energetic matrix. I have already discussed how word sounds access experiential gestalts interiorized over time. In addition to words, we take other sensory cues as clues and integrate them with interiorized experience toward a bearing on involvement with our interlocutor. If we see a certain facial expression and body posture, hear a certain vocal timbre, breathing pattern, and pattern of forceful emphasis, and smell a certain odor, we integrate these patterns with our own personal experience toward an understanding and feeling of the particular emotion our interlocutor is experiencing. Through this metonymic process, accomplished by embodied imagination and “senses of,” our energetic matrix resonates with that of our interlocutor.

In linguistic communication, the aspects with which we resonate are very often quite tacit — either in peripheral awareness or out of awareness altogether. It is relatively easy to repeat someone's words. The way that they are said is a bit more ephemeral. Other aspects, such as breathing patterns or patterns of pupil dilation, are even more difficult to bring into central awareness. However, we are tacitly aware of them and they become part of the subsidiary integration toward the focal outcome of resonating with our interlocutor.

Human Reality as Energetic in Nature

The view of signs as *structural* rather than energetic media is entirely consistent with the objectivist framing of the relationship of the human internal world to the external world. This view emphasizes the boundedness of the human internal world, trusts the outer world to be more “real” or “true” than the inner, and distrusts the ability of the individual to gain access to that true reality without distortion. Objectivism *necessitates* the operation of a stabilizing *bridge* between inner and outer. According to this view, our interaction with many important human realities is always mediated, never immediate.

What the objectivist view ignores is the fact that much of human reality — such as the social, political, educational, economic, aesthetic and religious — *exists only within living human beings*. It is true that *traces* of these realities exist in the physical environment. However, as aspects of human life, these realms of human life themselves would cease to exist if their human media ceased to exist. Only physical traces of them

would still exist. If archeologists from another time or place found these physical traces, they might begin to reconstruct the realities they stemmed from, but might do so quite imperfectly. The point is that there is an *energetic* aspect, as well as a *physical* aspect, to these human realities that exists only in and through human beings. Through our energetic matrices, we are the medium for their energetic existence.

Thus, when we have third level communicative experience and feel that we live our part in some larger existential reality — patriotism, beauty, life, femininity, the value of clear understanding, the unity of all people, etc. — we are not only living our part, we are giving existence to that reality. We are not connecting only with something *outside* ourselves that exists in other people and in physical traces, but creating it from within. Our connection with it is *not* mediated. We may, then, leave traces of that larger existential reality in the environment that might act as an outer sign of it to another person. Through sharing experiences of this kind, we commune not only with these larger aspects of life that can give it meaning, but also with other people. Through the semiotic flow, we co-create these energetic aspects of human life.

The Power of Resonant Communication

Although tacit, resonant aspects of communication are quite powerful. Bourdieu's *Outline of a Theory of Practice* evinces a strong concern for metonymic invocation of wholes through transfer of partial patterns. He suggests that tacit aspects of communication, beyond the reach of central awareness, may even be more powerful

than those that we can examine critically. Whole tacit schemas of understanding are easily, stealthily accessed through invocation of seemingly insignificant parts:

If all societies and, significantly, all the “totalitarian institutions”, in Goffman’s phrase, that seek to produce a new man through a process of “deculturation” and “reculturation” set such store on the seemingly most insignificant details of *dress, bearing, physical and verbal manners*, the reason is that, treating the body as a memory, they entrust to it in abbreviated and practical, i.e. mnemonic, form the fundamental principles of the arbitrary content of the culture. The principles embodied in this way are placed beyond the grasp of consciousness, and hence cannot be touched by voluntary, deliberate transformation, cannot even be made explicit; nothing seems more ineffable, more incommunicable, more inimitable, and, therefore, more precious, than the values given body, *made* body by the transubstantiation achieved by the hidden persuasion of an implicit pedagogy, capable of instilling a whole cosmology, an ethic, a metaphysic, a political philosophy, through injunctions as insignificant as “stand up straight” or “don’t hold your knife in your left hand”. The logic of scheme transfer which makes each technique of the body a sort of *pars totalis*, predisposed to function in accordance with the fallacy *pars pro toto*, and hence to evoke the whole system of which it is a part, gives a very general scope to the seemingly most circumscribed and circumstantial observances (94).

Social reality reproduces itself *in the living medium of individual people* through metonymic access and resonance of complex, but tacit schemas. For instance, a simple order to “Sit like a lady!” resonates deeply with a little girl’s tacit knowing about herself, her socially defined notions of femininity, and her personal relationship to those notions. She either resonates positively — with the notion, or negatively — against it. If she resonates positively, the power of the order and the social reality that it attempts to maintain create in her a desire to override any personal tendencies or desires she may have to sit with a slouch or with arms and legs akimbo. Thus, the socially defined reality of the feminine values of neatness, self-control and modesty continue their existence in

the living medium of the little girl. The quality of energy that we call “feminine” — controlled, yet alluring in its beauty — *lives* in the physical medium of the little girl and becomes stronger as she matures. She may, in time, transmit that same energetic quality to other little girls through orders to “Sit like a lady!” With or without conscious awareness of exactly what she is doing, she thus reproduces it not only in herself, but in others, as well. Femininity covertly reproduces itself by working through those parts of the self that are least accessible to examination, but powerfully felt.

These kinds of existential realities are the stuff that our resonant bodies — our energetic matrixes — are made of. Resonating soundlessly with strokes from outside ourselves — “Sit like a lady!” or “What a guy!” — they are deeply felt. Always there, though they resonate, their resonance becomes the atmosphere in which all other thoughts and feelings play out. The foundations of how we live with and through each other, they remain hidden, but can strike us powerfully when revealed:

The aspects of things that are most important for us are hidden because of their simplicity and familiarity. (One is unable to notice something — because it is always before one’s eyes.) The real foundations of his enquiry do not strike a man at all. Unless *that* fact has at some time struck him. — And this means: we fail to be struck by what, once seen, is most striking and most powerful (Wittgenstein, 50).

Although resonant communication may be hidden, it can be striking and powerful. Thus, it behooves us to pursue a clear understanding of it.

IV

MUSICAL EVENT STRUCTURE METAPHORS

INTRODUCTION

English speakers make sense of the flux of experience through two complex metaphors, which Lakoff (1994) calls “event structure metaphors.” Both of these metaphors integrate structure from a kind of bodily experience in the world with current percepts toward a bearing on making sense of a current event. In one, the “location” version, the bodily experience integrated with current percepts is that of moving through the world from one location to another. In the other, the “object” version, the bodily experience integrated with current percepts is that of receiving, possessing, and giving away *objects*. In this chapter I will demonstrate that making sense of musical events involves integrating these two, basic event structure metaphors with simpler musical percepts such as PITCH, MOTION, LOCATION, PASSAGE, BRIDGE, RESTS and VOLUME, BLEND, FLOW, MODULATION, some of which were described in the last chapter. In other words, simpler musical percepts metonymically invoke these more complex metaphors toward a bearing on making sense of the music *as eventful*.

Since the listener integrates these metaphors with the sound wave in the process of perceiving music, the metaphors are *experientially real*. Although current metaphor theory describes metaphoric processes as “mapped” in nature, musical metaphors do not feel as if they have been “applied onto” the music. Rather, they feel like an integral part of it, as Polanyi’s theory of meaning demonstrates. In and of itself, the sound wave does

not embody patterns of motion and mood, but when a listener transforms it in her experience into musical notes, it does.

Not only the metaphors that people use to speak of music, but *how* they use them must thus be examined. In the linguistic context, verbal cues such as aspect, deixis, and nominalization give clues as to how the speaker positions herself with respect to the musical event. By integrating such verbal cues with analyses of metaphors we can better understand the whole constellation of the event, not just how the music “out there” appears to the listener. In this chapter, I will focus on analyses of musical metaphors in speech about music gathered in rehearsals, classes, and informal discussions with students at the Curtis Institute of Music.

I begin my exploration by describing linguistic evidence that suggests the existence of two different ways of making sense of music: in many cases, for a single musical phenomenon, two different metaphors may be used to refer to it. These words dichotomize into two groups, logically consistent within the group, but inconsistent between groups. This pattern suggests the existence of two separate ways of making sense of music. After introducing this suggestive evidence, I discuss Lakoff’s analysis of event structure in English. After laying this theoretical foundation, I will examine the linguistic evidence for the existence of two music event structure metaphors. In the next two sections I describe the two musical event structure metaphors, and then summarize my conclusions.

PITCH AND VOLUME → MUSICAL EVENT STRUCTURE METAPHORS

Language about music often employs two or more metaphoric expressions for the same musical phenomenon. In the table below, I have demonstrated how these expressions dichotomize into two internally consistent groups.

<u>phenomenon</u>	<u>group A</u>	<u>group B</u>
musical sound:	discontinuous: PITCHES, LINES, TEXTURES subjects, figures, motives	continuous: sound STREAMS, BLENDS SURGES, WAVES of sound
frequency change:	MOTION by STEP or LEAP	MOTION by FLOW
beginning & ending:	ENTERING, EXITING	OPENING, CLOSING
cadences:	gate like: OPEN or CLOSED	valve like: WEAK or STRONG
temporary stops:	RESTS	SPACE, or CUTTING OFF the sound
amplitude:	dynamic levels	VOLUME
harmonic change	PROGRESSION, BRIDGE, TRANSITION to new key area	MODULATIONS

Table 4.1

Group A emphasizes discontinuity: individual pitches move by step or leap in lines that together form textures. Group B emphasizes continuity: musical substance flows in blends, surges, or waves. Group A structures the sound as motion through locations: *figures* move, ENTERING and EXITING different key AREAS by way of BRIDGES. Group B structures the sound as a FLOWING SUBSTANCE that MODULATES, thereby changing in quality.

Each of these groups of words could be seen as being metonymically invoked from one of the two first level metaphors: PITCH and VOLUME. The musical term “pitch” relates to pitching a ball or the pitch of a roofline through the image schema of graduated height. Although ball or roofline pitches are continuous, in musical language, “pitch” has come to mean a specific location on a continuous scale and thus is discontinuous in nature. We speak of those locations as separate “pitches.” Thus, beginning with this metaphor, one could metonymically invoke a system that emphasized discontinuity in the musical flux. If “pitches” are separate “things,” they can be separate height locations to which the music, as agent, moves — “The music *goes up* here.” If pitches are separate things that move in space, then musical space exists. If separate pitches are locations, then complexes of harmonically related pitches, like keys, can be locations, as well. In addition, complexes of melodically related pitches can be agents that move through those locations — “This figure *enters in* A, but when it *exits*, it is *in* E.”

In contrast, beginning with the first level metaphor VOLUME, one could metonymically invoke a system of metaphors that emphasizes *discontinuity*. “Volume” is used in the musical context in the same way that it is used in other contexts — as a measure of mass. In and of themselves, sound waves do not have mass. However, the use of the term “volume” in relation to sound indicates that the listener has integrated the structure of a mass (uncountable) substance with the sound waves. Since change in musical pitch is seen as movement, this particular mass substance moves, and it does so in a flowing manner. Thus, the musical substance can behave like liquid or gas —

flowing forcefully against the body of the listener. It may even MODULATE from one state or quality to another.

It is possible, then, to see the two first level metaphors, PITCH and VOLUME, as the invoking qualities for two modes of experiencing music's eventfulness. These two modes, one that structures the event as movement of an agent through locations, and the other that structures the event as the movement of a flowing substance, are consistent with Lakoff's general event structure metaphors.

THE GENERAL EVENT STRUCTURE METAPHORS

As Lakoff explains it, "Various aspects of event structure, including notions like states, changes, processes, actions, causes, purposes, and means are characterized cognitively via metaphor in terms of space, motion, and force" (1994, 59). In addition, one of his students, Jane Espenson, discovered that in general, English has not one, but *two* separate ways of structuring events metaphorically, summarized in the table below.

<u>"location" version</u>	<u>"object" version</u>
1. states are locations (bounded regions in space).	1. attributes are possessions.
2. changes are movements (into or out of bounded regions).	2. changes are movements (of possessions, namely, acquisitions or losses).
3. causes are forces (controlling movement through locations).	3. causes are forces (controlling the movement of possessions, namely, giving or taking away).
4. actions are self propelled motions.	4. actions are self-controlled acquisitions or losses.
5. purposes are destinations.	5. purposes are desired objects (Lakoff 1994, 65-66).

6.	means are paths (to destinations).	6.	<i>To which I would add:</i> means are actions taken for the purpose of acquisition or loss.
7.	difficulties are impediments to motion.	7.	difficulties are impediments to acquisition or loss.
8.	expected progress is a travel schedule; a schedule is a virtual traveler who reaches prearranged destinations at prearranged times.	8.	expected progress is an account ledger.
9.	external events are large moving objects. ¹	9.	(no correlate)
10.	long-term, purposeful activities are journeys (Lakoff 1994, 62).	10.	long term purposeful activities are periods of increase or decrease of attributes.

Table 4.2

To exemplify how these metaphors operate to structure our understanding of an event, I will examine the way that we talk about the “time” event, which is summed up by the metaphor **TIME PASSES**. The notion that time passes requires two things: 1) an observer for whom time can pass and 2) an abstract concept “time” that can be conceptualized as something concrete enough to be observed.

If we think about time using this first version of the event structure metaphor, by **STATES ARE LOCATIONS**, times are static locations that the observer, by **CHANGES ARE MOVEMENTS**, passes through. Specific periods of time are **LOCATIONS**, which the observer is **ON** when the two are conceptually present at the same time: “*On Thursday, I will meet with my advisor.*” The observer **MOVES** from one **TIME-LOCATION** to another:

¹ To me, this particular entailment does not seem to fit with the rest. In fact, in some ways it seems more consistent with the object dual, described next.

“By the time I *get to* Tuesday, I should be finished with that task.” Long term, time oriented activities become journeys for the observer: “As we *move on through* the years...” Extended periods of time become a path that observers move through toward their final destination: “*On* Monday we’ll plan the party. *On* Tuesday we’ll buy the party favors and decorations. *On* Wednesday we’ll buy the food.” etc. Because it conceptualizes the abstract as *location*, Lakoff calls this version of the event structure metaphor the *location dual*.²

The second version of the event structure metaphor, rather than conceptualizing the abstract as *location*, conceptualizes it as an *object*, and thus is called the *object dual*. In the case of TIME PASSES, periods of time are no longer locations, but are objects that the observer can possess or lose: “I *have* only one hour to complete this.” or “We’re *losing* time just sitting around and dithering about this.” Changes are still movements, but rather than movements of the observer through locations, they are movements of objects into and out of the observer’s possession or vicinity. In this version of TIME PASSES, the observer becomes stationary and time objects pass her: “As I lie in bed sick, one hour after the other *passes by* and I accomplish nothing.”

Just as we integrate time percepts with these event structure metaphors toward a bearing on making sense of a time event, we integrate musical percepts with these event structure metaphors toward a bearing on making sense of a musical event. If English speakers have two distinct ways to structure thought and speech about the non-musical

² In calling this a “dual,” I am following a convention Lakoff sets in his writing. He and his students have noted that metaphors often have a counterpart that accomplishes the same conceptual task, but does so in a qualitatively different way. He calls these matched metaphors *duals* of one another.

events of their lives, it is logical to hypothesize that they use the same, or similar, two ways to structure eventful musical experience.

Indeed, I did find evidence of the presence of two such distinct musical event structure metaphors (hereafter called “MESMs”) in the language of the musicians at Curtis. The rest of this chapter will explore those two MESMs and how they might act to lend structure to abstract musical sound. The next section explores the linguistic evidence that suggests that in the two MESMs the relationship between the observer (the listener) and the observed (the music) differs. From there, I will move on to detailed descriptions of each of the two MESMs.

THE RELATIONSHIP OF THE OBSERVER TO THE OBSERVED IN THE TWO MESMS

The linguistic evidence points to two different conceptualization of observer to observed in the two MESMs. In the *location MESM*, which corresponds to Lakoff’s location dual, the listener, viewing from afar, observes musical figures moving from one musical location to another. In the *substance MESM*, which corresponds to Lakoff’s object dual, the listener is anchored, deictic center, as a musical substance flows past her.^{3,4}

³ As it will become clear, in the case of *musical* events (as contrasted with events in general), it is more appropriate to call the “object” dual a “substance” dual. This change in terminology is due to the fact that rather than integrating the structure of experience with contained objects with musical sound, enculturated listeners integrate the structure of experience with *flowing substances*.

⁴ Since the point I am making here involves speech about music, I have not included musical notation. The reader should not be concerned if he or she is not familiar with either of these pieces and thus does not know what the examples refer to. I will be referring the reader rather to the language of the examples.

With the following description of Lizst's *Piano Sonata in B Minor*, pianist Amy Cheng illustrates the location MESM, in which the listener views musical figures moving from one musical location to another:⁵

The beginning theme actually *comes* (plays first theme). It's very poetic. And it *comes* in, it *lurks* around in many different places. **This is** (plays same theme). It *comes* back in the very, very end. It *ends* the same way it *begins*. (Plays same theme, beginning on pitch a M3 higher.) So I think, in a way, he* is completing the piece like that.⁶ He *goes* back to the beginning. He *begins* that way and **then he goes** to allegro part and in between, you know, **there's** a slow part, lyrical part and it *develops* to a very typical fast part again. And then the real second movement *comes* in with the recitative. It's like recitative, where it's very dramatic, vocal, romantic, dreamy, sentimental, all this kind of quality. But in between with, you know, a lot of striking (plays the third theme), *brings* back the memory of the opening {indecipherable word} and **then** after all this lyrical you know passionate thing, *goes* into a fugue. He* used the opening two themes in allegro and incorporate, it's very, it's actually a very amazing composition. And **then**, you know, it *goes* into a transition part, it's up and up up and it, it *returns* to the allegro, which is, you can say is the first movement. Or I call it a recap, because it's really a one-movement piece. Close to a recap. And more or less the same thing, it's oh...you know, the same thing. The same *cantabile part comes* back.

Example 4.1: Amy's speech (location dual)

The second example, which illustrates the substance MESM, in which the listener is anchored in the center of the musical flow, is from a conversation I had with violinist Sara Bittloch about Brahms' *Sonata for Violin in D minor*, the first movement.⁷

D: What's the basic mood of this first theme?

⁵ I will explain the differing fonts in these examples later in this section.

⁶ At times she uses the word "he" to index Lizst. Note that, except for the two uses of "he" marked with an asterisk, where she clearly indexes the composer, she could have just as easily said "it," indexing "the music." Most of these uses of "he" are metonymic, substituting the composer for the composed.

⁷ This is a condensation of part of a conversation I had with Sara. The bracketed ellipses indicate digressions or back channeling removed for the sake of brevity.

- S: *FOR ME*, it's very nostalgic music. [...] Do you know what I mean? [...]
- D: Well, it's odd because it's, you know it seems urgent. [...] There's an urgency to it. And yet {the basic rhythmic flow} is not really two beats to the measure. *TO ME*, it's one beat to the measure most of the time except you have these little spots where it isn't. And yet at the same time There's this urgent sort of {duh duh duh duh}. [...] But I'm interested in your saying that it's nostalgic. [...]
- S: It's like, yeah, like a kind of memory, but with this urgency which you are saying which, um... You know like, I feel it may be like when if you have a [...] time that you remember that you maybe miss or something. [...] You know, you feel you could live that again, you wish you could live that again or something, you know? [...]
- D: So it's, the nostalgia's sort of generalized, it's not for a specific time and place.
- S: Oh, it's in the, you know, it's in the music, actually. [...]
- D: So, what is it about that that makes you have that feeling of nostalgia?
- S: I, for example, I don't like so much this performance, but I think he plays the beginning so well, exactly for that. I just love the way he (sings first 2 notes) you know how he goes to that note and, it's like crying.
- D: How he sort of builds toward it?
- S: No, I mean not so much in dynamic. I think in *sotto voce* you can't [indecipherable word] so much but like in feeling you can feel so much. [...]
- D: Um...so it's sort of {a building of intensity}?
- S: Yeah, mm hm.
- D: rather than {a building of volume}.
- S: Yeah, mm hm. [...]
- D: So you sort of felt like *A SENSE OF* nostalgia and yearning here.
- S: Yeah, I really...
- D: How do you think [...] that the piano line, um...*contributes* to that?

- S: Yeah, it's so...octaves. You know they have *THIS SENSE OF* like um...bareness, you know? [...] And... it, *FOR ME*, it fits definitely. I can't really *explain* it. It's like, um...yeah, a little bit empty feeling. Not really wanting to *put* harmony, but you know, just {a continuation} of sounds or whatever.
- D: Uh huh. What about the rhythm, the rhythmic
- S: And that's what *creates* the urgency I think, (sings the syncopated effect and mimics it with hands) that they are not... [...] And it's all one long phrase which like *grows* here a little, you know it gets more intense.
- D: Uh huh. So why does it, how does it get more intense? Is it just the um
- S: It's going up, I think that's mainly and also the, you know, the [development] of this {(sings m9 and through m15, though skips crescendo in 11-12)} [...]
- D: Right. Okay, and then you've got this, the same. How do you feel about these little things?
- S: It's the same kind of thing. It's also intensity very much.
- D: *TO ME* it seems even a little more urgent.
- S: Yeah.
- D: um...Why does it seem a little more urgent? I mean I think the fact that this is a smaller interval, just a half [...] step and these are large intervals and There's just this push
- S: There's also this
- D: and you've got {(sings triplets in the right hand of the piano part)}
- S: the triplets against two [...] *makes* a very big...you know, three against two? [...] That's like, really unstable. (sings)
- D: Right, so that...huh. Okay, so then it *goes* on and [...] at the end of the phrase
- S: It just *dies* quietly.

Example 4.2: conversation with Sara (substance dual)

In each of these examples, which illustrate the two MESMs, the listener situates herself differently with respect to the musical sound. Linguistically, this difference in situatedness is accomplished in two main ways: verbal aspect and deixis.

In linguistic scholarship, “aspect” is a very complex and much debated category.⁸ I am using “verbal aspect” to refer to a difference in quality of situation conveyed by verbs, which can be categorized as either conveying a dynamic or a stative quality. Dynamic and stative verbs can be distinguished from one another both semantically and grammatically. In general terms, dynamic verbs express

activity [e.g. run, walk], process (e.g. change, grow), bodily sensation (e.g. feel, hurt), etc. (Crystal, 103).

On the other hand, stative verbs

express states of affairs, rather than actions, i.e. the expression of relational processes (e.g. be, belong to, involve, seem) or of inactive perceptual or cognitive processes (e.g., know, mean, realize, suppose) (ibid, 287).

Grammatically, dynamic verbs

occur in the progressive form (e.g. I’m running, He’s playing) and in the imperative (e.g. Run!)” (ibid, 103),

whereas stative verbs usually do not (e.g. *I am supposing; *Suppose!) (ibid, 287).

Some English verbs can be used as either dynamic or stative, including the verb “sound”:

⁸ Laurel Brinton (1988) suggests that the confusion lies, at least in part, in the failure of scholars to differentiate between “aspect” (whether a speaker portrays an event as completed, ongoing, beginning, continuing, ending, or repeating) and “aktionsart” (“the inherent nature of the situation portrayed”). In Brinton’s terms, I am concerned with aktionsart here.

e.g. “The trumpet shall sound” (dynamic) or “It sounds like you want to go home” (stative).

In the two examples of speech about musical events above, I highlighted the aspect of the verbs: *dynamic* with italicized text and stative with underlined text.⁹ If you look at the main verbs of each sentence, you will see that in Amy’s description (which illustrates the location MESM), dynamic verbs predominate (It *goes*, It *comes*, It *develops*, etc.), while in my conversation with Sara (which illustrates the substance MESM), stative verbs prevail (It’s like, There is, You have, It seems, etc.). This predominance of one aspect over the other gives the utterances either of two general qualities: dynamic or static.

In addition to aspect, deixis plays a part in shaping the differing qualities of these two examples. Deixis refers to

those features of language which refer directly to the personal, temporal or locational characteristics of the situation within which an utterance takes place, whose meaning is thus relative to that situation; e.g. *now/then, here/there, I/you, this/that* (ibid, 86).

In other words, deictics anchor the speech to the situation. Listeners who become confused about what the deictics in an utterance refer to may feel disoriented and will generally stop the speaker to clarify. Without clarification, the rest of the words in the utterance cannot easily be made sense of.

⁹ I highlighted only those verbs that described the musical event. In addition, I did not highlight verbs that were functioning as auxiliaries.

I have marked the deictics in the examples with a bold font: **it**.¹⁰ Looking again at Amy's description (the location MESM), note that the most common deictic is "it," paired with a dynamic verb. Along with "it *dynamic verb*," she also uses "then" fairly often, adding up to a manner of presenting the situation that suggests a series of actions happening to a figure over a period of time and *outside of* Amy. She seems to be at a distance, *observing* these actions happening to that figure and *narrating* them for someone who cannot observe for herself.

As Sara and I converse (illustrating the substance MESM), we use a variety of deictics (it, you, me, I, that, they, this), indicating a less unified conception of what we are talking about. Rather than watching something that is outside ourselves at a distance, we seem more to be in the middle of a variety of things that are occurring, noting what we are sensing and feeling about the them. The various deictics are paired most often with stative verbs. We are not talking about a single thing *going and doing*, but about multiple things, and how they *are* or *seem*. We use "then" only once, suggesting less concern with a series of events taking place through time. Instead, we use existential "there" many times, pointing rather to *existence* in time, rather than location in time. (These are marked with an underlined, bold font: **there's**.) These combinations of verbal aspect and deictics suggest that, rather than experiencing this event from a distance, experientially, Sara and I are *inside* the event, an integral part of it.

¹⁰ Sometimes deictics refer internally to a sentence, not externally to a situation, e.g. "Somebody that is revealing to you a secret...." I have not marked these.

In addition, we use constructions that suggest we are in a mode of identification with both the music and each other. For example, Sara began talking about the music with the statement, “*FOR ME*, it’s very nostalgic music.” to which I later responded, “So you sort of felt like *A SENSE OF* nostalgia and yearning here.” Rather than sitting outside the musical event, observing it from afar, as Amy’s speech indicates she is, Sara seems to have a closer relationship with the sound, as if she were *inside* the stream of sound, sensing its qualities. I have marked all of the words that indicate this mode of identification with italicized, small capitals, e.g., *A SENSE OF*. This mode of identification extends beyond the relationship Sara describes with the music to her relationship with *me* as her interlocutor. Her use of the indefinite pronoun “you” includes me, herself and anyone else who might be listening.¹¹

These two examples also differ in the kinds of metaphors employed. Amy’s musical event concerns the motion of a figure in and through space and time: “[I]t comes in, it lurks around. [...] then it goes into a transition part, it’s up and up up.” In this and other ways, it resembles Lakoff’s *location dual* of the event structure metaphor. For that reason, I will refer to it as the location dual of the musical event structure metaphor..

In contrast, Sara and I conceive of the musical event as the flow of a substance that can have particular qualities, including temperature, mood and force: “There’s an urgency to it. And yet {the basic rhythmic flow} is not really two beats to the measure.

¹¹ I think this mode of identification causes this mode of speech about musical events to happen in an interactive mode. My conversation with Sara, which was my best extended example of this kind of speech, was completely interactive.

TO ME, it's one beat to the measure.” “[I]t's like *crying*.” “It's so...octaves. You know they *have THIS SENSE OF* like um...bareness.” “And it's all one long phrase which like *grows* here a little, you know it *gets* more intense.”

In this *substance* oriented MESM, the active “flow” of musical “substance” is packaged in nominalizations, which are nouns (static in nature) made from verbs (active in nature). These are marked with brackets: {a building of volume}. Sung or played demonstrations of the music are nominalized and used in sentences as nouns.¹² These “packages” of musical process can be temporarily “possessed” by the listener (*you've got* {(sings triplets in the right hand of the piano part)}) indicating, again, a mode of identification with the music. *Having* is possessing, which conceptually maps the CONTAINMENT schema onto a person, with the person becoming a field of containment and the possession becoming the contained. All of these qualities mark this as similar to Lakoff's *object dual* of the event structure metaphor. However, although the musical substance is packaged by nominalizations in language, it is experienced and spoken of as a flowing substance rather than an object. For this reason, I will refer to this as the substance dual of the musical event structure metaphor.

From the linguistic evidence regarding the relationship of the listener to the music, we can see that the two MESMs differ in their figure-ground orientation. In the location MESM, the music acts as both figure and ground, with a musical figure moving against a musical ground. The listener sits outside this action and observes it. In

¹² In contrast, in the location MESM, sung or played demonstrations tend not to be nominalized and made an integral part of sentences. Instead, they are used to illustrate what the musical figure is doing.

contrast, in the substance MESM, as the music flows past the listener, it is the figure. At the same time, the listener, situated in the center of that flow, experiencing and sensing its qualities, becomes the ground. For example, consider Sara's statement: "Yeah, it's so...octaves. You know they have this sense of like um...bareness, you know? [...]. And...it, for me, it fits definitely. I can't really explain it. It's like, um...yeah, a little bit empty feeling." As the octave figure "passes" Sara, it plays out in her, as ground, as a sense of bare emptiness.¹³ The substance MESM situates the listener in the center of the musical flow, where she becomes the ground for the action of the music as figure, while the location MESM situates the listener at a distance from the music, with both figure and ground located in the music "out there."

Each of these MESMs relates to different aspects of embodied imagining.

Situating the listener *at a distance from* the music, the location MESM relates to the imaginative sense of vision. A listener operating in this mode will speak as if she *sees* the event in the music, as when Amy said, "It comes in and lurks around in many different places." If she elaborates what she sees imaginatively, she will describe visual metaphors, such as when pianist Anna Polonsky called the broken arpeggios of the first movement of Beethoven's fourth piano concerto "lacy." Situating the listener *inside* the music, the substance MESM relates to the imaginative sense of touch (or taste), the kinesthetic sense, and the emotional senses. A listener operating in this mode will speak as if she touches the music (e.g., when Sara said "They have this sense of bareness" or

¹³ See Lakoff and Johnson (1999), pp. 198-200, for more on the relationship between the general event structure metaphors and figure-ground.

describing a timbre as “silky”), feels its force (e.g., when I said “There’s this push”), or senses a particular mood (e.g., when I said “There’s an urgency to it”). If she elaborates what she sees imaginatively, she will describe metaphors based on these senses (e.g., being on a roller coaster ride).

In summary, we can see that the two different relationships between observer and observed render these two MESMs logically distinct from one another. In the location dual, the observer is outside looking at a figure moving through a series of locations. In the substance dual, the observer is inside the flow of musical sound, sensing its qualities. I am not suggesting here that people commonly use only one of these MESMs to experience or talk about music. In fact, it is quite common to observe both metaphors used even in the same sentence.¹⁴

I now turn to detailed descriptions of these sets of metaphors, exploring first the location MESM. I invite my readers to imagine as they read that they are listening to music and are situated in relation to the music in the ways that I describe as characteristic of the two MESMs. I also ask that you actively imagine being in the experiential modes that I describe for each MESM. Such imaging may make my argument clearer.

MUSICAL EVENT STRUCTURE METAPHOR — LOCATION DUAL

The source domain of the location MESM is the MOTION of a discrete FIGURE or FIGURES in and through SPACE as OBSERVED by a listener. Such motion UNFOLDS IN TIME through a series of MUSICAL LOCATIONS. The specific time event dual that operates here

¹⁴ For example, in my conversation with Sara, we switch from the object dual to the location dual for our last two utterances.

is the location dual, where time is conceived of as a journey through various time locations. In the location MESM, the listener is located outside the musical action, VIEWING it, as if it were on a stage.

Given the fact that this MESM lends itself to an analogy with a dramatic event on a stage, for the purposes of clarity in my exposition, I will employ some of the terms of dramatic action, such as “setting” and “action.”

Setting I: Extended-Static Musical Time-Space

For Amy Cheng, the first theme of Liszt’s *Piano Sonata in B Minor* has a way of “lurking” around a stage-like setting, returning again and again.

The beginning theme actually comes (plays first theme). It’s very poetic. And it comes in, it lurks around in many different places.

The first clue that Amy gives to indicate that this musical event takes place in a limited space is her statement that the first theme “comes in.” This, and the commonly employed term “entrance,” suggests movement into a particular location.

The basic setting Amy suggests, with the listener situated outside the musical event viewing something that moves through a limited space, emphasizes three of the usual four constructs that we call “dimensions”: height, width, and time. Recall that time in this MESM is metaphorized as location, so that one of the entailments of this conception of time would be TIME EXTENDS IN SPACE.¹⁵ This entailment stretches time out to various static locations, and so the third dimension could also be consider to be

¹⁵ This metaphor is evident in such linguistic constructions as “A *long* time ago...”

length. The distant observer can view a relatively long portion of that time, making this musical event structure more *diachronically* than synchronically ordered.

The setting, then, for the ACTION in this musical event structure is a visual space, rather analogous to a stage. In our culture, we metaphorically project a CONTAINMENT schema onto a location, with the sides of the container mapping onto the boundaries of the location. Once something moves past the boundary, it is metaphorically *in* the location container.

The nature of the containment of the musical location is rather complex. Although the metaphor of viewing action on a stage suggests three dimensions (height, width, and depth), musical space is comprised, rather, primarily of height and width. However, even this description is inadequate, because the “width” does not exist all at once, but unfolds in time. The emergence of musical space in and through time complicates my discussion of the metaphorical projections involved in its conceptual construction.

One of the entailments of the location dual of the time event, in which time is conceived of as a journey through various time locations, is the metaphor TIME IS EXTENDED SPACE, which I will refer to as extended-static time-space. If we examine this metaphor, we can see that it has two versions. The first is a kinesthetic version, in which the person speaking is located in the time event, with the past behind her and the future in front, e.g. “As I head toward the future....” The second is a visual version, in which the person speaking is located outside the time event observing something inside moving

from one time location to another, e.g. “That project will go on from one day to the next.” This version of the time event metaphor operates in many of our visual representations of time, such as most calendars, which represent days as a series of blocks to be read from left to right.¹⁶

Although both kinetic and the visual versions of extended-static time-space can operate in this musical event structure, the visual version is most prevalent in speech conditioned by it.¹⁷ Thus is evident in Amy’s speech, which places her outside the event, looking in at it.

[It] begins that way and then [it] goes to allegro part and in between, you know, there’s a slow part, lyrical part and it develops to a very typical fast part again.

This version of time-space also appears in musical notation, where the viewer sees representations of a musical event stretching out across the page, moving through various locations.¹⁸ The extension of musical time-space in a manner that suggests *width* and *height* is reinforced by the notion that music has a *horizontal* axis and a *vertical* axis, common metaphorical expressions for melody and harmony. The setting, then, for musical action is an extended-static musical time-space limited by the viewer’s field of vision.

¹⁶ While it is true that the day blocks on a calendar do not move continuously from left to right, but instead are represented in a fashion that requires the reader to move her eyes to the next line, this is only an artifact of the technology of paper.

¹⁷ However, the kinesthetic version is very evident in rehearsal speech. It is also evident in talk about musical *momentum*, which I will discuss in the next chapter.

¹⁸ Again, the same limitations of paper technology apply to representations of music as do to calendars.

Action I: Melodic Motion

This conceptual setting provides the ground against which visually oriented melodic motion takes place.¹⁹ In a visual form, the idea of motion suggests the logic of figure and ground.²⁰ When detecting motion with our eyes, we know that something is moving because we see a figure moving across some sort of background.

Within extended-static musical time-space, notes move to variously placed positions with respect to height. Discussing the Liszt Piano Sonata in B minor, Amy says the music “goes into a transition part, it’s up and up up.” As discussed earlier, musical height results from integrating the UP/DOWN image schema with the sound wave. Although this metaphoric integration can be explained in a number of different ways, the most experientially basic explanation is one that stems from the physical experience of singing: the vibrations of low notes are produced lower in our throats and high notes higher. As the musical event unfolds the lowest and highest pitches delimit the overall range. The fact that musical pitches are experienced as high and low entails some sort of GRAVITY in this MESM. “Up” and “down” exist with respect to gravity. In gravity-free space, they do not exist.

Musical motion through this range can be accomplished in a variety of manners. If the vertical SPACE between notes in a moving series is smaller (a whole note or a half note), they are described as moving in STEPWISE fashion. If the SPACE covered is larger,

¹⁹ For more on musical motion, see Lochhead (1989/90). For early cognitive semantics work on motion, see Talmy (1975).

²⁰ Vision is not the only way to detect motion. If you are in a car and close your eyes, you can certainly detect changes in motion through your kinesthetic and proprioceptive senses.

it is described as a LEAP. If a series of notes are sounded on the same pitch, with the same rhythm, unless a static quality is desired, the player must take special precautions to ensure that the sound goes somewhere and does not give the impression of stagnation.

As pitches move through extended-static musical time-space, they describe melodic LINES in it. Although perceptually, musical pitches moving through the horizontal axis are usually discrete (with exceptions for vocal, string or trombone portamentos), due to the integration of a PATH schema, these pitches are connected into melodic LINES. Multiple LINES weave together into different musical TEXTURES, which can be described as dense or open, depending on how many lines are involved and how close they are in musical space/time. The different LINES may be more easily differentiated if they are drawn with different timbres, or tone colors.

Direction I: The Harmonic PATH Image Schema; Harmonic Locations

Multiple LINES do more than simply create different musical TEXTURES. Taken together, they create vertical harmonies that move in harmonic PROGRESSIONS. In the tonal system, we understand those progressions as a PATH image schema that constrains the movement of the melody. Melody notes must correspond with concurrent harmony notes most of the time. When they do not, they are called nonharmonic tones and are carefully resolved back on to the harmonic PATH.

In tonal harmonic theory, the tone, chord, and key that constitute both source and goal of this path is the tonic, which the music theory book used during my research time at Curtis defines in this way:

The tonic, the central tone of the key, forms the *point of departure* from which the other tones move and the *goal to which they are directed* (Aldwell, Schacter, 1989, 5, emphasis in original).

This quote suggests two things: 1) that, in the tonal system, the melody alone constitutes a PATH image schema, and 2) that the tonic note is both source and goal for the melodic path. The tonic note is the center of GRAVITY from which all STEPS and LEAPS originate and to which they must eventually return. In addition, the notes of the tonic triad, considered the most stable in a key, are often the source of some of the more important tones in a melodic line. The tonic key, often called the “home” key, constitutes both source and ultimate goal of the harmonic path.

The progression of harmonies constitutes a path for the melody by constraining their movement. As the harmonies progress, the composer must choose important melody tones from the notes of the changing triads, taking care in the treatment and resolution of nonharmonic tones in both the melody and the harmony parts.

Alternatively, the composer may write the melody first and add complementary harmonies later. However, even though in this version of the composition process the melody constrains the harmony, conceptually speaking, the harmony is still the path for the melody. No term, such as “nonmelodic,” exists for discussing how a melodic path might constrain harmonies.²¹

²¹ Usually, if harmonies are added to a melody, they are considered harmonic “support” for the melody. This metaphor seems architecturally oriented, and may very well be simply a projection of architectural thought to musical thought. However, along with statements such as “I found her interpretation very *convincing*,” it may also be part of a metaphor that conceptualizes music in terms of arguments, which in our culture are often talked about in architectural terms. I have yet to examine either the music/architecture or the music/argument connections.

The harmonic path winds its way from the home key location to various other harmonic areas, such as closely or remotely related keys. Keys are CONTAINED LOCATIONS made up of a certain set of pitches; a melody is IN one key or another. When a melody moves from one key to another, it may make its TRANSITION by way of a BRIDGE. In a rehearsal, after a stop for discussion, the group might reconvene at a particular key location, usually at the boundary, where one key changes to another.

Direction II: The Extended-Static Musical Time-Space PATH Image Schema

Paths and locations are not only harmonically oriented, however. They are also defined by extended space/time. As stated at the beginning of this section, the time event structure metaphor operational in this version of the musical event structure is the location dual, where time is conceived of as a journey through various time locations. This involves a PATH image schema. The source and goal of extended space/time, in general, remain relatively abstract, but are somewhat concretized by the notion of past and future. The path is made up of different time locations, such as hours, days, weeks and months. Those locations are traversed by a virtual traveler who advances forward into the future, from one moment to the next. Depending on whether the kinesthetic or the visual versions are in operation, the virtual traveler is either the speaking observer or “now.”

In this version of musical time, the beat is a virtual traveler who passes through different metrical locations. Players must be careful to “keep up with the beat,” but not to “rush” or “drag” it. Metrical locations are broken up similarly to time locations: a

whole piece has numerous sections (variously defined, sometimes called periods); sections are broken up into measures. Often times a whole section will be in a single tempo. Tempos are LOCATION-CONTAINERS at which, in rehearsal, players begin. As the sounding beat moves through metric locations, it encounters RESTS — places where it stops sounding. It also encounters cadences, which function similarly to gates that are OPEN or CLOSED. Cadences function as boundaries from one location to another. These various metric locations, along with rests and cadences are drawn up in the score, which acts as both a travel schedule and a map for both the beat and the players producing the sound.

In that musical map, contrary to what I have said above about a single beat, multiple beats exist. Players may begin at or on the *fourth* beat of measure. Does this musical event structure have a single beat that advances into the future or multiple beats that function similarly to the “moment to moment” path “stones” of the time event structure? This question might be answered in two ways. First, recall the two versions of the operational time event structure: kinesthetic and visual. In the kinesthetic version, a single beat advances toward the future; in the visual version, multiple beats lay out a path on which the musical figure advances.²² Second, if the music is both figure and ground in this MESM, the beat is single when it is the figure (the virtual traveler moving forward), but multiple when it is the ground (the PATH stones upon which the virtual traveler trods).

²² This advancement, analogous to walking, can be seen by the fact that we say that a sound begins on or off the beat.

Action II: Melodic FIGURE Contrasting with Harmonic/Rhythmic GROUND

The FIGURE/GROUND logic of musical motion takes a more complex form in that of the melodic or rhythmic figure that moves against a harmonic/rhythmic ground. This kind of musical motion is quite complex so I will not be able to cover all of its possible aspects. Instead, I will suggest the basic principles involved, followed by examples.

Amy Cheng calls the opening figure in the Liszt Sonata a theme:

The beginning theme actually comes (plays mm. 2-3). It's very poetic. And it comes in, it lurks around in many different places.

In addition to “theme” and “figure,” the word “motive” is often used to describe the most perceptually prominent, moving musical sounds. What all of these words accomplish, conceptually, is to take a series of separate pitches and “solidify” them into a single, gestalt “object.”²³ “Figure,” for which the main entry in the Oxford English Dictionary reads “The form of anything as determined by the outline,” does so by emphasizing the process of containment involved in the gestalt perception. “Motive,” which Webster’s Seventh New Collegiate Dictionary traces back to Latin *motus*, the past participle of *movere*, “to move,” emphasizes the *motion* the gestalt figure contains.²⁴

The ground is comprised of musical sounds that, perceptually, are less prominent than the figure. Usually, the ground has both harmonic and rhythmic components. The harmonic component may be static, such as a drone, or active, i.e. a harmonic

²³ Lakoff and Johnson (1980, 25-32) refer to this metaphoric gestalt projection as an ontological metaphor. See Narmour (1990) for more about gestalt perception of melodic figures.

²⁴ The word “theme” is part of another set of metaphors that liken musical composition to linguistic composition.

progression. The rhythmic element is usually organized by meter, which in this version of the musical event structure, is conceptualized as a container that organizes the beat. The metric function of containment is important here in that it lays out a regular background motion against which a less regular foreground rhythmic motion may be perceived. Alternatively, melodic or rhythmic musical motion may take place over a more melodically oriented ostinato figure, i.e. a ground bass, or a rhythmic ostinato.

When talking about the second movement of Schubert's *String Quartet* "Death and the Maiden" (Example 4.3, next page), Chinese violinist Chen Zhao told me

[T]he second violin and the viola have the background (sings triplets). And then the cello has the pizzicato with the first violin. In some ways this is more of a melody here. But it's put in the background. Whereas the violin has the ornaments um... And.... like the maiden goes through some kind of struggle here.

In this case the second violin and viola background is rhythmically and metrically extremely regular, providing a background pulse of triplets. The cello provides a soft pizzicato bass line that continues the same rhythmic pattern set by all instruments in the first two sections of the movement. Together, the three lower instruments provide a harmonic background that moves at the same pace as it has since the beginning of the movement. The first violin stands out on the top, because of range, relative pace, a difference in metric organization (duple against the triple background), a very different rhythm, and dynamic change. Considered diachronically, this figure is also very different from anything heard up to that point in the movement. Chen characterizes it as going through some kind of struggle.

String Quartet

Schubert

Musical score for String Quartet, measures 1-12. The score is for Violin I, Violin II, Viola, and Cello. It shows a dynamic shift from *pp* to *f* with a *cres.* (crescendo) marking. The score is in G major and 4/4 time.

Musical score for String Quartet, measures 13-16. The score is for Violin I, Violin II, Viola, and Cello. It shows dynamic markings including *decres.*, *p*, *pp*, and *cres.* with accents. The score is in G major and 4/4 time.

Example 4.3

25

Vln. I
pp

Vln. II
pp

Vla.
pp
pizz.

Vc.
pp

29

Vln. I
pp

Vln. II

Vla.

Vc.

3 3

Example 4.3

Chen's example demonstrates how figure and ground may be differentiated from one another in various ways, some more active and others static. The active methods have to do with motion and variation. Included in this group is the relative pace of the figure against the ground, as when a quickly moving melodic figure stands out against a slowly changing harmonic ground. Another active method is the relative amount of motivic change, as when a melodic figure is varied against a background of a melodic ostinato. The static methods include such musical elements as timbre, range, and dynamic levels.

The figure may not always move at a faster pace than the ground. Describing the beginning of Ravel's *Daphnis and Chloe*, Suite #2, (Example 4.4, next ten pages) Min Park, a young flutist, characterized it as "the sun rising against the murmurs of the forest." In this case, extremely rapid, but metrically strict and rhythmically even, passages played by the woodwinds, harps and celesta, as well as sustained tones in the upper strings and horns provide a static background for the gradually rising lower strings. These lower strings, which describe the motion of the rising sun, are differentiated from the background by timbre, range, and a varied rhythm and melodic line.

155 Lent $\text{♩} = 50$

156 Lent $\text{♩} = 50$

Aucun bruit que le murmure des ruisselets amassés par la rosée qui coule des roches

pp
Sourdines
ff
Sourdines
Jeu ord.
Div.
pp
Jeu ord.
Div.
pp
Jeu ord.
Div.
pp
Jeu ord.
Div.

• Otez les sourdines une à une en commençant par les chefs de pupitres. Toutes doivent être enlevées à **156**
 Remove the mutes one by one beginning with the first stands. All should have been removed by **156**.

Example 4.4, Ravel's *Daphnis and Chloe*

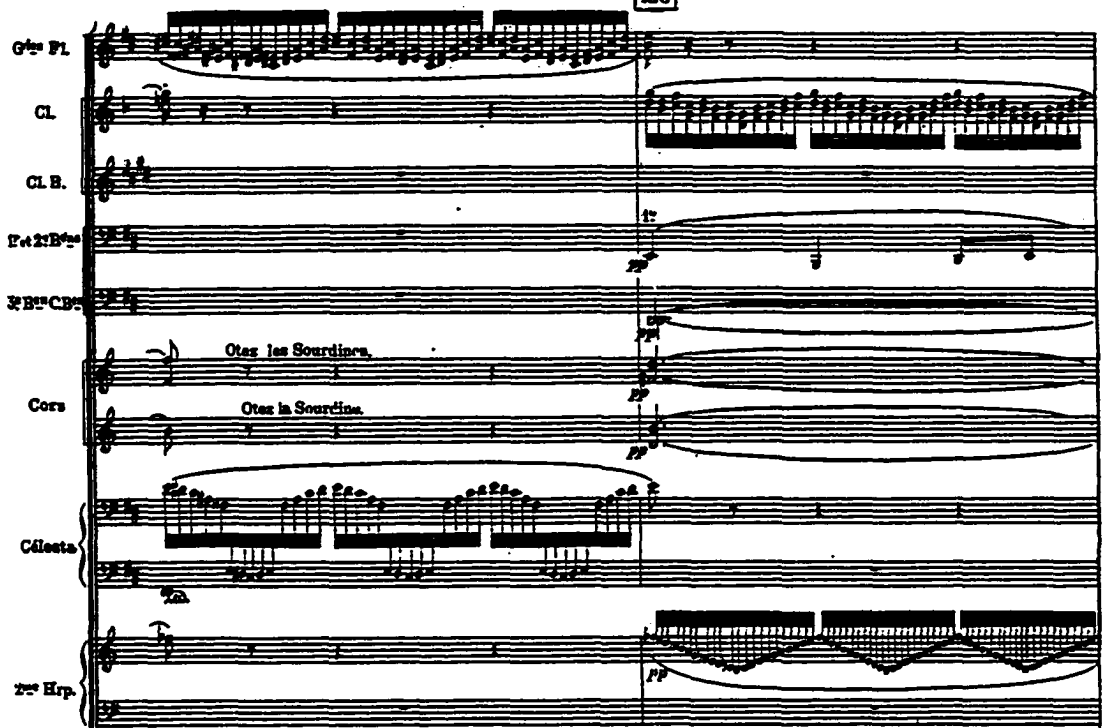
1^{re} Fl.
 Cl.
 Cors
 Celesta
 1^{re} Hrp.
 2^{de} Hrp.
 1^{re} Vces
 Div.
 2^{de} Vces
 Div.
 Uts
 Div.
 Alt.
 Div.
 Vclles
 Div.
 C. B.
 Div.

Daphnis est toujours étendu devant la grotte des Nymphes.

Fl.
 Cl.
 Cl.B.
 F.
 B.
 Cors
 Celesta
 Harp.
 Sordines
 Div.
 Div.
 Div.
 Div.
 Div.
 Div.
 Div.
 C. B.
 Lic.

1^{re} Fl.
Cl.
Cl. B.
F. et 2^{es} B.^{es}
3^{es} B.^{es} C.B.
Corns
Clarinete
2^e Hrp.

Otez les Sourdines.
Otez la Sourdine.



Peu à peu le jour se lève.

1^{re} Viol.
Div.
2^{de} Viol.
Div.
Alt.
Div.
Violon.
Div.
C. B.
Div.

Otez les Sourdines
Otez les Sourdines
Otez les Sourdines
Otez les Sourdines
Otez les Sourdines
Otez les Sourdines
Otez les Sourdines
Otez les Sourdines



Solo

1^{re} FL.

2^e FL.

Fl. en sol.

Rth.

Cor A.

CL.

CL. B.

Fr. et 2^e B^b.

3^e B^b et C^b.

Cors

2^e Hsp. *pp*

On perçoit des chants d'oiseaux

3^e Voz. Solos *mf en dehors*

Voz.

Alt. Div.

1^{re} Voz. Div.

C. B. Div.

Pc Fl.
Ob Fl.
Fl. sol.
Hrb.
Cor A.
Cl.
Cl. B.
1st & 2nd Trp.
3rd & 4th Trbn.
Cym.
Hrp.
3 Vns Solos
Vns
Alt. Div.
Vl. Div.
C. B. Div.

Pc FL
Solo
Gr FL
Fl. sol
Htz
Cor A.
Pc CL
CL
CL B.
Ba.
Ba. CB.
Cora
Trp.
1st Trb.
2nd Trb.
1st Hrp.
2nd Hrp.
3 Vln Solos
1st Vln Div.
2nd Vln Div.
Alc. Div.
Vlna Div.
C. B. Div.

157

Pt. Fl.
 Gt. Fl.
 Flauto Sol.
 Hrh.
 Cor A.
 Pt. Cl.
 Cl.
 Cl. B.
 Fagotto
 Fagotto-Contr.
 Cors.
 Trp.
 Tromba
 Tromba
 1^a Hrp.
 2^a Hrp.
 157 Col Tutti
 3^a Vce
 2^a Vce
 1^a Vce
 Div.
 Div.
 2^a Vce
 Div.
 Alt.
 Div.
 Vcllo
 Div.
 C.B.
 Div.

This image shows a page of a musical score, page 340, for a large orchestra. The score is arranged in a vertical column of staves. The instruments listed on the left side of the staves are:

- G^{te} Fl.
- Flaut. sol.
- Cor. A.
- 1^{re} Cl.
- Cl.
- Cl. B.
- 1^{re} Tr. B^{te}
- 2^{de} Tr. B^{te}
- Corn.
- 1^{er} Tr. T^{ub}
- 2^e Tr. T^{ub}
- Harp.
- 1^{re} V^{cl} Div.
- 2^e V^{cl} Div.
- Alt. Div.
- V^{cl} Div.
- C. B. Div.

The score contains musical notation for each instrument, including notes, rests, and dynamic markings. The woodwinds and strings are playing active parts, while the brass instruments have more sparse, sustained notes. The percussion section includes a harp and a tuba. The page is numbered 340 at the bottom center.

158

G⁴e FL
 Flenu
 Cor A.
 P¹e CL
 CL
 CL B.
 E⁴ 2^e Tr.
 3^e Tr. C.B.
 Cors
 E⁴ 2^e Trb.
 3^e Trb. B.
 2^e Hrp.
 P¹e v^{es}
 Div.
 2^e v^{es}
 Div.
 Alt.
 Div.
 Vcllo
 Div.
 C. B.
 Div.

pp espressif
 Div.
 Div.
 pp espressif
 pp
 pp

158

Sometimes, rather than a figure and ground, the music contrasts two figures of varying character. Concerning the first trumpet figure of Hindemith's *Sonata for Trumpet and Piano* (Example 4.5, next page), written around the time that Hitler was first coming to power, Jason Gamer exclaimed:

It's like "Verve!" you know, "Life! Life is starting!" with all the vigor and passion that that embodies. And at the same time there are these Nazis marching along, trying to squash it. (Sings rhythm of first measure of piano score.) "Yum puh dum pum pum pum pum pum." You can just see them, you know?

Rather than being mere background, the piano part is a figure unto itself. Played at a march-like tempo, its block chords stride on, bounding off the downbeat of one measure and on to the next. Even without fitting these figures into a historical program, considering them wholly on musical grounds, they clearly constitute contrasting figures. Besides timbre, they differ in rhythm, articulation and kind of motion, with the trumpet part constituted primarily of leaps and the piano part primarily steps. The piano part could actually be considered both as a figure and a ground. While it is distinct enough to be a figure, it is also more rhythmically repetitive than the trumpet, and so might stand out somewhat less for some listeners.

Musical *figure/ground* schemas can take varying forms, but the basic principle remains: a figure *stands out* against a ground because of some perceived difference between them.

Sonata

Hindemith

Mit Kraft (♩ = 88-100)

Trumpet

Piano *f*

The musical score is presented in three systems. The first system shows the beginning of the piece with a tempo marking of 'Mit Kraft' and a metronome indication of a quarter note equal to 88-100. The trumpet part is in the upper staff, and the piano part is in the lower two staves. The piano part starts with a forte dynamic (*f*). The second system continues the melodic line in the trumpet and the complex harmonic accompaniment in the piano. The third system shows further development of the themes, with the piano part featuring dense chordal textures and moving bass lines.

Example 4.5

Setting II: Regions of Musical Space, Terrain

The notion of FIGURE/GROUND is very complex and takes many forms. I'd like here to examine one of the implications of this notion, the relationship between ground and extended-static musical time-space. I will argue here that, just as we conceive of the physical space we live in as having varying regions and terrains — such as underground, ground, above ground, and sky — so we conceive of musical space as having varying regions and terrains. To understand this, we must consider both musical figure/ground and gravity.

While we commonly use the term “ground,” since figure/ground is fundamentally a phenomenon viewed from afar, “ground” is better understood as “background,” rather than the earthly ground. This suggests that, at times, in this musical event structure, the more static ground visually “fills up” extended-static musical time-space in a particular fashion, serving as a backdrop for a more active figure.

For instance, at the beginning of Ravel's *Daphnis and Chloe* (Example 4.4, p. 332), two woodwinds execute extremely fast, relatively parallel passages that undulate in small to medium intervals. These passages are so rapid that they present a blur of sound to the listener; it is nearly impossible to pick out individual notes. According to the program written in the score these passages represent the sound of minute brooklets running over rocks: “*Aucun bruit que le murmure des ruisselets amassés par la rosée qui coule des roches*” (“No noise but the murmur of the rivulets collected from the dew that runs down from the rocks” translation: Maribeth Clark). While in their blurred

rapidness they do index the idea of fluidity, the notion that they iconically represent the sound of brooklets is somewhat implausible. The way a brook sounds depends on a number of factors, such as the kinds of rocks involved, the speed and amount of the water, and the way that the water and rocks interact. However, in general, the sounds of a brook are much steadier in pitch than Ravel's passages are. Brook sounds can be a steady stream of white noise, a relatively steady treble sound or bass sound. Although they do fluctuate to some degree in pitch, those fluctuations do not tend to cover a wide range.

To my mind, Ravel's passages do a much better job of iconically representing the visual effect of a brook.²⁵ The structure of the visual effect of a brook maps quite neatly onto the structure of the aural effect of these passages. The undulating intervals suggest water moving around rocks, with some rocks being larger than others. The aural blurring depicts the visual blurring of rapidly moving water. In this way, Ravel "fills in" (visually oriented) musical space/time with a background against which the "lines" described by the rising sun can be "seen." Indeed, we do sometimes talk about instruments "filling in."

In the spatial relationships between the different instrumental parts in the Ravel example, musical time-space is used in a fashion that is iconic with our visual experience of these things in the world and in a manner that is consistent with the gravity present in

²⁵ Knowing little of the program of this piece, these figures have always reminded me of wind swirling through morning mist, another visually oriented metaphor.

this MESM.²⁶ At dawn, the sky lightens somewhat before we can actually see the sun, indicating to us that it is somewhere below the horizon. In the Ravel, the sun, depicted by the lowest strings, is placed in musical time-space below the ground created by the brooklets and the sustained tones. It lurks below the horizon for a while, indicating its presence but not showing itself (basses & second cello, mm. 1-7). While the ground stays at the same pitch level, the sun theme gradually rises from the bass, through the cellos and violas, finally cresting the horizon (passing the ground passages) with the second violins two and a half octaves later (rehearsal #157). As the sun gets nearer to the horizon, the “space” above it is filled with the iconic sounds of birdcalls, which gradually rise in pitch so that they are always above the sun.

Another example of the iconicity of “regions” of musical space/time with space in the world is provided by Beethoven’s *Piano Concerto no. 4* (Example 4.6, next page).

Talking about it, young Russian pianist Anna Polonsky said,

It comes to a thing full of flats and totally unexpected (m 105). And what it comes, on the very top and the very bottom and this is supposed to ring (plays very high note) and this is supposed to be kind of like this deep under the sea kind of dynamic. Not necessarily thinking that this is under the sea. But just the dynamic that you would “Ooo,” that kind of sound.

Clearly, Anna is not saying that this music represents the ocean in the way that Ravel’s music represented a nature scene at dawn. Rather, she suggests that it shares some dynamic quality with the sea. Looking at the score, we see that the melody floats very

²⁶ Note that this holds true whether you imagine the “brook” lines as an aural depiction or a visual depiction. Either way, if you were in a forest, you could locate the ground by this image (aural or visual).

Concerto #4

Beethoven

The image shows a musical score for Piano and Orchestra, labeled "Example 4.6" and "347". The score is in 3/4 time and features a key signature of one flat (B-flat major or D minor). The Piano part is written in two staves (treble and bass clef). The Orchestra part is also in two staves (treble and bass clef). The Piano part begins with a *pp* dynamic and *espress.* marking. The Orchestra part begins with a *pp* dynamic and *arco* marking. The score includes measures 104 through 110. Measure 104 is marked with a first ending bracket. Measure 105 is marked with a *cresc.* marking. Measure 106 is marked with a first ending bracket. Measure 107 is marked with a first ending bracket. Measure 108 is marked with a first ending bracket. Measure 109 is marked with a first ending bracket. Measure 110 is marked with a first ending bracket. The score includes various musical notations such as slurs, accents, and dynamic markings.

Piano

Orch.

pp *espress.*

pp

arco

104

cresc.

106

110

110

L.H.

Example 4.6

347

high above a much lower bass line that undulates up and down in even waves. At the same time, the orchestra plays sustained tones in the low to medium register, with the bass part a pedal B flat below a slowly changing harmony (B flat to F dominant seventh back to B flat). The left hand piano line incorporates notes of both the treble orchestra part and the pedal bass. When Anna played this for me, she used the sustaining pedal in the bass, which made the sounds run together. She explained, "The pedal is intentional. That's what makes it murky and kind of shaded and kind of hazy." In addition, when listening to it, I find that the pedal bass in the orchestra, when it contrasts with the changing harmonies, contributes to a harmonic "murkiness."

All of this adds up to an impression of murkiness in the lower parts contrasting with the melody line, which rings with "bell-like clearness" in a very high register. Anna called this a "deep under the sea kind of dynamic." Whether or not she meant to use this metaphorical expression literally, it is clear that the "murky" lower parts map to the deep, dark, shaded, hazy floor of the ocean, and that the bell-like melody line maps to the ocean's surface.

Earlier in our conversation Anna had talked at length about how spiritual she felt this movement was, likening the opening passage to angels.

Well, this particular part to me, to my teacher, who actually gave me the idea, is religious and kind of um..., it's peaceful, it's like clouds. And it's extremely loving, to me, it just has such a warm emotion to it, that... It's so angelic, that's the word. I'm not religious, kind of? Well not particular, I don't believe in angels, but if I was an angel, it would be like this. An angel would be peaceful and warm, like all protective and beautiful, but not refined, exquisite kind of beautiful? Not like Gothic architecture but more like... just warm and....

After she played the “ocean” passage for me, I commented, “It is really neat the way you have the murky left hand then the bell-like clearness of the right hand.” “Of angelic melody,” she immediately responded. For Anna this high, floating melody line not only maps to the surface of the ocean, but to the angelic heavens, both of which could be seen as weightless and shining. Although she did not say it, it is not a leap to suppose that the murky bass then might map to the murky, messy world of human beings on the earth, which, along with the murky depths of the ocean, could be seen as heavy and dark.

The point is that the “regions” of musical space can map iconically onto the regions of physical and cosmological space that we live in. As in the physical world, in the musical world certain kinds of events, “objects” and personas exist in lower realms and others, higher.

The above also implies that “terrains” of various sorts can exist in musical time-space. When we call large intervals “leaps,” what do we imply the sounds are leaping on to or over? I am not suggesting that this “terrain” exists for us conceptually in a positive sense, but rather in a negative one. What I mean by this can be clarified by an analogy to the activity of drawing. If a person draws a chair, she can attend to and draw the lines of the chair. In addition, she could also attend to the negative space, the shapes in between the legs or the slats of the back. In perceiving a chair, while we do not usually attend to the negative space, it is there, shaping our perceptions of the positive characteristics of the chair. I suggest that when we listen to music, while we do not normally attend to the musical time-space terrain unless a program directs us to it, it is still there, shaping our

perceptions and conceptions of the positive characteristics of the music. I will take this idea up again in the next chapter in relation to musical momentum.

Summary

To summarize, the location MESM dual, exemplified by Amy Cheng's speech about Liszt's *Piano Sonata in B Minor*, is set in an extended-static musical time-space limited by the viewer's field of vision. This conceptual setting provides the ground against which visually oriented melodic motion occurs. Melodic movements up and down are constrained by a harmonic PATH schema, and pass through various harmonic locations. Those musical paths and locations are also conditioned by the location dual of the time event structure metaphor.

Moving through the musical locations, more active figures stand out against more static grounds. The grounds can visually "fill up" extended-static musical time-space in a particular fashion, serving as a "backdrop" for more active figures. Those figures use the "regions" of this musical space in a manner that is consistent with our gravity-oriented experience in the world. Musical motion can negatively imply various kinds of "terrains".

MUSICAL EVENT STRUCTURE METAPHOR — SUBSTANCE DUAL

Not all musical events are visually oriented. Another kind of musical event is oriented more toward "feeling." Rather than being concerned with the movement of figures through musical space, it is concerned with the movement of the protean musical

substance as it flows around a sensing listener. Speeches from my conversation with

Sara illustrate:

D: Well, it's odd because it's, you know it seems urgent. [...] There's an urgency to it. And yet the basic rhythmic flow is not really two beats to the measure. To me, it's one beat to the measure most of the time except you have these little spots where it isn't. And yet at the same time there's this urgent sort of duh duh duh duh.

S: Yeah, it's so...octaves. You know they have this sense of like um...bareness, you know? [...] And...it, for me, it fits definitely. I can't really explain it. It's like, um...yeah, a little bit empty feeling. Not really wanting to put harmony, but you know, just a continuation of sounds or whatever.²⁷

Situated in the middle of the flow of musical sound, Sara and I sense its qualities, not visually oriented qualities but those oriented kinesthetically, tactilely, and emotionally.

As indicated earlier, the language that signals this musical event structure is *stative* in aspect. In addition to stative verbs, other aspects of the language signal that the speaker is in a mode of identification with the music and with her interlocutor: the indefinite pronoun “you,” reports of “a sense of” or “a feeling of,” comparative phrases—“It’s like crying” or “For me it’s like an empty feeling.” Reported speech describes the listener’s reactions to the musical forces affecting her or her “You go, ‘Oh, (sigh), okay.’” Existential “there” describes states of musical existence, rather than pointing to specific things — “There’s an urgency to it.” or “There’s a little bit of angst in it.”

²⁷ Comments made in orchestra rehearsal also suggest that musical sound is sometimes conceptualized as a substance. “Give me *a lot of sound* on that lower part.” “Those *hairpin swells* [crescendo/decrescendo]—don’t overdo it, it becomes maudlin. Just make a slight *lean into it*.” “Give me just a little bit more *substance*.” “Careful that the eighth notes don’t get *too heavy* in the legato.”

The source domain of the substance dual is the FLOW and FORCE of MUSICAL SUBSTANCE as they occur in time to a listener. The specific time event dual that operates in this metaphor is the object dual, which conceives of time as a flowing substance or a series of objects that flow toward and past the observer. In this musical event structure, the listener is located inside the structure, sensing the flow of musical substance with her feeling self (comprised of “senses of x”).

That feeling self includes at least three aspects of the polysemous verb “to feel”:²⁸

- 1) the (metaphorically projected) tactile/sensory self, which detects sensuous qualities in the musical substance such as temperature, surface texture, solidity, shape, weight, taste, purity, and illumination;
- 2) the (metaphorically projected) kinesthetic/proprioceptive self, which senses conditions and states of force of the musical substance, such as intensity, stability and instability; and
- 3) the emotional feeling self, which senses the mood of the music.

In the last section, since it was appropriate to the nature of the location MESM, I organized the exploration by concepts of staged narratives (action, direction). But these notions do not suit the substance MESM, since its basic nature is more about interaction between the listener and the musical sound. Therefore, after describing the setting in

²⁸ Eve Sweetser (1990) has traced the etymology of words for “to feel” in Indo-European languages and discovered that in all of these languages the verb for tactile sensation becomes generalized to indicate general sensory perception (35-36). In addition, she says, “the sense of touch is not only linked with general sense perception, but is also closely tied to emotional ‘feeling.’ [...] [I]t is most commonly the case that a given language has at least one basic ‘emotional-feeling’ word which comes from the domain of physical feeling” (37).

which these interactions take place, I will present the exploration as a series of interactions between the music and the feeling self, as outlined above.

Setting

This basic setting, with the listener situated inside the musical event, feeling the flow of musical substance around her, emphasizes three constructs that might be called “dimensions”: 1) a domain internal to the listener, 2) a domain immediately external to the listener, and 3) a version of time that emphasizes an awareness of the eternal now, to the exclusion of the distant past or future. For the listener, the action takes place either internally or in her immediate environment, with little regard for what has happened in the distant past or will happen in the distant future. Rather than an extended and static time-space, this musical event occurs in the immediate and dynamic time-space of the object dual of TIME PASSES. This time-space is more synchronically oriented, with location awareness radiating outward from the listener at deictic center. The setting is not experienced as a container schema (or a series of container-locations), but is limited only by the “reach” of the listener’s senses within the external musical realm.

In this immediate-dynamic time-space, the listener does not advance forward, but is anchored deictic center the musical substance, which flows, along with dynamic time, past her. At deictic center with the listener is the beat, now singular and cyclical, rather than either multiple and linear or singular and advancing forward. The beat, singular and cyclical, marks the ever-present “now.” In rehearsal, rather than producing statements about “on” the beat or “off” the beat, this produces seemingly illogical statements about

things happening *between a single beat*. For instance, on 2/21/95, speaking about a syncopated passage in Brahms' *Symphony no. 1*, fourth movement, measure 384, Wolfgang Sawallisch said to the Curtis orchestra, "If you [the lower strings] are not with me on the beat, nobody [the upper strings] can play between the beat." This *apparent* illogic does not, however, appear illogical to the enculturated player, since they understand it in relation to the substance MESM, where the beat is cyclical.

Flowing around the listener at deictic center (where Sawallisch and the Curtis orchestra are "on the beat" together) is the musical substance. The listener can be "immersed" in the sound substance; it can "lift" her or "leave her hanging." *Gravity* acts as an orientational force in this MESM as well, and exerts an influence on the substance, giving it *weight* at times. As the substance flows past the listener, she might temporarily possess it, since its flow and action can be packaged as objects in verb nominalizations—"Here you *have a rising, a building of intensity, a relaxation.*"

Interaction I: Tactile/Sensory Self and Musical SUBSTANCE

What is the nature of the musical SUBSTANCE? The fact that in language it is "packaged" as nominalizations — a "resolution," "a quickening of the pace" — points to its basic nature as a mass noun. A mass noun refers to something that is conceptualized as a continuous entity, that is not conceptually contained, e.g. beef, cheese, water, or land. In talking about these nouns, one must specify a particular portion: a pound of beef, a piece of cheese, a glass of water, or an acre of land. The nominalizations used in this MESM specify portions of musical substance. Note by contrast that the nouns that

refer to musical sound in the location MESM are not nominalizations: notes, pitches, melodies, lines, chords, intervals, figure, or motives. In addition, these nouns indicate that in the location MESM, musical sound is countable (not mass) in nature, contained by non-continuous containers. In the substance dual, rather than talking about dynamic levels (which index discrete, almost countable, contained levels of loud and soft) as in the location dual, we talk about the volume of sound: “Horns, give me more!” (which indexes an amount of sound substance).

The status of the musical substance as a moving, mass noun lends logic to the sense that it is conceptualized as a *liquid*, or alternatively gaseous, substance. When listening and making sense of music from this point of view, listeners integrate the “structure” (or “non-structure”) of liquids with basic musical percepts. Thus music, like liquid, becomes a mass noun that moves in a flowing fashion. A number of common metaphorical expressions support the notion that musical substance is liquid: music FLOWS, one can be IMMERSED in the sound STREAM, an instrument playing too loudly *drowns out* others, and in order to ask a friend to turn up the CD player, you can shout “*Pump up* the volume!” The musical substance does not simply flow unabated, but is cut into smaller portions by articulation. Those articulations may be legato and flowing or staccato and detached, e.g. “Let the sound flow” or “I want you to cut off the ends of the notes.”

Besides being present in larger or smaller amounts, the musical substance can have various qualities, many of which we refer to by the term timbre. In this musical

event structure metaphor, rather than functioning to delineate different visually-oriented musical lines, timbre concerns the quality of sound substance, which varies not only from instrument to instrument, but also within the possible range of sounds that a single instrument might make.

We have no well-defined set of technical terms that refer to timbre; unless we use terms like “oboe sound” or “violin sound,” talk about timbre is metaphorical. As far as I can tell, most of the metaphors stem from the involvement of what I have called above “tactile/sensory self,” which detects sensuous qualities in the musical substance, such as temperature, surface texture, solidity, weight, purity, illumination, shape, sensuality and taste. Musical sound may be warm or cold (such as a percussive “clank” on an anvil), smooth or grating, diffuse or solid, light or heavy, pure or rich, bright or dark. It may be lush, round, sweet, or plummy.²⁹ Not *all* of the timbre metaphors I heard at Curtis stemmed from the involvement of the tactile/sensory self. I heard one (non-American) conductor at Curtis say to some trumpet players “The quality of that E flat is too pushy, like an American salesman.” This struck me as a rather anomalous statement, one that not only communicated information about a sound the conductor *did not* want, but also conveyed his displeasure in hearing it.

This kind of mapping of terms across sensory modalities is usually attributed to the process of synesthesia.³⁰ I would explain this cross-sensory phenomenon with the same process that I have used to explain musical meaning: metonymic invocation.

²⁹ In addition to single notes having certain sensual qualities, some intervals also have them. For example, octaves and fifths can sound hollow in some contexts.

³⁰ For more on synesthesia, see Baron-Cohen and Harrison, 1997.

These cross-sensory terms apply to sound because a pattern or quality embodied by the sound for the listener invokes the experiential gestalt of that term. As Mark Johnson has argued (1987, 44), experiential gestalts are not internally undifferentiated. Rather, they have structure. Consider, for instance, the experiential gestalt of “warmth.” If you recall sitting by a warm fire on a cold day, the most striking aspect of that memory is probably feeling of warm temperature on your skin or watching the dancing flames. Just thinking about that, it is difficult to see how the word “warm” could apply to a sound. However, recalling other aspects of the experiential gestalt “warmth,” it is not so difficult to see the connection. The warmth of a fire not only makes our skin warm, it also warms the muscles under the skin and relaxes them. In that more relaxed state, it is easier to feel happiness or contentment. A “warm” sound is one that makes the listener feel relaxed and happy, thus indexing the relaxed, contented state she might feel when her body is warm. This index of *part* of the “warmth” experiential gestalt brings the whole gestalt to mind. That gestalt is called “warm” and so we apply the word “warm” to something that has no physical temperature. In similar fashion, a “grating” sound rubs nerves the wrong way, a “solid” sound can “hit” with a stronger *force* than a “diffuse” one, and “bright” sounds attract attention just as bright lights do.

Metonymic invocation can explain many of the words that we choose to describe timbre, but not all. Sometimes these immediate impressions are mediated by other conceptual metaphors of the culture. For instance, we associate warmth with emotional involvement and expressiveness: “She is a very warm person.” We may feel that warm

colors (red, yellow, orange) are more expressive than cool colors (blue, silver). These can be summed up by the metaphor WARM IS EXPRESSIVE. It is also true that we consider a warm sound to be more expressive. Thus, calling a musical passage “expressive” may be the result of integrating the metonymic invocation of warmth with the cultural metaphor WARM IS EXPRESSIVE.

Sometimes these sound qualities might be combined in a way that stems from experiential gestalts derived from embodied experience. As players, we might want to produce a heavy, concentrated sound or a light, diffuse sound. It would make less sense to try to produce a heavy, diffuse sound or a light, concentrated sound.³¹ This is because of our embodied experience with substances in the world: assuming a similar amount of material, concentrated substances will be heavier and diffuse substances lighter.

Interaction II: Kinesthetic/Proprioceptive Self and Musical FORCE

Since the musical substance is moving, it would logically exert a FORCE on the listener, who is, in this MESM, at its center. Many Curtis students commented about sensing force in music: “There’s a *turmoil* going on; *turbulence*. [...] It’s very, very *unsettling* and full of *argument* and the *struggling*.”³² “There’s just like something about it that I can’t explain right now, that just like *has a big whoosh on you* like you know

³¹ Actually, musicians *do* conceive of a light, concentrated sound. Especially in situations where a quiet sound must project (e.g. a pianissimo solo passage in an orchestra piece), the sound must be very soft, but have an intensity that makes it project. However, I remember this skill being very hard to learn on the flute, partly because it just seemed counterintuitive to attempt to make a soft, but intense sound.

³² Amy Cheng, of Liszt’s *Piano Sonata in B Minor*

you're like 'Wow!'"³³ "There's a sense of *surging* lushness."³⁴ These comments indicate that this flow of musical substance can exert FORCE on the engaged listener.

Again, this experience of musical force is best discussed with reference to metonymic invocation of experiential gestalts. In concrete physical reality, musical sound has very little real physical force. It exerts force on our *eardrums* and, if played at a loud enough volume, can cause other bodily tissues to vibrate. However, in listening to music, we sometimes *feel* a sense of *force* that is not physical in the same way that vibrations hitting the eardrum are physical, but that in some fashion embodies the patterns of the gestalt experience of physical force. As with the experience of timbre, we feel musical force because it is metonymically invoked.

Musical force is very complex and understanding some aspects of it, logically, requires more than an understanding of only the location dual or the substance dual of the MESM. Here I will confine myself to those aspects appropriate to the substance MESM: *intensity* and *stability/instability* of the musical substance. I will cover other aspects of force in the next chapter.

Intensity

It is not uncommon in rehearsals for the conductor to index the INTENSITY of the musical sound. Considering the physical quality of musical sounds and how they interact with human bodies, it is evident that pitches can be intense because they are toward the upper or louder limits of our hearing ability. However, musical intensity can occur at

³³ Min Park, of Ravel's *Daphnis and Chloe*, Suite 2

³⁴ Deanna Kemler, of Ravel's *Daphnis and Chloe*, Suite 2, in conversation with Min Park

any range or volume level, and can strike us as emotional, sensual, kinesthetic or even spiritual in nature. Since it can involve so many aspects of human experience, musical intensity is a very complex phenomenon, which I cannot explore fully here. I would, however, like to think about degrees of power or intensity as they relate to musical sound substance in this MESM.

As I established above, we can integrate aspects of our “liquid” experiential gestalt with simple musical percepts toward a bearing on experiencing music as a flowing substance, with many of the characteristics of flowing substances. One of those characteristics is that intensity can vary. Three main factors go into making the physical force of a liquid more powerful or intense: 1) volume, 2) speed of flow, as it varies with volume and 3) size of aperture, as it varies with volume and speed of flow. The greater the volume and speed of the liquid, both of which can be changed by manipulating aperture, the greater the intensity of the flow. The same principles hold true for varying the intensity of the musical sound substance.

Think about playing outside with a hose when you were a child. If you wanted to make the stream more powerful or intense, you could do a number of things. You could turn the water on harder, which increased the speed and so the volume. Alternatively, you could put your thumb on the end of the hose or use a nozzle. Doing so decreases the volume of the stream but, given the fact that the volume and speed inside the hose stays the same, it increases the speed of the water outside the hose. If you varied the position of your thumb on the end of the hose or changed the nozzle, you

could also produce a diffuse spray, which had less intensity but covered more area.

Another way to alter the intensity of a stream of water can be seen if we think about a showerhead with various settings. If you do not turn the water on any harder, but put the showerhead on the “pulse” setting, you will experience the stream as more powerful or intense. These same principles hold true for intensification of musical sound. The following will increase its intensity: 1) more volume, 2) a faster flow, 3) a more concentrated flow, and 4) pulsation of sound.

For example, consider a musical phrase in which a single pitch is held, but should grow in intensity, for instance, the first entrance of the flute in Mozart’s *Flute Concerto in D Major*



Example 4.7

The flute begins on the D below, on a weak beat, and floats up to the higher D, where it sits for four full bars. Underneath the flute, the orchestra repeats the same theme that opened the concerto. On the score, it is marked piano. The usual way to play this high D is to begin softly and unobtrusively and gradually increase the intensity of the sound, until it almost feels like the intensity can no longer be contained by that note and so it *must* “spill over” into the next set of notes.

A number of methods or a combination of methods could be employed to create that intensity. You can start with a more diffuse sound with less volume and gradually

add volume and concentration of sound (like “focusing” a water nozzle at the same time you turn it on harder at the spigot).³⁵ You can also begin with a narrower, slower vibrato and gradually increase the speed and breadth of the vibrato (like a variable speed “pulse” setting on a shower head, with a concomitant increase in speed/volume). If you wanted to take liberties not usually taken with this note, you could add a trill that started slowly and increased in speed (again, the “pulse” phenomenon). If you went further beyond the boundaries of the Mozart style, another way to instantiate the “pulse” phenomenon would be to add a tongued rhythm that increased in speed but suggested no particular meter. To add even greater force to the tongued rhythm, you could begin with a softer tongue and gradually increase the force of your attack (like gradually increasing the amount of water while the pulse setting is on). To go even further beyond the boundaries of the usual Mozart style (and way beyond the bounds of the Mozart aesthetic), you could do any one of the above, plus sneak in another flute player every beat, so that the volume is really pumped up by the end of the note. The aesthetic effect of these varying strategies aside, they could all be employed to increase the intensity of the musical sound substance.

Just as the action of a thumb, a nozzle or a showerhead can greatly affect the force of the flow of water, so can articulation. We can hear a direct effect on the musical force from the manner that the player articulates. In general, the more forceful the sound desired, the more forceful the articulation necessary. In rehearsals, this effect is

³⁵ On the flute, varying sound concentration is accomplished by varying timbre.

conceptualized as a metaphor: MANNER OF SOUND PRODUCTION IS MANNER OF SOUNDING. This produces such statements as, “That pizzicato is not just clump, clump, clump. Make sure it has vibrato” (which the conductor said to the basses at the same time he mimicked walking heavily with his hands) and “Don’t just percuss! Kiss!” (which the conductor said to the cymbals to elicit a lighter sound).³⁶

We integrate aspects of our “liquid” experiential gestalt with simpler musical percepts toward a bearing on the sense that the musical sound has intensities of varying levels.

Stability/Instability

If the moving musical substance has force, separate forceful streams might combine to create a situation of STABILITY (balanced forces) or INSTABILITY (unbalanced forces). In itself, in physical reality, musical sound is not inherently stable or unstable.³⁷ We conceive of musical sound as stable or unstable because the experiential gestalt of stability/instability can be invoked metonymically from simpler musical percepts.

Experiences of stability/instability always occur with reference to the foundational force in our experience: gravity. Stability is linked to either balance with respect to gravity or a balance of forces with respect to gravity. If I stand with my body

³⁶ The “pizzicato” statement was made by David Hayes to Curtis Orchestra, 2/18/95, of Brahms’ first symphony, first movement, m. 158. The “percuss” statement was made by Otto Werner Mueller, 2/23/95, of the overture to Wagner’s *Gotterdammerung*, rehearsal number 41.

³⁷ This is not, of course, taking into account the instabilities of sound production. For instance, on my flute, alone amongst all of the notes of its register, the middle E does not sound with great certainty. It often “cracks” to a higher overtone if I “push it” too hard (play too loud) or if I attack with too much force.

perpendicular to the plane of the earth's surface, my body is balanced and stable. If I lean against another person while they lean against me, we can arrange our bodies in such a position that, though each of our bodies would fall if it were in that position alone, together the gravitational forces our bodies exert on each other balance out into a stable system.

Instability relates to either lack of balance with respect to gravity or lack of a balance of forces with respect to gravity. If I am standing outside on a windy day and a huge gust of wind hits me, I may struggle with it, temporarily unstable because the forces on my body (gravity from below and wind from the side) are unbalanced. In addition to these obvious physical manifestations of instability, other physical characteristics can occur in experiences of instability. First and foremost, instability causes a momentary physical disorientation with respect to gravity, that most orienting of forces. In addition, it might cause muscular tension, a rise in heart rate and blood pressure, or a feeling of anxiety or elation (e.g. on a carnival ride).

The tonal musical world, as experienced in both MESMs we have discussed, also has a fundamental orienting force — the tonic, which is often metaphorized as a center of gravity.³⁸ Other tones, when played in relation to the tonic, are felt to be stable (e.g. the tonic to the dominant) or unstable (e.g., the tonic to the leading tone). In addition, intervals that do not involve the tonic note, when played in the tonal system, can feel relatively stable (e.g. the fifth from the dominant to the supertonic) or unstable (e.g., the

³⁸ See Glickman (1983).

tritone from the leading tone to the subdominant). Musical passages in which a tonic is clearly identifiable are felt to be stable, whereas those without a clearly identifiable tonic (usually passages in the process of modulating to a different stable key area) are unstable.³⁹

I have played a game with students in introductory music classes, both history of western art music and world music, that illustrates to them that, despite a wide range of experience with musical training, most of them can readily feel this stability and instability. I begin by playing a piece of tonal music for them that includes both stable and unstable passages. I stop the recording at random spots and ask whether it feels stable or unstable to them. A great many of them are usually able to respond correctly. I then explain the notion of the tonic as the center of gravity and play some scales and I-IV-V-I progressions in various keys on the piano, sometimes stopping on the V and asking them where it should go next. After this preparation, I play a number of recordings of stable, non-modulating passages for them and stop the recording at random and ask them to sing the tonic, to give them experience in orienting themselves to the tonal gravity. Once they understand tonal gravity and have practiced orienting themselves, I play the original recording again and ask about stable and unstable spots. After the minimal preparation that I give them, most students are able to respond correctly.

³⁹ Note that the change from one key to another would logically be called a *modulation* in the substance dual, rather than a *bridge* or a *transition*, as in the location dual.

I am not suggesting that this ability to identify musical stability/instability is due to some inherent property of all human brains to do precisely that, nor to the minimal training that I give them. Rather, I suggest that it is due to two main factors: 1) the early enculturation about musical sounds and meanings these students have received through various channels: singing, television, movies, radio, recordings, live performances, etc. and 2) their embodied experiences with stability/instability and the basic human ability to understand one realm of experience in terms of another. Once they understand that musical stability is a matter of orientation with regard to musical gravity, just as physical stability is a matter of orientation with regard to physical gravity, and are able to orient themselves with regard to the gravity of tonal music, most students are able to detect musical stability or instability.⁴⁰

Musical stability is not only a matter of harmonic stability with regard to the tonic. It is also a matter of metric flow, which is more a matter of basic balance than a matter of a balance of differing forces. In our embodied experiences in the world, we have all felt wind blowing. If it gets to a certain speed, we must lean into it to keep our balance. If it were to come in short, violent gusts at unpredictable intervals of time, it might succeed in knocking us over because we could not adjust the lean of our bodies quickly enough to compensate for the force of the wind. In an analogous fashion, a

⁴⁰ The fact that being solidly *in* a key is felt to be stable leads me to the notion that harmonic progressions within a key somehow embody a system of balanced forces or a process of balancing forces, whereas modulation entails imbalanced forces that deflect the harmonic substance onto another path. The question of how harmonic progressions within a key embody a balancing of forces is beyond the scope of this investigation, but it is a very interesting question.

regular metric flow gives us a stable pattern of pulses of the sound stream to adjust to, and so an irregular pattern feels unstable.

Interaction III: Emotional Senses and Patterns and Qualities of Mood

Although the musical substance is conceptualized as a liquid, the musical “liquid” is not like any ordinary liquid. We have seen that, imaginatively, it is quite protean in nature, able to take on many different sensory qualities, such as light, weight, and surface textures. In addition, it can take on qualities that, when sensed from embodied perception, can integrate with emotionally oriented experiential gestalts toward a bearing on recognizing and feeling emotions and moods. These qualities include, but are not limited to: tension/relaxation, restraint/abandon, energy/lethargy, ease/uneasiness, activity/inactivity, excitation/calm, and expansion/contraction. As with INTENSITY and STABILITY/ INSTABILITY, qualities of musical flow that relate to mood or emotion are not inherent in the sounds of music themselves. Sounds, alone or in combination, sustained or articulated, cannot be tense, restrained, energetic, uneasy, excited or expansive. They can, however, metonymically invoke the experiential gestalts of these qualities in a listener. The listener may integrate aspects of these experiential gestalts with the musical percepts toward a bearing on recognizing or feeling the qualities that may in turn invoke experiential gestalts of moods or emotions.

Consider, for example, the experiential gestalt of “activity” and how musical sound might metonymically invoke it. In our daily lives, since even before we were born, we have experienced activity. In its most concrete sense, “activity” refers to physical

motion, which entails movement through space. We think about this on a relative scale and call relatively greater amounts of motion “active” and relatively smaller amounts of motion “inactive.” We measure amounts of motion (and therefore action) with respect to amplitude and speed — the greater the amplitude and speed, the greater the amount of motion; the lesser the amplitude and speed, the lesser the amount of motion. As discussed above, in this MESM, the musical substance can move up and down with regard to gravity and at greater or lesser speeds. Those “movements” may metonymically invoke the “activity” experiential gestalt. A listener might then call musical motion that embodies greater amplitude and speed “active” and that which embodies lesser amplitude and speed “inactive.”

Another quality that might be sensed in the musical substance is energy, which relates closely to activity. In recalling the experience of feeling energetic, the most salient characteristic for me is a sense of potential force in my body. Recall that the basic definition of force posed above is “any cause that changes the motion or the shape of an object.” Potential force would then be a sensation felt in the body that can be channeled toward activity. That activity would either begin motion or change the motion or shape of the body (and possibly other objects interacting with it). Thus, the experiential gestalt of “energy” would include 1) potential force directed toward 2) activity. The amount of that potential force and the ensuing activity can vary — from very little, which we usually term something like “lethargic,” to more than usual, which we usually call “energetic.”

How can musical sound embody the patterns of the experiential gestalt of “energy” outlined above? I have already established that musical sound can index gestalt patterns of a listener’s embodied experience with *force* and *activity*. Since the gestalt pattern of “energy” is a matter of potential force being directed toward activity, when both come into play, the sound indexes the patterns of our remembered experiences with the quality of energy and we “sense” that the music “has” energy.

Not all experiences with the patterns of energy are equal, however. In addition to the possibility that the amount of energy varies, the quality of the directed energy — the focus — can vary, from very focused to diffuse. For example, “excitement” can be considered a kind of “energy” or energetic state. The main difference between “energy” and “excitement” is that “excited” entails a lesser amount of focus than “energetic.” An excited person will make movements that are not as focused as a purely energetic one; they may also have a harder time focusing mentally. On the other hand, lethargy and calm, which are opposite on a continuum from energy and excitement respectively, have an inverse relationship with regard to focus. Lethargy is less focused and calm more so. In the musical event, the patterns of energy, excitement, lethargy and calm would follow the patterns of those experiences in embodied experience.

I have also suggested that in this MESM the listener can sense that the musical substance is “expanding” or “contracting.” One of the most basic embodied experiences of EXPANSION is found in breathing patterns: the chest expands and relaxes, usually outside our conscious awareness. If we cough, our chest muscles contract with great

force. The experiential gestalt of EXPANSION and CONTRACTION both involve a contained substance or field. In EXPANSION that state of containment is made larger, in CONTRACTION smaller.

Although the image schema of CONTAINMENT has not yet been explicitly introduced into the substance MESM, it is evident in a number of its elements. Simply referring to the musical substance requires a process of containment. Since musical substance is a mass noun, it must be referred to by words that contain it. This is accomplished through the process of nominalization, which temporarily contains the processual verb. In addition, in discussing musical intensity, we saw how pulsing, the rhythmic containment and release of sound substance, increases intensity. Furthermore, the top and bottom of the sound substance can be considered a container just as the top and bottom of water in a lake is a container that contains fish. EXPANSION of the containment field of musical substance can occur in a number of ways: 1) outward in amplitude (two streams, one moving upward, one moving downward), 2) forward in space (a single stream projecting outward from the general sound mass), or 3) through the passage of time (a rhythm that gradually expands). CONTRACTION involves the opposite processes.

The senses of restraint and abandonment in musical substance also depend on a feeling of containment or lack thereof. However, in this case the containment is not of the mass of the substance, but of the force of its forward movement. Restraint is a matter of energy whose forward motion or force is contained. This containment can

occur in varying degrees. In this MESM, meter and tempo function to contain (in a sense, discipline) the forward flow of musical substance. Restraint can be sensed when the forward flow has been moving at a particular rate of speed and then is held back. It can also be felt when substance that logically should be moving faster, such as downward flowing substance, moves at a slower rate of speed.

Not all of the modal qualities are a simple mapping of physical qualities of speed, force and direction of the musical substance. Rather, some metonymically index gestalt structures of bodily experience — for example *tension* and *relaxation*, which are often linked with harmonic instability and stability or dissonance and consonance. We saw above that physical tension is a part of the gestalt structure of experience with physical instability. When we experience musical instability, rather than calling it “unstable,” we may say it has some tension. Through the word “tension” we metonymically index the whole experiential gestalt structure for “instability.” A reference to tension, however, may just be a reference to one’s *reaction* to the quality of the sound substance. Some sounds do simply make us tense, such as screeching chalk, birds, and babies. Dissonant intervals would seem to both refer metonymically to the “instability” gestalt structure *and* have the direct action of making us tense.

To conclude, I would like to describe a concrete example of how these “modal qualities” might play a part in giving the music a sense of a particular emotion. I will illustrate with an example suggested by my conversation with Sara — the sense of urgency that we both felt at the beginning of the Brahms’ *Violin Sonata in D Minor*.

Violin Sonata in D Minor

Brahms

The image displays a musical score for the Violin Sonata in D Minor by Johannes Brahms. It consists of three systems of music, each with a Violin part and a Piano part. The Violin part is written in a single staff with a treble clef and a key signature of two flats (B-flat and E-flat). The Piano part is written in two staves, with the upper staff in treble clef and the lower staff in bass clef. The key signature for the Piano part is also two flats. The time signature is common time (C). The first system starts with a *p* (piano) dynamic marking for the Violin and a *sotto voce* marking for the Piano. The score includes various musical notations such as slurs, ties, and dynamic markings. The first system ends with a double bar line. The second system begins with a measure number '5' above the first measure of the Violin part. The third system begins with a measure number '9' above the first measure of the Violin part. The Piano part in the third system features triplet markings (indicated by the number '3') in the right hand.

Example 4.8

Musical score for measures 13-16. The system consists of three staves: a single treble clef staff at the top, and a grand staff (treble and bass clefs) below. Measure 13 is marked with a '13' above the treble staff. The music features a melodic line in the treble staff and a complex accompaniment in the grand staff, including triplets and slurs.

Musical score for measures 17-21. The system consists of three staves: a single treble clef staff at the top, and a grand staff (treble and bass clefs) below. Measure 17 is marked with a '17' above the treble staff. The music features a melodic line in the treble staff and a complex accompaniment in the grand staff, including triplets and slurs. The dynamic marking *pp* (pianissimo) is present in measures 18 and 19.

Musical score for measures 22-25. The system consists of three staves: a single treble clef staff at the top, and a grand staff (treble and bass clefs) below. Measure 22 is marked with a '22' above the treble staff. The music features a melodic line in the treble staff and a complex accompaniment in the grand staff, including slurs and a fermata over the final measure.

Example 4.8

The noun “urgency” is a nominalization of the process expressed by the verb “to urge,” which, in its most concrete form, means, “to force or impel in an indicated direction or into motion or greater speed.” So, “urgency” would have a gestalt pattern that included 1) at least two “players” or objects, one of which 2) forced the other to 3) move in some direction or at greater speed. Sara and I agreed with one another that the piano part was what created the sense of urgency. Looking at that part now, we can see that it has certain qualities that correspond to the gestalt pattern of “urgency” described above. It is made of 1) two “players” (the left and right hand notes), one of which (the right hand) 2) forces the other (the left hand) to 3) move in some direction or at greater speed. Until measure 11, the right hand notes are almost always exactly an octave higher than the left hand notes, and they enter the sound stream a half a beat behind the left hand notes. Since we perceive notes an octave apart as being essentially “the same” as one another, this configuration gives the sense that the right hand is directly “behind” the left hand, urging it forward. An even greater sense of pressing forward is created by the downward motion of the figure, which adds the force of musical gravity to the sense of urgency.

At the same time, the tempo, steady at about mm. 80-84 until the 3 against 2 figures in measures 11-12, acts as a field of containment for the press of forward moving musical sound, giving the sound a sense of being “bottled up.” During the 3 against 2 figures in mm. 11-12 and 16-21, the tempo slows down noticeably to mm. 72, further containing the press of forward motion.

Contrast the above characterization of the exposition with the piano part in the recapitulation, which begins at rehearsal letter D (Example 4.9, next two pages). The notes involved are essentially the same, but with extra notes added in between the original notes, so that each hand is playing a steady stream of (non-syncopated) eighth notes with the right hand in large part imitating the left in tandem an octave higher. While we felt that it retained some of its urgency, Sara and I characterized this as less urgent than at the beginning. Sara agreed with my characterization that the beginning seemed more “bottled up” while this part evoked more the feeling of a person up and moving, perhaps feeling restless. She called this part more “flowing.”

The image schema of FLOW stems from embodied experience with water.⁴¹ The gestalt pattern includes an 1) uninterrupted continuity that is 2) smooth. Since in the recapitulation version of the piano part, the two hands are moving together at a steady eighth note pace, and since it is played in a smooth (legato) fashion, this part embodies the gestalt pattern of “flow” more than the piano part at the beginning. If the part were played staccato, it would not embody the patterns of “flow” as well. A staccato playing would emphasize, rather, the large intervals involved, and would seem more energetic and active than flowing.

In contrast with the tempo in the first statement of this theme, the tempo in the recapitulation is slightly slower (mm. 72), but is steady throughout. This does not lend

⁴¹ The etymology given for “flow” in Webster’s is “ME *flouwen*, fr. OE *flowan*; akin to OHG *flouwen* to rinse, wash, L *pluere* to rain, Gk *plein* to sail, float.”

Violin Sonata in D Minor

(recapitulation)

Brahms

The image displays a musical score for the recapitulation of the first movement of the Violin Sonata in D Minor by Johannes Brahms. The score is arranged in two systems, each with a Violin part on a single staff and a Piano part on two staves (treble and bass clef). The key signature is D minor (two flats). The time signature is common time (C). The first system covers measures 134 to 137. The second system covers measures 138 to 141. The Violin part features a melodic line with various ornaments and phrasing. The Piano part provides harmonic support with intricate textures, including triplets and complex rhythmic patterns. Measure numbers 134, 138, and 138 are indicated at the beginning of their respective systems.

Example 4.9

Musical score for measures 142-147. The score is written for a single melodic line and a piano accompaniment. The melodic line starts at measure 142 with a treble clef and a key signature of one flat. It features a series of eighth and sixteenth notes, with some slurs and ties. The piano accompaniment consists of two staves: the upper staff has a treble clef and the lower staff has a bass clef. The piano part includes chords, arpeggiated figures, and some triplets. The key signature remains one flat throughout.

Musical score for measures 148-153. The score continues from the previous system. The melodic line starts at measure 148 with a treble clef and a key signature of one flat. It features a series of eighth and sixteenth notes, with some slurs and ties. The piano accompaniment consists of two staves: the upper staff has a treble clef and the lower staff has a bass clef. The piano part includes chords, arpeggiated figures, and some triplets. The key signature remains one flat throughout.

Example 4.9

to a sense of restraint or containment, but supports the feeling of uninterrupted, smooth continuity.

As for the sense of urgency that the recapitulation retained for us, we agreed that it was more a sense of “restlessness” than “urgency.” “Restlessness” involves continual movement, with no rest, which this piano part certainly embodies. Does this mean that *every* piano part that evokes continual movement with no rest is apt to be called “restless”? The answer is obviously “no.” Listeners experience the patterns of the music in the context of what they know about the genre, as well as what has happened earlier in the piece. In this instance, we experienced the “continual movement” in the context of our memory of the sense of urgency and nostalgia we felt at the beginning of the piece. In that context, continual, smooth motion is more likely to be sensed as “restlessness” than as some other quality that involves “flow.”

Summary

More kinesthetically oriented than the observation oriented location MESM, the substance MESM is founded on metaphors that index the interaction of the listener with the MUSICAL SUBSTANCE. The structure of musical substance, including basic structure and the structure of force interactions, is projected from embodied knowledge of liquids, as can be seen by such metaphors as musical immersion, pumped up volume, and sounds that drown out other sounds.

The listener, who is deictic center, attends to the flow of substance with differing, but unified aspects of her feeling self: the tactile/sensory, kinesthetic/proprioceptive, and

emotional selves. Through these aspects of herself, she detects variations in the quality of the protean substance: sensory variations like timbre, variations in force and stability, and variations in modal qualities.

SUMMARY COMPARISONS OF THE TWO MESMS

To clarify the contrast between the two fundamental MESMs, I will present two different tables. The first summarizes the two sections above in a manner that allows the reader to compare them. The second contrasts them in terms of generic level, abstract notions that are involved in the conceptualization of events.

Location MESM

Substance MESM

observation oriented

“feeling” oriented

time ordered by location dual:
diachronic

time ordered by object dual:
synchronic

listener oriented outside event

listener oriented inside event, deictic center

“stage-like,” *contained*, setting created by unfolding of *extended* space/time limited by virtual “visual field.”

setting not contained, bounded only by reach of listener’s senses. Oriented toward 1) an internal domain, 2) an external domain and 3) *immediate* space/time.

listener attends to *figure* which moves in contrast to *ground*

listener attends to varying qualities of the musical *substance*

gravity exists, pitches move up and down, “regions” of musical *space* can be iconic with regions of physical space, negative “terrain” exists

gravity exists, musical *substance* flows up and down

pitches move STEPwise or in *leaps*, creating *lines*

substance is mass noun, FLOWS like *liquid*

pitch movement creates forward motion through various <i>locations</i> defined by both harmonic & rhythmic elements	<i>substance flow</i> creates musical <i>force</i> , which increases & decreases in intensity in the same manner that liquids can
single beat, deictic center moving forward or multiple, linear beats	single, cyclical, stationary beat
meter measures extent of time-space	meter measures flow of musical substance
melody moves through <i>space</i> , on <i>path</i> constrained by harmonic <i>progressions</i>	harmonies creates stability/instability with respect to tonal <i>gravity</i>
harmonic <i>progressions</i> create different <i>locations</i> , <i>remote</i> or <i>close</i> . <i>Bridges</i> and <i>transitions</i> link different locations	harmonic flow <i>modulates</i> from balanced forces to unbalanced forces to balanced
multiple <i>lines</i> create <i>textures</i> tension	relationships between sounds create
timbre helps to differentiate different <i>lines</i>	timbre part of system of musical <i>force</i>
loudness conceived in terms of dynamic <i>levels</i>	loudness conceived in terms of <i>volume</i>
event spoken of in narrative fashion: dynamic verbs	event spoken of with stative language that places the listener <i>inside</i> the event: stative verbs, comparative phrases, existential “there”s, reports of “a sense of” or “it feels like,” reported speech giving experiencer’s reaction to events, verb nominalizations

Table 4.3

Note that it is in the metaphors that provide basic orientation that these two systems are most clearly inconsistent with one another:

- 1) Conception of time-space—extended/static vs. immediate/dynamic.
- 2) Position of listener with respect to musical event—outside observation vs. inside “feeling.”

- 3) Difference in setting—contained, “stage-like” vs. uncontained, limited by reach of senses.
- 4) Basic kind of action—figure moving through locations vs. substance flowing past listener.

Note also that the two systems are internally consistent.

For the second summary table, I return to Lakoff’s general notion of the metaphoric structuring of events. If you recall, he argues that human beings structure certain generic, abstract notions involved in conceptualizing events metaphorically. Those abstract notions are states, changes, processes, actions, causes, purposes, means and difficulties. He then suggests that in English we have two specific ways of doing this: one that emphasizes locations and one that emphasizes objects and their qualities. The following table shows how the two MESMs instantiate those generic qualities differently.

<u>Location MESM</u>	<u>Substance MESM</u>
states are locations observed by listener	states are attributes possessed by musical substance and sensed by listener
changes are movements to or from locations observed by listener sensed by listener	changes are differences in quality, condition or state of sound substance as sensed by listener
process is progression from location to location as observed by listener sensed by listener	process is modulation of quality, condition or state of musical substance as sensed by listener
actions are self propelled motions on the part of a musical gestalt figure or the composer, observed by listener	actions are self propelled productions of sound on the part of the musical substance or player, sensed by listener
causes are forces controlling movement to or from locations	causes are forces controlling the flow, quality, condition, or state of musical substance

purposes (goals) are destinations	purposes (goals) are qualities, states or conditions desired by listener
means are paths to destinations or states	means are relationships between dynamic musical qualities that produce conditions
difficulties are impediments to movement of musical figure	difficulties are impediments to changes in quality of sound substance

Table 4.4

The narratives below illustrate the differences in language produced by these two different MESMs. I have narrated the first 24 bars of Brahms' *Violin Sonata in D Minor* (Example 4.8, p. 372) using first the location dual and then the substance dual. As you read or after you read each narrative, you may want to relate its specific language to both of the summary charts.

The *passage* begins quietly, but *urgently*, with the violin *on* a somewhat sustained A, while the piano *moves downward* in quarter notes, with one hand imitating the other at the octave. *From there*, the violin *leaps up* to a D and *floats down* to an A, where it *lingers* for a couple of measures, while the piano continues its urgent, imitative figure. After that, it *does* pretty much the same thing for the next four bars, only *starting on* an F and *moving down* to a C#. The main difference is that the piano has a *denser texture* for the first two bars, since extra octaves *come in* and imitate at the third instead of the octave. Once it *gets to* the C#, the violin labors to *move upward*, *leaping up* to a B flat, only to *fall back down* again. Then *in* m. 11, *on* the D, it begins to *press forward* again. The piano *line* changes there, too, in that *place* where it presses forward. It's got block chords, with the right hand in 3, *against* 2 in the left hand. *In* measure 13, while the piano *goes back to* the urgent, imitative *figure*, the violin *begins on* the C# again and *begins to move toward* the climax of the phrase. From the C#, it *leaps back up* to the B flat, *falls down* to an F and *then with one big leap*, *reaches* the *highest* note, an E, which *then falls down* to the *climax* note, a B natural. From there, it *winds gradually downward* until, in m. 24, it *finally reaches a resting point*, the A an octave below the first A.

Here, at the opening, there's a sense of urgency in the piano, with the octaves imitating one another—"duh, duh, duh, duh..." And the violin, it's like crying, the way it intensifies when it changes to the D. Next, you have a part that is like the beginning again, only it starts on a lower note and the piano sound is heavier, since it adds extra octaves that imitate at the third instead of the octave. It helps to pull the violin sound down to the C# in m. 9. From there, the sound begins to intensify again. The piano part continues to move in octaves, but the sound is energized because the intervals coming up are larger than the ones at the beginning. The violin part builds and swells gradually upward, intensifying especially in mm. 11-12. The piano part in mm. 11-12 changes to a really unstable pattern, 3 against 2. It helps to keep the violin sound going, which just a few bars earlier (mm. 10-11), seemed like it was running out of steam. The instability of the 3 against 2 helps to propel the sound forward to begin to intensify again. The violin part intensifies again until finally, it mm. 14 and 15, it climaxes on a B natural. From there, the sound winds down until you finally get the A in m. 24 which, to me, has a feeling of being resigned.

Note that these two narratives describe the same musical event, but in a different manner, with a corresponding difference in feeling and impact.

CONCLUSION

Using linguistic evidence, including both what is said and how it is said, I have argued the existence of two distinct complex metaphors that may be integrated with simpler musical percepts toward a bearing on recognizing or feeling a sense of eventfulness in music. The location MESM, which emphasizes *discontinuity* of sound, involves the movement of a musical figure through musical space as observed from afar by a listener who watches with imaginative vision. The substance MESM, which emphasizes *continuity* of sound, situates the listener in the center of a musical flow, feeling its varying qualities and patterns.

At the beginning of this chapter, I introduced these metaphors as belonging to the second of the three levels of musical experience described in chapter three. I would now

like to qualify that statement. As I said in chapter three, I do not consider these three levels to be distinct levels, but rather a continuum of experience. On that continuum of experience, I would place the substance MESM closer to the third level than the location MESM. Judging from my experience, it seems to me to be the entry point to the third level. If I am experiencing the music in such a fashion that it seems distant, it will strike me as “just notes.” If I make an effort to let the music “wash over” me, so that I *feel* it in a more immediate fashion, it might *still* feel like “just notes” — I will recognize the feeling qualities of the music without living them. Alternatively, the music might “get to me” and will feel like music. In getting to me, the music bypasses whatever resistance I have to merging with it and, in a level three experience, I will begin to live the music.

Before concluding this chapter, I would like to comment on the nature of musical event structure metaphors with regard to their level of generality or specificity. In *More than Cool Reason*, Lakoff and Turner distinguish between generic and specific level metaphors. Metaphors such as LIFE IS A JOURNEY are specific because they map structure from a fixed source domain to a fixed target domain. They also are very specific in that they have a fixed list of correspondences from one domain to another. For example, the person is the traveler whose goals are destinations and for whom important life events are landmarks. Generic level metaphors, on the other hand, do not consist of either fixed source or target domains or fixed lists of correspondences. Instead, they consist of “higher order constraints on what is an appropriate mapping and what is not” (80). Lakoff further clarifies the nature of generic level metaphors,

suggesting that both causal structure and aspectual structure are preserved in the mapping (1994, 72). An example of a generic level metaphor is EVENTS ARE ACTIONS, which structures situations where an agentless event is conceived of as an action by an agent, e.g., “My computer ate my paper!” or “The vengeful wind knocked over the weary traveler.”

In building the argument of this chapter, I have consistently referred to embodied experiences in the real world as sources for the musical event structure metaphors, which might suggest that these embodied experiences are generic and these musical metaphors are specific. While it is true that the structure of the MESMs are borrowed from embodied experience, through integration with simple musical percepts, they in turn act as structuring metaphors for the musical experience of listeners. In that way, they are generic in their operation. While when we discuss music in technical terms, we use these metaphors on a specific level, (saying that notes go up and down, figures move from place to place, we need a brighter sound, or a passage is unstable), I believe that in our experience of music, these metaphors can indeed be generic. They provide structure that constrains what we may map onto the experience, but do not specify the actual content. They provide causal structure and aspectual structure. In this way, individual response to music is individual, but is constrained by the individual’s integration of these enculturated patterns.

We have seen one example of this already in an earlier section: “Musical Event Structure Metaphor — Location Dual” when Anna Polonsky compared part of

Beethoven's Piano Concert no. 4 (Example 4.6, p. 347), to both the ocean and the separation between heaven and earth. These images arise from music in which a melody of bell-like clarity floats high above very low and murky undulating arpeggiated bass line. That sound waves can embody these images for Anna and other enculturated listeners results from the integration of the basic causal and aspectual structure of the location MESM. Aspectually, the musical situation is constructed such that it locates Anna outside the musical event, viewing it from afar. Causally, the music is constructed such that discrete pitches occupy and move forward with different qualities of motion (distinct, as in "bell-like" or murky) through distinct regions of musical space (very high and very low). Both pictures suggested by Anna fit the structure suggested by the music, since the top of the ocean and angels are very high and shimmering in clarity and the bottom of the ocean and the earth are, in contrast, more murky. Had she said to me that the top part was somehow similar to Scottish pipers off on a misty hill and the bottom was like the families of the pipers at home by the fire, it would not have made sense to me. Although the aspect of height of this image is somewhat similar to that of the music since the pipers are up on a hill, the rest of the image does not match well. At that point, I might have considered the idea that Anna's way of understanding this music was quite different from mine. I certainly would have asked her to clarify.

As generic level metaphors, these MESMs can metonymically invoke novel metaphors. The listener integrates partial structure provided by the MESM with other experiential gestalts toward a bearing on novel metaphors. The location MESM

supports novel visual metaphors, e.g. the beginning of *Daphnis and Chloe*, which could be the visual effect of a brook or a swirling mist. The substance MESM supports novel “feeling” metaphors, as when I once described a singer’s voice as “like ketchup” (because it felt both rich, edgy [like the sour aspect of ketchup flavor], and sweet at the same time) or Sara’s “sense of urgency” in the piano line at the beginning of Brahms’ *Violin Sonata in D Minor*.⁴²

In concluding this chapter, I would like to again point to a limitation of my argument. I am not claiming that the members of this linguistic community speak exclusively using one or the other of these MESMs to structure their speech. In fact, they usually do not. Instead, sentences easily can and do contain traces of both structures, such as this sentence I uttered while talking with Chen Zhao about Schubert’s string quartet, *Death and the Maiden*: “And this chord, these first few bars still have this sort of very sad and anguished feeling to them and then it slowly makes it way over to the major.” I started out in the substance dual and switched mid-sentence to the location dual. Even more common than sentences that combine both MESMs are paragraphs that combine both.

If we do not speak exclusively in one or the other, what is the point of pulling them apart in an analysis? Primarily to begin to understand the part that embodied

⁴² In regards to gendering of metaphors, I have no indication that the generic level metaphors are gendered in any way. However, novel linguistic metaphors grounded in the generic metaphors will be gendered in a fashion consistent with the ways that metaphors will be gendered in other realms of our culture, e.g., “graceful” = feminine while “bounding” = masculine. Anna, the only student who spoke of gender, called the “angelic melody” expressive, but added that it was not expressive in a feminine way, but in the spiritually masculine way appropriate to her understanding of Beethoven’s character.

imagining plays in musical experience. In the next chapter I will argue that descriptions of the most vivid experiences of music combine both of these metaphors into a single blend. In order to understand those blends, it is necessary to analyze musical event structure into as many logically consistent systems as are evident. If we were not aware of those individual systems, it would be difficult to sort through any logical inconsistencies encountered in analyzing the blends.

In the next chapter, I will explore the relationship of these two seemingly distinct systems. In addition, I will examine various metaphors that can only be understood with reference to both of these MESMs and therefore play a role in integrating them into a single, experientially rich system.

V

METAPHORIC BLENDS

INTRODUCTION

In the last chapter, I explored two music event structure metaphors (MESMs) that differed in the kinds of embodied experience the listener integrated toward a bearing on experiencing a sense of eventfulness in the music. They also differed in the way that the listener was situated with respect to the action and in the ways that he imagined states, processes, actions, causes, purposes, means and difficulties. In this chapter I turn to the relationship between these two structures and how they form a foundation for other, more complex metaphors that better express the rich possibilities of musical experience.

The two MESMs explored in the last chapter each stem from a fully functioning mode of experiencing music. However, the metaphors I will explore in this chapter suggest modes of experience that are richer and more complex than either the metaphors of “sitting back and viewing musical motion through space” or “being in the flow of musical substance feeling varying qualities” would suggest. On the third level, experience of musical events is more involved than either of these metaphors describes. Metaphors operative on the third level require a *blend* of the two basic MESMs.

Here, Italian harpist Laura Caramelino describes her experience with Ravel’s

Introduction and Allegro:

L: Well, it has a lot of light and a lot of color; it’s these explosions of color and sound. I think it’s one of the most beautiful things ever written! [...] [I]t’s more than the expression of feeling, it’s feeling itself, you know? It’s not something

that makes you feel any better, it's something you are inside that takes you and brings you around in this colorful world. It's a microcosmos, I would say. Yeah, we talk the whole time about expression of feelings, but it is feeling by itself, in a way. So I wouldn't be able really to give a definition of it, because it carries you on!

D: Can you tell me some of the places that it carries you? If it bothers you to try and be pinned down, tell me.

L: (Sings.) Well, you know, the whole cadenza (plays), this is like taking you, somebody that gives you a hand and then retreats it and starts to run away. So...[...] (plays) it's like a sensation of being trapped and being led somewhere until you run and reach the light. Or you're curious, you're just trying to find something and all of a sudden you end up being this very (plays) sensual place. These chords are just expression of, it's, what could it express!? (laughs.) It's um... I'm trying to find some words, but I really cannot. It's just... the flow of... either in a beautiful light or in... say mood. (laughs.) But still I wouldn't like the restrictions of being in a mood. (plays.) It's practically another person speaking. (plays.) Somebody that is revealing to you a big secret, or (plays) I dunno, could you think about a mood? It's so tender, it's not even having vision any more. (laughs)

Her experience is clearly more complex than either MESM could account for and her description reflects this complexity. For instance, in saying that the music "carries you on," Laura uses the metaphor *MUSIC IS A VEHICLE*, which requires elements of both MESMs to be in operation at the same time.

Although in the ways they deal with states, processes, actions, causes, purposes, and means these two structures seem rather different, in this chapter, I will demonstrate how these differences are complementary. Rather than opposing one another, they are reverse images of one another. Indeed, I will argue that the more complex metaphors, such as *MUSIC IS A VEHICLE* and musical *MOMENTUM*, operate through a process of *blending* the two simpler MESMs. In addition, I will argue that some more complex

metaphors, such as DIRECTION and SCALING EFFECTS are possible in part because of the emergent logic of the blended musical realm. However, I must first explore more cognitive semantics theory, specifically the concepts of mental spaces and blending. These ideas will help us see how two seemingly disparate musical metaphors can combine into more complex metaphors.

RELATIONSHIP OF THE MESMS

How are the musical event structure metaphors related? Some of the terms of my analysis, such as dynamic/static and contained/uncontained, suggest opposition. The image schema OPPOSITION stems from embodied experiences of opposing forces, such as the pushing or pulling games children play. This force image schema has also been spatialized to mean “set over against something that is at the other end or side of an intervening line or space” (Merriam-Webster, 592). However, other terms of my analysis, such as “vision/feeling,” “movement by STEP-LEAP/FLOW,” and “diachronic/synchronic” do not suggest opposition. Rather, they suggest the image schema COMPLEMENTARITY. This image schema refers to two parts that go together to complete some whole, such as a hand and glove.

How can two views of the same thing be both OPPOSITE and COMPLEMENTARY? The single image schema that sums up these image schemas and the relationship between the two MESMs is that of REVERSAL. To illustrate the image schema REVERSAL and its relationship with both OPPOSITION and COMPLEMENTARITY, consider a thin piece of metal that has been stamped with a shape. Imagine a shallow, rounded shape, in bas-

relief style so that it has a bulge and a flat plane surrounding it. If you look at the front of the metal, the bulge projects in toward you; if you look at the back, it projects out away from you. In a spatial sense, the sides of the object OPPOSE one another: front is opposite of back. In addition, when you turn it over, the bulge projects in spatially OPPOSITE directions. If you imagine the moment that the flat metal was stamped with the bulge, you will see that the bulge resulted from opposing forces: the stamp moving in one direction, the metal resisting in the other.

At the same time that this object embodies aspects of OPPOSITION, it also embodies aspects of COMPLEMENTARITY. The front of the object bulges in convex fashion, while the back bulges concavely. The front of the bulge is rounded, as is the back. It would be very surprising to turn to the back of the object and see a squared bulge projecting outward, away from you. The shape of the back side of the object complements the front. If this small object were instead a large building with the exact same shape, when you walked inside, you might see internal structure of some sort that supports the bulging shape on the outside, COMPLEMENTING it structurally.

REVERSAL can encompass various SPATIAL relationships: front/back, outside/inside, up/down, side/side. If you REVERSE an object and view it from the OPPOSITE side, you see COMPLEMENTARY views. REVERSAL also involves relations of both FORCE and MOTION. If you are driving a car and go into “reverse,” your car exerts force in a backward direction. The car moves in OPPOSITE directions by using forces that

are COMPLEMENTARY. OPPOSING forces of equal intensity are COMPLEMENTARY, since they add up to a balanced, stable system.

The relationship between the two MESMs is one of REVERSAL, and includes aspects of both OPPOSITION and COMPLEMENTARITY. The following table contrasts the two in a fashion that shows elements of OPPOSITION with underlined words and elements of COMPLEMENTARITY as *italicized* words. Some elements that could be both opposite and complementary are underlined and *italicized*. This table should function something like the REVERSE image of a photographic negative laid next to its positive print. By looking from one to the other, you can see which elements are opposite, and which are complementary.

Location MESM

Substance MESM

setting is contained by listener's field of *vision*

setting is uncontained; limited only by reach of listener's senses, "*feeling*" sense emphasized

listener is uncontained by setting, stationary, viewing from *outside*

listener is contained by setting, stationary, a deictic center, experiencing from *inside* as music flows past

ground is *background*; static and contained

ground is *ground*; dynamic and uncontained

gravity is important with reference to *UP/DOWN* image schema

gravity is important with reference to *weight* and *stability*

musical time/space is static and *extended* to locations that music moves through; *diachronic*

musical time/space is dynamic and *immediate* and flows past the listener with the musical substance; *synchronic*

multiple contained locations, defined by musical aspects (*harmony/rhythm/dynamics*)

single uncontained location, defined by reach of listener's senses

contained notes are singular, countable entities

music moves by *STEP* or *LEAP*

chords are spatially contained, vertical locations, externally structured, can be closely or openly spaced

harmonic/rhythmic/dynamic PATH image schemas uncontained and dynamic, constrain motion of melodic PATH image schema

melody is *top-most PATH schema*; constrained by harmonic/rhythmic/dynamic PATH/LOCATION schemas

beat ordered by *LINEAR, SPATIAL* image schema; each beat is the “place” where a new “time span” begins

meter measures *extended, static time/ space* by means of *LINEAR, SEGMENTED, SPATIAL* order

meter contains beats, acts as a force for regularity that can be played against

tempo measures rate of speed of musical *movement*; tempo can be a *container-location*

timbre helps to differentiate different musical *lines*

uncontained notes merge into a mass substance

music moves by *FLOW*

chords are uncontained forces for forward (horizontal) movement, structured internally by LINK schema combined with various FORCE schemas

harmonic/rhythmic/dynamic PATH image schemas subsumed and thus contained by musical substance; linguistically contained by verbal nominalizations

melody is *surface of sound mass*; uncontained, but *supported* by sound mass

beat order by *PULSATING FORCE* image schema, grouped by *HIERARCHICAL SCALE* image schema; each beat is another pulsation of musical force

meter measures *flow of musical substance* by means of a *HIERARCHICAL SCALE GROUPING*

beat defines meter

tempo measures rate of speed of *musical substance*; tempo is a *quality of the musical substance*

timbre is a *quality of the musical substance, part of the system of force intensity*

Table 5.1

By examining these contrasting views of the MESMs, you can see that they are, in large part, reverse images of each other. Note that, besides “contained/uncontained” and “static/dynamic,” the contrasted terms are, in large part, image schemas that COMPLEMENT one another.

To further develop the metaphor that I suggested just before the table — that of a photographic print and its negative — let us consider which of these might be the “positive” image and which the “negative.” At first glance, it might seem that the location MESM is positive and the substance MESM is negative. The location MESM seems to emphasize outlines and an easily graspable overview. The substance MESM, on the other hand, emphasizes internal qualities, perhaps more like an x-ray than a negative. Like a photographic negative or an x-ray, it can give an impression of weirdness, seeing things that are not normally seen. However, if you remember the experience of actually being into the music, of sensing its qualities and the effects it has on you, then the substance MESM would seem to be the positive image, while the location MESM is the negative. I would say that, in terms of the dominant epistemology in our culture, the location MESM is positive in terms of knowledge, because we associate “knowing” with “seeing” so strongly. In terms of experience the substance MESM is positive, because we think of experience as strongly connected with embodied feeling. Certainly, the idea that the location MESM is positive in terms of knowledge is supported by the fact that the academic study of this music, music theory, dwells much

more in aspects of the location dual than the substance dual. This is also due to the fact that musical notation is shaped by the location dual.

That the two MESMs are reversals of one another stems from the fact that they are special cases of the general event structure metaphors proposed by Lakoff. Lakoff and Johnson (1999, 198-200) note that the general event structure metaphors are reversals of one another in terms of figure-ground orientation. In the location dual, the affected entity is the figure, while the effect is the ground (“That line of thought took me [figure] down a blind alley [ground]). The reverse is true in the object dual, in which the affected entity is the ground while the effect is the figure (“The confusion of that blind alley gave me [ground] a great deal of grief [figure]). However, as discussed above, the MESMs are reversed in a more complex manner, being complementary in many ways and opposite in many others.

In the rest of this chapter, I will explore how varying elements of the two MESMs combine to create more elaborate metaphors. First, however, I will turn to some recent theory in cognitive semantics that can help us to understand how two or more metaphors can blend into a single more complex metaphor.

MENTAL SPACES AND BLENDING

Two concepts from cognitive semantics will help to elucidate how multiple metaphors can function as a single system: mental spaces and blending (Fauconnier 1985, 1997, Fauconnier and Turner, 1996, 1998, Lakoff 1987, Sweetser and Fauconnier 1996, Turner and Fauconnier 1995, Turner 1996). Mental spaces are imaginative

domains used in meaning construction. Examples of mental spaces are past or future time “locations” (“In the past/future...”), hypothetical situations (“If I were to do that...”), places (“At school...”), fictional situations (“In *Jane Eyre*...”), theatrical frames (“In the theatre...”), social situations (“At the dance...”), as well as more abstract domains, such as academic disciplines (“In ethnomusicology, we do it this way...”).

Mental spaces are not empty spaces that need to be explicitly populated every time they are brought up; they are associated with certain actors, activities, objects, and so on. For instance, if my daughter says to me “At school...” I know to expect certain characters and activities in what she is beginning to talk about. If a colleague says, “In postmodern theory...” I know to expect certain writers and ideas. The mental space provides a context for understanding. For instance, in the mental space of “postmodern theory” I would probably understand the term “universal” in a different manner than I would if I encountered it in the mental space of “a sermon in church.”

Mental spaces are not necessarily separate, singularly contained entities. Usually a mental space will relate to one or more other mental spaces, and can do so in a variety of ways. For instance, “In the future” relates to both “in the present” and “in the past” at a basic definitional level, if in no other way. Mental spaces can “nest” within one another: the mental space “Mozart’s *Flute Concerto in D Major*” nests within the mental space “classic era music.” The flute concerto space shares generic aspects with the classical era mental space, but not specific aspects.

Generally, a mental space will not contain elements that contradict one another; in other words, they tend to be internally logically consistent. For example, a piano player who played a Mozart piano concerto might confuse (or perhaps incense) listeners concerned with historical accuracy if the cadenza he performed was in the style of the late Romantic period.

“Mental Space” Problematic as a Term

As it is theorized in the literature cited above, the idea of mental spaces is still situated in the objectivist framework, (as is evinced by its name). Mental spaces are a matter of imagination. The term “mental” locates the imaginative process entirely in the mental field, operating in an *explicit* manner. The term “space” indicates the “stage” upon which these mental imaginings play out. Although “mental spaces” *may* operate as explicit mental imaginings on a sort of mental stage, they may also operate through tacit body imagining, which this term excludes. While we may not be explicitly aware of these bodily imaginings, I have argued that they operate to shape our lives, nonetheless. In addition, in theoretical work on mental spaces (cited above), and in work based on it, the term “imaginative” is generally used in a very encompassing manner. It includes not only the usual, more mental and visual aspects of the word, but also image schemas we understand through embodied experience in the kinesthetic realm, as well as emotional experience. This dissonance — between not only the term “mental space” and experience, but between the term and explicit aspects of its theory — suggests that a different term be found.

I propose “imaginal gestalts.” I suggest “imaginal” because it is an adjectival form of “imagine” but does not have the same connotation of visual, mental images played out on a mental stage as “imaginative” does. With “imaginal,” I mean to invoke the kind of embodied imagining I discussed at length in chapter two — imagining rooted in bodily knowing and expecting, imagining that *can* become explicit but may remain tacit.

The term “gestalt” retains useful aspects of “space” while relinquishing those that are not. “Space” suggests a container for a specific set of “things” (ideas, memories, people, places, concerns, etc.) — a whole, contained realm in which those things operate. “Gestalt” can also suggest a specific and whole set of things *without* positing a clear boundary around them (as does “space”). In addition to suggesting a specific and whole set of things, “gestalt” also suggests specific relationships and processes that obtain between those things. In contrast, “space” brings to mind a place that contains objects. It does not suggest specific the relationships or processes of those objects. In addition, a “space” is something that occurs outside a person; its use in this case is metaphorical. In contrast, a “gestalt” is something that already and always *occurs inside a person*. It is already understood to be a psychological, experiential process.

Furthermore, the term “imaginal gestalt” has the advantage, for me, of tying the theory of “mental spaces” to the theory of invoked meaning. “Mental spaces” works *to a certain degree* with the theory of invoked meaning — hearing “In post-structuralist theory....” *calls forth* a certain set of writers and issues to the “mental stage.” However,

it limits the results of the invoking action to the mental stage. “Imaginal gestalts” allows the invocation to affect any or all aspects of the person who is creating meaning. An event occurs to that person that invokes and focuses the integration of an imaginal gestalt (a set of subsidiary aspects of their energetic matrix) toward a focal whole. Hearing “In post-structuralist theory...” invokes not only a mental context for understanding, but gut reactions and other bodily aspects of the gestalt, such as tension from remembered frustrations with certain writers or excitement at the insight of others. These aspects of the gestalt are important not only in and of themselves because they are part of the total experience and meaning of “In post-structuralist theory....” They are also important because it is from this “gut” level (this tacit knowing) that we can bring forth new insight and understandings into post-structuralist theory. The “imaginal gestalt” of post-structuralist theory is theoretically much more whole than is the “mental space” of poststructuralist theory.

In what follows, I will explain the idea of “blends” of “mental spaces.” However, I will not use the original language as Fauconnier and Turner elaborate it. Rather, I will use the language developed in chapter two in the discussion of invoked meaning.

Blends

With this terminology in place, I will now continue with an explanation of *blends* of imaginal gestalts. When two or more different imaginal gestalts are integrated together toward a bearing on another imaginal gestalt, cognitive semanticists call the combination a blend. For example, a recent television commercial for Volkswagen Jetta

makes use of blending in order to elicit a warm, fuzzy feeling from consumers for the car. One imaginal gestalt invoked by this commercial is that of a New Zealand sheep farm. This gestalt is invoked by the accent of the speaker, the scenery, the visuals of a sheep farm, and general knowledge that one of New Zealand's most important economic activities is sheep farming. The second imaginal gestalt invoked is that of the Volkswagen Jetta, a very small, maneuverable car. In the story implied by the commercial, alongside his sheep, the farmer raises Volkswagen Jettas, which behave amazingly like the Border collies known to be stock characters at New Zealand sheep farms. By blending the imaginal gestalts of Volkswagen Jettas and Border collies, the Jetta marketers hope to invoke in viewers a warm, fuzzy feeling for the Jetta similar to what they might feel for a Border collie or for their own dog. The blend implies that just as a Border collie is always ready to please, love and serve, so is the Volkswagen Jetta.

This blend of the Border collie and Volkswagen Jetta imaginal gestalts is possible because the two input gestalts share some elements in the first place. Figures 1 and 2 below represent the imaginal gestalts of "Border collie" and "Volkswagen Jetta." Their shared characteristics are typed in normal, non-bolded letters. The characteristics they do not share are bolded.



Figure 1: Border collie gestalt

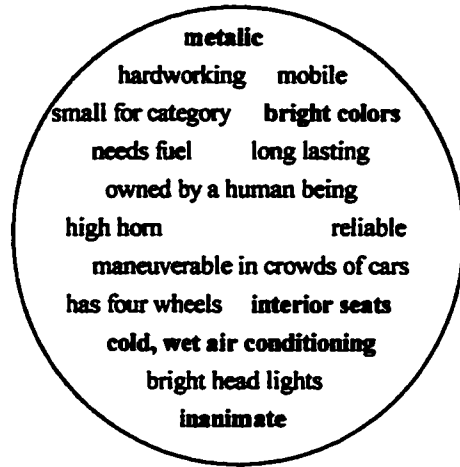


Figure 2: Volkswagen Jetta gestalt

Fauconnier suggests that the reason that this connection between the two imaginal gestalts is possible in the first place is that they share a generic gestalt comprised of their shared elements (1997, 149). The generic gestalt for “Border collies” and “Volkswagen Jettas” is represented in figure 3 below. Note that the elements in the generic gestalt are often more abstract than those in the input gestalts. For instance, while Border collies have four feet and Jettas have four wheels, the generic gestalt has “four appendages for motion.”

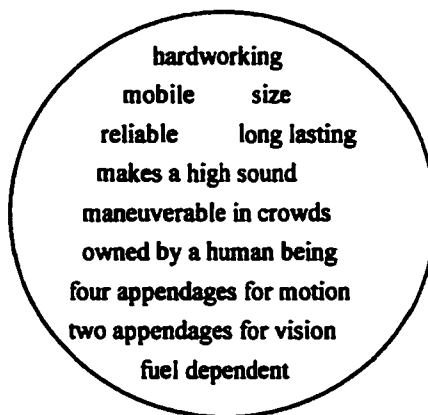


Figure 3: generic gestalt

This generic gestalt both suggests and constrains the blend of elements from one gestalt with those in the other. For example, since the generic gestalt contains “two appendages for vision,” it suggests the blend of “dog eyes” and “car headlights” that becomes “car eyes.” On the other hand, nothing in the generic gestalt would support the integration of floppy ears or a wagging tail into the blended gestalt so, although it could be introduced, it might stretch the imagination a bit too far. The reaction of viewers might be that a cute commercial had crossed a line into silliness.

Once the generic connections between the two input gestalts have been made, aspects of each may be integrated toward a bearing on a blended gestalt. With the blend emerge characteristics and relationships that did not exist before the connection and integration were made. The blended gestalt for “Border collies” and “Volkswagen Jetta” is represented by figure 4 below.

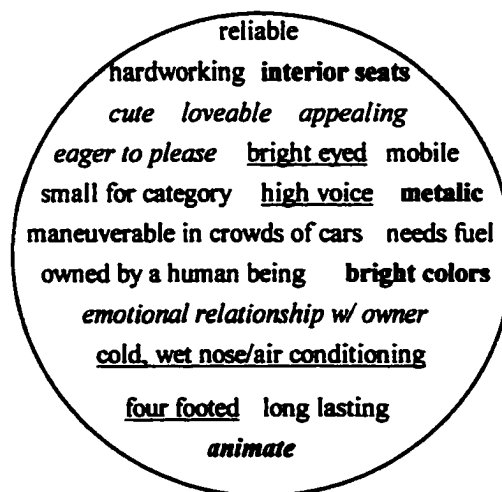


Figure 4: blended gestalt — “Border collied” Jetta

Three different processes occur in the emergence of new characteristics and relationships in blended gestalts: composition, elaboration and completion.

Composition is a matter of integrating selected elements of both input gestalts toward the creation of a new reality in the blended gestalt. In this case, characteristics of Border collies, such as “cute, appealing, eager to please” and “capable of an emotional relationship with owner,” are integrated with Jettas to produce a “cute, appealing, eager to please” car that is “capable of an emotional relationship with its owner.” In figure 4, I have indicated these characteristics in italicized print.

Elaboration is a matter of embellishing the connections between the two gestalts according to the emergent logic of the blended gestalt.¹ I have indicated the elaborations in the blended gestalt (figure 4) by underlined text. Consider, for instance, the “two appendages for vision.” Although in the commercial, the headlights of the cars are not represented as eyes, in the mind of the viewer, the logic that emerges when Jettas “become” Border collies makes it feasible to do so. If a car is to become alive and dog-like, its two bright appendages that relate to seeing might well be bright eyes. Those bright eyes, then might indicate the kind of intelligence that Border collies demonstrate in their work with sheep. In the same manner, the high horn of a small car can become the high, yapping voice of a dog, the four wheels can become four legs, and the cold, wet air-conditioner can become a cold, wet nose. These aspects of the blend are all a matter of elaborating the logic of the new gestalt that emerges when the two gestalts are integrated.

¹ Note that the logic involved here is more often a tacit, bodily logic than it is an explicit, mental logic.

Completion involves the invocation of other imaginal gestalts not explicitly mentioned in a way that complements the explicit gestalts and creates further emergent logic and structure. In this case, the imaginal gestalt integrated is that of animacy. According to our everyday knowledge of animate creatures, they move and are capable of feeling and thinking. Once the blend of Border collie and Jetta is made and the characteristics “eager to please,” “lovable,” and “capable of an emotional relationship with an owner” are introduced into the blended gestalt, the inanimate car develops the capacity for animacy. Integrating characteristics of animate creatures with an inanimate object invoke animacy for that object. According to the emergent logic of the commercial, if the viewer buys a Jetta, he will have the same, satisfying relationship with it that he might with a live Border collie.

To summarize these processes, *composition* involves integrating aspects of two imaginal (experiential) gestalts related through a generic gestalt toward a bearing on the creation of a blended gestalt. *Elaboration* is a matter of using the emergent logic invoked by the blend in embellishing it. Finally, *completion* involves invoking the integration of related gestalts with the two original gestalts according to the emergent logic of the blend.

Blends of Music Event Structure Metaphors

In my discussion of the two MESMs, I described explicit and detailed pictures of two imaginal gestalts that enculturated members of this musical tradition use implicitly to think and talk about musical events. These musical imaginal gestalts share at least two

generic gestalts. Table 4.3 (p. 382) suggests one kind of generic gestalt. This gestalt is made of the abstract notions that Lakoff has suggested make up understanding of any kind of event, musical or otherwise: states, processes, actions, causes, purposes, means and difficulties. We saw at the end of that chapter how the two MESMs concretize these same notions and the relationships between them in very different manners. Table 5.1 (p. 394) suggests another kind of generic gestalt made up of the musical elements that the two MESMs share. That table showed how each of the MESMs metaphorizes these elements differently, using OPPOSING viewpoints and COMPLEMENTARY image schemas. In figure 5 below I have shown these two generic gestalts as separate because they contain elements that are different in levels of abstraction. However, they could be included in the same generic gestalt, since they do interact with one another. In order to suggest this interaction, I have overlapped the circles of the diagram.

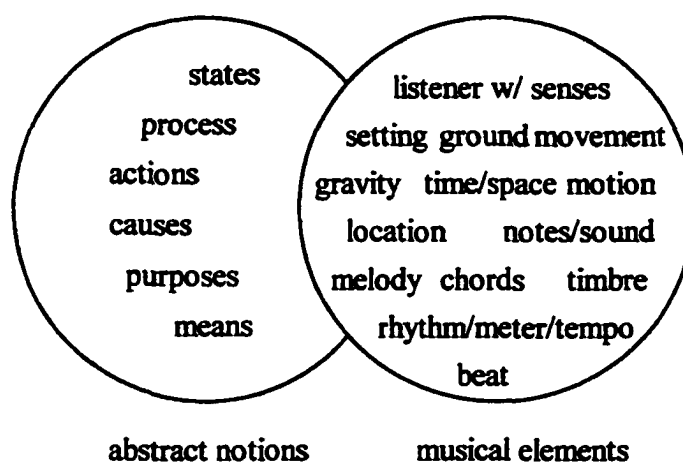


Figure 5

As I suggested at the beginning of the last chapter, each MESM can be seen as a logical extension and elaboration of one of the first level metaphors. The location

MESM extends and elaborates the image of discontinuous, moving PITCHES, while the substance MESM extends and elaborates the image of a continuous, moving VOLUME of musical substance. We saw in the last chapter how most of the metaphoric vocabulary used in talking about music relates to these two extensions of the first level PITCH and VOLUME. These terms make sense with reference to their associated MESMs.

Most of the metaphors used in talking about music can be traced back to one or the other of the MESMs. These simpler metaphors make sense from the point of view of these specific complex metaphors. However, some metaphors cannot. They are more complex and require the logic that emerges when the two MESMs are *blended*. A blend of the two MESMs creates an imaginary musical realm, which the listener cannot only “get into” but be “transported” by. Being “transported” by the music constitutes a level three experience. The rest of this chapter explores several metaphors that require the logic of a blended musical realm, including MUSIC IS A VEHICLE, MOMENTUM, DIRECTION, and SCALING EFFECTS. While I believe that these metaphors relate to level three experience, I do not mean to claim that use of any of these metaphors automatically indicates a level three experience. I will clarify this point in the conclusion.

GETTING INTO THE MUSIC

One of the primary goals in the American conservatory tradition is to “get into” the music — to become totally involved with the musical sound or, as I described it earlier, to *live* the music. While this metaphor does not involve a blend of the two MESMs, per se, I include it with this group of metaphors because it describes the

transition from level two experience to level three. I believe that the substance MESM is a transitional mode between level two and level three. The location MESM maintains distance between the listener and the music, keeping the music as an “object” “out there.” This distance does not encourage the listener to open himself to *living* the music. In contrast, the substance MESM places the listener in the middle of the music, sensing its qualities and patterns. This can occur in a fashion in which the listener does *not* open himself to living the music — he simply recognizes qualities and patterns in the music through embodied perception. However, he can also, from this position, open himself to feeling at one with the music. “GETTING INTO THE MUSIC” indexes the perspectival change involved in not only moving into the music through the substance MESM but also opening oneself to living it.

MUSIC IS A VEHICLE

MUSIC IS A VEHICLE, which relates to GETTING INTO THE MUSIC, gives rise to such expressions as being *moved* or *transported* by the music or taking a musical *journey*. In general, socially and experientially, the primary goal in listening to music in this tradition is the experience of GETTING INTO IT and BEING MOVED. GETTING INTO IT suggests a loss of experiential distance, an immersion in the musical substance. Once the listener has “gotten into” the musical substance and relinquished experiential distance, he may be “moved” by it. BEING MOVED suggests a loss of agency to the music.² Grammatically,

²While BEING MOVED is commonly described as an *emotional* experience, other evidence points to it also being a matter of feeling moved by the music physically. When I asked Curtis students how they knew they were hearing “just notes,” many of them pointed to a lack of impulse in their own bodies to

the listener becomes the direct object of the action of the music: “I was listening to the music,” which suggests that this listener is in control of the situation, becomes “The music moved me,” which suggests that the music controls the listener.

Grammatical Evidence for MUSIC IS A VEHICLE as a Blend

BEING MOVED relates to the metaphor MUSIC IS A VEHICLE, which is evident in such expressions as “musical journey” and “It transported me!” In this metaphor, the music acts as a vehicle that picks up the listener and transports him from musical location to musical location. Laura Caramelino used this metaphor in describing her experiences with Ravel’s *Introduction and Allegro*.³

L: Well, it has a lot of light and a lot of color; it’s these explosions of color and sound. I think it’s one of the most beautiful things ever written! [...] [I]t’s more than the expression of feeling, it’s feeling itself, you know? It’s not something that *makes* you feel any better, it’s something you are inside that *takes* you and *brings* you around in this colorful world. It’s a microcosmos, I would say. Yeah, we talk the whole time about expression of feelings, but it is feeling by itself, in a way. So I wouldn’t be able really to give a definition of it, because it *carries* you on!

D: Can you tell me some of the places that it carries you? If it bothers you to try and be pinned down, tell me.

move to the music or a problem with the physical motion of the people playing the music. Either the player exhibited no physical motion beyond what was necessary to produce notes, or they exhibited an excess of motion, making it seem affected. It was clear that “music” should move the player physically in a way that “notes” do not. It was also clear in the comments of many of the Curtis students that being moved *emotionally* was an important way to distinguish between “music” and “notes” as well. As I emphasized in the last chapter, “feeling” is a polysemous term that covers both kinesthetic and emotional sensations. When you hear music, you can *feel* moved in all the ways that that polysemous verb suggests.

³The special fonts indicate the same thing that they did in the last chapter, in “Linguistic Evidence of Dual Music Event Structure Metaphors.”

Stative verbs = has, are inside

Dynamic verbs = *makes, carries*

Deictics = you, this

- L: (Sings.) Well, you know, **the whole cadenza (plays.), this is like taking you,** somebody that *gives you* a hand and then *retreats* it and starts to *run away*. So...[...] (plays) **it's like** a sensation of being *trapped* and being *led* somewhere until you *run* and *reach* the light. Or you're curious, you're just *trying to find* something and all of a sudden you **end up being** this very (plays) sensual place. **These chords are** just expression of, it's, what could it *express!*? (laughs) It's um... I'm trying to find some words, but I really cannot. It's just... the flow of... either in a beautiful light or in.... say mood. (laughs.) But still I wouldn't like the restrictions of being in a mood. (plays.) **It's** practically another person *speaking*. (plays.) **Somebody** that is *revealing* to you a big secret, or (plays) I dunno, could you think about a mood? It's so tender, it's not even having vision any more. (laughs)
- D: **It's tender and it also seems** mysterious at the same time to me, to a certain extent. This section especially.
- L: I dunno, you think it's that mysterious? Because it **has** a resolution, it's not unresolved tension, any way (plays). It just **keeps on rocking** (as she continues to play). **And then you have** (plays) you're back home somehow... a big cop or something if you **were** lost, don't worry... until the main theme *comes* out again.
- D: Yeah, **that's** sort of a returning home. It's *getting somewhere*.⁴
- L: Yes! **You just have** a revelation of a new world! Yeah, I think you have anything to say about this piece is the revelation that **there is** something beautiful **there!** And it's *expressed like this!*

Example 5.1

Compared with the examples of speech given for the location MESM (p. 309) and the substance MESM in the last chapter (p. 311), at first glance it seems most like the substance MESM. It is very much like it in a number of ways. Between stative and dynamic verbs, stative verbs predominate as the main verb of most sentences. In

⁴The deictics in this utterance refer not to any particular figure in the music, but to the sensation the music caused this particular listener to feel. More clearly stated it would read, "That's a feeling of returning home, of getting somewhere."

addition, the deictics are quite varied. However, this example also differs from that given for the substance MESM in two important ways — 1) use of dynamic verbs in subordinate clauses and 2) lack of nominalizations of the musical flux.

Although the main verbs of most of her sentences are stative, Laura uses quite a few dynamic verbs, as well. When she uses dynamic verbs, they are usually in subordinate clauses that describe the effect of the music on her, as the listener. “[I]t’s something you are inside that *takes* you and *brings* you around in this colorful world. [...] [T]his is like *taking* you, somebody that *gives* you a hand and then *retreats* it and starts to *run* away. So...[...] (plays) it’s like a sensation of being *trapped* and being *led* somewhere until you *run* and *reach* the light.” This predominant linguistic structure suggests that Laura feels a loss of agency to the musical event. She voluntarily hands herself over to the musical event to be transport by it to varying realms of sensation.

This voluntary subjection to the forces of the musical event can also be seen in the way that, contrary to the manner of speech exhibited in the substance MESM, Laura does not use nominalizations. Recall that in the substance MESM, speakers are temporarily anchored, deictic center, in the flux of musical substance and its force. From that position, as they talk about the musical event, they nominalize both the musical substance and the forces it presents: “a building of intensity” or “an expansion of the sound.” In addition, they speak as if, as the musical flux passes them, they temporarily “possess” it: “Here, you have a building of intensity.” This “packaging” and “possession” of the musical substance suggests that in the substance MESM, the listener

feels some control of the musical event, or at least does not feel as if they have lost control to it. In contrast, Laura does not use nominalizations in this way, nor does she “possess” the music.⁵ Instead of temporarily “possessing” the “packaged” (nominalized) musical flux, which would suggest that she was in control of it, she instead allows herself to come under its control, to be “transported” by it.

Although the above two linguistic structures (dynamic verbs and lack of nominalizations) are not common in the substance MESM, they are common in the location MESM. This would suggest that the operating metaphor is a blend of parts of both MESMs. The linguistic expressions that Laura uses certainly suggest both: the substance MESM (“flow, feelings, explosions of light and color”) and the location MESM (“getting somewhere, a microcosmos, a new world”). In addition, she explicitly uses the MUSIC IS A VEHICLE metaphor: “[I]t carries you on!”

In considering the metaphor MUSIC IS A VEHICLE, if we were to only consider the metaphor, without looking at speech governed by it, we might decide that it is merely a kinesthetic version of the location MESM, rather than the visual one that I have described in detail. In a kinesthetic version of the location MESM, the listener would be located inside the frame, moving along with the beat from one musical location to another. This is consistent with the metaphor of music as a vehicle. However, we can see from Laura’s speech that, if she has used it in a fashion that is consistent with the rest

⁵Only at one point in her narrative does she say “And then you have” and play the music that comes next. Since she does it only once, and does not follow it with a verbal nominalization, I take the “And then you have” more as an introduction to her playing of the part of the musical event that comes next in her narrative and less as an indication of her general relationship to the musical event.

of her speech community, **MUSIC IS A VEHICLE** involves much more than a kinesthetic version of the location **MESM**.

In fact, when the members of this speech community speak of “being transported” by the music, it is often to some otherworldly realm, a place that is well beyond the pedestrian description of moving from one location to another. Descriptions of this experience often have spiritual overtones. They bring to mind an ancillary definition of the word “transport”: strong or intensely pleasurable emotion: ecstasy, rapture (transports of joy). People often say that, like spiritual experience, the experience of being transported by music is ineffable.⁶ In fact, to be exact, I should probably call this metaphor something like **MUSIC IS A VEHICLE TO AN INDESCRIBABLY BEAUTIFUL AND EVENTFUL PLACE**.

Logical Evidence for MUSIC IS A VEHICLE as a Blend

The logic of all three of the above metaphors is consistent with logic of the move from location **MESM** to a blend of the both **MESMs**. “**GETTING INTO IT**” suggests that the listener who has been at a distance moves to a point at which he is in direct physical contact with the musical substance, as does “becoming immersed in the music.” “Being moved” suggests that the listener/music relationship is then close enough that the substance can effect the listener on a “feeling” level. Going on a “musical journey”

⁶Because of this ineffability, I am very indebted to Laura for describing her experience for me. In our conversation, I sensed that she felt her description to be inadequate to fully impart the experience. However, even if it was a poor match for her experience, it revealed a great deal about that experience to me through the linguistic analysis presented here.

suggests that the flow of the musical substance actually picks up the listener and transports him to musical places.

How can sound “transport” a listener? In the last chapter, when I was considering the simpler MESMs, I would have answered this question by considering the embodied experience of being transported, looking for the gestalt patterns and then finding analogues for them in musical experience. For the sake of argument, let us now try to do that and see where it leads.

The embodied experience of being transported in the world consists of a person stepping into a vehicle of some sort and sitting, more or less passively, as the vehicle moves him from place to place. As he is moved forward from place to place, he experiences changing locations, events that take place in them, as well as his reaction to those events. All of this is experienced by the rider in a fashion whose immediacy is relative to the kind of vehicle he is transported by. Let us assume for the sake of this argument that the vehicle is one in which relatively immediate experience can be had, one in which the rider is open to the environment, such as a buggy pulled by a horse and not one in which the rider is sealed from the environment, like an airplane.

Are the patterns of experience suggested by the above scenario existent in the experience of listening to music? Some of the patterns definitely are suggested. For example, in the last chapter, in my exploration of the location MESM, I established the metaphorical existence of various locations in the musical realm. In that MESM, the listener watched as a musical figure moved from one location to another. It is not

difficult to see how a listener could imagine himself into the musical landscape. What is more difficult is the notion of being in a musical vehicle.

What are the patterns of embodied experience of being in a vehicle? Imagine yourself sitting in a horse drawn buggy with your eyes closed and earplugs in so that you are less aware of the changing locations you are being carried through and more aware of the feeling of being in a vehicle. What are the patterns of your bodily experience? They would be something like the following: the feeling of your seat pushing into your back as the buggy accelerated, vibrations from the movement of the buggy over the road, the wind in your face, and occasional changes in your center of gravity from the buggy turning, speeding up or slowing down.

Nothing in the linguistic evidence I gathered at Curtis, or in my own experience of music suggests to me that the above patterns of embodied experience of being in a vehicle are present in the experience of music. No one spoke to me of anything reminiscent of the feeling of a seat pushing into his back, vibrations from the movement of the musical vehicle, or changes in his center of gravity of the sort caused by a turning, accelerating or decelerating vehicle. Neither could I find less obvious linguistic evidence for any of these events occurring directly. And yet the operating metaphor here is BEING MOVED or TRANSPORTED by the music. It is clear that this metaphor operates in some fashion other than embodying the patterns of real life experience directly.

Rather than a direct embodiment of the patterns of real life transportation, musical TRANSPORTATION is a matter of a blend of the imaginal gestalts of the two

fundamental MESMs I outlined in the last chapter. As I described above, when two imaginal gestalts are blended, through the process of completion, it is possible to extend the blended gestalt further by means of knowledge from a third (or more) separate, but compatible, imaginal gestalt. In the case of the “Border collie Jetta,” once the similarities between an animate Border collie and an inanimate car became apparent, the quality of “inanimacy” could be overridden by “animacy” by completing the blend through general knowledge of animacy (not just the knowledge of the animacy of Border collies). In the case of the MUSICAL VEHICLE, knowledge of the compatible imaginal gestalt of riding in vehicles is added to the blend of the two MESMs to extend them logically. Although the experience of being transported by music does not include sensations like feeling a seat push into your back, since it does include patterns that suggest some aspects of riding in a vehicle, e.g. movement from location to location or experience of more or less stable terrain, our knowledge of riding in a vehicle can be used to override those elements that are absent: wind caressing skin, a seat pressing into a back from acceleration, etc. Once a blend of two imaginal gestalts has been begun, other compatible gestalts may be integrated to extend the emergent logic of the new gestalt. In other words, aspects of the two MESMs, themselves invoked by the first level PITCH and VOLUME, may further invoke the integration of compatible imaginal gestalts toward a bearing on experiencing music.

In order to illustrate this new gestalt and how it is a blend of the imaginal gestalts of the two MESMs, I will now show how the different generic gestalts look in this new

blended gestalt. If you recall, at the end of the last section I suggested that two generic gestalts could be seen in musical events. The first consisted of the abstract notions involved in conceptualizing all events in English, musical or not: states, changes, processes, actions, causes, purposes, means and difficulties. Below is a table describing these notions in the imaginal gestalt of BEING MOVED or TRANSPORTED by music. If you will compare this with the corresponding table of the imaginal gestalts of the two MESMs in the last chapter (Table 4.2, p. 306), you will see that this gestalt is a blend of aspects of those two gestalts. As you may recall from earlier in this chapter, three different processes occur in the emergence in blended gestalts of new characteristics and relationships: composition, elaboration and completion (pp. 403-405). In parentheses following each description, I have suggested the particular process occurring.

States are locations that possess attributes. (composition)

Changes are movements to or from locations that possess varying attributes. (composition)

Process is movement from kind of location to a different kind of location by the observing listener. (composition)

Actions are self propelled motions that pick up the listener and move him from location to location. (elaboration and completion from the imaginal gestalt of being physically transported)

Causes are forces controlling movement of the listener to or from locations. (elaboration and completion, as above)

Purposes are destinations with desired qualities, states or conditions. (composition)

Means are paths to destinations that have dynamic musical qualities that produce conditions or states. (composition)

Difficulties are impediments to the movement of the musical vehicle. (elaboration and completion)

Table 5.2

Some of the notions above, such as “States are locations that possess attributes,” are very similar to the original MESMs. These are composed of elements of both

MESMs. Others, such as “Actions are self propelled motions that pick up the listener and move him from location to location,” diverge from the original MESMs. These are the notions in which the process of completion from knowledge of riding in vehicles is added.

The second generic gestalt described at the end of the last section consisted of elements particular to the portrayal of dramatic events and specific to musical events: observer, setting, ground, movement/motion, gravity, time-space, location, notes/sound, melody, chords, timbre, rhythm/meter/tempo, and beat. Some of these elements can easily be seen to be a blend of the same elements in the two MESMs, as they are described in table 5.1 (p. 394). Others present a logical inconsistency that must be dealt with before we can accept the idea that MUSIC IS A VEHICLE is a blend of the two MESMs.

We can see the following elements as a blend of the aspects of the two MESMs:

Setting is abstractly contained in that the listener is familiar enough with the whole terrain to have imaginal map, yet uncontained in immediate experience.
(completed by knowledge of “imaginal maps”)

Listener contained by setting, not stationary, moving through musical realm.
(composition, elaboration)

Senses used by listener include both feeling and vision. (composition)

Ground is ground; dynamic and uncontained.

Gravity import w/ reference to both UP/DOWN schema and weight and stability.
(composition)

Multiple contained **locations**, defined by musical aspects

Chords are uncontained and structured internally by link schema combined w/ various force schemas.

Tempo measures rate of speed of movement of musical vehicle through musical terrain.
(completion and elaboration)

Timbre is a quality of the musical substance, part of the system of force intensity.

Table 5.3

The elements above present no logical inconsistency that would impede their being part of the same imaginal gestalt. (Remember that imaginal gestalts are generally logically consistent.) However, in thinking through this blended imaginal gestalt, I did encounter one major logical inconsistency that had to be resolved before I could consider MUSIC IS A VEHICLE a blend of the two MESMs. The inconsistency relates to the directional switch in musical flow through time-space between the two MESMs.

Imagine listening to a piece of music in the substance MESM mode. You are now in the music and as the musical substance flows past you, you feel what is happening, sensing the changing qualities of the substance. Which direction does the music flow from? Logically, since it is governed by the object dual of the time event structure metaphor, it will flow toward you from the front. Remember that the object dual of the time event structure metaphor structures time as a series of time-objects that approach the observer from his front (future) and flow past him to his back side (past). He looks forward to a particular hour that is coming toward him, and back at the past that has already passed him by. Similarly, in the substance dual of the MESM, the listener looks forward to a particular phrase that is coming, which then flows past him and is behind him.

Imagine now that you are listening to the music in the location MESM mode — sitting back, observing what is happening as the musical “figure” moves through musical “locations” unfolding in time-space. If you “get into” the frame and join the figure, moving forward with it, which direction would the music be flowing from? Action in

this MESM is governed by the location version of TIME PASSES, so musical time-space would be extending before you and musical force would be coming from behind you, propelling you forward. The direction of the flow of musical force is opposite that of the substance MESM.

This change in direction presents a logical problem for blends of the two MESMs. If you add these imaginal gestalts together, unless you solve this logical problem, you end up with a situation where the listener is forever caught in the midst of a major clash of forceful flows, one from the front, one from behind. How can the music flow from both front and back?

One way to solve this logical conundrum is to say that only one of these directions can be imported into a blend. We saw this solution in the Border collie/Jetta blend. The Border collie imaginal gestalt included the notion “animate,” whereas the Jetta gestalt included the opposite, “inanimate.” The blended gestalt, however, included only “animate.” This was because the emergent logic of the blended gestalt dictated that only “animate” be included. Once the notions “cute, lovable, appealing, eager to please” and “capable of an emotional relationship with owner” were added to the Jetta gestalt, only “animate” would logically fit the gestalt.

We could do the same with the gestalts blended from the two MESMs. For instance, with MUSIC IS A VEHICLE we could decide that logically, the direction of the flow of music must come only from behind and leave it at that. If you only look at the

metaphor MUSIC IS A VEHICLE and metaphoric expressions based on it, like “musical journey,” this seems to make complete sense.

However, when you examine speech based in this metaphor, the situation is not so clear. Consider Laura’s statement, “[T]his is like *taking* you, somebody that *gives* you a hand and then *retreats* it and starts to *run* away.”⁷ Clearly, she is feeling musical force of some sort from in front. Recall that she said all of this in a description framed by the statement “It carries you on!” which indicates clearly she feels force from behind as well. In addition, this experience is clearly so very rich for her that a description of it as the music simply carrying her from location to location seems quite reductionistic. In fact, it is less reductionistic and more true to her description of her experience to say that this is indeed “*a situation where the listener is forever caught in the midst of a major clash of forceful flows, one from the front, one from behind.*” Perhaps this statement holds more explanatory power as well. But how can this be true?

We must remember, first of all, that the sounding musical “world” through which the listener “travels” is not pre-existing and static, but dynamically created in time. As the “traveler” goes along, the “locations” he “visits” do not exist until “now” hits them. When “now” leaves them, they exist only in the listener’s remembered imaginal gestalt of the piece. At the same time that this is true, it is also true that a pre-existing condition for the listener to be able to “get into” the music and “go on a musical journey” is that he have enough experience with the piece or the style to anticipate reasonably what is

⁷Laura’s use of “retreat” is unusual and is due, I believe, to the fact that her native language is Italian, not English. The way I heard it, she means “pulls it away.”

“around the next corner.” In other words, he must have at least a semblance of a feeling for the image schemas he will encounter. This means that, in going on a “musical journey” not only the present time, the “now,” is available to the listener’s awareness, but past times, remembered experiences with the music are present, as well. While the present sounding music may be “lifting” him and “transporting” him from behind, the past virtual music (in the form of a feeling for definite or possible upcoming image schemas) is what he anticipates coming from in front of himself. Vivid musical experience emerges at the moment that the sounding time/space encounters the virtual/remembered soundscape. A metaphor that illustrates this is that of riding a roller coaster. The track is the virtual/remembered soundscape, while the rider in the car is in the sounding time/space. The anticipation of the dips and loops of the coming track can be just as thrilling to the rider as the experience of the present state of the car. Both the present moment of bodily orientation or disorientation and the anticipation of future moments shape the experience.

Another way to reconcile the apparent inconsistency of logic in the notion that the music flows in two opposing directions at once is to think of it in terms of positive and negative. In the last chapter I suggest that there existed a sort of negative musical “terrain” that was analogous to the negative space one can see between the legs of a chair. While we do not usually attend to the negative space and do not have a name for it, it is still there, shaping our perception of the chair. The negative musical “terrain” is a virtual model of the mental/feeling “map” we have developed of a piece or style. As an

embodied experiential/kinesthetic version of the mental/visual idea of “mental map,” it is, perhaps, more appropriate to call it an “imaginal map.” It is similar to the kinesthetic operating knowledge we have of our everyday environment. We aren’t usually aware of it, unless someone changes something unexpectedly.

Similarly, our bodies, both physical and emotional, build up a knowledge of a particular musical terrain. As we listen, our remembrances of the image schemas of the terrain flow toward us from the future, rather like an unprinted negative. As the sounding moment that flows from behind and carries us along through the terrain hits these remembered image schemas, they come vividly to life, much as exposed photographic paper comes to life when it is awash in developer.

I do not mean to suggest that the experience of listening is in any way static or totally constrained by past experience. Image schemas are not static forms that act as templates, but are part of a dynamic process that forms and informs our understandings and experiences. As the players of the music encounter the remembered image schemas, the rich specifics of those schemas may be filled out in numerous ways. Similarly, as the listener encounters the remembered image schemas of a favorite recording, he is not limited to only anticipating and reliving the same past experiences present in his existing imaginal map. He may take an exploratory attitude toward the music and direct his attention as he wishes, perhaps attending to new relationships or sounds he had not noted before. In this way, he fills in and adds more detail to his existing imaginal map of the recording. The more detail his imaginal map contains, the greater the number of

details he can take in at a single time in his experience of the music, the richer that experience would be. In addition, his mood may alter his perception and experience of the piece.

To return to the notion of a negative terrain, this idea gives us another way to think of a “clash of forceful flows, one from the front, one from behind.” Consider the structure of forceful experience. Mark Johnson has identified six aspects to the structure of the force experiential gestalt:

- 1) [F]orce is always experienced through *interaction*. [...]
- 2) [O]ur experience of force usually involves the movement of some object (mass) through space in some direction. [That is, force has a *vector* quality.] [...]
- 3) [T]here is typically a single *path of motion*. [...]
- 4) [F]orces have *origins* or *sources*, and because they are directional, agents can direct them to *targets*. [...]
- 5) [F]orces have *degrees of power or intensity*. [...]
- 6) [B]ecause we experience force via interaction, there is always a *structure or sequence of causality* involved (1987, 43-44).

I agree with Johnson’s analysis, but would add to it. With this analysis, he has examined the experiential gestalt of *active* force. His first element, that force is always experienced through interaction, suggests a kind of *passive* force, as well, one that does not necessarily involve the rest of these elements. For instance, the force that gravity has on me involves 1 and 4 (the origin is beneath me). As with the notion of negative space and musical terrain, we are not generally aware of these kinds of passive forces as forces, but they do shape our experience in the world forcefully.

I suggest that, at the same time that the positive sounding music exerts an active force from behind the listener, the negative musical “terrain” exerts a passive force from in front of him. Again, it is something like the tracks of a roller coaster, which divert and

control the motion of the active force exerted on the car that carries the rider. Another example would be a beach, which diverts the force of waves in their forward movement, or the terrain covered as a person walks or hikes through it.

With that logical inconsistency reconciled, I can now return to examining how the generic elements particular to the portrayal of dramatic events and specific to musical events play out in this blend of the two MESMs. These elements are those involved in musical time-space and motion through it:

In the listener's "mental-feeling map," positive musical time/space is static and extended to locations that music moves through; diachronic.

Negative musical time/space is dynamic, immediate and synchronic. Creates negative musical terrain. (composition, elaboration, & completion)

Contained *notes* merge into a mass *substance* that FLOWS from behind the listener, moving him forward. Negative terrain (from front) moves by STEP or LEAP. (composition, elaboration, & completion)

Beat is ordered by both schemes. The beat ordered by the pulsating force image schema, grouped by hierarchical scale image schema, comes from behind, moving forward. The linear, spatial beat is part of the negative terrain coming up in front. (composition, elaboration, & completion)

Abstractly, *meter* measures extended static time/space by means of linear, segmented spatial order.

Concretely, *beat* is grouped by means of HIERARCHICAL SCALE GROUPING.

Meter is defined by beat.

Melody is deictic center with the listener.

Table 5.4

The combination of these two sets of factors from the two MESMs, the event structure factors as well as the musical ones, into a single imaginal gestalt creates a blended musical realm that is much like the physical realm that we live in. It is a realm that we can "get into" and explore or give ourselves over to, allowing ourselves to "be moved" or journey in a "musical vehicle." This blended musical realm has its own

emergent logic. I now turn to some of the effects of the emergent logic of this blended imaginal gestalt — momentum, direction, and scaling effects.

MOMENTUM

Just as changes in speed in a vehicle brings the experience of physical momentum to the foreground, changes in speed in a musical vehicle might bring musical MOMENTUM to the fore. The following description from my notes of a Curtis orchestra rehearsal illustrates:

The whole orchestra was galloping along together at a good clip, everybody putting their all into it, when all of the sudden the conductor stopped to make a correction. Well, instead of stopping immediately, many of the players kept playing, slowing their tempo gradually, but at individual speeds, not as a group. It gave the effect of gradually dissolving momentum—a car that is going at a great speed, crashing into something and the picture gradually moving into slow motion, pieces of the car flying in different directions. It was really funny. Everybody laughed. The orchestra “cracked up” into “pieces,” then in response, we all “cracked up” in laughter.

While only one of the players I later spoke with used the term “momentum,” evidence of MOMENTUM as an organizing idea can be seen in the speech of many other players.⁸ Several players talked about keeping the MOMENTUM of the music going in places where, logically, it could not be done. For instance, in describing how she plays the oboe line of the first two phrases of the first movement of the Mozart oboe quartet in F major (K.370, Example 5.2, next page), Janet Miller told me that she plays the last note of the antecedent phrase “up” and the last note of the consequent phrase more

⁸I thank my colleague Laura Lohman, whose work suggested to me the metaphor of MOMENTUM.

Oboe Quartet

Mozart

The musical score for Oboe Quartet by Mozart, Example 5.2, is presented in two systems. The first system includes staves for Oboe, Violin, Viola, and Cello. The Oboe part begins with a forte (*f*) dynamic, followed by a piano (*p*) dynamic, and ends with a forte (*f*) dynamic. The Violin and Viola parts start with a sforzando (*sf*) dynamic, followed by a piano (*p*) dynamic. The Cello part begins with a forte (*f*) dynamic and then moves to a piano (*p*) dynamic. The second system continues the Oboe part with a piano (*p*) dynamic and the Violin and Viola parts with a sforzando (*sf*) dynamic, followed by a piano (*p*) dynamic. The Cello part continues with a forte (*f*) dynamic and then a piano (*p*) dynamic. The score is marked with measure numbers 6 at the beginning of each system.

Example 5.2

“down.” This description puzzled me. Although the first note is a G and the second an F, I knew she wasn’t talking about relative note height. I asked her to clarify. She replied,

... in terms of inflection. Because this [the first phrase] doesn’t sound like an end, you know? It sounds like it needs something to finish it. So maybe... sort of in the way you articulate these things? the Gs there.... and the way you end the note? This one would have a hair stronger articulation, and it would end more definitively. It’s really hard to describe those. It’s hard to play it out of context, too. If I had my oboe here, it just would all happen instinctively. Sort of, you’re sort of playing through the rests. This [the F] is the end, but here [the G] you want to keep it going through the rests.

Even though Janet’s oboe doesn’t sound through the rests in question, she plays the note before them in a manner that suggests that the musical MOMENTUM continues through the rests.

Beethoven

“Das Lebewohl”

The image shows a musical score for the first movement of Beethoven's 'Das Lebewohl' for piano and oboe. The piano part is in the upper system, and the oboe part is in the lower system. The piano part begins with a *p* *legato* marking and ends with a *pp* marking. The oboe part begins with a *pp* marking and ends with a *f* marking. There are dynamic markings of *cresc.* and *f* in the oboe part. The score is divided into two systems by a dashed line labeled (8^{va}). The piano part has a *pp* marking at the end of the first system. The oboe part has a *pp* marking at the beginning of the second system. The piano part has a *pp* marking at the end of the second system. The oboe part has a *f* marking at the end of the second system.

Example 5.3

Reza Jacobs made a similar comment while describing how he thinks about playing the ending of the first movement of Beethoven's piano sonata "Das Lebewohl," opus 81a (Example 5.3, previous page). Near the end of the coda, after a passage that is the longest quiet section of the movement, the music lands on a set of whole note, octave Cs in the right hand, with the left hand a brief quarter note followed by rests. The right hand whole note is marked "crescendo," and leads to a set of louder quarter note B flats in the next measure. The B flat then leads to the two final, V-I, forte chords, which have a much denser texture than the rest of the coda, consisting of fully voiced chords in each hand.

The note in question is the whole note, octave C marked "crescendo," an instruction that is technically impossible to accomplish on the piano. The marking "crescendo" suggests that, in some other-than-sounding fashion, the player must build up enough MOMENTUM on the note to carry the piece through the final denser, more energetic chords. As Reza described playing this he said that he solved the problem of the "crescendoing" whole note by simply *thinking* as he held the C that it was getting louder. That way, he could gauge the dynamic level of the final three chords. He described having seen Rudolph Serkin "think" a crescendoing whole note. As a listener/observer, he knew that the whole note was crescendoing because he could see Serkin's face get red and his body posture change in preparation for playing the next, louder note. In this instance, rather than suggesting the MOMENTUM of forward motion across rests, the player must suggest a buildup of MOMENTUM in a place where he has no

way of doing so with the actual musical sound. Reza solved the problem with an imaginal process, which then affected the physical process of playing, and possibly, the listener-observer's process of experiencing the musical event.

How can music have MOMENTUM? In chapter three I argued that a sense of momentum could be invoked if the listener integrated the elements of PITCH, VOLUME, and changing PULSE (i.e., changing tempo). Here, however, I argue that momentum is not a simple matter of integrating these elements — adding them together to the sum of momentum. Rather, it involves integrating these elements *from the perspective of the blended musical realm*. In order to either recognize or feel musical momentum, the listener must attend to the sound from the perspective of either *having been inside* or *being inside* the blended musical realm, with its forceful flows and negative terrain.

The Elements of Momentum

Momentum is learned through walking or running over the earthly terrain, interacting with the forces of gravity and inertia. These forces influence the amount of effort that must put forth in order to accelerate, continue moving forward, and decelerate. Negotiating momentum is a matter of judging the amount of *effort* or *force* you need to apply to go forward or how much you need to *restrain* your body against the force of gravity or inertia in order to move down a hill or stop safely.

Momentum also involves knowing how different masses will behave at specific speeds in interaction with the forces of gravity and inertia. In addition to learning about momentum through moving with our own bodies, we also learn about it through carrying

and pushing other objects. This kind of experience gives us a sense of the effect that greater or lesser amounts of mass have on momentum. From carrying or pushing objects of different masses over varying terrain, we know that it takes greater effort to gain momentum with larger masses, and that once they gain speed, they have more momentum than smaller masses and thus take more force to control.

In my conversations with students at Curtis, all of the comments concerning momentum occurred in the context of discussing how to play a specific passage. These comments involve the question of *effort* as it interacts with *mass* and *terrain*. Rather than being stated in the terms I analyzed earlier as integrating toward a sense of momentum — PITCH, VOLUME, and changing PULSE — they relate to an imagined personal interaction with musical mass in musical terrain.

Technical Effort vs. Effort of Momentum

The effort embodied by musical sound can be a matter of the real, technical effort involved in actually accomplishing the sounding of notes or it can be a matter of *apparent* effort — the player making something that is technically simple sound effortful for the sake of musical momentum. Deanne van Rooyen, a harpist who was also an accomplished pianist made this clear to me through examples taken from her experience with Chopin's *Ballade in G Minor* (opus 23). Deanne spoke many times of either making passages that were not technically difficult sound effortful or allowing passages that were difficult to sound that way. For instance, in the passage from mm. 68-76 (Example 5.4, next page), Deanne talked about the melodic figure that first appears in

Ballade

The image shows a musical score for Chopin's Ballade, measures 67 through 74. The score is written for piano and consists of two systems. The first system covers measures 67 to 72, and the second system covers measures 73 to 74. The right hand (treble clef) plays a melodic line with various ornaments and dynamics, including a prominent octave leap in measure 69. The left hand (bass clef) provides a bass line with a steady eighth-note accompaniment. The score includes dynamic markings such as 'pp' (pianissimo) and 'f' (forte). The key signature is one flat (B-flat major or F minor), and the time signature is 3/4.

Example 5.4

the right hand in measure 69 as an octave leap. Describing why she had to make it sound difficult (although it wasn't technically difficult for her), she said,

you have to get the sense that there's a big distance from, on an octave [playing the figure in 69]. Not [and she plays it again, and the octave doesn't have the sense of difficulty she's talking about].

She went on to say and demonstrate that each time this figure appeared (in m. 73 from the half note G to the dotted quarter note A flat, in m. 74 as the half note F to the dotted quarter G), she tried to make it sound difficult so that it seemed like a larger leap than it really was. When I asked Deanne how she made something that was technically easy sound difficult, she replied, "You *think* it's difficult." As with Reza above, this is again a situation where embodied imagining of the music affects the sound produced by the player and perceived by the listener.

As her enculturated listener, I took this all to say something about the momentum of the passage. The whole passage is marked piano, so there is not a lot of mass to the sound substance. In addition, the melodic line begins low, but leaps upward near the beginning and follows a very gentle incline downward from there. Therefore, because the music is soft (thus lacking in mass) and the incline gentle, the momentum may be generally on the low side. However, in its forward movement, it encounters a number of large leaps. The effort made in executing those leaps helps to give the sound momentum and propel it forward. To narrate the passage in more detail, it begins on a relatively low note, an F, and moves gently down to an E flat. This step down in terrain with a relatively small mass does not provide much momentum. The need to make the octave leap to the E flat sound effortful stems from the fact that the passage has a low amount of momentum. The effortful sounding octave leap provides a push to the forward momentum of the sound. The sound, still quiet and without much momentum, then floats gently downward a fourth to a B flat, after which it makes another effortful leap of an octave. From that point on, it moves generally downward in stepwise motion, with fewer upward motions than downward.

The two other notes in the passage that Deanne tries to make sound “difficult” are the A flat and G on the fifth quarter note of measures 73 and 74 respectively. Instead of being large intervals like the “difficult” intervals that preceded them, these are small intervals, a half step and a whole step, respectively. Why should these small upward intervals be made to sound difficult and not other small upward intervals that

precede them? Since they echo the earlier E flat figure in rhythm, they suggest the same kind of pushing forward that it provided in the effort necessary to cover the distance of an octave. Each of these figures moves down a fourth for the eighth note and then up a third. Except for the previous octaves, these are the largest intervals in this melodic passage. They momentarily interrupt the gentle float downward, and the effort they require provides a boost in momentum that propels the melody finally downward to the F in m. 76, where a repetition of the same passage begins.

In the case above, Deanne described a situation in which a technically easy passage must be made to sound effortful in order to suit the requirements of musical momentum. Later, she discussed a situation in which a technically difficult passage *should* sound difficult in order to suit musical requirements. Measures 118-124 (Example 5.5, next two pages) follow a section that is marked fortissimo in which both hands are each playing two to four notes at all times, and the sustaining pedal is used much of the time. This creates the effect of a very large sound mass that, in context, sounds triumphant and joyful. At 118, the music changes somewhat. It retains the quality of a large sound mass, with the right hand playing in octaves and the left a series of fourths and fifths that fill in the octaves to complete the chords. The right hand octaves make a series of three ascents up an octave by step, landing on F#, G# and B, respectively.

The musical sound at this point embodies the patterns of someone trying to push a large object up a hill. If the player were technically able to make this sound easy, and

Ballade

Chopin

Piano

The image displays a musical score for Chopin's Ballade, specifically Example 5.5, which covers measures 108 through 117. The score is written for piano and consists of four systems of music. Each system contains a grand staff with a treble clef on the upper staff and a bass clef on the lower staff. The key signature is one flat (B-flat major or D minor), and the time signature is 4/4. The first system begins with a dynamic marking of *ff* (fortissimo) and includes a piano instruction. The notation features complex textures with frequent sixteenth-note passages, often beamed together, and various rests. Measure numbers 111, 113, and 116 are clearly marked at the beginning of their respective systems. The score includes numerous slurs, ties, and dynamic markings such as *ff* and *pp*. The overall style is characteristic of Chopin's late Romantic piano music, emphasizing melodic flow and harmonic richness.

Example 5.5

119 (#)

121

123 (#)

125

dim.

sempre piu animato

128

Example 5.5
436

did so, it would not seem right. We know that it is difficult to move large objects up hills. To make it sound easy would draw attention to the amazing strength (technique) of the player and not to the music of the phrase. In this culture, where the music should be the center of attention, not the player, this would constitute a musical faux pas.⁹ It is much more musical to allow this difficult passage to sound difficult, to fill the sound with the effort made to make it and thus a sense of slowing momentum as the sound moves toward and finally “crests” the apex of the passage (the B in m. 122). After the sound reaches the apex, it cascades easily downward in measures 124-25 and then for the next four measures, roils around, static in forward movement and terrain covered, but still full of the momentum of the effort made earlier in the passage. Whereas in the earlier case, technical effort did not equal appropriate musical effort, in this case, the effort it took Deanne technically to produce the sound matched the effort it might take to move this musical mass over this particular musical terrain.

We can see from the above that producing musical momentum is a matter of imaginably being *inside* the blended musical realm. In order to be musical, the music must not sound effortless. However, the apparent effort must *not* stem from actual *technical* effort. Rather, it must stem from the imagined effort necessary to move the musical *mass* over musical *terrain*. In order to accomplish this imagined effort, the player must not feel and project the effort of any real technical difficulties involved

⁹Contrast this with the culture of Indian classical music in which, sometimes, part of the fun of a musical evening is witnessing great feats of technique by the players. During a flashy *jhala*, the musical sound is enjoyable, but so is openly sharing one’s amazement at the technical accomplishment of the player producing the sound.

(unless, as in the second case above, the technical effort *matches* the effort of momentum). Rather, they must feel and project the effort of moving musical mass over musical terrain. Through that projection, the music embodies the patterns and qualities of momentum. If a player did not understand musical momentum, and simply played through the notes without a concern for projecting it, in places where the technical effort matched the effort of momentum, a listener might feel a sense of momentum. However, in places where the technical effort did not match the effort of momentum, the music would probably sound like “just notes.”

In order to make sense of and engage with (or *live*) the sense of momentum, the listener must also listen *from the point of view of the blended musical realm*. If he had no experience of this blended musical realm, he would simply hear pitches of varying volumes at varying tempos. In example 5.5 above, he would hear a very loud, ascending passage that slowed. He might take this as effortful, but would take it as *technical* effort, not the effort involved in musical momentum. Making sense of and living the quality of momentum, as well as other such musical qualities, involves not only the integration of invoked elements like pitch, volume and pulse. It also requires integrating these elements from a specific, point of view. That point of view is informed by both moving through the real world and understanding the analogy between moving through the real world and moving through the imaginal blended musical realm. *It is the logic of the blended musical realm that makes the integration of pitch, volume and tempo bear*

on a sense of the effort of momentum and not on a sense of the technical effort of producing notes.

I turn now to two other metaphors that are made possible by the emergent logic of the blended musical realm: **DIRECTION** and scaling effects.

DIRECTION

Once the blended musical realm is in place, other metaphorical qualities, such as **DIRECTION**, are made possible by its newly created logic. In order to examine this, I will explore three kinds of evidence: 1) a definition of **DIRECTION** and the aspects of that definition that point to its nature as part of the emergent logic of the blended musical realm, 2) a diagram of **DIRECTION** and how it suggests aspects of both MESMs at the same time, and 3) the logical conditions of each MESM and how both must be in place at the same time for **DIRECTION** to occur.

DIRECTION can be correlated with the dictionary definition of “direction.” The meaning that it most corresponds to is “the line or course on which something is moving or is aimed to move or along which something is pointing or facing” (Merriam-Webster, 236). This definition suggests a **PATH** schema, with a beginning point and a path that stretches before the “thing moving.” It does not necessarily entail an ending or goal point. Musical **DIRECTION**, however, entails beginning, path and goal point, which is in itself, a simple image schema. However, musical **DIRECTION** does not correspond to only the simple image schema of beginning, path and goal. Rather, it also entails the thing moving along the path as well. In other words, the “thing moving” is also the course on

which it moves, so therefore, that course becomes a quality of the “thing moving.” At each moment that the music sounds it at once creates a moving “thing” and suggests the course that the thing will take.

However, DIRECTION is more than just a matter of a thing moving along a path that is a quality of that thing. The idea of a “thing” moving along a “path” suggests the kind of direction that occurs in the location MESM, where a musical figure moves along and is CONSTRAINED by a harmonic-rhythmic PATH or moves in an upward or downward direction through musical space. Instead, DIRECTION indexes a more complex phenomenon, one that is a matter of CONSTRAINT of potentially unruly musical flows and forces. Both musical MOMENTUM and MUSIC IS A VEHICLE suggest that flows of musical forces course through the terrain of this blended musical realm. In order for those sounds to be considered “musical” (and not just notes), they must “have direction.” Note that, phrased this way, direction is not just the way a musical object or figure is pointing, as in “go in a direction.” Instead, it is a quality possessed by the sounds themselves. Musical sounds not only “go” in a direction, they “have” that direction as well. Both linguistic constructions are used and generally imply one another. Music that “goes” somewhere “has” direction; music that “has” direction “goes” somewhere. This duality of expression and image points to the blended nature of the imaginal gestalt of this metaphorical construct.

The complex and dual nature of this construct can also be seen in the diagrams used to teach it to students. As a young flutist learning to control volume levels, I first learned the concept of **DIRECTION** with the aid of a diagram similar to the following:

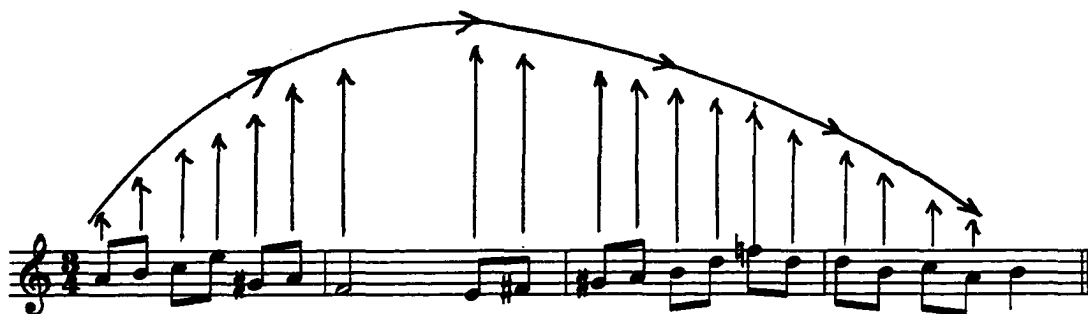


Diagram 5.1, Bach's Sonata for Unaccompanied Flute

At first glance, this might be seen to be simply a diagram that suggests the **CONSTRAINT** of **VOLUME** — an aid to disciplining the volume levels of individual notes so that they conform to some overall plan, rather than the disordered series of volumes that might stem from the technical difficulties of sound production.¹⁰

However, with a second look it is apparent that the diagram is not just a matter of **CONSTRAINT** of **VOLUME**. Two elements of the diagram suggest that it embodies a more complex construct. First, the over-arching line is pointing in a particular direction toward a particular note. This indicates that the volume levels are not important in and of themselves, but rather as part of a disciplined move toward a particular goal note.

¹⁰ On the flute, the lower register, which most of this passage is in, can be difficult to play loudly. If the flutist was not proficient in playing the low notes loudly, he would probably fade to the initial F, rather than getting louder.

Second, the apex of the directional shape shows the CLIMAX of this phrase, while the end of the shape shows the last note of it.

As a student, I learned from this diagram to not only discipline the volume levels of individual notes, but to also discipline the timbre of those notes to suggest more or less musical INTENSITY. These elements, when included with the “forward motion” of the sound indicated by the over-arching arrow, added up to a sense of musical MOMENTUM, so that, rather than a CONSTRAINT of VOLUME/INTENSITY as it relates to forward movement toward a goal, for me this represents a CONSTRAINT of MOMENTUM.

Either way you consider this diagram, whether as a CONSTRAINT of VOLUME/INTENSITY as it relates to forward movement toward a goal, or a CONSTRAINT of MOMENTUM, it points to the dual, blended nature of the construct. If you view it as a CONSTRAINT of VOLUME/INTENSITY as it relates to forward movement, you can see traces of the logic of the location MESM in the notion of forward movement. You can also see traces of the logic of the substance MESM in the concern with VOLUME and INTENSITY. Alternatively, if you see the diagram as a CONSTRAINT of MOMENTUM, since MOMENTUM is part of the logic of the blended musical gestalt, then CONSTRAINT of that MOMENTUM would also be part of that logic.

As the above suggests, imaginal gestalts each have a logic that CONSTRAINS the events that can take place in them. In each of the MESMs, certain conditions are in place that govern what happens in the gestalt. If we look at each MESM individually, we can see that neither one alone would allow for DIRECTION to occur.

The conditions of the location MESM can be summed up as follows: from a distance, the listener observes the movement of a musical figure through musical space. He observes that figure moving in various directions (upward/downward), forward to various locations. From his embodied experience in the world, he may know, logically, that some kind of force is causing that motion, but an awareness of that force is not immediate to him. Likewise, he may know that the figure may have MOMENTUM, but an awareness of it is not immediate. Therefore, he would not be aware of DIRECTION, since it embodies a CONSTRAINT of MOMENTUM.

The conditions of the substance MESM can be summed up as follows: the listener observes the flows of musical substance from a position in the middle of those flows. He is aware of the sensations and qualities of the sound substance. He is not immediately aware of the long-term locations that those sounds will reach. Therefore, since direction is a matter of a CONSTRAINT of VOLUME/INTENSITY as it relates to forward movement toward a goal-location, he would not be aware of DIRECTION. Instead, awareness of DIRECTION requires that the blended imaginal musical realm be in place for the listener. He needs to be aware of both the flows and forces of the sound, as well as the terrain and locations that that sound will traverse.

DIRECTION is also discussed using a number of other names, such as “line,” “shape” and “phrasing.” All of these names, in differing ways, index the kind of CONSTRAINT of forces I have been discussing here. This theoretical construct is much more complex than I have presented here. My purpose has not been to give an

exhaustive analysis of this metaphor, but to argue that it is made possible by the emerging logic of the blended musical realm. Without the blended musical realm, with its negative musical terrain and the possibility of both the player and the listener “getting into” the frame and feeling MOMENTUM, DIRECTION would not be possible.

SCALING EFFECTS

Another metaphor that I have noted as part of the emergent logic of the blended musical realm is that of SCALING EFFECTS. While I have not heard this specific term used at all, many linguistic expressions used in talking about this music make sense only by reference to it. The term “scaling effects” refers to the differences in behavior and properties of animals and things that are near the limits of the range of sizes.

[S]caling things up or down changes their behavior.... [A]s you scale up from bugs to beasts, weight increases as the cube of the animal’s size (its volume), while muscle strength increases as only the square of its size (its cross-sectional area). In general, things seem “heavier” in proportion to their size as you scale up and “lighter” as you scale down (Hively 1998, 88).

Scaling effects explain why fleas can jump so many times their own height, while elephants can barely leave the ground.

In the blended musical realm, scaling effects come into play in the different “characters” assigned to instruments of different sizes. For example, consider the piccolo and double bass, to contrast two instruments at different ends of the scale for size. The piccolo often plays music that could be characterized as “showy”—very fast, with many notes, and often with a very light articulation and many trills. It is not

uncommon to characterize this kind of piccolo music as “bird-like,” or to compare it with other light, high, fast-moving phenomena, such as wind or fairies. In contrast to piccolo music, the double bass is often given music that is slow and lumbering, with many glissandos that exploit the technical difficulties of moving from one note to another on this large instrument. As in the case of the piccolo and birds, it would not be unusual to see bass music compared to a large, slow-moving animal or other, similar phenomena.

This kind of characterization is made possible, in part, through the emergent logic of the blended musical realm. Through this space move musical “objects” or “characters” with various qualities—size and physical characteristics. The listener is “in” the space, moving through it with the music, sensing the qualities of that motion. Through sensing the qualities of motion, the listener can grasp the size of a creature or moving object because the quality of motion of a “figure” indexes the size of the creature or object making that motion.

CONCLUSION

In this chapter, I have argued that some of the complex metaphors used in describing music and musical experience, such as GETTING INTO IT and MUSIC IS A VEHICLE, are part of a process of blending the two simpler MESMs into a single, more complex imaginal musical realm. In addition, I have argued that other, related complex metaphors, such as MOMENTUM, DIRECTION, and SCALING EFFECTS are possible because of the emergent logic of that blended musical realm and because of the addition of other imaginal gestalts based on embodied experience in the real, physical world.

The logic of the blended musical realm is the point of view from which one must integrate the musical elements either directly invoked by the sound wave (as in PITCH and VOLUME on the first level) or metonymically invoked by the first level elements (as in LINE or INTENSITY on the second level). That logic is what constrains the integration of these elements *toward a bearing on living them as "music,"* not on understanding and experiencing them in some other fashion (as when a listener hears the effort of momentum as technical effort). Thus, the blended musical realm is what makes third level musical experience possible. When someone listens from the point of view of the blended musical realm, he is not really "in" this realm. What is really true is that this realm *exists imaginally in him.* From the point of view of this imaginal realm, he can recognize and feel musical realities like MOMENTUM, DIRECTION, and SCALING EFFECTS. He can also be TRANSPORTED by the music.

While it may have seemed artificial to some readers whose main experience with music at this point in their lives is "being into it" to separate this single, experientially rich and eventful imaginal gestalt into two, separate MESMs, I believe it is theoretically necessary to do so for a number of reasons. First, it explains why we so often have two words for what seems to be the same aspect of musical events, e.g., bridge/modulation, notes/sound, dynamics/volume. Alternatively, it clarifies why we have two different conceptions of the same word, e.g. "beat" as location on musical path vs. "beat" as pulse of sound substance or "rhythm" as pattern of movement in time vs. "rhythm" as musical

flow. In addition, it elucidates why those two sets of words form two groups of metaphors that are consistent with one another.

Second, it helps to explain the varying grammatical modes used in describing these experiences. As I argued earlier, varying modes of use of verbal aspect, deixis, and nominalizations are consistent with the notion of two separate MESMs and blends of them.

Third, separating this musical realm into two parts helps to explain both the meaning and cultural centrality of the metaphor GETTING INTO IT. Following the logic of this metaphor, we know that there must be an “it” to get into and that there must also be a different, but related, way of experiencing the “it” before one enters it. This suggests different levels of intensity of musical experience that correspond with the notion of simpler and more complex musical events. These simpler and more complex musical events, in turn, correspond with the events based on MESMs and a blend of the MESMs, respectively.

Fourth, separating the blended musical realm can also begin to help us to understand the duality of experience some musicians report. Laura Caramelino reported losing herself to music, allowing it to carry her on. At the same time, in another part of the conversation, she talked about controlling the sound she was producing, attending to both what was happening in the moment (synchronic awareness) and where the music was eventually going (diachronic awareness) at the same time. Clearly, she sometimes is “into” the musical event experiencing it, and sometimes is “outside” of it producing it.

When she is producing it, she reports needing to be aware of aspects of both MESMs at the same time.

In the midst of a discussion of musical motion, Janet Miller and I came up with another example of a duality of experience.

J: The music is in control of the motion. If you listen to the relationship between the notes like this? This is a big flourish of a scale. And it, you might even speed up a hair at the end and then slow down there. [Sings.] Not necessarily noticeably, but just enough to give it a sense of motion.

D: Yeah. A lot of the things you've been talking about are sort of having to do with shaping that motion in one way or another.

J: Because it's all there. I kind of like it to propel itself.

D: Is that what for you, in large part, kind of separates playing notes from playing music? is that sense of motion being there? that you're going somewhere and there's...

J: Rather than "going somewhere," "going somewhere" seems to me if that's the method, is to go somewhere, it seems to me it's sort of on the surface? To me, um... thinking about the relationship between the notes sort of results in going somewhere.

D: Ah.

J: Because it's more... I don't know how to explain it. It's just more intense.

D: It sounds like a kind of *a being there, but a being there that is going somewhere at the same time you're being there?*¹¹

¹¹Since I made this statement and not Janet, I would like to be quite clear about the chronology of events as this conversation relates to the writing of this dissertation. I had this conversation and made this comment well before I began to think in terms of two musical event structure metaphors. At this point in time, I knew that I was probably going to write about music as an "event," one that corresponded more to the location dual of Lakoff's event structure metaphor. I had not yet made the connection between the two sets of metaphorical terms I was encountering and two internally consistent MESMs. This statement was only a description of experience that I had had and suspected that Janet was trying to describe, not a statement that was in any way influenced by my thinking about two MESMs and blends.

J: Yeah.

The notion of “a being there that is going somewhere at the same time you’re being there” corresponds quite well with the idea of the two MESMs, as well as the idea that they can blend into a single metaphor. The location dual emphasizes the experience of “going somewhere,” while the substance dual stresses the experience of “being there.” If you experience both “at the same time,” the operating metaphor is a blend of the two. However, it is still possible in the midst of the blend to become aware of the different elements that produce the blend.

Finally, understanding the complexities of musical experience helps us to better understand the complexities of music. If we truly understand that music is not a free standing object, that it exists *as “music”* only in the experience of people who hear it, that those people, indeed, *become the living media for its existence*, we will approach it differently, both in the way we theorize about it and in the way we teach it. Most theorizing about Western art music has been accomplished from the point of view of the location MESM, a point of view that reduces music to something much less than it really is. If we teach music, both how to play it and how to appreciate it, from an understanding based on that incomplete theorizing, we are teaching from a position that undermines the very goals we are trying to reach. The point is that, since music exists as “music” only in the experience of the listener, musical experience and “music” are one and the same. We must understand musical experience in order to truly understand music.

CONCLUSION

SUMMARY

This dissertation assumes that the process of discovery and explanation are best served when the nature of the epistemology utilized is consistent with the nature of the phenomenon being investigated. This assumption stems from an understanding of conceptual metaphor, which tells us that when an abstract situation is conceived metaphorically as if it were a more concrete situation, the following occurs: the structure and logic of the concrete event are integrated with the percepts of the abstract event toward a bearing on understanding the structure and logic of the abstract event *in terms of* that of the concrete event. In other words, both structure and logic are “mapped” from the concrete event onto the abstract event. Therefore, because structure and logic are borrowed from one event and integrated to another, if an epistemology uses conceptual metaphor, both the structure and logic of the concrete event should be consistent with the structure and logic of the abstract event. Since we investigate and explain *in terms of* this structure and logic, if inconsistencies exist between epistemology and phenomenon, we will misconstrue both the structure and logic of the phenomenon under study.

Both “music” and “notes” are phenomena that exist meaningfully *as* “music” and “notes” *only in the experience of enculturated listeners*. Thus, if the basic assumption of a necessary consistency between epistemology and phenomenon is correct, the epistemology required for investigating “music” and “notes” and any meaning that arises

in relation to them should center on human experience. The specific *kind* of human experience must be consistent with the nature of the musical experience in question. In the case of Western art music, for an enculturated listener, although the sound wave does not manifest such qualities and events in the same manner as does the music, the music manifests qualities and events such as motion, force, tension, relaxation, stability/instability, intensity, gesture and momentum. We know these qualities and events as *non-musical* qualities and events through living in and through a body, moving through terrains and interacting with moving objects and substances. Therefore, integrating them with the sound wave in the process of producing music must, of necessity, involve the body. We *know* the musical sound wave as motion, force, tension (and so on) through *aspects of ourselves gained in embodied experience in the physical world*. The epistemology used to investigate music and its meaning must therefore involve the experience of living in and through a body, moving through terrains and interacting with moving objects and substances.

The objectivist epistemology at the base of most writing about musical meaning involves a specific kind of embodied human experience interacting with the world. This epistemology is based on an analogy to visual and manual behavior in the world, specifically to the behavior of building larger structures (buildings or machines) from smaller parts. However, when applied to knowing, the structure and logic are not mapped in a straightforward manner: the building of larger structures from smaller parts does not involve the whole body. Rather, it involves only the mind and senses.

Based on the structure and logic integrated from manual manipulation of parts into wholes, this analogy gives rise to the following epistemological and philosophical tendencies: 1) understanding phenomena under study as a collection of separate parts, each of which has its own essential nature and function; 2) understanding the parts as not *necessarily* relating to or cohering with one another; 3) understanding these separate parts as “basic,” meaning the level at which both understanding and explanation should begin; 4) modeling phenomena as structural or mechanic blueprints, thereby mapping relatively atemporal geometric and/or mechanical logic onto the phenomena under study; and 5) trusting only evidence that can be “seen,” “grasped” and “measured.”

The above tendencies condition the way that objectivism models human beings, their relationship with one another and the external world, and the process of communication. Objectivism models human beings as a collection of parts that are relatively separate in function. The mind is the most important part that accomplishes the most necessary functions: intelligence, imagination and perception (after the portal senses interface with the outer world). The body is a brute slave to the mind. Likewise, objectivism models the relationship between human beings and their environment as if it were part of a humanly built object. Human beings are seen as relatively separate from their environment and from one another and therefore, some manner must exist of connecting them with both their environment and each other. That connection is supplied by language. Words are “packages” of meaning that correspond exactly to natural categories in the world. They therefore can be used to create representations in

the mind that connect the individual with the outside world in a “true” and “objective” fashion. In addition, words can be sent through the “conduit” of speaking or writing, transmitting meaning packages from person to person thereby connecting heretofore unconnected individuals. By decoding the words, the mind of the listener recreates the mental representation sent by the speaker, thus “seeing” and “grasping” her “true” meaning. Communication, then, is understood as a matter of the mechanical encoding, transmission, reception and decoding of meaning-objects that strive toward a “true” and “objective” mental representation of states of affairs in either the objective or subjective world.

Under objectivism, then, as a communicative process, music becomes subject to the logic of the representation schema, with its emphasis on reference, truth, and meaning as “content.” It becomes a meaning-object to be decoded or understood by dissecting it into its constituent parts. The listener performs perceiving, decoding and imagining primarily with her brain, in conjunction with ears and relevant nerve pathways, which transmit the sound information to the brain.

The objectivist view of the musical meaning situation is in stark contrast to my experience and understanding of it. For me, musical meaning occurs in a fashion in which the whole body engages intimately with the sound wave, integrating culturally defined metaphoric structure and logic with personal experiential gestalts toward a bearing on the merging of self with the transcendent reality of “music,” as well as other transcendent realities that the music may symbolize. Human beings become the resonant

medium for music's existence and musical experience becomes the energetic medium in which transcendent realities come into and maintain their existence. Through integrating us as subsidiary particulars toward a bearing on a reality that transcends our individual lives, resonant meaning determines, in part, the meaning of our lives.

The nature of musical meaning, as described above, is inconsistent with the objectivist epistemology. Musical meaning is clearly experience centered and thus should be explored by means of an experienced centered epistemology, such as the epistemology outlined in chapter two, which combines Johnson and Lakoff's embodied realism with Polanyi's tacit knowing. Rather than being based on an analogy, this epistemology is grounded in the idea or image of human beings as creatures who have evolved in the earthly and social environments for meaningful action in those environments. Based on the experience of a human being who interacts with and adapts to her environment, who both creates and is created by her environment, this grounding image gives rise to the following epistemological and philosophical tendencies:

1) understanding phenomena under study in a holistic fashion, with the whole being logically prior to the parts; 2) understanding the parts as *metonymic* in nature, that is, as subsidiary particulars with the *inherent* power to integrate toward a bearing on the whole (standing in co-creative relationship to each other and to the whole) and deriving their meaning from their participation with each other in the whole; 3) understanding "basic" as a function of human experience (not a natural category of the objective world), and thus defining it as a matter of human interaction with the world: the level at which that

interaction is most *psychologically* simple; 4) modeling phenomena with human-centered models, thereby encompassing the diachronic change that human adaptation to the environment requires; and 5) trusting *not only* evidence that can be seen, grasped and measured, but *also* evidence that can be heard, smelled, tasted, and felt (in all of the senses of the word “to feel”).

This epistemology conditions a view of human beings, their relationship to one another and the world, and the process of communication very different from that of objectivism. Human beings are not understood as essentially separate from the environment; rather we have been (and continue to be) created by and for the environment. Thus we are already at one with it. In addition, this epistemology takes human beings as whole creatures whose parts function and participate co-creatively, as when body movement helps a conductor to imagine the music before she conducts. This leaves room for an expanded view of such faculties as intelligence, imagination and perception. Rather than being a matter of quickness of mental storage or encoding/decoding, intelligence is conceived of as a matter of how quickly the whole organism adapts, tacitly or explicitly, bodily and mentally, to the challenges of the environment.¹ Imagination, too, is conceived in a different manner. It is not understood as primarily a liminal function of mental representation separate from everyday life. Rather, imagination is closely allied with intelligent, whole-bodied adaptation to and

¹ Please note that the phrase “tacitly or explicitly” may be misleading to those who have not well internalized the tacit knowing schema. It gives the impression that one or the other of these adjectives will apply. However, since all explicit knowledge is *rooted in tacit knowing*, all explicit knowledge involves tacit knowing as a matter of course. To be more exact, I would have to write “tacitly or tacit-explicitly.”

action in the environment, functioning tacitly or explicitly to bring new perspectives to that process.² It can *also* operate in special, liminal realms of life, but if it is functioning well, it is available and operational on an everyday basis. Perception is not understood as a matter of breaching the boundary between the inner self and outer world, accomplished only with the “portal” senses and the brain. Rather, senses are whole-bodied organs of awareness, alertness, and attention that help us to engage with not only the natural environment, but the social environment, as well. This definition expands the usual list of senses to include such embodied, socially inflected senses as the sense of humor, the sense of modesty, the sense of honor and the sense of melody. In addition, this definition allows us to see how embodied imagination acts as a sensory organ, as we use it to track events in the environment.

The commitment to the ground of human engagement with the world means that meaning, and everything related to it — truth, understanding, categories, concepts, etc. — are all relative to human experience in interacting with the environment. Meaning and truth are human constructions made and used in the course of everyday living. They are part of the energetic matrix of understanding and motivation in and through which we conduct our lives. In this way of thinking, it is taken as a given that human beings and other creatures evolved in a way that enables them to live meaningful lives in the earthly and social environments.

² Or, as in the case of the fearful woman discussed in chapter two, operating *dysfunctionally* to keep the individual stuck in an old perspective.

The postulation that both people *and animals* live meaningful lives suggests that meaning is functionally *prior* to communication; i.e., rather than meaning being a function of communication, communication is a function of meaning. *If this is true, then the basis for understanding meaning will be found not by examining verbal communication alone, but rather by examining the kind of meaningful, embodied engagement with the environment that we and other animals can accomplish without the involvement of communication.*³ Polanyi's theory of tacit knowing provides us with a theory of meaning so grounded in embodied engagement with the environment. In this theory, meaning arises when an event invokes the tacit, embodied integration of subsidiary particulars into a bearing on a meaningful focal whole, which determines the meaning of the subsidiary particulars. The invoking event, subsidiary particulars, and focal wholes may occur internally and/or externally to the individual who makes meaning. Meaning, then, is a creative process that knits together external and internal realms at the same time that it integrates parts toward a bearing on wholes. When viewed in this light, it can be seen that, rather than meaning being confined to the process of communication, the vast majority of meaning processes on the earth are not related to communication. Plants and animals, as well as people, perform meaningful integrations with their environment constantly, or they die.⁴

³ In this statement, I do not use the term "communication" in the richer sense that I have been, based on Dewey's "process of creating participation." Rather, I use it in the sense that it has come to have due to the influence of the conduit metaphor: "a process by which meanings are exchanged between individuals through a common system of symbols" (Merriam-Webster 168).

⁴ And even when living entities die, they become part of the meaningful integrations of other living entities.

Several objections might be made to the above point of view. It might be objected that I am simply conflating different senses of the word “meaning” or “meaningful”: being or having purport, intent, purpose, significance, denotation, or connotation. However, Polanyi’s schema of meaningful knowing makes it clear that, rather than being different in *kind*, these senses of “meaning” are different in *aspect*. Each of these glosses refers to a different aspect of the whole meaning process as described by Polanyi. Another objection may be that to place artistic or communicative meaning in the same class with such biological meanings as ingesting nutrients and respiring trivializes their value. To that objection, I would respond that it is simply a matter of perspective. To me, rather than trivializing artistic or communicative meaning, this perspective lifts the value of biological meaning to the level where it belongs.

In the human being, meaningful integrations occur in many different areas and on many different levels at the same time. Each higher level is invoked metonymically by lower levels, with the focal outcome of lower levels becoming subsidiary particulars integrated toward a bearing on the focal outcome of higher levels. In musical meaning, on the lowest level, the physical sound wave integrates with the listener’s neuro-biology and tacit cultural knowing toward a bearing on hearing PITCH, VOLUME, duration, timbre, consonance, dissonance, and location. These simpler percepts integrate with the culturally inflected embodied musical senses and other tacit knowing, such as a knowledge of the two musical event structure metaphors, toward a bearing on making sense of musical sound. Musical sound then integrates with the listener’s personal

experiential gestalts, including experience with the blended musical realm, toward a bearing on *living* the qualities and events embodied by the musical sound. At that point, not only does the musical sound give body to these qualities and events, the listener's body does, as well. The listener becomes the living medium for the music, resonating to and with it. If she understands the music as symbolic for an aesthetic or social reality that transcends herself, she will, while living the music, give life to that transcendent reality.

Just as "notes" and "music" exist *as notes and music* only in human experience, much of human reality — such as the social, political, educational, economic, aesthetic and religious — exists *as human reality* (not just physical reality) only in human experience. However, since these realities involve so many people acting in coordination, they seem to, and indeed *do* transcend the lives of individuals. We, as individuals, stand in co-creative relationship to each other and these transcendent realities. We perform these creative acts in part through the semiotic flow.

Semiosis is usually modeled geometrically, with the sign acting as a structural medium between some aspect of the inner world of the individual and some aspect of the outer world. Symbolic communication and third level musical communication in which the focal outcome involves the integration of the individual's sense of self with a transcendent reality suggest that, in addition to acting as a *structural* medium, signing acts as an ontological medium for an energetic, resonant level of communication to arise. In resonant communication an energetic meta-medium (analogous to the sound vibration

in physical resonance) becomes the medium (similar to a bacteriologist's nutritional medium) through which individuals and transcendent social realities co-create one another.⁵

Modeling signs as bridging structures emphasizes their nature as *mediators*. The logic of the bridge entails a clear separation between the individual's inner and outer worlds, which signs "bridge." Arising from this model is a persistent tendency to image human beings as always already separate from one another and from their semiotic environment. Even in our attempts to connect, mediation is right there, in front of us, getting in the way. While it is true that when communication fails, signs *do* seem to get in the way, when it succeeds, signs become either experientially transparent, as in the case of language, or extremely immediate, as in the case of music.

In contrast to the structural model, modeling signs as *ontological* media that give rise to the possibility of an energetic meta-medium does not create this same emphasis on mediation. For this purpose, the metaphor of RESONANCE serves well. As an energetic phenomenon based in material phenomena, the nature of resonance better matches that of the energetic level of communication. In addition, the logic and structure of resonance seem to better match that of the experience of successful communication. The resonating vibration unites all parts of the violin in a more immediate fashion than does the bridge. Following a similar structure and logic, the energetic meta-medium made

⁵ The similarity in function between the energetic meta-medium and the bacteriologist's nutritional medium, in which she *cultures* colonies of bacteria, suggests the semantic link between the bacteriological "culture" and the anthropological "culture."

possible by signs unites all parts of the semiotic situation in a fashion more experientially immediate than that entailed by the structural version of semiosis.

Above, I have summarized the *general* aspects of the theory of musical meaning developed in chapters one through three. This theory is grounded in my own experience and in the experience of other members of this musical culture, as it was available to me through their descriptions. My hope is that this dissertation and other publications based on it will test this theory against the experience of other members of this culture. This testing is one aspect of further research that might be accomplished. While this theory is grounded in experience with Western art music and other kinds of Western communicative media, I hypothesize that this *general* theory may apply to other kinds of communicative media in other cultures.

The general aspect of my theory pertains to the following theory of meaning, of which music is one kind: that an internal or external event invokes multi-leveled integration of subsidiary aspects of an individual's energetic (and or biological) matrix toward a focal whole that may or may not be available to the individual's awareness. This general theory involves both metonymic and metaphoric processes. Metonymy is involved when an external invoking event supplies only *part* of the subsidiary particulars integrated toward a whole. Metaphor becomes involved when the individual creating meaning integrates structure and logic understood from a more concrete situation toward a bearing on understanding the structure and logic of a more abstract situation.

My hypothesis is that these more general processes occur cross-culturally. This hypothesis remains to be tested.

GROUNDING METAPHORS

More distinct to specific cultures may be the exact metaphors metonymically invoked. In Western art music, these single metaphors relate to one another through two complex metaphors: 1) MUSICAL SOUND AS DISCRETE FIGURES MOVING THROUGH DIFFERENT MUSICAL LOCATIONS and 2) MUSICAL SOUND AS A FLOWING, FORCEFUL, MODULATING SUBSTANCE. These complex metaphors integrate the general of understanding of events in English (which is integrated from embodied experience in the world) with the sound wave toward a bearing on experiencing the music as eventful. Each of the musical event structure metaphors can be logically invoked metonymically from one of the two first level, culturally defined metaphors: PITCH or VOLUME. In addition, the two musical event structure metaphors can be conceptually integrated toward a bearing on a blended musical realm into which the listener can enter and be TRANSPORTED by the music, feeling its MOMENTUM and DIRECTION.

These metaphors *ground* Western art music in three ways: semiotically, bodily, and socially. As I discussed in chapter three, musical sounds are multivalent in that they can be integrated by human beings in many ways that might function semiotically. Any of these aspects of a sign may function *as* the sign; the aspect that functions semiotically is the *ground* of the sign. For example, depending on both their musical context and how they are produced, tones of faster and lower frequency can seem higher or lower,

narrower or broader, lighter or heavier, brighter or darker, or more tense or relaxed.

Any of these perceived qualities of tones might function semiotically. In general, in the culture of Western art music, tones of faster and lower frequency can seem to be *any* of the above. However, of these possibilities, we have chosen **PITCH** as primary, with the whole location **MESM** extending logically from it.⁶ Thus **PITCH** and the metaphors that extend logically from it ground semiotically our perception and understanding of Western art music. The same can be said about the other primary metaphor, **VOLUME**, and the complex substance **MESM** that it entails.

These metaphors ground our experience of Western art music in bodily experience in the world. We can experience this music in the way that we do only because we have had bodily experience in the world. If we were purely mental beings (like the “advanced” creatures that have been portrayed in science fiction fantasies) we could not experience this music in the way that we do. Like the idea of purely mental beings, the notion of the “purely musical” is a fantasy grounded in the objectivist portrayal of the world of communication and meaning. It may be true that musical events may sometimes direct the listener’s attention intramusically, but the sign’s ability to direct attention is grounded in the listener’s integration of the sound wave with aspects of herself learned through embodied experience in the world. As an aspect of the embodied human meaning process, “the musical” cannot be “pure.” Rather, since it is

⁶ If one of these other pairs, such as brightness/darkness were the primary metaphor, a totally different set of metaphoric entailments would arise. For instance, instead of being perceived as motion, frequency change would entail change of lightness.

one of the many aspects of the energetic matrix, it is intimately bound up with other kinds of meaningful integrations between the individual and her environment.

As we saw in chapter one, working from an objectivist point of view, Meyer discounts the importance in “the musical” of the participatory body, which he calls “anticipatory motor attitudes.” Rather than seeing anticipatory motor attitudes as primary to musical understanding, he sees them as secondary — their participation stemming from other, more primary mentally or visually-based kinds of interaction with the musical.

Anticipatory motor attitudes [...] are brought into play on the basis of: (a) information as to composer, style, or form which leads the listener to expect a repetition of past motor experience evoked by the particular type of work; (b) program notes or other statements as to tempo, volume, mode, mood, and so forth that supply information as to the appropriate motor attitude; and (c) visual clues provided by performers in the form of gestures and postures, which lead the listener to assume a like attitude... (79).

He gives no clue as to how these connections can be made in the first place, that is, how they are grounded. I have argued that they are grounded in bodily perception and understanding through the metaphoric system I have explored in this dissertation.

Finally, because musical meaning is grounded by a set of metaphors learned from and shared by enculturated group members, these metaphors serve to ground individual musical experience in group understanding. Musical experience is often portrayed to be extremely individual, as if one person’s experience of a piece is likely to differ wildly from another’s experience of the same piece. It *is* true that, on the third ontological level, individuals may elaborate the sense of the music in different ways. However, on

the second ontological level, they are perceiving the music with similar embodied musical senses and thereby sensing a similar complex of musically embodied image schemas. The image schemas involved are grounded semiotically in the metaphors, and thus these metaphors constrain the kind of musical sense that can be made of a particular piece. Even though someone else may hear that piece in a fashion that, *on the surface*, seems very different from my hearing, since the two hearings share image schematic involvement *under the surface*, I can almost always understand why the other person heard what they did. The learned metaphors ground our understandings socially, as well as semiotically and physically. We learn them as we interiorize our culture and they ground our experience in the semiotic system of the group. Thus grounded, our experience is always at least partially understandable to other members of the group.

One further major metaphor is involved in grounding this particular musical system: the metaphor of music as “expression,” which was occasionally used by the students at Curtis. The students did not use this in the same way that music theorists have: trying to better understand the mechanics of musical meaning through an analogy to linguistic meaning. Rather, they used it in a manner that rings truer to experience: trying to explain the expressive quality of playing music or the sense that one interpretation might be more *convincing* than another. Of all the students that I spoke with, Reza Jacobs used this metaphor most explicitly. He likened a musician interpreting the musical notation to an actor interpreting the words of the play, pointing especially to the way that each actor will mold the same words to their own personal inflections.

R: I ask myself, now, "How is Reza going to *say* this? How do I want to say this musical phrase." Because that's, that was like a revelation for me, you know? How would I say this for it to make sense for me? Because when I speak, when I'm speaking to you now, I'm using my own pauses, my own syntax, my own grammar, my own inflection. And it makes sense for me. But I could easily write these words down on a piece of paper and give them to someone else. And then they'd have to make those words make sense for them. They wouldn't give exactly the same inflection and the same timing that I would. So that's exactly how I, they're like words and I have to make them make sense for me.

D: Uh huh. And when you're playing, do you have a sense that, that same sense of saying something?

R: Yes, now more than before. Because I'm aware of it now. And although I think I did it before, unconsciously, but now somehow it's clear in my mind.

In my own musical education, I did not learn this idea as "saying" something with the music, but rather as the sense that I was "singing" the music instead of playing it on the flute. Imagining that I "sang" rather than "played" helped me to attend *past* any technical problems involved in producing notes to the "music" in those "notes."

In the process of interpreting music, this sense that you are expressing while playing, or hearing expression while listening, relates to those aspects of music most similar to spoken language, the aspects of language referred to by the term "paralanguage." Paralanguage includes such aspects of speech as variations in intonation, stress, vocal timbre, rhythm and quality of articulation. These are the aspects of speech that vary most greatly in different emotional contexts; they carry a great deal of information about the emotional state of the speaker. These are also the aspects of speech that, unlike words and informational content, *do* occur in music. Just as emotion in spoken language may be conveyed by intonation, stress, timbre, rhythm and

articulation, emotion in music may be conveyed by intonation, stress, timbre, rhythm and articulation. For example, just as a feeling of aggression might be heard in words that are forcefully articulated at a fast tempo with a tense timbre, a feeling of aggression might be heard in music that embodies these same qualities. Just as a person hearing language integrates these qualities toward a bearing on feeling aggression in the speaker, a person listening to music integrates these qualities toward a bearing on feeling aggression in the music.

This link with paralinguage suggests that MUSIC AS EXPRESSION is not really a metaphor. Music simply uses the same qualities involved in the expressive aspects of language, shaping them in a heightened and artistic fashion. We do not “map” expressiveness from language to music or integrate the more concrete expressive structure and logic from language to the more abstract musical situation. Paralinguage and its musical counterparts are equally concrete. Rather than a metaphoric relationship, the expressive functions of music and language relate to one another through being specific instances of general aspects of human expressiveness. These same qualities can be expressed in different media, through the body in dance and costume, through narrative structure in film and literature, or through visual means in painting and photography.

This general expressive function might ground music cross-culturally *to some degree*. To a reasonable extent, and probably dependent on historical cultural connections, I can get a sense of the emotions conveyed in a language I do not

understand through paralinguistic cues. *To the extent that a musical system elaborates paralinguistic cues similar to those I embody in my paralinguistic sense*, I might be able to understand its emotional cues. However, this hypothesis remains to be tested.

The point here is that, along with the metaphors discussed in detail in chapters four and five, music's expressive function grounds it semiotically, bodily and socially. The metaphors discussed in chapters four and five direct our attention mainly to the *stuff* of music. The expressive function directs our attention to the way that that stuff is used expressively. Not only do notes of particular heights function semiotically, the way that those notes are articulated, their rhythm, stress and timbre function semiotically, as well. Not only do we perceive note height bodily, we perceive expressive functions bodily, as well, through bodies well experienced in personal expression. And as individuals formed by interaction with other individuals, our expression is ground in embodied, socially inflected experience interacting meaningfully with the environment.

CONCLUSION

In this dissertation, I have explored the question of musical meaning, a question that has become increasingly urgent in recent years. Academic music discourse, like that of other humanities and social science disciplines, has been undergoing a re-orientation of focus from "knowledge" to "meaning." Such theoretical constructs as "hegemony" and the "cultural imaginary" re-situate aesthetic processes from the margins of social life

to its center.⁷ “No longer mere fantasy..., simple escape..., elite pastime..., [or] mere contemplation..., the imagination has become an organized field of social practices, a form of work..., and a form of negotiation between sites of agency (individuals) and globally defined fields of possibility” (Appadurai 1996, 31). We are beginning to realize that, far from being inconsequential entertainment, aesthetic processes play an important role in the construction of aspects of social reality like gender and ethnic identity.

Ethnomusicology and related disciplines (such as folklore and performance studies) focus on how social meaning is created and maintained through the musical experience of the individual. We recognize that performers not only perform a “text,” they also perform such social meanings as identity or life possibilities (e.g., modeling aspirations that viewers may adopt). We now know that the power of performance extends beyond the text and performance arena into the daily lives of participants.

However, although we may recognize that social meaning is created in the musical experience of the individual, in attending primarily to the *social* aspects of meaning, we have not yet properly theorized “the musical experience of the individual.” That experience is one of *meaning*, a meaning that resonates through the whole body, often out of the reach of words. It is a meaning that connects the individual to social realities that dwell both in her and beyond her individual existence. Although we recognize that the meaning of performance extends beyond the text, we still often model imaginative meaning as “text,” as in “*scripts* for possible lives” (Appadurai 1996, 3).

⁷ For more on the relationship of imagination to social reality, see Becker and Yengoyan 1979, Caughey 1984, and Anderson 1991.

Rather than taking the bodily resonance of imaginative meaning into account, as well as the participation of the body in imagination, we continue to model imagining as the action of a mental site for representation — a mental “staging ground for action” (*ibid* 7).⁸ A theory of resonant meaning addresses these gaps.

Although empirical evidence has demonstrated clearly to scholars that imaginative processes play an important role in constructing social reality, the people of our society, in general, still do not understand their importance. Viewed through dominant (tacit) theories of imagination (as discussed in chapter two), a theoretical split necessarily arises between everyday reality and imagination: social realities become the currency of everyday living, while aesthetic processes become disconnected from mundane life, located in a liminal realm. Thus, our society sees the imagination as a realm we escape to from time to time, but that has no particular potency in the mundane world. While social realities like gender and race are known to be quite real, with concrete consequences for our lives, imaginary reality is seen as more unreal than real, with few concrete lived consequences. At most, the imaginary is a reality to be mentally “tried on,” but shed and left behind in the performance arena. Because mentally healthy people know the difference between “the real” and “the imaginary,” the power of the

⁸ Ethnomusicology, folklore and performance studies are not monolithic in nature, but rather are fields made up of individuals diverse in both their thinking and the theories they draw on. It is impossible to represent that diversity here. I choose Appadurai to represent my understanding of the general state of theorizing about imagination for several reasons. At the time of this writing, his thinking is influential; at the 2000 conference of the Society for Ethnomusicology he delivered the Charles Seeger Lecture — an honor bestowed only on well-esteemed scholars. In addition, the theme of his recent, well-received book, *Modernity at Large*, is the way that imaginative processes construct social reality in a global setting. Although my field of “hearing” is necessarily partial, I have heard no outcry against his underlying theory of imagination from any of the fields that might draw on him. This suggests that it is currently acceptable, though perhaps, in its tacitness, unexamined.

imaginary disappears when the movie theater is behind us, or the CD player, television or video game is turned off. This tacit theoretical vision forces imaginative power into a ghetto outside the boundaries of our “real” lives. It may be a pretty ghetto, but it is a ghetto nonetheless — a ghetto whose boundaries prevent its inherent power from escaping from the margins of society to its center.

As scholars, it is our job to effect the positive social good of guiding society to a clearer understanding of the power and importance of imaginative processes. Up until this point, we have had no explicit theory of imagination sufficient to the task of helping us to do so. As I have argued in this dissertation, a theory of resonant meaning allows us to explicitly take the imaginary out of its ghetto and locate it theoretically in our everyday lives, where it has been operating all along. Polanyi’s structure of tacit knowing enables an understanding of imagining not only as a mental faculty at play in special, liminal realms, but also as a whole-bodied faculty that evolved through daily interaction with the environment for the purpose of successful adaptation. This vision of imagining makes clear its creative role in perception, which is also viewed as whole-bodied, a faculty of alertness, awareness and attention. Especially in respect to living in a social world, “how we imagine the world to be” in a tacit, embodied fashion influences how we perceive the world through culturally inflected, embodied senses such as the senses of humor, modesty, honor, etc. Through perceiving the social world in a particular manner and behaving as if it *is* that way, we can actually *create* the very conditions we imagine.

That we create reality through imagining suggests a “reality” different in nature from our culturally defined “really real.” Our usual version of “the really real” is modeled on the objectivist epistemology: reality as solid objects that can be seen, manipulated and measured. This is a reality whose philosophical bases are vision and touch — modeled after seeing and touching objects that, though they may fade in time as does a rose or may have a fleeting temporal presence as does flowing water, are relatively atemporal in their solidity. We can *see* these objects and prove their existence through having seen them, touched them, and measured them. This reality is at a distance from us, just as objects must be at a certain distance for us to see or manipulate them. It is not an internal reality, but the external reality of “cold, hard fact” that would continue to exist even if we did not. This reality corresponds roughly to Peirce’s “Secondness” — the being of actual fact — of specific instances of living beings, events or objects.⁹ In this kind of reality the “imaginary,” such as an imaginary friend, becomes *opposed* to “reality,” thereby taking on the role of “the unreal.” We cannot see or touch the imaginary friend, therefore she is unreal.

If, rather than sight and touch, our idea of reality stems from hearing and kinesthesia (by which I mean the feeling of the lived body), a different version of reality emerges. This is a more immediate reality, one that does not occur at a distance but as experientially unmediated, just as we experience hearing and kinesthesia more

⁹ I say that the correspondence is a rough one because events, such as the event of having a thought or a feeling, can seem very immaterial though they have a material basis. And indeed, having a thought or feeling cannot be reduced to their material bases.

immediately than we do seeing and touching with the hands.¹⁰ Unlike the material reality described above, this reality does not exist outside human experience of it — it is a matter of human interaction with the world and would cease to exist if human beings did.¹¹ Traces of it exist in the material environment, just as sound waves exist physically, but this kind of reality exists, *as itself*, only in human experience, just as music exists *as music* only in human experience. Based in material reality, this reality requires the organized energy of a human being to actually exist. It is an energetic reality that dwells in and through us at the same time that we dwell in and through it. The stuff of this reality is not material, but energetic pattern — subsidiary particulars integrated by an individual in a meaningful way toward some larger whole. This stuff is not solid and atemporal, but exists in the flux of temporality — highly changeable as the individual interacts with and adapts to her environment. In its own way, this reality is just as real as the “objective” reality described above. In certain ways, this reality can *seem* more real than the material objective reality, as is true in the case of hearing, where the lived reality (actual hearing) takes complete precedence over the material reality (neuro-biological transduction of sound waves).

This reality corresponds to Peirce’s Firstness (qualitative possibility) and Thirdness (predictive possibility). Qualitative and predictive possibilities do not exist *as*

¹⁰ It may be obvious to a listener that a sound source is at a distance, but the experience of actually hearing seems more immediate than does seeing. For more on the spatialization of sound, see Feld 1982, Stoller 1989, and Roseman 1991.

¹¹ To be more exact, this kind of reality can also exist in the experience of animals.

possibilities outside human experience of them.¹² I may have an awareness of the possible quality of balance and the predictive possibility that in building a house of cards, certain combinations will be balanced and other will not. Outside my experience, in the material world, exist cards, gravity and surfaces upon which a house of cards may be built. From my embodied experience, I bring to the situation a sense of balance and from that a predictive sense of what combination of cards will produce a balanced structure. These two realities interact in the process of building the house of cards. My sense of balance and predictive feeling for the situation are no less real in their own way than the cards, gravity or surface are materially real. The results of the building session will exist not only in the material world, as whatever structure I create, but also in the energetic world, as I integrate this particular experience with cards toward a bearing on my general sense of balance.

Corresponding to Peirce's predictive possibility (Thirdness) is Polanyi's definition of reality. He places reality on a continuum from specific instances (Peirce's Secondness) to predictive possibilities, with predictive possibilities being "more real" than the specific instances that integrate toward a bearing on those predictive possibilities. He illustrates with the process of coming to know a person:

[A]s we move to a deeper, more comprehensive, understanding of a human being, we tend to pass from more tangible particulars to increasingly intangible entities: to entities which are (partly for this reason) more real: more real, that is, in terms of my definition of reality, as likely to show up in a wider range of indefinite future manifestations (168).

¹² Again, animals also exist in and through these kinds of possibilities as well as do people.

In Polanyi's way of thinking, the existence of the general concept of "dog" as a predictive possibility operative amongst a group of English speakers is *more* real than an actual dog. I would not say that it is *more* real; rather that it is real in a different way. Both of these kinds of reality — material and energetic — are necessary for life on this planet and exist in synergistic relationship.

To return to the initial concern of this conclusion, although the "imaginary" is clearly "unreal" when seen from the point of view of material reality, it can clearly be "real" in energetic reality.¹³ For the fearful acquaintance discussed in chapter two who imagined me to be threatening, I *was* really threatening. Her *general concept* of the world as threatening, her *reality* of the world as threatening was so strong that it skewed the evidence in specific instances to conform to itself. I have no doubt that this woman truly felt me to be a threat. To a little girl who has an imaginary friend, in certain ways, that friend functions just as a materially real friend might function. She may *feel* just as real as a real friend. In an energetic way, she *is* just as real.

Social realities are energetic in nature. Given the latent hegemony of objectivism in our thinking, we tend to project social realities outside ourselves, reifying them in the process. We nominalize them into objects: gender, race, education, politics, economy, social class, age, religion, etc. As objectified realities that exist outside ourselves, we have little "real" responsibility for them. To be sure, these realities have some material

¹³ Bateson (1972) presents the paradox of the real unreal clearly with the following diagram:

All statements within this frame are untrue

basis: bodily structures, skin colors, buildings, papers, and so on. However, in their most *powerful* form for human beings they are, rather, energetic — *a matter of qualitative and predictive possibilities diachronically integrated and synchronically instantiated*. Just as my sense of balance guides my behavior in building a house of cards, my general sense of particular social identities — gender, race, age, social class — guides my behavior when I interact with specific people who embody them. As culturally inflected senses of qualitative and predictive possibility, these social realities dwell in and through us as we dwell in and through them. The way we *imagine* the possibilities creates the sense of the way things are, while the sense of the way things are can create how things come to be in material reality.

This view of imagination and its link to material, lived reality suggests its very real power. Societies that have existed or do now exist in which the objectivist point of view is not hegemonic easily recognize this power. In these societies, the power of the individuals responsible for imaginative technologies has been acknowledged through position — a position associated with the gods, such as a priest or shaman, or with kings, such as the court jester — or through fear, by forcing players and singers to the margins of society, inviting them to the center only for specific rites and occasions in which their power is deemed useful. In contrast, in our society, objectivism holds sway, leading us to label the imaginary as “unreal,” “trivial,” and “mere entertainment.” As a society, we are bewitched by a dazzling array of imaginative technologies, but unaware of their power to create. In *energetic* reality, decisions about what and how we imagine

as individuals resonate throughout the entire social reality, because *we are* that social reality — it lives in and through us. As scholars — *social leaders charged with shaping the way the people of our society imagine their world to be* — we should make the power of performance explicitly and exquisitely clear.

BIBLIOGRAPHY

- Addis, Laird. 1999. *Of Mind and Music*. Ithaca: Cornell University Press.
- Aldwell, Edward and Carl Schachter. 1989. *Harmony and Voice Leading*, second edition. Fort Worth: Harcourt Brace Jovanovich.
- Anderson, Benedict. 1991 [1983]. *Imagined Communities: Reflections on the Origin and Spread of Nationalism*. London: Verso.
- Appadurai, Arjun. 1996. *Modernity at Large: Cultural Dimensions of Globalization*. Minneapolis: University of Minnesota Press.
- Auerbach, Susan. 1989. From Singing to Lamenting: Women's Musical Role in a Greek Village. In *Women and Music in Cross-Cultural Perspective*, 25-43. Urbana: University of Illinois Press.
- Austin, J.L. 1962. *How to Do Things with Words*. Oxford: Oxford University Press.
- Bamberger, Jean. 1991. *The Mind behind the Musical Ear: How Children Develop Musical Intelligence*. Cambridge: Harvard University Press.
- Baron-Cohen, Simon and John Harrison, eds. 1997. *Synesthesia: Classic and Contemporary Readings*. Oxford: Blackwell.
- Basso, Ellen. 1989. Musical Expression and Gender Identity in the Myth and Ritual of the Kalapalo of Central Brazil. In *Women and Music in Cross-cultural Perspective*, 163-176. New York: Greenwood.
- Bateson, Gregory. 1972. A Theory of Play and Fantasy. In *Steps to an Ecology of Mind*, 177-93. New York: Ballantine Books.
- Bauman, Richard. 1984. *Verbal Art as Performance*. Prospect Heights, IL: Waveland Press.
- _____. 1989. Performance. In *International Encyclopedia of Communications*, 3:262-66. E. Barnouw, ed. Oxford: Oxford University Press.
- Bauman, Richard and Charles Briggs. 1990. Poetics and Performance as Critical Perspectives on Language and Social Life. *Annual Review of Anthropology* 19:59-88.

- Becker, A.L. and Aram Yengoyan. 1979. *The Imagination of Reality: Essays in Southeast Asian Coherence Systems*. Norwood, NJ: Ablex Publishing Corp.
- Beckler, Stanworth. 1981. Comment on Marion Guck, "Musical Images as Musical Thoughts: the Contribution of Metaphor to Analysis." *In Theory Only* 5/8:9-11.
- Benford, Gregory A. 1989. Force. In *The World Book Encyclopedia*. Chicago: World Book, Inc.
- Bolinger, Dwight. 1986. *Intonation and its Parts: Melody in Spoken English*. Stanford: Stanford University Press.
- _____. 1989. *Intonation and its Uses: Melody in Grammar and Discourse*. Stanford: Stanford University Press.
- Bourdieu, Pierre. 1977. *Outline of a Theory of Practice*. Trans. R. Nice. Cambridge: Cambridge University Press.
- Briggs, Charles. 1988. *Competence in Performance: The Creativity of Tradition in Mexicano Verbal Art*. Philadelphia: University of Pennsylvania Press.
- _____. 1992. "Since I am A Woman, I Will Chastise My Relatives": Gender Reported Speech and the Reproduction of Social Relations in Warao Ritual Wailing. *American Ethnologist* 19:337-361.
- _____. 1994. The Sting of the Ray: Bodies, Agency, and Grammar in Warao Curing. *Journal of American Folklore* 107:139-166
- _____. 1996. The Meaning of Nonsense, the Poetics of Embodiment, and the Production of Power in Warao Healing. In *The Performance of Healing*, 185-232. Carol Laderman and Marina Roseman, eds. New York: Routledge.
- Brinton, Laurel. 1988. *The Development of English Aspectual Systems: Aspectualizers and Post Verbal Particles*. Cambridge: Cambridge University Press.
- Brugman, Claudia. 1990. What is the Invariance Hypothesis? *Cognitive Linguistics* 1(2):257-266.
- Buchler, Justus. 1940. *The Philosophy of Peirce: Selected Writings*. London: Kegan Paul, Trench, Trubner & Co. Ltd.
- Caughey, John. 1984. *Imaginary Social Worlds: A Cultural Approach*. Lincoln: University of Nebraska Press.

- Chernoff, John Miller. 1979. *African Rhythm and African Sensibility: Aesthetics and Social Action in African Musical Idioms*. Chicago: University of Chicago Press.
- Clifford, James, and George Marcus. 1986. *Writing Culture: The Poetics and Politics of Ethnography*. Berkeley: University of California Press.
- Cooke, Deryck. 1987 [1959]. Excerpts from *The Language of Music*. In *Contemplating Music: Source Readings in Musical Aesthetics*, 179-280. Carl Dalhaus and Ruth Katz, eds. Stuyvesant, N.Y.: Pendragon Press.
- Cowan, Jane. 1990. Dancing Sings: Deciphering the Body in Wedding Celebrations. In *Dance and the Body Politic in Northern Greece*, 89-133. Princeton, Princeton University Press.
- Cox, Arne. 1999. *The Metaphoric Logic of Musical Motion and Space*. Ph.D. dissertation, University of Oregon.
- Crystal, David. 1985. *A Dictionary of Linguistics and Phonetics*. Cambridge, MA: Basil Blackwell, Inc.
- Csikszentmihalyi, Mihaly. 1982. Toward a Psychology of Optimal Experience. In *Review of Personality and Social Psychology*, 13-36. Beverly Hills: Sage Publications.
- Csordas, Thomas. 1989. Embodiment as a Paradigm for Anthropology. *Ethos* 18(1):5-47.
- _____. 1993. Somatic Modes of Attention. *Cultural Anthropology* 8(2):135-156.
- _____. 1994a. Introduction: The Body as Representation and Being-in-the-World. In *Embodiment and Experience: The Existential Ground of Culture and Self*, 1-24. Cambridge: Cambridge University Press.
- _____, ed. 1994b. *Embodiment and Experience: The Existential Ground of Culture and Self*. Cambridge: Cambridge University Press.
- _____. 1994c. *The Sacred Self: A Cultural Phenomenology of Charismatic Healing*. Berkeley: University of California Press.
- _____. 1996. Imaginal Performance and Memory in Ritual Healing. In *The Performance of Healing*. Carol Laderman and Marina Roseman, eds. New York: Routledge.

- Deikman, Arthur. 1982. *The Observing Self: Mysticism and Psychotherapy*. Boston: Beacon Press.
- den Otter, Elisabeth. 1985. *Music and Dance of Indians and Mestizos in an Andean Valley of Peru*. *Eburon Delft.
- Densmore, Frances. 1922. *Northern Ute Music*. Smithsonian Institution Bureau of American Ethnology, Bulletin 75. Washington: Government Printing Office.
- Desjarlais, Robert. 1996. Presence. In *The Performance of Healing*, 143-164. Carol Laderman and Marina Roseman, eds. New York: Routledge.
- Dewey, John. 1934. *Art As Experience*. NY: Minton, Balch & Company.
- Dirven, René. 1999. Conversion as a Conceptual Metonymy of Event Schemata. In *Metonymy in Language and Thought*, 275-287. K.U. Panther and G. Radden, eds. Philadelphia: John Benjamins Publishing Co.
- Dura, Marian Theresa. 1998. *The Kinesthetic Dimension of the Music Listening Experience*. Ph.D. dissertation. Northwestern University.
- Epstein, Mark. 1998. *Going to Pieces Without Falling Apart: A Buddhist Perspective on Wholeness*. New York: Basic Books.
- _____. 1995. *Thoughts Without a Thinker*. New York: Basic Books.
- Farnell, B. 1999. Moving Bodies, Acting Selves. *Annual Review of Anthropology* 28:341-73.
- Fauconnier, Gilles. 1985. *Mental Spaces: Aspects of Meaning Construction in Natural Language*. Cambridge, MA: MIT Press.
- _____. 1997. *Mappings in Thought and Language*. Cambridge: Cambridge University Press.
- Fauconnier, Gilles, and Mark Turner. 1996. Blending as a Central Process of Grammar. In *Conceptual Structure, Discourse, and Language*. Ed., A. Goldberg. Stanford: CSLI/Cambridge.
- _____. 1998. Principles of Conceptual Integration. In *Discourse and Cognition: Bridging the Gap*. Ed., J.P. Koenig. Stanford: CSLI/Cambridge.

- _____. 1999. Metonymy and Conceptual Integration. In *Metonymy in Language and Thought*, 77-90. K.U. Panther and G. Radden, eds. Philadelphia: John Benjamins Publishing Co.
- Feld, Steven. 1981. "Flow Like a Waterfall": The Metaphors of Kahuli Musical Theory. *Yearbook for Traditional Music* 13:22-47.
- Feld, Steven. 1990 [1982]. *Sound and Sentiment: Birds, Weeping, Poetics and Song In Kaluli Expression*. Second edition. Philadelphia, University of Pennsylvania Press.
- Ferguson, David. 1960. *Music as Metaphor: The Elements of Expression*. Minneapolis: University of Minnesota Press.
- Fernandez, James. 1988. Isn't There Anything Out There We Can All Believe In? The Quest for Cultural Consensus in Anthropology and History. Paper presented at the Institute for Advanced Study School of Social Science, Princeton.
- Gadamer, Hans-Georg. 1982. The Ontology of the Work of Art and its Hermeneutical Significance: Play as the Clue to Ontological Explanation. In *Truth and Method*. New York: Crossroads.
- Geertz, Clifford. 1973. *The Interpretation of Cultures*. New York: Basic Books
- Gibbs, Raymond Jr. 1989. Understanding and Literal Meaning. *Cognitive Science* 13:243-251.
- _____. 1992. Categorization and Metaphor Understanding. *Psychological Review* 99(3):572-577.
- _____. 1999. Speaking and Thinking with Metonymy. In *Metonymy in Language and Thought*, 61-76. K.U. Panther and G. Radden, eds. Philadelphia: John Benjamins Publishing Co.
- Giorgi, Amedeo. 1994. A Phenomenological Perspective on Certain Qualitative Research Methods. *Journal of Phenomenological Psychology* 25:190-220.
- Glickman, Eugene. 1983. Tonality and Gravity. *Current Musicology* 36:113-24.
- Goffman, Erving. 1974. *Frame Analysis: An Essay on the Organization of Experience*. New York: Harper and Row.

- Guck, Marion. 1981a. Musical Images as Musical Thoughts: the Contribution of Metaphor to Analysis. *In Theory Only* 5/5:29-42.
- _____. 1981b. *Metaphors in Musical Discourse: The Contribution of Imagery to Analysis*. Ph.D. dissertation. Music: University of Michigan.
- Handel, Stephen. 1989. *Listening: An Introduction to the Perception of Auditory Events*. Cambridge, MA: MIT Press.
- Hansen, Forest. 1974. Ferguson's Dissonant Expressionism. *Journal of Aesthetics and Art Criticism* 32/3:343-56.
- Hanslick, Eduard. 1957 [1854]. *The Beautiful in Music*. Gustav Cohen, tr. Morris Weitz, ed. New York: The Liberal Arts Press.
- _____. 1986 [1854]. Excerpts from *The Beautiful in Music*. In *Musical Aesthetics: A Historical Reader*, 265-307. Edward Lippman, ed. Gustav Cohen, tr. Stuyvesant, N. Y.: Pendragon Press.
- Hasty, Christopher. 1997. *Meter as Rhythm*. Oxford: Oxford University Press.
- Hively, Will. 1998. The Incredible Shrinking Finger Factory. *Discover* 19(3):84-93.
- Howes, D. ed. 1991. *Varieties of Sensory Experience: A Sourcebook in the Anthropology of the Senses*. Toronto: Toronto University Press.
- Huizinga, J. 1955. *Homo Ludens: A Study of the Play Element in Culture*. Boston: Beacon.
- Hymes, Dell. 1975. Breakthrough into Performance. In *Folklore: Performance and Communication*, 11-74. Dan Ben-Amos and Kenneth S. Goldstein, eds. The Hague: Mouton.
- Iyer, Vijay. 1998. *Microstructures of Feel, Macrostructures of Sound: Embodied Cognition in West African and African-American Musics*. Ph.D. Dissertation, University of California, Berkeley.
- Johnson, Mark. 1987. *The Body in the Mind: The Bodily Basis of Meaning, Imagination, and Reason*. Chicago: University of Chicago Press.
- Jones, Mostyn. 1995. Inadequacies in Current Theories of Imagination. *The Southern Journal of Philosophy* 33:313-333.

- Kapchan, Deborah. 1994. Moroccan Female Performers Defining the Social Body. *Journal of American Folklore* 107:82-105.
- _____. 1995. Performance. *Journal of American Folklore* 108:479-508.
- _____. 1996. *Gender on the Market: Moroccan Women and the Revoicing of Tradition*. Philadelphia: University of Pennsylvania Press.
- Keil, Charles. 1979. *Tiv Song*. Chicago: University of Chicago Press.
- _____. 1994 [1966]. Motion and Feeling through Music. In *Music Grooves*, 53-76. Chicago: University of Chicago Press.
- Kelso, J.A. Scott. 1995. *Dynamic Patterns*. Cambridge, MA: Bradford Books/MIT Press.
- Kendon, A. 1997. Gesture. *Annual Review of Anthropology* 26:109-28.
- Kingsbury, Henry. 1988. *Music, Talent and Performance: A Conservatory Cultural System*. Philadelphia: Temple University Press.
- Koskoff, Ellen. 1989. The Sound of a Woman's Voice: Gender and Music in a New York Hasidic Community. In *Women and Music in Cross-Cultural Perspective*, 213-223. Urbana: University of Illinois Press.
- Kövecses, Zoltán. 1986. *Metaphors of Anger, Pride, and Love: A Lexical Approach to the Structure of Concepts*. Philadelphia: John Benjamins Publishing Co.
- _____. 1990. *Emotion Concepts*. New York: Springer-Verlag.
- _____. 1991. Happiness: A Definitional Effort. *Metaphor and Symbolic Activity* 6(1):29-46.
- Krantz, Steven. 1987. *Metaphor in Music*. *Journal of Aesthetics and Art Criticism* 45:351-60
- Lakoff, George. 1986. The Meanings of Literal. *Metaphor and Symbolic Activity* 1(4):291-296.
- _____. 1987. *Women, Fire, and Dangerous Things*. Chicago: Chicago University Press.

- _____. 1988. Cognitive Semantics. In *Meaning and Mental Representations*, 119-154. Eds. Umberto Eco, Marco Santambrogio, Patrizia Violi. Bloomington: Indiana University Press.
- _____. 1990. The Invariance Hypothesis: Is Abstract Reason Based on Image-Schemas? *Cognitive Linguistics* 1(1):39-74.
- _____. 1993. Contemporary Theory of Metaphor. In *Metaphor and Thought*, 202-251. Ed., Andrew Ortony. Second edition. Cambridge: Cambridge University Press.
- _____. 1994. What is a Conceptual System? In *The Nature and Ontogenesis of Meaning*, 41-88. eds. Willis F. Overton and David S. Palermo. Hillsdale, NJ: Lawrence Erlbaum Assoc., Inc.
- _____. 1996. Sorry, I'm Not Myself Today: The Metaphor System for Conceptualizing the Self. In *Spaces, Worlds, and Grammar*, 91-123. G. Fauconnier and E. Sweetser, eds. Chicago: University of Chicago Press.
- Lakoff, George and Mark Johnson. 1980. *Metaphors We Live By*. Chicago: University of Chicago Press.
- _____. 1999. *Philosophy in the Flesh*. NY: Basic Books.
- Lakoff, George and Mark Turner. 1989. *More than Cool Reason: A Field Guide to Poetic Metaphor*. Chicago: University of Chicago Press.
- Langacker, Ronald. 1990. *Concept, Image, and Symbol: The Cognitive Basis of Grammar*. Berlin: Mouton de Gruyter.
- Langer, Susanne. 1987 [1942]. Excerpts from *Philosophy in a New Key*. In *Contemplating Music: Source Readings in Musical Aesthetics*, 637-676. Carl Dalhaus and Ruth Katz, eds. Stuyvesant, N.Y.: Pendragon Press.
- Lewis, George. 1988. The Politics of Meaning: Emergent Ideology in Popular Hawaiian Music. *Tracking: Popular Music Studies* 11(2):23-33.
- Lewis, J. Lowell. 1995. Genre and Embodiment: From Brazilian *Capoeira* to the Ethnology of Human Movement. *Cultural Anthropology* 10(2):221-243.
- Lindsay, Jennifer. 1979. *Javanese Gamelan*. Oxford: Oxford University Press.

- Liszka, James. 1996. *A General Introduction to the Semeiotic of Charles Sanders Peirce*. Bloomington: Indiana University Press.
- Lochhead, Judy. 1989/90. The Metaphor of Musical Motion: Is There an Alternative? *Theory and Practice* 14/15: 83-103.
- Lock, Margaret. 1993. Cultivating the Body: Anthropology and Epistemologies of Bodily Practice and Knowledge. *Annual Review of Anthropology* 22:133-55.
- Lucy, John. 1996. The Scope of Linguistic Relativity: An Analysis and Review of Empirical Research. In *Rethinking Linguistic Relativity*, 37-69. J. Gumperz, ed. Cambridge: Cambridge University Press.
- _____. 1997. Linguistic Relativity. *Annual Review of Anthropology* 26:291-312.
- Lyon, M.L. and J.M. Barbalet. 1994. Society's Body: Emotion and the "Somatization" of Social Theory. In *Embodiment and Experience: The Existential Ground of Culture and Self*, 48-66. Cambridge: Cambridge University Press.
- Marcus, George and Michael Fischer. 1986. *Anthropology as Cultural Critique: An Experimental Moment in the Human Sciences*. Chicago: University of Chicago Press.
- Mason, Michael. 1994. "I Bow My Head to the Ground": The Creation of Bodily Experience in a Cuban American *Santería* Initiation. *Journal of American Folklore* 107:23-39.
- Mendoza-Walker, Zoila. 1994. Contesting Identities Through Dance: Mestizo Performance in the Southern Andes of Peru. *Repercussions* 3(2):50-80.
- Merriam, Alan. 1967. *Ethnomusicology of the Flathead Indians*. Chicago: Aldine Publishing Company.
- Merriam-Webster. 1969. *Webster's Seventh New Collegiate Dictionary*. Springfield, MA: G. & C. Merriam Co.
- Meyer, Leonard. 1956. *Emotion and Meaning in Music*. Chicago: University of Chicago Press.
- Moulin, Jane Freeman. 1994. Chants of Power: Countering Hegemony in the Marquesas Islands. *Yearbook for Traditional Music* 26:1-19.

- Moyle, Richard. 1988. *Traditional Samoan Music*. Auckland: Auckland University Press.
- Narmour, Eugene. 1990. *The Analysis and Cognition of Basic Melodic Structures*. Chicago: University of Chicago Press.
- _____. 1992. *The Analysis and Cognition of Melodic Complexity*. Chicago: University of Chicago Press.
- Ness, Sally Ann. 1992. *Body, Movement and Culture: Kinesthetic and Visual Symbolism in a Philippine community*. Philadelphia: University of Pennsylvania Press.
- Nettl, Bruno. 1954. *North American Indian Musical Styles*. Philadelphia: American Folklore Society.
- _____. 1995. *Heartland Excursions: Ethnomusicological Reflections on Schools of Music*. Urbana: University of Illinois Press.
- Neustadt, Kathy. 1994. The Folkloristics of Licking. *Journal of American Folklore* 107:181-196.
- Noyes, Dorothy. 1993. Contesting the Body Politic: The Patum of Berga. In *Bodylore*, 134-161. Katharine Young, ed. Publications of the American Folklore Society. Knoxville: University of Tennessee Press.
- Ogden, Charles, A., Ivor A. Richards. 1923. *The Meaning of Meaning: A Study on the Influence of Language upon Thought and of the Science of Symbolism*. London: Routledge and Kegan Paul.
- Ortner, Sherry. 1984. Theory in Anthropology Since the Sixties. *Comparative Studies in Society and History* 22(2)126-66.
- Polanyi, Michael. 1969. *Knowing and Being*. Chicago: University of Chicago Press.
- Polanyi, Michael and Harry Prosch. 1975. *Meaning*. Chicago: University of Chicago Press.
- Radden, Günter and Zoltán Kövecses, eds. 1999a. *Metonymy in Language and Thought*. Philadelphia: John Benjamins Publishing Co.
- _____. 1999b. Towards a Theory of Metonymy. In *Metonymy in Language and Thought*, 17-59. K.U. Panther and G. Radden, eds. Philadelphia: John Benjamins Publishing Co.

Rappaport, Roy, 1992. Ritual. In *Folklore, Cultural Performances, and Popular Entertainments*. Richard Bauman, ed. New York: Oxford University Press.

Reddy, Michael. 1993 [1979]. The Conduit Metaphor — A Case of Frame Conflict in our Language about Language. In *Metaphor and Thought*, 164-201. Andrew Ortony, ed. Cambridge: Cambridge University Press.

Reed, Susan. 1998. The Politics and Poetics of Dance. *Annual Review of Anthropology* 27:503-32.

Roseman, Marina. 1989. Inversion and Conjuncture: Male and Female Performance among the Temiar of Peninsular Malaysia. In *Women and Music in Cross-Cultural Perspective*, 131-149. Urbana: University of Illinois Press.

_____. 1991. *Healing Sounds from the Malaysian Rainforest*. Berkeley: University of California Press.

_____. 1996. "Pure Products Go Crazy": Rainforest Healing in a Nation-state. In *The Performance of Healing*, 233-269. Carol Laderman and Marina Roseman, eds. New York: Routledge.

_____. 1998. Singers of the Landscape: Song, History, and Property Rights in the Malaysian Rain Forest. *American Anthropologist* 100:106-121.

_____. 2000. The Canned Sardine Spirit Takes the Mic. *The World of Music* 42(2):115-136.

Sapir, Edward. 1949 [1921]. *Language: an Introduction to the Study of Speech*. New York: Harcourt, Brace & Company.

Saslaw, Janna. 1996. Forces, Containers, and Paths: The Role of Body-derived Image Schemas in the Conceptualization of Music. *Journal of Music Theory* 40:217-243.

Scheper-Hughes, Nancy and Margaret Lock. 1987. The Mindful Body: A Prolegomenon to Future Work in Medical Anthropology. *Medical Anthropology Quarterly* 1:6-41.

Schieffelin, Edward. 1985. Performance and the Cultural Construction of Reality. *American Ethnologist* 12(4):707-724.

- _____. 1996. On Failure and Performance: Throwing the Medium Out of the Seance. In *The Performance of Healing*, 59-89. Carol Laderman and Marina Roseman, eds. New York: Routledge.
- Schmidt, Richard. 1967. Phenomenology. *The Encyclopedia of Philosophy* 6:135-151. New York: Macmillan Publishing Co., Inc. & The Free Press.
- Seeger, Anthony. 1987. *Why Suyu Sing*. Cambridge: Cambridge University Press.
- Serafine, Mary Louise. 1988. *Music as Cognition: The Development of Thought in Sound*. New York: Columbia University Press.
- Sheets-Johnstone, Maxine. 1999. Emotion and Movement: A Beginning Empirical-Phenomenological Analysis of Their Relationship. *Journal of Consciousness Studies* 6(11-12):259-77.
- Sklar, Diedre. 1994. Can Bodylore be Brought to its Senses? *Journal of American Folklore* 107:9-22.
- Sklar, Diedre. 1991. *Enacting Religious Belief: A Movement Ethnography of the Annual Fiesta of Tortugas, New Mexico*. Ph.D. dissertation, Department of Performance Studies, New York University.
- Smith, Charles J. 1976. Comment on Gryc. *In Theory Only* 2/3-4:7-12.
- Solie, Ruth. 1977. *Metaphor and Model in the Analysis of Melody*. Ph.D. dissertation. Musicology: U. of Chicago.
- _____. 1980. The Living Work: Organicism and Musical Analysis. *19th-Century Music* 4/2:147-56.
- Stoller, Paul. 1989. *The Taste of Ethnographic Things*. Philadelphia: University of Pennsylvania Press.
- _____. 1996. Sounds and things: Pulsations of Power in Songhay. In *The Performance of Healing*, 165-184. Carol Laderman and Marina Roseman, eds. New York: Routledge.
- _____. 1997. *Sensuous Scholarship*. Philadelphia: University of Pennsylvania Press.
- Sweetser, Eve. 1990. *From Etymology to Pragmatics: Metaphorical and Cultural Aspects of Semantic Structure*. Cambridge: Cambridge University Press.

- Sweetser, Eve and Gilles Fauconnier. 1996. Cognitive Links and Domains: Basic Aspects of Mental Space Theory. In *Spaces, Worlds, and Grammar*, 1-28. Chicago: University of Chicago Press.
- Such, David. 1985. *Music, Metaphor, and Values among Avant-garde Jazz Musicians Living in New York City*. Ph.D. dissertation, Folklore and Mythology: U. California, Los Angeles.
- Sugarman, Jane. 1997. *Engendering Song: Singing and Subjectivity at Prespa Albanian Weddings*. Chicago: Chicago University Press.
- Sutton, Anderson. 1989. Identity and Individuality in an Ensemble Tradition: The Female Vocalist in Java. In *Women and Music in Cross-Cultural Perspective*, 111-130. Urbana: University of Illinois Press.
- Talmy, Leonard. 1975. Semantics and Syntax of Motion. *Syntax and Semantics* 4:181-238.
- _____. 1988. Force Dynamics in Language and Cognition. *Cognitive Science* 12:49-100.
- Toelken, Barry. 1991. Ethnic Selection and Intensification in the Native American Powwow. In *Creative Ethnicity: Symbols and Strategies of Contemporary Ethnic Life*, 137-156. Logan, UT: Utah State University Press.
- Tolle, Eckhardt. 1999. *The Power of Now*. Novato, CA: New World Library.
- Tracey, Hugh. 1970. *Chopi Musicians: Their Music, Poetry and Instruments*. London: Oxford University Press.
- Turino, Thomas. 1993. *Moving Away from Silence: Music of the Peruvian Altiplano and the Experience of Urban Migration*. Chicago: University of Chicago Press.
- Turnbull, Colin. 1990. Liminality: A Synthesis of Subjective and Objective Experience. In *By Means of Performance*, 50-81. Richard Schechner and Willa Appel, eds. Cambridge: Cambridge University Press.
- Turner, Mark and Gilles Fauconnier. 1995. Conceptual Integration and Formal Expression. *Metaphor and Symbolic Activity* 10(3):183-204.
- Turner, Mark. 1990. Aspects of the Invariance Hypothesis. *Cognitive Linguistics* 1(2):247-55.

- _____. 1991. *Reading Minds: The Study of English in the Age of Cognitive Science*. Princeton: Princeton University Press.
- _____. 1994. Design for a Theory of Meaning. In *The Nature and Ontogenesis of Meaning*, 91-107. Willis F. Overton and David S. Palermo, eds.. Hillsdale, NJ: Lawrence Erlbaum Assoc., Inc.
- _____. 1996. *The Literary Mind*. Oxford: Oxford University Press.
- Turner, Victor. 1967. Betwixt and Between: The Liminal Period in *Rites de Passage*. In *The Forest of Symbols*, 93-111. Ithaca: Cornell University Press.
- _____. 1969. *The Ritual Process: Structure and Anti-Structure*. Chicago: Aldine Publishing Co.
- _____. 1977. Variations on a Theme of Liminality. In *Secular Ritual*, 36-52. Sally Moore and Barbara Myerhoff, eds. Amsterdam: Van Gorcum, Assen.
- _____. 1988. *The Anthropology of Performance*. New York: PAJ Publications.
- Vander, Judith. 1988. *Songprints: The Musical Experience of Five Shoshone Women*. Urbana: University of Illinois Press.
- Varella, Francisco, Evan Thompson and Eleanor Rosch. 1991. *The Embodied Mind: Cognitive Science and Human Experience*. Cambridge: MIT Press.
- Walser, Robert. 1991. The Body in the Music: Epistemology and Musical Semiotics. *College Music Symposium*, 31:117-126.
- Washabaugh, William. 1996. The Politics of Passion: Flamenco, Power, and the Body. In *Flamenco: Passion, Politics and Popular Culture*, 1-31. Oxford: Berg.
- Waterman, Christopher. 1990a. *Jùjú: A Social History and Ethnography of an African Popular Music*. Chicago: University of Chicago Press.
- _____. 1990. "Our Tradition is a Very Modern Tradition": Popular Music and the Construction of Pan-Yoruba Identity. *Ethnomusicology* 34(3):367-380.
- Whorf, Benjamin L. 1945 [1939]. The Relation of Habitual Thought and Behavior to Language. In *Language, Thought, and Reality: Selected Writings of Benjamin Lee Whorf*, 134-59. Ed., J.B. Carroll. Cambridge, MA: MIT Press.

- Williams, Clover. 1994. The Bachelor's Transgression: Identity and Difference in the Bachelor Party. *Journal of American Folklore* 107:106-120.
- Witherspoon, Gary. 1977. *Language and Art in the Navajo Universe*. Ann Arbor: University of Michigan Press.
- Wittgenstein, L. 1953. *Philosophical Investigations*, trans. G.E.M. Anscombe. NY: Macmillan.
- Zbikowski, Lawrence. 1998. Metaphor and Music Theory: Reflections from Cognitive Science. *Music Theory Online* 4(1):1.1-6.1
- Zemp, Hugo. 1979. Aspects of 'Are'are Musical Theory. *Ethnomusicology* 23:5-48.
- Zuckermandl, Victor. 1956. *Sound and Symbol: Music and the External World*. Willard Trask, trans. NY: Pantheon.