UNIVERSITY OF CALIFORNIA, SAN DIEGO

Unpacking Musicianship
A teaching–learning episode

A dissertation submitted in partial satisfaction of the
requirements for the degree Doctor of Musical Arts

in

Contemporary Music Performance

by

Kathleen Gallagher

Committee in charge:

Professor John Fonville, Chair
Professor Liam Clancy
Professor Stephanie Jed
Professor Carol Plantamura
Professor Jane Stevens

2009

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Chair

University of California, San Diego

2009

DEDICATION

I dedicate this dissertation to those
who willingly followed me down the rabbit hole
into the wonderful land of music two

EPIGRAPH

Music doesn't come from musical instruments:
musical instruments simply amplify and
project innate musicianship.
Graeme Leak

TABLE OF CONTENTS

Signature Page…….. iii

Dedication…… iv

Epigraph……... v

Table of Contents…… vi

List of Figures……..... vii

Vita……... xiv

Acknowledgements…….. vii

Abstract of the Dissertation……. ix

Unpacking Musicianship. A teaching-learning episode……... 1
- Introduction……. 1
- Musicianship……... 3
- Musicianship for the college student…….. 5
- National Association of Schools of Music…….. 6
- Comprehensive Musicianship……. 8
- Students entering college…… 9
- Audiation……. 11
- Sing…….. 12
- Sound before symbol…….. 14
- Tonal syllables……. 15
- Music learning theory……. 17
- Rudiments of notation……. 19
- Rhythm…… 24
- Pulse…… 25
- Independent pulse…… 27
- Unified pulse……... 28
- Meter……... 29
- Unified Pulse and Independent Meter……. 31
- Subdivision……. 33
- Rhythm syllables…… 36
- Hoffman, Pelto and White…….. 38
- Epilogue…….. 44

Bibliography…… 48

LIST OF FIGURES

Figure 1: Readiness for Levels of Learning, Edwin E. Gordon……. 18

Figure 2: The Sound Connections Learning Triangle, Don P. Ester……. 19

Figure 3: Rhythm syllables, Matthew Montfort…… 37

Figure 4: Rhythm syllables used by author……. 38

Figure 5: Rhythm syllables, Hoffman, Pelto and White……. 40

Figure 6: Rhythm syllables, Hoffman, Pelto and White……. 41

VITA

1991 **Bachelor of Music** (Performance)
Sydney Conservatorium of Music, Australia
Field of Study: Flute performance

1995 **The Studio**
Residential course of study with Trevor Wye. Kent, United Kingdom

2002 **Master of Performance** (Music)
Sydney Conservatorium of Music, Australia
Field of Study: Flute performance

2006 **Walden Teacher Training Institute**
New Hampshire, USA

2009 **Doctor of Musical Arts, Contemporary Music Performance**
University of California, San Diego

SELECTED TEACHING

Associate-in-Music
University of California, San Diego, CA (2006-2009)
Courses taught: Basic musicianship, Sound in time, Performance making

Faculty
Walden Music School (Summer, 2008)
Courses taught: Musicianship, Composition, Movement

Teaching Assistant
University of California, San Diego, CA (2003-2006)
Courses taught: Basic musicianship, Western art music, Contemporary music

Teacher of Flute
Moriah College, Bondi. (2003)
St Pius X, Chatswood. (2000-01)
Burwood Girls High School. (1998-01)
University of New South Wales. (1997-00)
Australian Institute of Music. (1996)

INVITED LECTURES

University of California, San Diego
Language/Rhythm - The Physicality of Emotion. Dance department (2008)
Vocal improvisation. Dance department. (2007)
The UrSonate by Kurt Schwitters. Literature department. (2006)

Performance Making. Music department. (2006)
Strength and conviction in your performance. Music department. (2005)

University of Baltimore County Maryland, USA
Performance Making (2007)

Mitchell Conservatorium, Bathurst, Australia
Creative music making in the classroom. Workshop and Recital. (2006)

Sydney Flute Festival
Thinking Outside the Flute. Masterclass and lecture. (2004)

NSW Department of Education and Training, Sydney
An insiders guide to Australian flute music composed since 1970. (2003)

Sydney Conservatorium of Music
Flute music for composers. (2004)

Australian Flute Convention, Melbourne
Professional Development Day: *Australian Flute repertoire and composition through extended techniques*. (2002)

Australian National Band and Orchestra Conference (ANBOC)
Extended techniques for exquisite technique. (2001)

AWARDS

University of California, San Diego
International Friends Center Scholarship (2006)
Teaching Assistant Excellence Award (2006)
Recording and Travel Grant (2004/2006)
Graduate Student Scholarship (2003-09)
Ian Potter Cultural Trust, Australia
Travel Grant (2003)
University of Sydney,
Zelma Oakley Dineley Scholarship (2000)

ADMINISTRATION

The Australian Music Examinations Board. Examiner (2000-2004)
NSW Flute Society, Sydney. President (1997)
NSW Flute Society, Sydney. Events coordinator (1996)
Leichhardt Community Youth Association, Sydney. Management committee (1996)
St Peters Chamber Orchestra. Orchestra manager (1995)

ABSTRACT OF THE DISSERTATION

Unpacking Musicianship
A teaching-learning episode

by

Kathleen Gallagher

Doctorate of Musical Arts

University of California, San Diego, 2009

Professor John Fonville, Chair

The term *Musicianship* is rich and saturated with unspoken assumption. The word needs unpacking – let's just say it – what does it mean? And what is it doing in an undergraduate classroom? Who are these young adults and what do they need to know? This document presents the personal musings of a student wearing a teachers hat.

UNPACKING MUSICIANSHIP. A TEACHING-LEARNING EPISODE.

Introduction

I am taking this opportunity to begin gathering my thoughts and reflect on my time as a student teaching other students. The experience unlocked a portal that had previously failed to capture my attention. I had been teaching and playing the flute for as long as I can remember, but this was my first experience teaching in a college classroom. Each year was a completely different experience. Each year I met new people who came from different places with different needs and I had not anticipated the teaching–learning episode that would transpire. My students immediately became my teachers as I began to discover who they were, how they learned and what they needed. The class was a one-year core course that served, amongst other things, to prepare them for a traditional two-year theory program to follow. The class was called *basic musicianship*.

I asked a colleague about the word musicianship and he said, "We all know what it means. It's a given." Statements like this make me nervous. I, too, could make assumptions based on my own education but it occurred a long time ago, in a very different time and place. If I did not seek out current music educational philosophies and practices, I would be irresponsible. Of primary concern is the current population in this particular classroom. These young adults share little resemblance to my classmates of yesteryear and it takes time to learn who they are and begin to understand what they need.

I present few conclusions in this document and advise the reader to look elsewhere to find their own questions and answers. These are my personal musings, based on my experience in a particular setting. My writings are somewhat anecdotal -

this is my way. I also include many quotes from my students – these are the people that kept me honest.

Firstly, I look at the word musicianship through the minds of music philosophers and educators. I notice the impact of the National Association of Schools of Music and the Comprehensive Musicianship phase that touched some schools during the sixties. Secondly, I look at the current population in the undergraduate classroom – who they are and what they need learn, in order to satisfy the national curriculum. This leads to the notion of audiation and recent music learning theories. Finally, I include a lesson that revolves around rhythm. Rhythmic training is often overlooked yet remains the backbone of music from every culture. During my first year, I taught rhythm as I had been taught and it proved spectacularly unsuccessful so I had to find another way. The beginning of the lesson presented here pays homage to the notion of musicianship. Consequently, it is about so much more than simply counting in time.

Musicianship

What is this word *Musicianship*? The etymological source heralds the qualities embraced by a *musician*, which encapsulates the questionable and murky area of humans making music with a certain amount of knowledge and skill. But what is this *ship*? Is it the secret ingredient? One might be surprised by the difficulty in sourcing a precise definition and its notable absence from many music books and dictionaries. The word musicianship suggests a myriad of spoken and unspoken elements that change as inevitably as the tide. Rogers (1984) states, “this important, but vague, concept is as

elusive as music theory itself and – like a slippery bar of soap – is difficult to grip." (p.12) A precise definition has proven difficult to find and hard to keep track of.

Elliott[1] (1995) states, "musicianship is not synonymous with what it takes to make and listen for the music of any one musical practice. Musicianship is *practice-specific.*" (p.54) By way of example, my musicianship is anchored firmly inside the realm of western art music, and my training has in no way prepared me to be a flamenco guitarist, a Balinese gamelan player nor an Irish flute player. Do such limitations in my education invalidate my claim to musicianship? One might argue that I have not studied these instruments, but I must counter that musicianship is not about the instrument; it is about the community in which one chooses to exist. Within each community there are rules and regulations. There are expectations and assumptions that remain unknown to the outsider. Indeed, even insiders can spend a lifetime learning the rules of the game. As the outsider in these non-western traditions[2], I can sit happily for hours and derive great joy from their song yet am unable to 'make' this music. My listening is passive and ignorant, and I am unable to participate. To learn their secrets, to become one of them, I must actively participate in their community and embrace all it has to offer.

Jorgensen[3] (2003) states, "the word [musicianship] is used by music teachers in the English-speaking world to describe one of the ends of music instruction. Taken to refer to thinking, being, and acting as a musician, musicianship is a perennial and pervasive goal of music education practice." (p.197) This practice presents both explicit

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[1] Dr. David J. Elliot, a specialist in music education philosophy and Professor of Music Education at New York University.

[2] While I believe there is a great deal to learn from both non-western and popular music traditions, their specific practice falls outside the breadth of this paper.

[3] Dr. Estelle R. Jorgensen, a specialist in music education philosophy and Professor of Music Education at Indiana University.

and implicit objectives. How does one learn to 'think', 'be' and 'act' as a musician? Does one read it in a book? If one gathers this information from said book, does one then automatically become a musician? If I were to boast of my cooking prowess, would you be more convinced by my words or a demonstration? The creation of music is inherently saturated with activity and for this reason some even call it 'musicing.'[4]

Musicianship for the college student

In many ways, making music is a simple task. Blowing into a recorder, banging on a drum or singing *happy birthday* for a friend requires no musical training yet brings a great deal of happiness. Billions of people make music in this way every day and I embrace and applaud this unfettered bliss, yet I am frustrated. This simplicity gives permission to think a formal study of music requires little effort. This is a problem.

Our practice requires formal and informal knowledge and these two elements are codependent. "Formal knowledge includes verbal facts, concepts, descriptions, theories – in short, all textbook-type information about music." (Elliott, 1995, p.60) There is *book learning* that must be understood and absorbed; yet the largest proportion of our discipline is embodied via experiential learning and intuitive understanding. Rogers[5] (1984) states it "is not a subject like pharmacy with labels to learn and prescriptions to fill, but is an activity – more like composition or performance. The activity is theorizing: i.e., thinking about what we hear and hearing what we think about." (p. 7) This task is enormous and underestimated by many. After thirty years of classical training, I discover

[4] A discussion of the word musicing falls outside the realms of this paper. For complete discussion see Elliott (1995) p.40, and Small (1998) p.9.
[5] Michael R. Rogers is Emeritus Professor of Music Theory at the University of Oklahoma and Founding Editor of the *Journal of Music Theory.*

each day of how little I know. Informal knowledge is gained through participation and reflection. It is the knowledge of those on the inside. "To develop musicianship is, in part, to advance a student's feel for or affective awareness of what "counts" in musical situations." (Elliott, 1995, p. 65) Intuition will not be found in a book. Benward[6] (1981) offers the following message to the uninitiated:

> Intuition is knowledge that comes to a person without conscious remembering or reasoning. Your music intuition includes a vast storehouse of familiar sounds, established patterns of melody, harmony, and rhythm, and an instinctive consciousness that you draw upon thousands of times in the performance of a single composition. Bits of information you have accumulated since your first musical experience are stored in your memory and are shaped into thoughts or judgments that you apply daily. You make split-second decisions about the phrasing of a melody, the application of dynamics (louds and softs), and the tempo of the music you play. And yet, you are seldom able to say precisely where this knowledge came from. Your musical intuition has become a part of you through your experience and, indeed, is one of the most valuable gifts in your possession. (p.ix)

Our personal musicianship constantly evolves through spoken and unspoken understandings, around explicit and implicit facts as we learn to balance formal and informal knowledge. If one should choose to undertake a primary study of music at college in America, one will most likely be choosing to study the practice of western art music. Within this community there are rules and regulations.

National Association of Schools of Music

Founded in 1924, the National Association of Schools of Music (NASM) is "an organization of schools, conservatories, colleges and universities with approximately 615

[6] Dr. Bruce Benward. Considered by some to have been the most influential music theory pedagogue in the United States.

accredited institutional members. It establishes national standards for undergraduate and graduate degrees and other credentials." The *NASM Handbook 2007-2008* states students holding an undergraduate liberal arts degree in music are required to have achieved proficient facility with the following musicianship skills:

1. The ability to hear, identify, and work conceptually with the elements of music such as rhythm, melody, harmony, structure, timbre, texture.
2. An understanding of, and the ability to read and realize, musical notation.
3. An understanding of compositional processes, aesthetic properties of style, and the ways these shape and are shaped by artistic and cultural forces.
4. An acquaintance with a wide selection of musical literature, the principal eras, genres, and cultural sources.
5. The ability to develop and defend musical judgments. (p.80)

Annual reviews, changing conditions, new technology and experience in the classroom all ensure the list remains relevant to those attending college. This list reflects a comprehensive education that one expects to take place over several years and these are some of the 'skills and abilities that practicing musicians must have.' They are 'practice-specific' and serve to develop the ability to 'think, be and act' as a musician in this specific community. They "centre on skills and abilities that practicing musicians must have; connecting notation with sound (or sound with notation), reading music, conducting, performing at the keyboard and/or with one's major instrument/voice, developing historical perspective and analytical techniques, using appropriate terminology etc." (Rogers, p.12)

Comprehensive musicianship

During the 1960s, the Music Educators National Conference (MENC[7]) initiated a large interdisciplinary music program in Northern America known as the Contemporary Music Project (CMP). Ultimately it became known as Comprehensive Musicianship (CM). They sought to create well-rounded musicians by covering all facets of music education, previously studied independently, under one umbrella in the one classroom. The subjects included ear training, improvisation, composition, conducting, performing, analysis and harmony. "The underlying philosophy behind all CM plans (was) to bring together discrete elements and ideas from the various branches of music study so that students are taught to understand music as a unified whole rather than as detached fragments." (Rogers, p.20) It is a noble idea and while I am in favor of a classroom that offers a well-rounded education, the challenge to give each musical branch adequate attention is enormous and has great potential for failure. Overgeneralization wreaks havoc. Learning a little about a lot denies the opportunity to study each branch with the depth and intensity it deserves. It was even "taken by some to emphasize teaching music as a humanity rather than as a performing art." (Jorgensen, 2003, p.201) While there are still some enthusiastic advocates around this country, CM fell out of favor and the schools I am familiar with, support the notion of separate study for each subject area. A focused study also affords the opportunity to work with a teacher with a specialized background, someone who has chosen that specific subject area as a life interest, thus ensuring a more valuable learning experience.

The classroom entitled *musicianship* now commonly attends to developing 'an understanding of, and the ability to read and realize, musical notation.' Furthermore, it

[7] MENC is a nonprofit organization for Music Education.

aims to cultivate the 'ability to hear, identify, and work conceptually with the elements of music such as rhythm, melody, harmony, structure, timbre and texture.'

Students entering college

Students entering college level music programs demonstrate enormous diversity in their prior music education. Some have taken instrumental lessons from an early age, and others have not yet had the pleasure. Some sang in their middle school choir, while others jammed in bands with friends on weekends. The breadth of skills in the classroom is enormous and the only common link is an interest in studying music through higher education.

Hoffman, Pelto and White[8] (1996) state incoming students "are less well prepared in many areas of fundamentals than were students of previous generations. This situation is not surprising given reductions in public school music education, a shift away from music making as a leisure time activity, and changing musical values." This is a very compelling argument and while somewhat frustrating, perhaps indeed a sign of the times. "As a result, there are increasing numbers of students with the interest and talent to study music at the college level who lack the requisite skills." (p.7) If we consider music making to be a skill, we must then acknowledge it will not be acquired over night. It will take time, patience and diligent work. The most fundamental requirement is the capacity to understand what we hear. We are not born with this facility but it can be developed through rigorous study.

[8] Music Theorists

Karpinski[9] (2000) states, "many universities, colleges, and conservatories report that entering students often suffer from deficiencies in aural skills."(p.7) He cites Wennerstrom (1989), who "reported that at the Indiana University School of Music a continuing problem is the entrance level of the freshman. Students are particularly ill prepared in aural skills and sight singing." (p. 163) If an instrumental entrance audition was required, one can assume these students read music but they have gleaned only a specific kind of knowledge. When viewing a score, they do not hear musical events, they see a set of instructions that indicate physical activity. For them, notation dictates which key to press rather than a sonic event. Perhaps their attention has not been pointed in this direction. Karpinski continues: "Earlier generations were not immune to this problem. The Juilliard School of Music (1953) listed ten characteristics typical of the incoming student, among which was that "he has an untrained ear. In most cases no attempt has been made to train the ear." (p. 48). Julliard also refers, he says, to students (particularly singers) "who cannot sing at sight the simplest diatonic melody." (p.7) I wonder if the student knew his ear needed training prior to that moment. Based on personal experience, it is possible to be consumed with getting the notes right, pressing the right buttons, viewing the score as an object to be devoured rather than a journey to be savored. The problem is not with the 'ear', but with previous misdirection and a lack of understanding.

Ester[10] (2005) reiterates, "The overwhelming majority of all American students are musically illiterate and the great majority of school music students have only the most limited comprehension of music notation." I am still trying to understand how it is

[9] Dr. Gary S. Karpinski is Professor of Music and Coordinator of the Music Theory program at University of Massachusetts Amherst.
[10] Dr. Don Ester is Professor of Music Education at Ball State University School of Music.

possible for a music student to have such a small grasp of notation, yet this appears to be the reality. I do not hold the student accountable. Ester continues, "This hard truth is born out when one observes the reading and aural skills of the typical first-year music major at most higher education institutions in the United States. It is the rare student who is able to proficiently transform notation into sound via the singing voice, and the even rarer student who can notate what s/he hears." (p.4)

Now we have a greater understand of who is sitting in the classroom of today. We have a place to start. It is imperative for the college curriculum to effectively address the most basic of skills required to be a musician. We need to start connecting sounds to the notation and learn the inherent behavior of western music.

Audiation

We need to be able to think 'in' music. Gordon[11] (1997) states, "sound becomes music only through audiation, when, as with language, you translate the sounds in your mind to give them meaning." (p.5) Audiation involves "hearing and comprehending in one's mind the sound of music that is not or may never have been physically present. It is neither imitation nor memorization. " (p.361) "Listening to music with comprehension and listening to speech with comprehension involve similar operations." Gordon asserts:

> Although music is not a language, the process is the same for audiating and giving meaning to music as for thinking and giving meaning to speech. When you are listening to speech, you are giving meaning to what was just said by recalling and making connections with what you have heard on earlier occasions. At the same time, you are anticipating or predicting what you will be hearing next, based on your experience and understanding. Similarly, when you are listening to music, you are giving

[11] Edwin E. Gordon is a Research Professor at the University of South Carolina.

> meaning to what you just heard by recalling what you have heard on earlier occasions. At the same time, you are anticipating or predicting what you will be hearing next, based on your music achievement. In other words, when you are audiating as you are listening to music, you are summarizing and generalizing from the specific music patterns you have just heard as a way to anticipate or predict what will follow. Every action becomes an interaction. (p.5)

Not everyone uses the term audiation,[12] and simply offer the unhelpful phrase, 'you have to hear it in your head'. Rogers (1984) cites "the cognitive ear." Smith (1934) states that "the musician must learn to 'hear with the eye, and see with the ear.' " (p. 58) Karpinski (2000) cites the "hearing eye" and "seeing ear." (p. 3) R. Murray Schaefer (1986) suggests in his text *The Thinking Ear* that we need to undertake 'ear cleaning.'[13] (p. 46)

The study of the 'hearing eye' and 'seeing ear' is attended to through classes labeled 'ear training', 'aural skills' or 'musicianship'. The 'thinking ear' is not directly related to instrumental performance and must be attended to with deliberate and conscientious effort. The lack of attention afforded this study prior to college has been well documented previously in this paper. Furthermore, White (1981) states that ear training "is the development of the ear for the study of music, for the performance of music, for the creation of music, and for enhancing the pleasure of simply listening to music." (p. 24) Clearly, the 'ear' is important. We need to know how to listen. We need

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[12] Karpinski (2000) prefers the term 'auralize'. He defines it as the "process of hearing music mentally in the absence of the physical sound." (p. 49)

[13] Schaefer (1986) states, "Before ear training it should be recognized that we require ear cleaning. Before we train a surgeon to perform delicate operations we first ask him to get into the habit of washing his hands. Ears also perform delicate operations, and therefore ear cleanliness is an important prerequisite for all music listening and music playing." (p. 46)

to know how to listen to the inherent behavior of western music. We need to understand the behavior of western music. Specifically. We have to sing.

Sing

Hungarian composer and pedagogue "Kodály[14] was convinced that singing is the most direct means to a musical education. Singing requires the rapid internalization of sound and provides immediate participation in the musical experience… . Since the human voice is the most intimate of all instruments and the inner ear is more easily developed through this personal medium, the voice is the most logical starting point." (Houlahan and Tacka, 2008, p. 21)

Learning to use this 'intimate instrument' with mindful awareness is a major cause of distress in the classroom, but this is what we must do. As instrumentalists, we learned to move first and hear later. When singing in groups, we learned to imitate and follow the pack, but not think for ourselves. Kodaly stated, "most singing teachers and chorus masters believe in controlling the pitch of the voice by the piano." (Bónis, 1974, p.216) We see it all the time on television. Imagine for a moment, a show with a group people learning a new song. Look around the room, and you will notice a piano player lurking in the corner, repeating the melody over and over. These people are learning by rote but not to think for themselves. These are the people in the first year college music classroom, and this is what they have been taught to do. The majority of this population has experienced 'success' through their ability to imitate so now we must challenge their preconceived notion of 'learning'. We must learn to create music ourselves and cease

[14] Zoltan Kodály, 1882-1967.

dependency on an external crutch. Kodaly stated, “We should not allow anyone even to go near an instrument until he or she can read and sing correctly. It is our only hope that one day our musicians will be able also to ‘sing’ on their instruments.” (Bónis, 1974, p.224) This is why we have to sing.

“But I’m a drummer,” one might say. Another suggested, “I don’t talk much, so I can’t really sing.” And finally, the most popular, “I know how it goes, I can play it on my <insert instrument here>, I just can’t sing it.” If we are unable to sing it, we do not know ‘how it goes’. Clearly, these students are wrong. The gaps in their knowledge are not their fault. No one told them that their instrumental prowess is unrelated to the ability to think ‘in music’ or organize sound in the mind.

One musical skill does not necessarily imply or lead to another. All too often, it can be an impediment. Kreter (1976) states:

> Students who choose to become music majors in college are usually experienced performers but are largely ignorant of theoretical matters, and, except for a fortunate few, usually have had no prior instruction in a systematic study of the aural forces which interrelate to produce the music they perform so well. In particular, they experience difficulty in correlating sound with symbol and in translating the sounds they hear into musical notation, and are often discouraged by the initial attempts to improve their aural awareness, recognizing the gap that exists between their performance skills and their capacity to identify the organic relationships within the music they are studying.” (p.xi)

I met a young man who was a fine instrumentalist. He taught himself. He picked up the instrument, made a sound and has never looked back. He never really learned to read music but his memory was excellent so he watched, listened and learned from those around him in the middle school jazz band. Now he wanted to read “more” and this is what caused the problem. He thought it should be easy and was quickly frustrated. “I

should be able to just get it!" When I asked why that should be, he said, "Because I can play it!" He tried earnestly to sing set melodies, was very good at following the contour, but had no knowledge of the specific relationships represented on the page. In some ways he had to unlearn most of what he knew and start from the beginning. This confronting situation proved too great a challenge and he lost interest. "Just as a calculator becomes a crutch for students who cannot multiply or divide so a musical instrument becomes a crutch for students who cannot audiate." (Gordon, 1997, p.10) It is not their fault.

> The majority of students… are taught to take whatever meaning they can from notation in order to function as contributing member of a music ensemble, yet for these students to be introduced to music theory before they can audiate, sing with good intonation, and move with good rhythm makes little or no sense, because contrary to what many music teachers, particularly instrumental teachers, believe, music theory simply cannot serve adequately as a readiness for music reading. In fact, just the opposite is the case. (Gordon, 1997, p.133)

These are the people in the first year college music classroom, and they face a very particular challenge. While most can read music, they do not have a 'hearing eye' and 'seeing ear', and this is what we must ask of them. They must be convinced to perceive something familiar in an entirely different manner. They need to find a way to connect sound to the symbols.

Sound before symbol

The notion of *sound before symbol* is gaining support in college education through recent publications such as Hoffman, Pelto and White (1996), Gordon (1997), Ester (2005), Karpinski (2000, 2006) and Krueger (2007) and it has a long tradition in western music. "For at least two hundred years, 'sound before symbol' has been a

fundamental component of music learning theories such as those promoted by educational theorists Johan Heinrich Pestalozzi, James Mursell, Jerome Bruner, Robert Gagne, and Edwin E. Gordon."(Ester, Scheib, Inks, 1996, p.60)

Prominent Educators in the twentieth century such as Kodaly from Hungary, Dalcroze in Switzerland, Orff from Germany and Suzuki from Japan, have devoted followers on an international platform and their methodologies have been producing excellent musicians for several decades. They too employ the notion of 'sound before symbol', yet because their practice is geared towards small children it had been dismissed in collegiate education. However, the young adults in a lower division music class can benefit enormously from this tradition. Its virtue lies in its inherent playfulness and does not challenge their instrumental sensibilities. The basic premise is that we learn to sing a specific pattern through call and response, label each part of the pattern and move the parts around while maintaining their individual integrity. Only then, do we notice how those sounds are represented by standard notation.

Tonal syllables[15]

Musicianship is about "creating a relationship with music, getting to know it, understanding it, struggling and building a stable foundation."[16] An essential part of the foundation can be established via tonal and rhythm[17] syllables, which provide a conduit between sound and symbol. Italian theorist and composer Guido d'Arezzo[18] has been

[15] Gordon (1997) defines *Tonal Syllables* as, "Different names that are sung for different pitches in a tonal pattern." (p. 378).
[16] Private communication with anonymous student
[17] Rhythm syllables are discussed on Page 37
[18] Guido of Arezzo, ca. 991-1033. Music theorist of the medieval era.

credited with the invention of solmization in the western world, the deployment of particular syllables to represent different places within a scale and still, "the use of syllables…is one of the most controversial issues facing teachers. Almost everyone has strong feelings on this subject." (Rogers, p.133) There are several kinds of syllables so the controversy orbits around their perceived value and then which kind is most appropriate.

I believe they are necessary and valuable, which is immediately apparent, even in print. If I were to sing 'la, la, la, la, la, la, la' for you, would you have any idea that it sounded like 'do do re mi do mi re'? Yes, a small amount of investment is required to learn the sound of 'do, re and mi', but now we have an explicit vehicle to discuss as we move towards audiation. We begin to speak and listen with comprehension. To my mind, not using some kind of label in the classroom is irresponsible.

As to *which* kind, I dare suggest our personal preference becomes 'best practice' and there are many[19] to choose from: Fixed do, where C is always 'do'; absolute letter names; scale degrees (otherwise referred to as numbers) and finally, movable do, where the resting tone, or 'do' can be moved around a stave depending on the key. From the perspective of one who has taught a class including people with little theoretical knowledge, I disagree with using numbers. They assume prior theoretical knowledge, and I have learned to assume nothing. 'You sang the wrong kind of three' is not something I ever want to say. In fixed do, the syllables do, re, mi, fa, so, la, ti are assigned to specific note names, that is, C, D, E, F, G, A and B, thus, do is always 'C'. 'Fixed do' allows us to continue reading precisely as we have been taught and 'letter names' naturally follow the

[19] See Gordon (1997) p. 56-67 for a more complete historical and contextual discussion

same path. This is precisely why I have become an advocate for 'movable do'. The way in which we were taught is clearly not working, and we need to follow another path. Karpinski (2000) states, "Fixed-do instruction would focus more closely on such skills as pitch reading, clefs, and transposition, whereas movable-do would focus more on tonic inference, scale-degree function, and the like." (p.147) In 'movable do', 'do' is always the resting tone or the first degree of the scale providing an aural orientation. 'Movable do' forces us to trust our ears instead of depending on our eyes. "This method stresses the development of hearing skills rather than music reading since the same musical and functional effects are always represented by the same symbols." (Rogers, p.133) The development of our hearing skills is a primary concern and "students need to acquire an aural experience of and facility with tonal, melodic pitch relationships." (Plude and Wanenchak[20], 2005, p.6) We need to understand the behavior of western music. We need to hear and sing these shimmering relationships and learn to view the notation under a different kind of light. We begin to see how sound is embedded in a score.

Music learning theory

Edwin E. Gordon (1997) is a strong advocate for 'sound before symbol' pedagogy and has developed an extensive 'music learning theory' discussing "how we learn when we learn music." (p.3) His basic premise is shown by his diagram in Figure 1, entitled *Readiness for Levels of Learning*. Interested readers will find his *Learning Sequences in Music* (1997) an engaging text and applicable to all age groups.

[20] Patricia Plude and Leo Wananchack are affiliated with *The Walden School*. Further information available at www.waldenschool.org

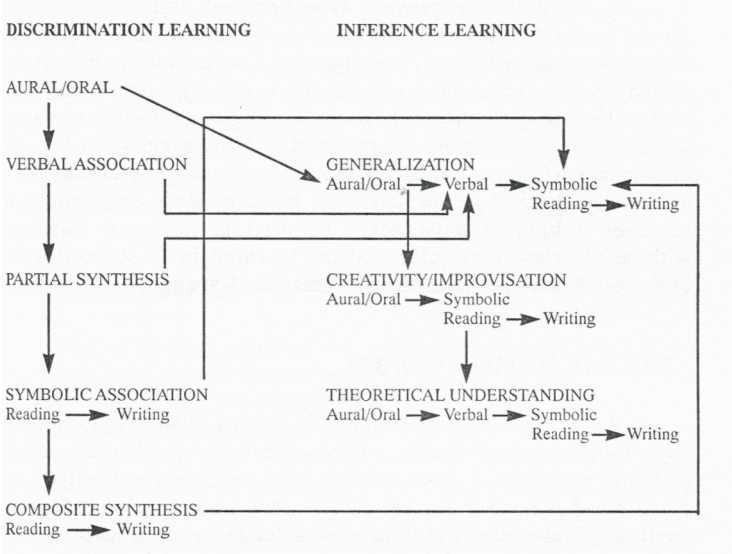

Figure 1: Readiness for Levels of Learning. *Learning Sequences* by Edwin E. Gordon, 2007, p. 233

Notice he does not start with reading and writing, but with aural and verbal association. We learn to speak before we learn to read. Gordon says "we learn in two general ways: by discrimination and by inference." He states "students engage in discrimination learning when they are conscious of being taught but do not fully understand what they are being taught or why." (Gordon, 1997, p.87) The point of entry requires initial memorization of a few tonal relationships that are immediately explored through improvisation. This becomes our own music and intuitive knowledge is reinforced through theoretical understanding. We learn to monitor ourselves and question what we hear. "Inference learning… occurs when students are unconscious of what they are learning or even that they **are** learning, because they are teaching themselves to learn what is unfamiliar by inferring from what is familiar." (p.87) We learn to trust our intuition and explore tacit knowledge through non-verbal communication. We learn to teach ourselves, we no longer require a crutch.

A similar case is made by Ester (2005) as we can view through his 'Sound Connections Learning Triangle'. See Figure 2.

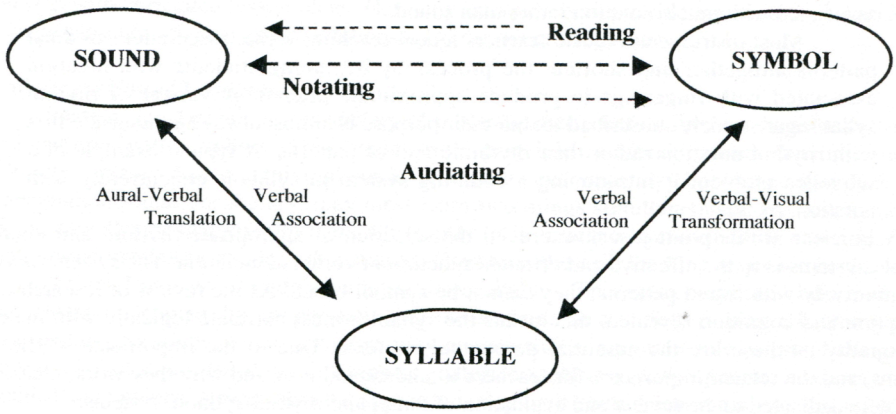

Figure 2: The Sound Connections Learning Triangle. *Sound Connection*s: A comprehensive approach to teaching music literacy. Don P. Ester. 2005. P.32

The *Sound Connections* approach "emphasizes the development of connections between the sounds and symbols of music and between the various modules of the brain that are involved in music literacy." (Ester, 2005, p. 31-32). I enjoy the straightforwardness of this diagram and include it here for the visual learners amongst us. Each element is equally important and we must learn to make the connections.

We learn through call and response, echoing what we have heard. We learn to understand the sounds we hear by association with meaningful syllables. We learn to associate syllables with symbols we can recognize. Once we recognize the symbols, we are able to make our own whether on the page or in our minds.

Both Gordon and Esther suggest specific sequences, or patterns to be learned. Ester (2006) states, "Students must develop a vocabulary of musical patterns before they can begin associating these patterns with symbols. This fundamental principle is often

ignored, but it is really extremely logical when you think about it." (p.34) Gordon calls these patterns *Learning Sequences* and Ester prefers *Developing a Sound Vocabulary.* The patterns follow the rules of western harmony. We never learn to sing a random series of notes, but an architectural frame on which to ground our knowledge.

Karpinski (2000) advocates the use of *Sequentials*, which "take a small contour and rhythm pattern and move it to successive scale degrees.." (p.149) Choir directors use such exercises and call them vocal warm ups. He continues, "With the conscientious practice and execution of these… exercises, sequentials, and resolution and tendency-tone patterns, musicians can gain some fluency at singing with syllables and will begin to associate specific syllables with particular scale degree functions." (p.151)

We are building a vocabulary that is not bound to a page, but lives inside us. We know. We can read the music of others and are free to make our own, with complete knowledge of what we do.

Rudiments of notation

Elliot (1995) states,

> Part of the musicianship of many (but not all) musical practices worldwide is knowledge about notation and knowledge of how to decode and encode musical sound patterns in staff notation, graphic notation, hand signs, or rhythmic syllables. But music literacy, or the ability to decode and encode a system of musical notation, is not equivalent to musicianship. It is only part of the formal and procedural dimensions of musicianship. Moreover, literacy should be taught and learned parenthetically and contextually - as a coding problem to be gradually reduced within the larger process of musical problem solving through active music making." (p.61)

When notation was first introduced in the west during the eighth century it was "intended not as a way to teach or to tell musicians what notes to sing or play, but only to remind them of what they already knew through audiation in prior performances." (Gordon, 1997, p.57) Our practice has changed dramatically since then and now we are expected to pick up a piece of music and 'read' it at sight, sound unheard.

Just as rudiments must be *taught* as any other subject, they must be *learned* as any other subject. We must fully understand and appreciate such things as a stave, what a clef means and how that might change things, key signatures, time signatures, pitch notation, rhythm notation, how a rest has nothing to do with actual resting, an accidental is very particular, a fermata is the same as a pause yet different from a sostenuto, and a staccato is short and detached but not faster.

From the teachers perspective, "*thorough* knowledge of fundamentals can almost never be assumed: it must be taught as any other subject. A superficial grounding in the basic elements …will cause more problems later on than almost any other form of negligence." (Rogers, p.34) Notation provides a visual cue that directs our audiation.

> "Like a basic two hundred word vocabulary in a language, or the multiplication table in mathematics, certain facts in music … once they are understood, must then actually be memorized. Some students never catch on that information computed from scratch each time is useless. Unless spelling or recognition of these constantly recurring pitch relationships can be instantaneous, simple analysis and composition assignments will take so many hours that no connection will ever be noticed between musical events occurring just seconds apart aurally or an inch away visually." (Rogers, 1984, p. 35)

Our reading skills must be fluent. Fluent means "capable of flowing, of moving with ease and grace."[21] While a detailed study of epistemology and learning theory lay outside the realm of this paper, one must appreciate the difference between knowing *that* and knowing *how*. It is not enough to be able to work out which second inversion major triad has an F# in the upper most voice - one must know. We have to "understand the concept, develop accuracy through practice and then develop speed. The culminating goal … is fluency – a smooth and instant melding of comprehension, precision and quickness so that the desired information is always confidently at one's fingertips." (Rogers, p.35)

"Music notation is a collection of visual symbols that are intended to represent the sound of music. Music theory attempts to define and explain the rationale behind the use of those visual symbols, and yet at best, notation works only like still photography, whereas music flows like a motion picture." (Gordon, 1995, p. 8) I make no attempt to 'explain the rationale' behind the symbols, but accept their inevitable presence in the discipline.

I remember little of my first encounters with the rudiments of music so have no experience to relate in the classroom. However, I have observed many people learn to read music for the first time, from four-year-olds to seventy-three-year olds, and, although the task is identical, their experiences are naturally quite different. The four-year-old is excited to learn one new symbol– it will keep him happy for a week. The seventy-three-year old is delighted to still remember what she learned last week and has

[21] "fluent." Merriam-Webster Online Dictionary. 2009.
Merriam-Webster Online. 1 August 2009 <http://www.merriam-webster.com/dictionary/fluent>

been telling her friends all about it. The twenty-year-old is impatient and frustrated by an overload of information because he is trying to learn everything at once. If a beginner is to learn a 'basic two hundred word vocabulary,' he needs to take it step by step. He requires considered direction and persistent nudging to avoid getting lost in the maze. The motion picture will never make sense unless we understand and appreciate what we see.

"Conventional musical notation is an extremely complicated code, and years of training are necessary for its mastery. Until it is mastered, it is an impediment to confidence… Ideally what we want is a notation that could be mastered in ten minutes, after which music could be returned to its original state – as sound." (Schaefer, 1984, p.263) This is the dream of students who were previously "taught to take whatever meaning they [could] from notation." (Gordon, 1997, p.133) They were not taught to read with understanding and knowledge, they were taught to see kinesthetic instructions. The 'hearing eye' is not directly related to instrumental performance and must be attended to with deliberate and conscientious effort.

One day a student arrived clutching the sheet music for *Giant Steps* by John Coltrane. Having heard it for the first time, he thought it was incredible and rushed off to find the sheet music. But it made no sense to him. "It sounds nothing like this!" he declared, holding the offending document at arms length with a contemptuous look on his face. In that moment, he unwittingly explained he was yet to grasp the 'motion picture' concept. This is perfectly understandable. I had not explained it, and he was clearly struggling with audiation and notation. All he could see was a series of still photographs that meant very little to him.

"Just as the ability to read these words makes for an independent learner, so the ability to read and write music notation makes for an independent musician." (Ester, 2005, p.1) Musicianship is "the ability to look at a piece of music and see beyond the ink."[22] In order to 'look at a piece of music' and 'see beyond the ink', one must have previously studied and accepted the consequences of 'the ink'.

Rhythm

"Rhythm is direction. Rhythm says: 'I am here and I want to go there.' (Schaefer, Murray R., 1986, p.65) "Rhythm is arguably the most important component of music. In all musics of all cultures, past and present, rhythm is central to musical experience and understanding." (Dalby, 2005, p.54) Rhythm provides "continuity or flow, articulation, regularity, proportion, repetition, pattern, alluring form or shape, expressive gesture, animation and motion (or at least the semblance of motion)." (Hasty, 1997, p.3)

Yet rhythm training is often neglected in classical education. Some even consider it a natural ability rather a skill that can be developed. Pitch and harmony dominate the playing field and when it comes to rhythm, we just follow along. We become preoccupied with the pitch which takes precedence over rhythmic precision. We forget – without rhythm there is no melody. How can this happen? In the school orchestra and the local choir, we follow the conductor. In the marching band, we follow the chap in front because as long as we stay with the pack, all indiscretions are forgiven. Indeed, "rhythm is often regarded as one of the most problematic and least understood aspects of music."

[22] Private communication with anonymous student

(Hasty, 1997, p.3) This is not acceptable. Rhythm will cease to be 'problematic' and misunderstood when we devote more attention to it.

Rhythmic fluency is fundamental. It was something I struggled with in my formative years and yet somehow managed to get by. My theoretical knowledge was solid but as soon as I put the flute to my face, my attention went to other things. I could tap my foot[23] in time with the music but, oddly enough, there was always a problem playing with others. An exasperated percussionist gave me a Dr. Beat[24] for my twenty-first birthday, and so began my education. I plugged it into my stereo system, cranked up the volume, and the entire room shuddered with the beat. After fifteen years of classical music education, I finally began to learn. The incessant pounding of this new toy held me accountable and made me honest. We must all find our own way to be honest.

Pulse

"Rhythm is a broad concept and an all-inclusive one covering everything having to do with the temporal aspect of music. It includes such subordinate concepts as 'pulse,' 'tempo,' 'note values,' 'rhythmic patterns,' 'meter,' and, in a sense, even 'phrase' and 'period.' Of all rhythmic elements, the most fundamental is *pulse*." (Fish, 1964, p.1) The words 'pulse' and 'beat' are interchangeable. "Most music psychologists and theorists recognize the beat as fundamental to rhythmic understanding, providing the "cognitive framework" for the perception of all levels of rhythm." (Ester, 2005, p.22)

[23] Or so I thought, at the time
[24] A brand of digital metronome

We can hypothesize all day about 'how' to establish and maintain a regular pulse. We can talk about math, draw lines on the board, showing that they bind time in space on flat surfaces but this does not demonstrate a regular pulse. Lines on the board are an excellent precursor to notation but first we must learn to *feel*.

We can notice our own heartbeat. This wet muscle sustains our life, yet is cast aside and unappreciated in the classroom. Its inevitable and persistent beat gives us strength to exist. It empowers us to move through life, one foot at a time, clearly demonstrating our intuitive understanding of the word 'pulse'. Every time we walk across campus, we produce a regular pulse. We do this automatically and it requires no attention, yet when we are asked to move in time with a piece of music, we fall apart into disarray. Why not tap into our automatic pilot source and use our intuition as a stepping-stone?

The study of music does not need to be sedentary. Physical activity can enhance awareness and empower us to take responsibility for our own learning. Swiss music educator Émile Jaques-Dalcroze was a great exponent for activity in the classroom and is best known for his course of study entitled Eurhythmics[25], a pedagogical method through which students embrace physical movement in response to sound. Australian educator Graeme Leak (2003) states, "The role of the body is acknowledged in the teaching, theory and practice of dance and drama, yet very little attention is paid to the use of the body in musical performance. Perhaps this is because there is so much focus on the instruments of music and their incumbent techniques and traditions." (p.3) Music comes from ourselves, not an instrument. Perhaps we can benefit from simply taking a moment

[25] For a detailed explanation, see Dalcroze (1913).

to listen. Leak's (2003) text *Performance Making – A manual for music workshops* (Currency Press) is an excellent resource for such an endeavor. Below is an activity taken from the text (pp.89-95) and I include it here as an attempt to share a physical learning experience with the reader. I invite the reader to participate where possible, remembering the activity is devised for a group learning experience.

> What does the word Pulse mean to you? What is pulse in relation to music?
>
> *Independent Pulse*
> Listen to the rate of your breathing. Don't adjust anything, just relax and breathe normally. Imagine your inhale/exhale cycle as a loop. Now locate one point on this loop and click your fingers each time you reach that same point. With eyes closed continue to listen to your own breath as you click your fingers at the pre-determined point. Now shift your listening focus to include the combined sounds of everyone in the room doing the same thing.
>
> Variations
> 1. Replace the finger click with a different body percussion sound of your own.
> 2. Try a vocal sound instead of a percussion sound. Experiment with different durations and dynamics.
> 3. Only play a sound on every second, or third, or fourth breath. Mix vocal and percussion sounds.
> Devise your own scheme of when to play and when not to, for example: 'In a six breath cycle I'll make a sound on breath one and breath five only'. Try different ratios of silence to sound.
>
> Discuss the differences. What kind of pulse is it? Where do you usually hear this kind of pulse?
>
> Independent pulse occurs around us all the time, in both the natural and built environments. You hear it on a factory floor, in city streets, on building sites or in the calm and tranquility of the bush. The machines, the people and the bush animals all sound in relation to their own unique, independent pulse. (Leak, 2003, pp.89-90)

It is surprisingly difficulty to maintain a constant yet personal pulse within a sea of swirling sound. For this reason, there is an enormous amount to be learned simply by paying attention for the duration of the exercise. Maintaining focus on one task while participating in another is a fundamental lesson that must be reckoned with. Music making is inherently about building layers of information while being mindful of others. If the foundation is weak, chaos will follow. We must challenge our listening and concentration skills which require continual nurturing across a multitude of platforms. If we pay attention, we notice our independent pulse is a mere fragment of a larger entity. If we listen, we might hear a naturally occurring rhythm reverberating around us. Sounds will blend, others will collide. We become the composition, gaining knowledge, empowerment and ownership – a process that is imperative for the development of musicianship. The activity continues and lives inside us when we leave the classroom. We begin to "recognize that music is everywhere, to be listened to and played with."[26] We experience the simple beauty of an independent pulse.

Western music is heavily laden with clock time, so we must learn to play with others presenting a united front.

> *Unified Pulse*
> Most musical performances have an agreed, or unified, pulse rate that performers lock into)
>
> Put a metronome on the floor in the middle of the circle sounding at 60 b.p.m.[27] Establish this pulse by 'walking on the spot', beginning on the right foot. This is not a four-four beat: it's just a pulse, with no accent or subdivision. Keep it steady, don't race. Keep listening to the metronome and walking the pulse. If you feel the metronome is dragging you or rushing you, adjust your speed to match the metronomes speed.

[26] Private correspondence with anonymous student
[27] Beats per minute

> Variation
> Appoint a leader to stand in the centre of the circle to lead changes in the speed of the pulse from slow to medium to fast, by simply changing walking speed and everyone following. Try sudden and gradual changes. (Leak, 2003, pp.90-91)

We must listen, watch and respond. Constantly. There are moments when we can lead and others where we must follow. Learning how to lead involves understanding and negotiation. You have to be clear. If you lead without concern for others, they may not follow where you want to take them. Learning to follow while maintaining personal integrity is one of the great challenges of rhythmic study. Ultimately, the lesson is not about following someone else, but learning to notice what we are doing ourselves *while we are doing it*. Learning to listen and be flexible. Maintaining a steady yet malleable pulse is a lesson gained through confidence, knowledge and mindful awareness. This gently ebbing pulse provides the unwitting foundation upon which we build all our knowledge.

Meter

Pulses can be assembled into groups of any number, and in western music they are often found huddled in groups of twos, threes and fours. As Leak (2003) states, "Groups of pulses constitute musical meter" (p. 92). "While response to the beat is considered the fundamental response to temporal regularity in music, response to music's meter, or grouping of beats, is considered hierarchical." (Radocy and Boyle, 2003, p.167) This hierarchy needs to be respected and internalized, so it can withstand the later addition of inevitable subdivision. Leaks lesson continues.

Unified pulse and meter

Feet: Right, left, right, left etc

•	•	•	•	•	•	•	•	etc.
R	L	R	L	R	L	R	L	

Grouped into twos

•	•	•	•	•	•	•	•	•	•	•	•
R	L	R	L	R	L	R	L	R	L	R	L

Grouped into threes

•	•	•	•	•	•	•	•	•	•	•	•
R	L	R	L	R	L	R	L	R	L	R	L

Grouped into fours

•	•	•	•	•	•	•	•	•	•	•	•
R	L	R	L	R	L	R	L	R	L	R	L

Step the following patterns in the feet with a metronome sounding. Begin on the right foot and emphasize the first pulse in sets of two (by being louder), then three, then four, then five, then six, then seven, then eight, and then nine. Note that the first pulse changes from right foot to left foot in the odd meters. The group leader calls the changes. Keep tempo at 60 b.p.m.

Add a clap

Repeat the above with the leader sounding a pulse (using claves or a cowbell) and the players clapping on the first of each grouping, keeping the feet still, for example in threes:

Grouped into threes

Group clap	x			x			x			x		
Leader	•	•	•	•	•	•	•	•	•	•	•	•

In this way we experience meter. In a more perfect world, all musicians would enjoy compulsory dance lessons, but time and funding prevent this occurring in a department of music. “Concepts of beat, pulse, strong vs. weak stress, schemes of accent patterns, basic duration, and tempo are among the most important topics for rhythmic ear training. All of these need to be organized and coordinated by some physical action in listening and performance.” (Rogers, 1984, p.143) The above exercise is a simple but effective way of introducing and experiencing all of these theoretical concepts. We are building our intuitive knowledge.

Now we are primed for polyrhythm – two independent meters moving concurrently. An in-depth study of polyrhythm can be addressed later in the learning cycle, but this is an opportune moment to whet the appetite and show the brilliance of a seemingly simple pulse.

> *Unified Pulse and Independent Meter*
> Three and four
> Split the circle and ask on half to clap the first of a three pulse meter and the other half to clap the first of a four pulse meter. Count four to begin. Twelve beats will go by before the group plays a ‘one’ together again.
>
> Three and five: How many before a unified one?
>
> Three, four and five: This will take 60 pulses to return to a unified ‘one’.
>
> Variation 1: Vocal version
> Replace the clap with a vocal sound. Assign, high medium and low registers to the groups. Ask each to quickly decide on a sound or word, to be performed in the allocated register. The sound should have a percussive attack quality to help articulate the resultant rhythm. Count to four then begin.
>
> Variation 2: Vocal and movement
> Each group adds a stepping movement to their sound. Try to recognize the end of the cycle by listening for the unified ‘one’ and stopping/freezing. Try starting each group in different places and use different directions

> across the space, from upstage to downstage in a line and vice versa, using directed walking patterns or any other variations the group suggests. Always count to four then begin. (Leak, 2003, pp.94-95)

I have used this lesson in classrooms filled with small children, large adults, dancers, actors and musicians. All bring their own knowledge and experience, expectation and assumption to the circle, and all are amazed that something so simple can be really quite wonderful. The final step is to create a composition including everything experienced thus far.

> In smaller groups, combine, summarize and resolve the above exercises into a short (5 minute) performance, which clearly demonstrates and changes between: independent pulse, unified pulse, unified pulse and meter, unified pulse and independent meter. Incorporate tempo changes into the piece. (Leak, 2003, p.95)

The message is this. A pulse is constant. It can fluctuate, throb, pound and quiver, yet it goes on. It can move independently from others, yet remain constant in its own action. When a pulse moves in time with another, it finds strength and movement in groups, articulated by the first and largest entity. This pulse is now unified in meter that is strong enough to weave its way through another or hold true to its original path.

This informal lesson does not come from a book but from the experience itself. The participants are entirely responsible for the sounds they create and may well gain their first taste of compositional pride as they create music that "is conveyed not only with the body and mind, but the heart as well."[28] We learn to maintain a pulse when it is governed by meter. We learn to *feel* meter. Too often "students are taught to *count* beats because they do not *feel* beats." (Gordon, 1997, p.37) "Most students have found that

[28] Private correspondence with anonymous student

their study is made easier if they can actually feel the metrical grouping as they perform." (Ottman, Mainous, 2004, p.105)

A hierarchy has been established and our each beat will subdivide, integrity in tact. The pulse is still there, but we draw our attention towards the rhythm living inside each beat. We notice the beat, and its contents, as one package of information.

Subdivision

Pedagogical literature supports the notion of thinking and learning this package as chunks, patterns or cells. Ester (2005) states, "the presentation of aural patterns as beat-oriented chunks not only encourages storage in long-term memory but it also facilitates efficient retrieval when reading and notating. If students are properly guided during instruction to match visual beat-unit patterns with aural beat-unit patterns – that is, hear and see in beat units rather than note-by-note – they will learn to read and notate in beat units." (p.26) Karpinski (2002) states, "common rhythmic patterns should be learned as *patterns*, to be recognized and performed integrally as entities on the fly." (p.176) White (1981) says, "Mastery of the cell forms will enable the students to develop rapidly their rhythmic reading skills." (p.39) If we learn the information in chunks, we can both retrieve it and identify it in the same way. It helps to move us quickly through the learning process as we build upon established infrastructures. Rogers states, "almost all rhythms that are encountered will be variations, extensions, combinations, or relatives of the shorter, more basic building blocks. Once these patterns are recognized as being familiar friends, reading and hearing tasks are remarkably eased. The eye, ear, and brain

find it much simpler to group rhythms together than to jump from individual note to note." (p.145)

Rhythm must be mastered intellectually and physically. "Understanding the mathematical foundation of rhythm and meter (time values; meter signatures; subdivision; grouping and adding of beats within a measure; proper beaming and notations simple vs. compound; duple vs. triplet.) is essential for any musician." (Rogers, p. 143) Just as we learned to feel beats, we learn to savor the feel of individual cells and their assorted nuances. Each chunk has a multitude of possibilities, a thousand directions it can take, or not, depending on the transient yet immediate environment - of the page, of the person, the ensemble, the instrument…. Every one of these environments requires a considered response and sensitive understanding that pays homage to the rhythmic nuance. These "rhythmic nuances constitute what we have referred to as the "feel" of a rhythm. The same rhythm may be played with many different feels, just as the same melody may be played with many different pitch inflections. Indeed, we can think of rhythmic feel as a kind of rhythmic inflection that gives a rhythm its subtle dynamic and emotional qualities." (Snyder, 2001, p.183)

Our primal understanding of rhythm is demonstrated with our bodies. Percussive sounds allow for a clear attack point yet show no duration. Duration amplifies the characteristic of a particular rhythmic cell. The number of students who state they understand a rhythm perfectly and can play it on their instrument, but are unable to tap or clap it because they are 'not coordinated enough' is also problematic. I would suggest physical coordination is not the problem. If we can say it, we understand it. If we cannot say it, we do not understand. Furthermore, "when one considers that rhythm and meter in

music were originally based on natural vocal meter – the rhythm of the speaking voice" (Gordon, 1997, p.69) it seems perfectly reasonable to use our voices.

During my first year of teaching, I gave the class a take home rhythm reading assignment to study and prepare for performance at later date. A student came to me with fear in his eyes. He said he understood what the rhythms meant and how they should sound but, 'How do I say it?' We sat down together and devised syllables he could remember and apply to particular patterns. My inexperience was showing, and I was quietly horrified in this moment – here I was, pretending to be a teacher and offering a quick fix solution that held no long-term value and completely failed to address the underlying issue. Here was a student grasping on for dear rhythmic life and all I could give him was *Boom Boom WaKaChiKiDa Boom*. Now I know he was really saying, "I can't read rhythmic notation," but using different words. He said he understood and, in my naivety, I believed him. While it may have been true on some level, he had not developed notational fluency and was looking for a quick fix, an escape route. My teaching had left him ill prepared, and it was not his fault. Something had to change.

At this point I embraced the notion of teaching one cell at a time and building rhythmic vocabulary. Sound before symbol was imperative. We had to start listening, remembering the sounds, remember how they sit inside our bodies, and later associating this knowledge with notation. We understand. We learn 'what to do' when we don't know what to do.

Rhythm syllables

The question remains - how do I say it? Well, it depends. There is lot of 'doo, doo, doo' and 'dah dah dah' going on in the world, but we need a more substantial learning and teaching tool. There is a long history of rhythm syllables in Western art music and Edwin E. Gordon (1997) provides an eloquent outline in *Learning Sequences in Music* pp. 69-83 should the readers interest be piqued.

Based on my experience, the system most often referred to in the classroom is known as the "1 e & a" and is somewhat self-explanatory. It is an excellent tool for corralling a concert band but encourages students to "respond to note values and to a much lesser extent, if any, to rhythm and meter." (Gordon, p.74) I wanted a system that would encourage creativity and improvisation. Something that was simple, easy to remember and not dependent on notation. I wanted syllables that made sense to me and could be manipulated to fit a complicated bundle of rhythmic energy with a minimum amount of effort.

I turned back to an exercise housed inside a packet of vocal duets compiled by Emeritus Professor Edwin Harkins[29]. Somewhat ironically, the exercise was a study in subdivision and polyrhythm and required specific syllables that previously failed to catch my attention, but after being struck by a bolt of lightening, I was enthralled. The syllables are derived from Solkattu, a South Indian onomatopoetic drum language that is "almost inseparable from the drumming itself."(Montfort, 1985 p.78) I was drawn to their

[29] Harkins drew inspiration from *Ancient Traditions – Future Possibilities* by world music specialist Matthew Montfort.

simplicity and versatility. The syllables live independently from notation, leaving us free to manipulate them in a way suited to western rhythm.

The basic premise requires the student to memorize specific syllables for groups of one, two, three and four and these groupings provide the building blocks for any other combination. (See Figure 3). Memorization does not happen from the page but from what one hears in class, through a series of call and response activities and housed inside the body. We can associate the sounds with symbols at a later point.

Syllables	Numerical group
Ta	1
ta ka	2
ta ki da	3
ta ka di mi	4
ta ka ta ki ta	5 (2+3)
ta ki da ta ki da	6 (3+3)
ta ki da ta ka di mi	7 (3+4)
ta ka di mi ta ka di mi	8 (4+4)

Figure 3: Rhythm syllables presented in *Ancient Traditions – Future Possibilities*. Matthew Monfort, Panoramic Press, Californa, 1985, p. 96

This system is excellent for three very good reasons. Firstly, it pays homage to an exciting rhythmic tradition, that demonstrates much greater complexity than anything heard in the western world and has been in place for thousands of years. Secondly, the beat is always expressed as a 'ta', so we never lose track of it when speaking. It sits prominently at the front of our mouth and requires little of our attention because of our previous study. We do not need to think about the beat. We know. The flute player in me appreciates the physicality of each pronunciation. Each syllable serves a different metric function and resides in a different place in the mouth. The lack of repeated movements

allows the tongue to move more easily from one place to another. In this way we enjoy aural, cognitive and kinesthetic learning. Finally, it proved popular in the classroom and rhythmic precision increased ten fold.

We ran into one problem with these specific syllables. Notice the syllables for a group of two inside a beat are ‘ta ka’. The syllables for a group of four, inside the same beat, are ‘ta ka di mi’. Two mathematically different groupings starting with identical syllables caused some confusion in the class, so the following year, for reasons that will become apparent, I changed the syllables to those found in Figure 4. The list may appear complex at first but the reader will quickly ascertain that it is largely all about options, and groups of twos and threes.

Syllables	Numerical group
Ta	1
ta di	2
ta ki da	3
ta ka di mi	4
ta di ta ki da	5 (2+3)
ta ki da ta di	5 (3+2)
ta ki da ta ki da	6 (3+3)
ta di ta di ta di	6 (2+2+2)
ta di ta di ta ki da	7 (2+2+3)
ta ki da ta di ta di	7 (3+2+2)
ta ki da ta ka di mi	7 (3+4)
ta ka di mi ta ka di mi	8 (4+4)
ta ki da ta ki da ta ki da	9 (3+3+3)

Figure 4: Rhythm syllables used by author

Hoffman, Pelto and White

During the first year we used these syllables (See Figure 1) in class, I stumbled across an article in the *Journal of Music Theory Pedagogy*. The title was "Takadimi: A Beat-Oriented System of Rhythm Pedagogy" by Richard Hoffman, William Pelto and John W. White (1996). Imagine my surprise. Somebody else thought the same system was a great idea!

These three music theorists had wanted to develop a system that bridged the gap between sound and notation, thus providing excellent support in the development of music literacy. While developing their system, they created a list of goals the end result should address.

> Goals for effective rhythm pedagogy
> 1. It should lead to accuracy and musicality in performance, both studied and sight-read, including the ability to recognize and perform musical gestures.
> 2. It should require and reflect an understanding of rhythmic structure, recognition of metric and rhythmic interaction, and an awareness of precise contextual location of beats and attack points
> 3. It should facilitate aural recognition and identification of rhythmic patterns and metric divisions.
> 4. It should provide a precise and consistent language for the discussion of temporal phenomena. There should be no need to create new terms or separate categories for performance, transcription, or analytical work
> 5. It should address rhythmic issues presented by musics outside the realm of traditional tonal literature such as asymmetric meters, modulation of meter or tempi, complex syncopations, complex tuplet groupings, and passages that combine these in novel and challenging ways
> 6. Like pitch solfege, it should be a system that is easily applied and adapts to broad applications, and it should be a tool for life-long use. (Hoffman, Pelto, White, 1996, p.8)

Hoffman (2006) states,

> Takadimi "does for rhythm what "do re mi" solfege does for pitch. It gives us a way to label the parts of a rhythm and can make it easier both to understand and to perform. Takadimi is beat oriented; that is, it assigns

> syllables based on the position of the note within the beat. It is also pattern based. Reading rhythm with Takadimi helps you learn to recognize rhythmic patterns and see groupings of notes, not simply read note to note. Reading rhythm this way is similar to the way we read groups of letters as words and not one letter at a time. The word "takadimi" is similar to a pattern used in the complex system of sounds used to learn Indian drumming. Indian music is not metric in the way tonal rhythm is, and so its use in that system is entirely different from the way we use it here. (Hoffman, 2006, p. vi)

Their resulting system employs two sets of syllables. One for simple beat division and another for compound time. Irregular divisions employ the same syllables, plus one. (See Figure 5 and 6)

Syllables	Numerical group
(Simple time)	
Ta	1
ta di	2
ta ka di mi	4
(Compound time)	
Ta	1
ta ki da	3
ta va ki di da ma	6
(Irregular division)	
ta ka di mi ti	5 (4+1)
ta va ki di da ma ti	7 (6+1)

Figure 5: Rhythm syllables presented in Hoffman, R., Pelto, W., & White, J. W. (1996). Takadimi: A beat-oriented system of rhythm pedagogy. *Journal of Music Theory Pedagogy, 10*, 7-30.

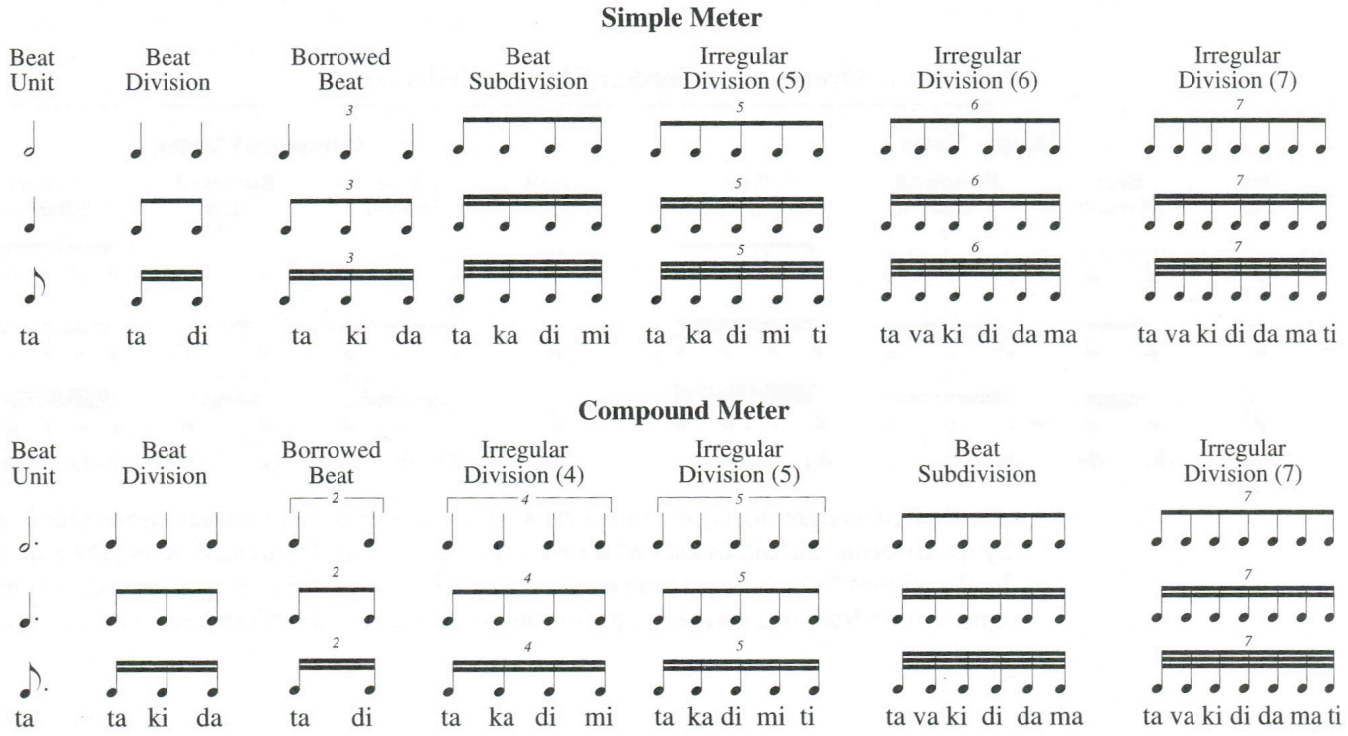

Figure 6: Richard M. Hoffman, William L. Pelto, and John W. White, "Takadimi: A Beat-Orientated System of Rhythm Pedagogy, *Journal of Music Theory Pedagogy, 10*, 7-30. 1996. Image captured from Krueger, 2007, p. 446.

I agree wholeheartedly and have viewed the benefits of the system time and time again. I am excited to see authors such as Karpinski (2000), Ester (2005) Krueger (2007) and Houlahan and Tacka (2008) embrace the system. However, I remain undecided about the grouping of six (ta va ki di da ma) (See Figure 5 and 6). While I support the notion of subdividing a group of three (ta ki da) and appreciate the virtue of the 'di' representing the half way point in both simple and compound time, it requires further learning, not adhering to previously cited rhythm pedagogy goal number four. Can not a group of six be more simply represented as a 2+2+2 or a 3+3? Perhaps. Previously I stated 'ta' always represents 'the beat' and now I am contradicting myself by suggesting we use 'ta' inside the beat. But, with extremely careful verbal introduction, at a particular moment in the learning cycle, I found this to be more of a help than a hindrance. It served to maintain integrity of the subdivisions nested inside the beat. 'Ta va ki di da ma', once learned, becomes one complete word and we might stop paying attention to what is happening inside the beat. We stop noticing precisely where the subdivisions lie. Having said that, I am sensitive of my own learning process and do not wish to interfere with best practice. Until I find resolution for my discontent, I present both possibilities in the classroom and encourage students to use what makes the most sense for them. To date, all articulations have been embraced.

For similar reasons, I disagree with the 'Hoffman, Pelto, White' syllables used for irregular division. (See Figure 5). A group of four is a completely different entity to a group of five. A group of four is solid and predictable, whereas a group of five is lopsided and has a delightful lilt. They share no relationship inside a singular beat and should not share syllables. It is absurd to present a group of five as 4+1 when it can be

articulated as a 2+3 or 3+2. The group of seven suffers a similar fate. It is much more appropriate to consider it as any combination of 2+2+3 or even 3+4, depending on musical context and personal preference. In this way, we can 'provide a precise and consistent language for the discussion of temporal phenomena.'

The Takadimi appears to be growing in popularity, and I predict it will continue to infiltrate music theory curriculum around the globe. The ultimate goal of rhythm pedagogy is to provide simple, clear understanding in a timely fashion. If we can spend less time talking about notation, we can spend more time enjoying music. That is what musicians do, yes? An old teacher of mine used to say "the proof is in the pudding", so I present some testimonies from those who now embrace 'takadimi'.

> Takadimi system focuses on syllabic sounds and the underlying feel of Rhythm. I could spend hours trying to discern some odd polyrhythm through numerically analyzing of each attack but with the TAKADIMI system, I'd begin to hear the inherent accents you could emphasize yourself, how the rhythm sits, and how it circles its way back into a loop.[30]

> Takadimi system made me start singing my own rhythms to myself. It started as sequential strings of rhythms and then I started thinking about rhythmic patterns that could fit into those spaces. Whether I was in a supermarket or concert hall before a performance, I would find myself taka-taka-takida-taka-takida-ing to myself. I doubt I would find myself singing '1ea&2e&a' to myself.[31]

> I don't believe in 1e&a 2e&a anymore. I thought that was the only approach in high school, and my rhythm reading was terrible because of it. Now I understand why. 1e&a teaches you where attacks fall and how to calculate where a beat lies in a measure. But the system is hopelessly attached to systems subdivided into 4, and usually measures of 4. It's a method to learn to sight-read without learning what the rhythms sound like on their own.[32]

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[30] Private communication with anonymous student
[31] Private communication with anonymous student
[32] Private communication with anonymous student

> Ta-ka-di-mi was a totally new approach for me because I didn't have to think about measures or putting together lines of rhythms, thinking about where the beats lay. All I had to do was memorize what my instructor called "cells", or the values of a single beat. We spent weeks memorizing combinations of note values that would fit into these cells, and learn how they sounds. Then sight-reading just became a matter of breaking down any kind meter (even systems in 5 or 7 weren't threatening anymore) into cells and recalling what I had memorized cell for cell. We learned subdivisions of every odd and even meter, and how these "cells" could be applied to quarter note beats, sixteenth note beats, whatever notation we came across.[33]

> Ta-ka-di-mi, oh how it is sweet chanting to my ears. This system was a form of verbal foot tapping: organic and natural. Anything that can simplify something so technical is good in my book. The rhythms from which I used to cower I now approach with a conquering motivation, knowing that ta-ka-di-mi is by my side.[34]

Epilogue

A class title is significant. It offers the first impression of subject content and our assumptions, based on previous individual experiences, will quickly follow. Despite broader connotations, the word *musicianship* is sometimes used in tertiary education to label a class that attends to the study of ear training, sightsinging, dictation and elementary analysis. In other words, learning how to speak, read and write in western music notation.

During my first year of teaching, one student grumbled to another, “There should be more theory.” He was an affable chap but often out of sorts. I heard myself say, “Honey, this is a musicianship class. It is *not* a theory class.” Our assumptions were

[33] Private communication with anonymous student
[34] Private communication with anonymous student

based on different experiences. Written theory was held in high regard at his previous school and this was, in part, why he decided to become a composer. In his experience, a class designed for music majors was viewed from the safety of the chair and filled with written exercises - transcriptions, analysis and compositions written in the style of others. He was taught to make a product that others might admire and produce. His experience was akin to mine, but I increasingly disagree with this model. I prefer a noisy classroom – singing, clapping and general noise making – improvisatory activities that focus on leadership, participation and the process of music making. In my grumpy students experience, composers delegated musical activity and were not required to participate. In his experience, performers did that. This young man was very resistant to change, but he came around by the end of the year. He still wears a composers hat but now owns a suitcase filled with many more options to chose from.

This particular class was not a theory class. It was a 'pre-theory' class. We studied the rudiments and became familiar with the building blocks of western art music through reflective practice. This was, in part, preparation for the theory class on the agenda in the following year. I was very interested in the practical application of knowledge and required verbal proof of understanding, in addition to penmanship. There is no reason to create a distinction between theory and aural skills. While each needs particular attention, we would do well to remember that one means little without the other in this traditional western environment.

Elliott (2005) states, "Musicianship is not an end in itself. The task of music education is not to develop the various forms of musical knowledge as ends in themselves

but to develop the musicianship of learners through progressive musical problem solving in balanced relation to appropriate musical challenges every stop of the way." (p. 122)

"As music teachers, we are about the education of *people*. This reality necessitates that we attempt to improve our students' lives individually and collectively."(Jorgensen, 2003, p.208) In order to do this, we need to be mindful of the current population in the classroom and meet them where they are. Our teaching practice must reflect current pedagogical trends and research. Teaching as we have taught, may not be best practice.

Earlier in this paper I questioned the difference between the word musician and musicianship. It is, of course, not about words. It is about the practice. The secret ingredient is, indeed, the Ship. "Musicianship is the ship that true musicians will never abandon."[35] The secret ingredient is the community in which one chooses to participate. "The word 'musicianship' implies ones existence as a musician within a community of musicians. It is a type of camaraderie that unites a group of people existing for and working towards a similar cause."[36] We might learn some of this from a book but, mostly, we learn from each other. We learn from our own experience through improvisation, through taking risks, through active participation rather than latent observation.

"Musicianship not only encompasses one's ability to perform, but one's knowledge of musical repertoire pertinent to ones musical ambitions, awareness of musical history, competence with music notation, being able to understand rhythm,

[35] Private communication with anonymous student
[36] Private communication with anonymous student

harmony, and theory. In addition, musicianship entails humility necessary to make sacrifices of time for practice and study of music."[37]

Musicianship is your soul trying to express itself, oozing out of your body, sending tingles down your spine, but you harness and caress the urge, and let music be your medium for your soul to shine.[38]

Musicianship is the search toward the infinite. Something no one will ever discover the true answer to, but something we (musicians) will always work towards. I like to think of it as taking steps each day that lead us closer to our destination; although we get closer and closer, we will never reach it.[39]

[37] Private communication with anonymous student
[38] Private communication with anonymous student
[39] Private communication with anonymous student

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