

Mind the Gap:
An Integration of Art and Science in
Music Theory Pedagogy

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List of Abbreviations

ABER	Arts-Based Educational Research
ABR	Arts-Based Research
AERA	American Educational Research Association
AKA	Alberta Kodály Association
ARCT	Associate of the Royal Conservatory of Music
ARMTA	Alberta Registered Music Teachers' Association
CFMTA	Canadian Federation of Music Teachers' Associations
CLG	Companion Listening Guide
CM	Comprehensive Musicianship
CPDL	Choral Public Domain Library
FHM	Frederick Harris Music
GMTA	Gloucester Music Teachers' Association
GTA	Greater Toronto Area
IKS	International Kodály Society
IMSLP	International Music Score Library Project
ISME	International Society for Music Education
JMTP	Journal of Music Theory Pedagogy
KM	Kodály Method
KSC	Kodály Society of Canada
LG	Listening Guide
MEAE	Music Education as Aesthetic Education
MTNA	Music Teachers National Association
MYC	Music for Young Children
OAKE	Organization of American Kodály Educators
OGS	Ontario Graduate Scholarship
ORMTA	Ontario Registered Music Teachers' Association
POGIL	Process Oriented Guided Inquiry Learning
RCM	Royal Conservatory of Music
SATB	Soprano, Alto, Tenor, Bass

SMT	Society for Music Theory
STEM	Science, Technology, Engineering, and Mathematics
U of C	University of Calgary
UBC	University of British Columbia
VCM	Victoria Conservatory of Music
WBM	Western Board of Music
WIMA	Werner Icking Music Archive

Abstract

My inquiry, centered on the applied practice of teaching, confronts the detachment that often disassociates the intellectual study of music theory from the physical experience of music. This pedagogical detachment, perceived as a split between opposing views of knowledge, privileges positivist *science* over interpretive *art* (Aróstegui, 2003), producing written competencies that have little or no musical meaning (Rogers, 2004). Endeavouring to re-attach music theory and the music it was initially intended to explain (Dirié, 2014), I constructed four Listening Guides to align with the intermediate-level theory curriculum of the Royal Conservatory of Music. Their construction incorporates elements of design research along with an underlying framework derived from the Kodály Method's four-step instructional process. Given my multi-faceted personal/professional interactions with music theory, my research project is presented in the form of a quest narrative that weaves together my story and the stories of participant teachers who established the Listening Guides' potential usefulness through reviewing and implementing interactions. This narrative, as a creative representation of arts-based research practices (Leavy, 2015), is derived from the blurring of specific cognitive findings and less definable aesthetic *knowings* (Greenwood, 2012). My data, both the prototypical data I designed and the empirical data I collected from focus group discussions with my participants, are filtered through an a/r/tographic lens that acknowledges the coexistence of my artist/researcher/teacher identities. The analysis of our aggregate narrative, as an exploration of music theory pedagogy with, about, in, and through music, relies on the evaluative tools of educational criticism (Eisner, 1991). Unfolding in a mostly linear climb, my quest for a fully integrated music/theory (art/science) pedagogy reaches its apex in the understanding that a music-logic organization confounds the subject-logic of traditional teaching approaches. Thus, my inquiry challenges the customary practices of scientific knowledge-building with a model for artistic "ways-of-knowing" in music theory pedagogy.

Keywords: a/r/tography, art/science integration, arts-based research, design research, educational criticism, guided discovery approach, Kodály Method, music listening, music theory pedagogy, quest narrative, Royal Conservatory of Music, spiral curriculum

Acknowledgements

If it takes a village to raise a child – as the African proverb attests – then it also takes a community to produce a dissertation. I embarked on this doctoral expedition with the amorphous intention of exploring my “what if ...?” ideas for the teaching of music theory. But it was my community that brought clarity of shape and form to my research project. Acknowledging that I could not have made this journey without the assistance I so gratefully received is a mere scratching at the surface of my indebtedness.

Although the trek from beginning to end was long and arduous, my supervisors’ constant encouragement kept my momentum moving in a forward direction – despite unavoidable fluctuations in its velocity. Since I had placed one foot in the field of music education and the other in music theory, I was accompanied by two supervisors: Dr. Richard Barwell, whose expertise includes the former, and Dr. Roxane Prevost, the latter. I could not have imagined a more supportive duo of mentors/tutors. Our frequent exchanges were always thought-provoking and I left our meetings fairly humming with ideas. Their guidance, born of a mutual trust, enabled me to launch each new task with confidence and security. Together, they are the rock on which I stand, and I thank them both with heartfelt appreciation.

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Closer to home, I was surrounded by the nurture and sustenance of my family. Before student, musician, teacher, examiner, author, and researcher, I am daughter, sister, wife, and mother. From my family, I derived both the stamina and the perseverance to see this inquiry through to its completion. I cannot begin to account for either the words or the deeds that empowered me to find (and then to indulge) my passion for writing. During this lengthy process, we have grown immeasurably – as individuals and as a family unit. My friends too were a

perennial source of motivation, bolstering my courage when it waned and weathering with me the rhythmic ebb and flow of my days/months/years.

Like any worthwhile endeavour, the writing of a dissertation inevitably traverses all manner of mountains and valleys. As a mature student (referring to my age and not necessarily my disposition), I was obliged to balance my doctoral studies with the professional duties and familial responsibilities of my “sandwich” generation. A global pandemic compromised the balance even further. But with the unwavering support of my personal/professional community, I reached the end of the expedition. *This* expedition. From a crisis of purpose in the summer of 2018, I came to an understanding that my research project is larger than me – or the physical/virtual studio that confines my teaching. Undoubtedly, there is much more work to be done. I fervently hope that my ideas for an art/science instructional integration will find their way into the big, wide world of music theory pedagogy.

For in the end is a beginning...

Dedication: I offer this manuscript – and the thinking it entails – to my husband, Keith Penny, an electrical design engineer who is the science to my art. Or is he the art to my science?

Acknowledging Previously Published Material

Portions of my dissertation are reproduced (with permission) from:

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These portions appear in the following sections: integrating multiple perspectives (chapter 1); a description of the problem, the scholarship in music theory, the scholarship in music theory pedagogy, the scholarship in music education, the nexus of music theory and music education (chapter 2); the scholarship in arts-based research (chapter 3); an opportunity to effect change, an adaptation of the Kodály Method for music listening (chapter 4).

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*Acquiring musicianship ... finally comes down to the competence
to use our thinking ability to improve listening and our listening ability to improve thinking.
As long as this cycle can be kept in motion, real education takes place;
we learn so that we can learn even more.
Each new accomplishment leads to ... more sophisticated
and more challenging levels of investigation and perception...
The helix is never completed which is why music theory ... is endlessly intriguing.*

– Michael R. Rogers

Prelude

An education not founded on art will never succeed.

– Margaret Mead (1901-1978)

The Preambular Discourse

Affiliated with the Society for Music Theory (SMT), the Music Theory Pedagogy Interest Group, in its mission statement, construes music theory pedagogy as “both the scholarly study of and the applied practice of teaching all areas of music theory, including rudiments, harmony, analysis, counterpoint, figured bass, aural skills, keyboard harmony, and other such subdisciplines” (SMT, 2019). My construal of music theory pedagogy, for the purpose of this inquiry, is centred on the “applied practice of teaching ... music theory,” particularly the teaching of rudiments as the precursors of harmony. Motivated by a desire to improve my teaching practice, and to similarly motivate my teacher colleagues, I confront the detachment that often isolates the intellectual study of music theory, separating it from the physical experience of music. This pedagogical detachment, perceived as a split between opposing views of knowledge, privileges positivist *science* over interpretive *art* (Aróstegui, 2003), producing written competencies that have little or no musical meaning (Rogers, 2004). My inquiry endeavours to reattach music theory and the music it was initially intended to explain (Dirié, 2014) – with the implementation of an integrated music theory pedagogy.

Just as my instructional expertise has matured over more than four decades of teaching music theory, so too has my sense of an intrinsic art/science imbalance. In my role as a music theorist, I acknowledge an allegiance to the analytical realm of music study and therefore, a fascination with its scientific configuration. But this fascination preserves abstract presentations of musical concepts that are divorced from aesthetic or sensory experiences in many teaching environments, including my own. As a music educator, I recognize that traditional deductive transmissions of musical concepts – by means of explanation, demonstration, or contrived illustration – do not enhance my students’ learning experiences, nor their appreciation for the artistic qualities of music.

A dichotomous dance ensues. In *theory*, meaning a set of principles on which to base my instructional practice, I champion the integration of art and science in music theory pedagogy. But in *practice*, meaning the instructional application of this set of principles, I frequently fall

short of my integrated ideal. Each September, when I begin a new academic year with a new group of students, I promise myself that I will include the piano in my teaching – that I will play examples of the musical elements we will study. I am faithful to my promise for the first few weeks, until I get caught up in exercises and corrections, problems and solutions. I justify my dwindling “performances” with the time constraints of schedules and deadlines. Before long, I revert back to old teaching habits and the piano is forgotten.

However, in the words of David J. Hargreaves (1986):

The intuitive experience and enjoyment of music should come first, such that the latter acquisition of formal musical skills occurs inductively, that is, as an integral growth of the [student’s] experience. A good deal of traditional music [theory] education has worked deductively: the formal rules have been taught in the abstract, for example, through verbal description or written notation, rather than in the practical context of making the sounds themselves. (p. 215)

Music is an acoustic art form; music theory is a scientific analysis of its symbology. Derived from this visual representation of an aural phenomenon, music theory is essentially a distillation of music’s component parts. But for many students, these non-contextualized parts are too far removed from the whole that generates them. Since the primary incentive for music theory instruction is preparation for written examinations, much music theory teaching is directed toward helping students develop coping strategies that will foster successful exam experiences. Although this is problematic in itself – teaching for the exam rather than the subject – I attempt to do both. I am increasingly aware, however, that I convey *my* understanding of music theory without allowing or encouraging my students to develop their own understandings.

Since I associate music theory with the printed score, my response to it is primarily visual. I am content with this imaging (or imagining) of musical elements – without their tangible manifestation. I see patterns that have distinct meanings for me because I can also hear the sounds that these patterns represent. But I cannot assume that my students see and hear in the same way that I do. As a music theory teacher, I should be enabling their hearing skills. Instead, I am almost exclusively occupied with their seeing skills. I tell myself that there is not sufficient lesson time to accommodate both skill sets, but I am effectually compromising my students’ interactions with music theory. Intent on addressing this issue, I set out to broaden/deepen the scope of my teaching practice with a research project in music theory pedagogy.

The first part of my inquiry incorporates aspects of design research. Early work in this discipline, mainly associated with architectural and industrial design, expanded to include engineering design in the late 1980s. While Herbert A. Simon (1969) established the foundations for a *science* of design, Donald A. Schön (1983) challenged Simon's technical rationality, promoting an "epistemology of practice implicit in the artistic, intuitive processes" that practitioners bring to "situations of uncertainty, instability, uniqueness, and value conflict" (p. 49). In a design context, Schön's reflective "knowing-in-action," a kind of knowing inherent in the intelligent actions of professional practice, is aimed at broadly understanding and improving design processes, rather than developing discipline-specific knowledge.

In the context of my inquiry, I designed four Listening Guides (LGs) that integrate both artistic and scientific discernments of music in the teaching of music theory. The LGs, which experiment with alternative practices, may be interpreted as design products aimed at understanding and improving the pedagogical processes associated with music theory instruction. Schön (1983) summarizes my practitioner's approach to their design:

A designer makes things. Sometimes he makes the final product; more often, he makes a representation – a plan, program, or image – of an artifact to be constructed by others. He works in particular situations, uses particular materials, and employs a distinctive medium and language. Typically, his making process is complex. There are more variables – kinds of possible moves, norms, and interrelationships of these – than can be represented in a finite model. Because of this complexity, the designer's moves tend, happily or unhappily, to produce consequences other than those intended. When this happens, the designer may take account of the unintended changes he has made in the situation by forming new appreciations and understandings and by making new moves. He shapes the situation, in accordance with his initial appreciation of it, the situation "talks back," and he responds to the situation's back-talk. (pp. 78-79)

The particular situation that generated the LGs is rooted in my multi-faceted experiences with both music theory and music education. As essential components of my inquiry, the LGs are aligned with the curricular requirements of the Royal Conservatory of Music (RCM), an internationally respected institution of music education founded more than 130 years ago. In 2016, RCM restructured its theory curriculum to better support students' performance studies. This restructuring, focused on musical literacy, provides fertile ground for my exploration of an integrated music theory pedagogy.

The Kodály Method (KM), a systematic concept of music education that developed in Hungary under the leadership of composer, ethnomusicologist, and educator Zoltán Kodály (1882-1967), gave agency to my ideas of integration. As a practical application of Hargreaves's (1986) inductive teaching approach, KM's music-centered instruction facilitates the enhancement of written competencies with auditory awareness. KM, which is also consistent with Piaget's (1969) child-developmental theories and Bruner's (1966) instructional theories, features a four-step pedagogical process – prepare, make conscious, reinforce, and assess – that provides the underlying theoretical framework for my inquiry (see chapter 3). The LGs brought this process, in which musical concepts evolve from experiences of active music making (Choksy et al., 2001), to the rudiments content of RCM's intermediate-level theory curriculum. Modelled after Choksy's (1999b) KM-inspired Listening Strategies, they purpose repertoire (art) for the integrated teaching of music theory (science).

In the second part of my inquiry, participant teachers offered the “back-talk” that establishes the potential usefulness of the LGs. My participants, drawn from RCM's College of Examiners as well as the Ottawa Region Branch of the Ontario Registered Music Teachers' Association (ORMTA), critically reviewed the LGs, then implemented them in their classrooms or studios. Both interactions – reviewing and implementing – concluded with focus group discussions divided by geographic location (Kanata, Orleans, and Toronto). In these discussions, the participants shared their experiences with the LGs and responded to one another. Given my personal/professional immersion in the subject matter, my voice is interspersed with my participants' voices. Their perceptiveness assisted my meaning-making in music theory pedagogy which in turn, assisted my challenging of its old-fashioned instructional traditions.

My research project is presented in the form of a quest narrative that weaves together my story and my participants' stories. It is a personal narrative focused on both the self-scrutiny of my professional practice and the wider-ranging scrutiny of pedagogical practices in my profession. As an exploration of teaching music theory with, about, in, and through music (Cornett & Smithrim, 2001), the unfolding of my narrative embraces emergent arts-based research (ABR) practices that provide opportunities for artistic “ways-of-knowing” and purpose art for the sake of scholarship. The rendering of my research as a narrative empowers a generative form of inquiry with the capacity to inspire positive change. Through its telling, the reader is invited to participate in the interpretation of my story, contextualizing Ainslie Yardley's

(2008) notion of truth as “that which we individually or collectively perceive to have authenticity” (para. 14). Thus, by “delving into the artefacts of memory” (para. 18), my narrative surpasses reportage and reveals *why* the story is told.

Filtered through the lens of a/r/tography, a methodology associated with living inquiry (Irwin & Springgay, 2008), my narrative is “inclusive of the collective experience of the participating community and its members” (Yardley, 2008, para. 32). Representing an *essence* of truth, it promotes a new understanding of music theory pedagogy with the potential for significant influence beyond the experience itself. An a/r/tographic lens, which acknowledges the coexistence of artist/researcher/teacher identities, accepts and appreciates artistic endeavours that cannot be measured by scientific means. This lens also recognizes the prismatic filter of my unique personal/professional perspective, as well as the perspectives of my participants. Seeking validity, the analysis of our aggregate narrative relies on the four dimensions of Eisner’s (1991) educational criticism: description, interpretation, evaluation, and generalization (see chapter 6).

An Overview of the Dissertation’s Structure

My research in music theory pedagogy experiments with alternative instructional practices that integrate both scientific and artistic views of music in the teaching of music theory. Influenced by KM’s four-step instructional process, my inquiry is guided by four preliminary questions:

- How can the teaching of music rudiments be integrated with repertoire?
- How can an integrated pedagogy be implemented?
- How can the implementation be improved?
- How can the teaching of harmony be enhanced by an integrated rudiments pedagogy?

Through the opening chapters, these questions are refined with contextual details that clarify and focus my research intentions. They also inform my perusal of the scholarly literature. More robustly stated at the end of chapter 3, these questions inform my analysis of both the prototypical data I designed for implementation and the empirical data I collected from my participants. But the question at the heart of my research endeavour – the one that inspired the LGs – is simply: What might an integrated music theory pedagogy look/sound/feel like?

The object of my quest is a fully integrated music/theory (art/science) pedagogy for the teaching of music theory. My narrative unfolds in a mostly linear climb toward my objective. At

the end of my climb, when I reached the apex of my quest, I came to understand that fully integrated instructional materials are non-existent. They require a music-logic organization that confounds the subject-logic of traditional materials. This is not to say that an integrated music theory pedagogy is impossible, only that it is not yet supported by appropriate instructional materials. Next steps involve the development of integrated instructional materials for the teaching of music theory, but these materials will challenge both the customary presentation of musical/theoretical concepts and their organization.

In this prelude, I have opened my narrative, established its context, and given background details that introduce the literary/musical work to come. Each of the six chapters comprises a necessary part of my quest as a whole, leading me ever closer to my research objective. The content of these chapters is outlined below:

- chapter 1 – presenting my personal perspectives
- chapter 2 – reviewing the scholarly literature in relevant disciplines
- chapter 3 – positioning my inquiry in ABR practices
- chapter 4 – describing the pedagogical design of the LGs
- chapter 5 – interacting with the participants' responses to the LGs
- chapter 6 – exploring reluctance/resistance to an integrated pedagogy

A postlude concludes my dissertation with a consideration of next steps and the potential future of a fully integrated music theory pedagogy. By providing a “pathway into [my] life experience,” I can offer the reader a “means of making sense of [her/his] own” (Yardley, 2008, para. 26).

Chapter 1

Music Theory Pedagogy: Situating Myself in the Discipline

*Two roads diverged in a wood, and I –
I took the one less traveled by,
And that has made all the difference.*

– Robert Frost (1874-1963)

Introductory Remarks

The subject of music theory is defined as a “branch of ... scholarship that studies the materials and structure[s] of music” (Randel, 2003, p. 879). It encompasses the properties of single sounds, such as duration and pitch, as well as collections of sounds, including rhythm, melody, and harmony. For nearly five decades, I have immersed myself in the study of music theory, observing its various elements from an overlapping succession of personal perspectives:

- student
- artist/musician
- teacher/practitioner
- examiner
- author/pedagogue
- researcher

The *whole* of my experience, as an integration of its constituent *parts*, has been shaped by the unique contribution of each perspective.

In chapter 1, a narrative recounting of my experiences with music theory, and its pedagogy, establishes my understanding of the subject matter. My narrative, exposed to critical analysis in subsequent chapters, forms the organizational nucleus of my dissertation. Each perspective, rendered as an individual interaction with music theory, layers my early observations with more recent reflections. Although their paths frequently cross, the six perspectives are, for the most part, chronologically ordered. Despite a blurring of boundaries, each “self” holds independent attitudes and assumptions that have influenced the progression of my meaning-making.

However, just as it is for musical analysis – a fundamental practice of music theory – too much fragmentation is dangerous (Rogers, 2004). It negates the comprehensiveness of a holistic experience. Therefore, the chapter will conclude with a reassembling of these fragmented perspectives to present my composite view within the discipline of music theory pedagogy. The

notion of integration, or the action of combining parts to become a whole, is central to my unfolding discussion.

A Student Perspective

My first lesson in music theory was mildly disconcerting. Since my piano teacher had taken a leave-of-absence, I was enrolled in a theory class at the local college. The first chapter of our textbook introduced rudimentary elements of notation (Wharram, 1969), beginning with the musical staff. I recognized the terms on the first page: note, staff, pitch, clef, treble clef, bass clef. On the second page, I encountered C clefs and for the first time in my musical experience, I felt uncomfortable with my perceived lack of knowledge.¹ Granted, I was a pre-teen in an unfamiliar college environment, but with no frame of reference for C clefs in my piano repertoire, I struggled to make sense of them – beyond memorizing an illustration in my textbook. What about their origin as pitch letters in medieval manuscripts? Or their vocal designations? Why are they nearly obsolete in modern notation? Grown-up questions such as these did not occur to me as a child. I simply wondered at the relevance of non-standard clefs.

In retrospect, I understand that I was mistakenly placed in a higher-level rudiments class but at the time, with my entry-level awareness, I could only surmise that music theory was excessively complicated. Like thousands of music students across Canada, I followed the curricular requirements specified by RCM. Providing a structured system of assessment, RCM's rudiments curriculum, which encompasses the basic elements and notational conventions of musical grammar, is sequentially organized to support a progressive series of theoretical or written examinations. When my theory instruction began in the early 1970s, there were three rudiments exams – preliminary, grade 1, and grade 2 – which were co-requisites for grade 5, grade 6, and grade 7/8 practical or performance examinations.

In my juvenile naivety, I assumed that music theory was merely a non-optional accessory for my piano playing – along with technique, ear training, and sight reading. I accepted the lack of a practical application for C clefs, and many other notational elements, as a long-established theoretical tradition. I did not question the directives of RCM. Thankfully, when my piano

¹ Moveable C clefs place Middle C, known as C4 (with a vibrating frequency of 261.625565 hertz), on any one of the five staff lines. The most common are the alto clef, regularly used for viola, and the tenor clef, intermittently used for cello, bassoon, or trombone. Positioning Middle C on the third and fourth lines respectively, these clefs, along with the bass F and treble G clefs, establish a reference or “key” for all remaining notes on the staff.

teacher returned from his study leave, the college classroom of my early theory lessons was replaced with his dining room. In this unpretentious setting, my apathy for music theory dissolved and my growing affinity was nurtured and developed.

To ameliorate my previous experience, Barbara Wharram's (1969) textbook was exchanged for another by Boris Berlin, Molly Sclater, and Kathryn Sinclair (1969). Instead of presenting every topic in its entirety, with letters (A, B, C) identifying the grade applicability of individual paragraphs in each chapter, this new book portioned its presentation in a sequential series of chapters for each grade. That is, topical information was ordered by grade rather than by subject. Consequently, C clefs, required for grade 2 rudiments, were introduced in chapter 16 – where they had ample preparation and would not baffle beginning students. Later, as I entered high school, I was encouraged to teach music rudiments myself. I have done so for more than forty years.

During my first years of teaching, I continued music theory studies with private lessons in the advanced subjects of harmony and history. Once again, I struggled with relevance. This time, I had difficulty connecting the black-and-white consistency of rudiments with the greyish malleability of harmony – classified as *tonal* harmony because of its hierarchical organization of pitches around a central tone or tonic. I missed the solidness of scale patterns and interval measurements, failing to understand that these rudimentary elements provide the harmonic basis for Western music of the common-practice period.² In their place, I met the fluidity of chord progressions and melody harmonizations that appeared to substitute predictability with randomness. How was I to make appropriate harmonic choices? If a single note could belong to multiple chord structures, and these structures could be sequenced in multiple progressions, the permutations and combinations were seemingly endless.

Tonal harmony provides syntax for the basic rudiments of musical grammar. As such, the *doing* of harmony shares commonalities with creative writing. I wrestled with the overwhelming possibilities of this creativity, feeling little confidence in my understanding of their rightness or wrongness. My first harmony textbook offered examples of harmonic progressions (Lawless &

² In the history of Western art music (as opposed to folk music), the common-practice period spans the Baroque, Classical, and Romantic eras, roughly from 1600 to 1900. Although this time-period encompasses considerable stylistic evolution, its unifying feature is the tonal system that arranges “musical phenomenon around a referential tonic” (Hyer, 2001, p. 584). Accordingly, the historical borders of the common-practice period coincide with the formation and subsequent disintegration of tonality.

Podoliak, 1972), including those designated “special treatment progressions” (p. 30), but it gave insufficient advice for their usage in the harmonization of melodies or basses. Essentially, it was a rulebook that documented the limitations of acceptable harmonic formulae, but continually disappointed my one question: Why? Although the authors clearly stated their belief that “interest in a subject increases with knowledge” (p. 4), my interest was not well-served and my knowledge became mired in confusion.

Recognizing this deficiency, my harmony teacher supplemented the textbook by James Lawless and Tela Podoliak (1972) with a workbook that allowed for both harmonic and melodic experimentation (Andrews et al., 1972). Unlike many of my contemporaries, I received harmony instruction at the piano. As a result, I learned to distinguish chord progressions that sounded good from those that did not. I learned to trust my ears but my teenaged intellect did not yet grasp the reasoning behind my aural comprehension, nor the logic behind tonal harmony.

Although I was apprehensive about my knowledge deficiencies when I entered a post-secondary environment, I soon realized that RCM’s harmony curriculum is topically equivalent to many universities’ first- and second-year theory courses. This equivalency offered me an opportunity to reconstruct my understanding of tonal harmony. It enabled me not only to reinforce my earlier experiences but to expand these experiences with additional layers of meaning. From every author and every professor, I collected new insights and discovered the answers to many of my *why* questions.

The author of my first-year harmony textbook was occupied with questions of *when*, specifically when “certain melodic progressions imply, normally, certain definite harmonies” (Lovelock, 1946, p. iii). I found this no-nonsense approach to commonplace progressions refreshing. In my second year, the absence of a textbook proved an equally refreshing, unfettering experience. My attention shifted from the authority of theoretical publications to the expertise of theorist practitioners and I began to understand that meaning-making in music theory – as in other disciplines – is a personal endeavour. Professor Allan Bell introduced me to functional harmony and with it, a system of chord classifications that facilitated bigger-picture thinking.

The importance of ear training also became evident to me. Broadly interpreted as aural skills, involving the activities of dictation and sight singing, ear training is defined by Michael R. Rogers (2004) as the “ability to hear musical relationships accurately and with understanding” (p.

100). This emphasis on aural understanding enhances the reciprocal dependency of hearing/listening skills and thinking skills, providing a tangible framework for music theory. Along with the ear training that accompanied my theory courses, I took an additional course in aural perception that strengthened my pre-university experiences with *solfège*. Using moveable-*do* solmization that assigns syllables (*do, re, mi, fa, so, la, ti*) to specific scale degrees, I began to audiate or mentally hear the pitches of my written harmonizations.

Still, the intricacies of functional harmony seemed to elude me. Contradicting the experiences of most students for whom the mind is the “natural leader of the ear” (Rogers, 2004, p. 103), I could hear and I could produce viable harmonic solutions through an aural process of trial-and-error. I could even analyze given harmonizations but I could not make rational sense of my intuitive knowledge. How did I know what I knew? Professor Bell suggested that I begin tutoring my younger peers and recommended me to several of his theory students, but it was not until after I completed my undergraduate studies that pieces of the harmonic puzzle began to come together for me. They arrived in flashes of inspiration over many years of teaching and thinking. But it was not my student-self who made the necessary connections.

An Artist/Musician Perspective

There was always a piano in our living room – a beautifully carved Martin-Orme upright (ca.1910). My mother learned to play in her youth; it was only natural that I should do the same. I loved playing the piano and quickly entered the realm of RCM. Recognizing its institutional name from the books in our piano bench, I experienced the oneness of a musical community that gave me an identity and a place of belonging. It also gave me a sense of security in other creative settings and enlightened my informal encounters with music both at church and at school.

The vice-principal of my elementary school, who was a fine musician, instituted a school-wide music program. As a student body, we sang at assemblies. In our classrooms, we received regular singing instruction that incorporated *solfa* syllables and rhythm duration syllables – such as *ta* and *ti-ti* for quarter notes and pairs of eighth notes, respectively. Although these syllables were not included in my piano lessons, they served to reinforce my awareness of both pitch and rhythm. As my experiences broadened, I became fascinated with the inner workings of music, particularly the patterns I observed. By way of example, I discovered, in my technical practice, that the upper tetrachord of an ascending melodic minor scale is the same as the upper tetrachord

of its parallel major.³ Of course, I did not possess the theoretical knowledge to express my discovery with this terminology. I demonstrated for my piano teacher but there was no mention of the sameness I had noticed in any of my music theory books. Surely, I was not the only one to have seen it.

With the passing years, I settled into my musician-self. I played for studio recitals, music festivals, and piano examinations. I also played periodically at church and at school. When I entered grade 7, I joined the school band and learned to play the clarinet. At my high school, the music program was exceptional. We had both brass and woodwind specialists who encouraged the formation of ensembles and invited me to play both the soprano clarinet and the alto clarinet, one smaller and the other larger than the standard instrument. I especially enjoyed our frequent music theory tests which included bonus questions designed to challenge those of us who studied privately. I remember, for instance, encountering F-flat major – a scale that cannot be written practically with a standard key signature, but must be derived theoretically with an extra accidental.

This is approximately the same time that I began to teach music rudiments. My new piano teacher, who had seen potential in me that I was only beginning to see for myself, envisioned and ultimately orchestrated a teaching opportunity that purposed my interest in music theory – not to mention her *dis*-interest in the subject. We created lesson plans at her kitchen table, using the Berlin, Sclater, and Sinclair (1969) textbook that I knew well. She entrusted me with four students who were ready for preliminary rudiments. One of these four went on to complete her studies in Toronto and became a piano examiner for RCM. Eventually, I taught all my teacher's rudiments students and added a few of my own. I also began to teach piano, having observed the first year of my youngest brother's lessons. The future seemed to be falling into place. My mother was a school teacher and my father, a banker. I was actively teaching, but I was increasingly drawn to the numbers that configure the analytical details of music theory.

Given my proclivity for theoretical interactions with music, I must question: How is an artist/musician perspective relevant for a dissertation in music theory pedagogy? While my inquiry is unavoidably coloured by my idiosyncratic view of the world (in its totality), nearly forty years after the unfolding of events I have described, I see that my pianist-self stepped back

³ A tetrachord is a succession of four consecutive pitches that form a distinct arrangement of whole steps and half steps. Diatonic (major and minor) scales consist of two tetrachords separated by a whole step.

to give prominence to my teacher-self. In similar fashion, music assumes a peripheral role in the teaching of music theory. Consequently, I am situated in the crux of my pedagogical problem – music theory that is habitually detached from the music it was designed to explain. A musical reattachment is necessary, but the *how* of it is as yet unclear. The re/union of music and theory is rooted in the collaborative interweaving of notes and numbers, sound and symbol. My approach to this amalgam is embedded in my continuing story.

A Teacher/Practitioner Perspective

When I was fifteen years old, two “someday” desires came to the fore of my consciousness and fully ensconced themselves. I aspired to (1) teach music and (2) write about music. I greatly admired my piano teacher and set out to make a life for myself modelled on hers. Not having previously encountered the word *pedagogy*, certainly not in relation to the piano or to music theory, I chose elementary school music as an area of emphasis for my undergraduate studies. I reasoned that it was most closely aligned with my career intentions.

Throughout my years at the University of Calgary (U of C), I experimented with many musical activities. I took voice lessons as a second-instrument study and joined the university women’s choir. In my last year, I successfully auditioned for the jazz choir. I also accepted a position as accompanist for a community children’s choir and after a time, assumed the conductor’s role. I even took a course in music copying through the university’s continuing education division and later, copied for a small music publishing company that added one of my student compositions – a vocal solo with piano accompaniment titled *Party Shoes* (1990) – to its catalogue of publications. Teaching, however, was my one constant activity. Even when I no longer lived with a piano, I taught in practice rooms, in churches, and in students’ homes. When I graduated, my parents bought me a new Yamaha (U1) upright piano that is still a prominent fixture in my studio.

Undeniably, my teacher-self was ready to embrace the future, but I had earlier stumbled on something else that intrigued me – or more precisely, some-*one* else. My choice of elementary school music placed me under the tutelage of Professor Lois Choksy, a highly regarded pedagogue and proponent of KM. Indeed, the English adaptation of the Hungarian method, while the product of many dedicated practitioners, is attributed to her. I met this remarkable woman in the first years of her tenure at U of C. Attracted by Choksy’s charismatic enthusiasm and her absolute devotion to KM, I was immersed in its procedural practices through her lectures

and publications (1974, 1981). Although I was also introduced to other methodologies and philosophies of music education, such as Dalcroze Eurhythmics (Swiss) and Orff-Schulwerk (German), I favoured KM. Perhaps it was a matter of first exposure, but the others seemed to be more-or-less rhythm-centric while KM holistically engaged all elements of music. Or perhaps it was KM's greater interaction with music theory. Either way, I witnessed its pedagogical advantages firsthand.

In my fourth year, I completed my practicum under Professor Choksy's supervision. There were two of us who together provided eight months of music instruction for the primary division of an elementary school near the university. We each visited two classrooms twice a week. On Mondays, we were critiqued by Choksy, her master's students, and one another; on Fridays, we were supervised by the classroom teachers. I was responsible for a grade 3 class and a 1/2 split, which gave me an opportunity to fine-tune my lessons for students at differing levels of development. The knowledge I gleaned from these experiences is immeasurable. An especially valuable piece of wisdom comes to mind: every activity must have an educational *purpose*. I had asked my grade 3 class to sing a familiar folksong. When they did, without noticeable error, their singing ended so quickly that I was startled and simply asked them to "do it again." From Choksy's evaluation, I understood not only that the second singing was purposeless, but that I had overlooked an occasion to broaden or deepen my students' interaction with the song.

My youthful encounter with Choksy and KM resonated deeply with my desire to teach. However, my bachelor's degree in music with a specialization in education, rather than education with a specialization in music, left me without employable credentials. As a result, I resumed teaching privately, both piano and theory. But Choksy's tutoring in music education, along with Bell's in music theory, intrinsically influenced both my teaching and my thinking. The seeds of future endeavours had been planted.

While considering my options, I enrolled in a graduate-level diploma program at U of C. Having experimented with KM in my practicum, I wanted to explore it further. For three weeks in each of three consecutive summers, I received intensive training in pedagogical principles and practices, musicianship skills (with *solfège*), folk music studies (including dance and movement), as well as choral techniques – all with an emphasis on KM. Every summer, the North American faculty was augmented with Hungarian master teachers (Favreau, 1998): Ilona Bartalus, Gábor Finta, Ildikó Herboly-Kocsár, János Horváth, Edit Lantos (d. 2009), Miklós Takács (d. 2015),

and László Vikár (d. 2017). These teachers, some of whom returned year after year, were all distinguished graduates of the Franz Liszt Academy of Music (officially the Ferenc Liszt Memorial and Research Center), except Dr. Vikár who served as Kodály's research assistant for many years. But it was the combination of Hungarian and North American expertise that contributed to the success of the program (Favreau, 1998). The importance of faculty who worked in our cultural context – adapting and developing KM for use in North American schools – cannot be overstated.

Each day was filled with singing. It began with the 4-part solmization of chorales (Bach) and ended with a rehearsal for our end-of-term concert. These concerts generally included a large-scale choral work, such as *A German Requiem* (Brahms), which we sang in my second summer. Although I loved every aspect of the program, I felt somewhat out-of-place because my colleagues were school music teachers. Why was I there? What did I intend to do with a teaching method designed for classroom implementation? I came to a partial answer in my last summer. Our final pedagogy project involved writing a KM-based curriculum for a full academic year of teaching music – both an overall plan showing the skills and concepts covered in a single grade as well as a “specific plan of lesson-by-lesson skills and concepts, including the materials and techniques to be used” (Choksy, 1988, p. 153). This project had no practical application in my studio, but it sparked my interest. I began to imagine a repurposing of KM for the teaching of music theory. I had several conversations with my instructor, but it was obvious that my ideas were still in their infancy. I gratefully accepted my diploma and returned to my “normal” teaching.

Most students came to my studio for piano lessons, but I supplemented their lessons with weekly theory assignments. Although RCM's curriculum had no theory co-requisites until grade 5, I chose to begin music theory instruction at the introductory grade. The preliminary portion of the rudiments book I used for my own first lessons had been expanded and published separately for younger students (Wharram, 1974). Grace Vandendool (1984), another RCM-affiliated author/teacher, released a new rudiments series in three volumes – for preliminary, grade 1, and grade 2 – that emphasized the relationship between music theory and the piano keyboard. By the late 1980s, her preliminary volume had also been expanded to become a progressive series of five preparatory books that I used extensively in my studio (Vandendool, 1984-1987).

Meticulously following RCM's curriculum and its recommended textbooks, I gradually broadened my theory teaching to include the advanced subjects of harmony and history. I was, however, uncomfortably aware that my knowledge of tonal harmony was still partially intuitive. How could I make sense of what I knew for my students? With multiple options for every harmonic scenario, how could I help them make appropriate choices? I have been occupied with these questions for most of my professional career.

I began to unravel the issue with one of my piano teacher's students. She was preparing for a grade 4 harmony examination as a co-requisite for her grade 10 piano studies. I had worked with a few students at the grade 3 level but not grade 4. We used the second volume of a new harmony series (Andrews & Sclater, 1988), completing all 405 pages. A companion volume provided solutions for the analytical exercises (Andrews, 1990), giving us a second opinion, but for the harmonization exercises, we were on our own. We completed them independently, then compared answers. As I struggled to explain the compromises and exceptions that peppered my harmonizations, I recognized the need for overarching generalizations to guide our efforts. Eventually, I understood that the *doing* of harmony requires problem solving and that my observations could benefit my students – such as the sameness I noticed long ago in parallel tetrachords.

As time passed, my collection of observations grew. With repeated teachings of the same musical elements using the same instructional materials, I began to notice that pertinent information was missing or that unexplained assumptions were made. I also began to anticipate my students' difficulties and endeavoured to avoid potential gaps in their comprehension. I combed music stores and mail-order catalogues for ancillary support. I found board games, card games, colouring books, flashcards, knowledge cards, magazines, mazes, note finders, note spellers, puzzles, staff tablets, storybooks, wipe-off keyboards, wrap-ups, word finders, and more. These items facilitated the review of notes, rhythms, key signatures, intervals, chords, terms, signs, symbols, composers, and score excerpts. I even found an unconventional series of books titled *Music Theory for the Bored and Confused* (Walden, 1980), which imaginatively described the development of musical notation.

Most of my teaching, however, was centered around the piano. Occasionally, I experimented with KM-inspired classes I called *ricercars*, from the Italian “to seek out” or “research,” but the business of preparing students for practical examinations, festivals, and

recitals was generally my focus.⁴ Recognizing the isolation of my home studio, I looked to the wider musical community for camaraderie and guidance. I had been invited to join the executive of the Alberta Kodály Association (AKA) when I completed my graduate diploma in Calgary. Bolstered by the experience, I joined the Edmonton Branch of the Alberta Registered Music Teachers' Association (ARMTA) and later, one of its special interest groups. In this smaller forum, convened for the purpose of exploring music-related technology, I began to experience the solidarity of professional interactions.

In the late 1990s, my husband was transferred to Ottawa. I sorrowfully left my students, but the relocation of my studio brought opportunity – I could re-invent myself as a music theory teacher. Realistically, however, a theory specialist requires referrals from an established community of practical (instrumental/vocal) teachers. I set out immediately to become a member of this community. I transferred my ARMTA membership to ORMTA and joined its Ottawa Region Branch. I made telephone calls and attended meetings. I resumed my piano lessons. In Edmonton, I had begun preparations for RCM's highest-level piano examination, hoping to add ARCT (Associate of the Royal Conservatory of Toronto) to my list of qualifications.

I accepted a number of piano students while I laid the groundwork for my theory specialization. Since many teachers address rudiments as part of their students' practical lessons, I targeted the subjects of history, harmony, counterpoint, and analysis. Before attending university, I had completed RCM's grade 10 co-requisite examinations. After graduation, I tackled the ARCT co-requisites, completing all but grade 5 harmony in Alberta. Within the first few years of our residency in Ontario, I completed the last written exam. Gradually, I received more referrals, adding more theory students to my roster. I bought a seasoned Yamaha (G3) grand piano and continued my piano lessons. When my youngest daughter expressed a desire to begin piano lessons of her own, I observed her interactions with our shared teacher, just as I had done with my youngest brother's lessons. To my surprise, I recognized hints of KM in my colleague's teaching. Years earlier, I had encountered a beginning piano method with a similar holistic approach (Clark & Goss, 1993), but I was reluctant to abandon mainstream methods.

This chance reminder prompted a time of deep reflection that proved to be a turning point in my professional career. My musings elicited two outcomes: (1) a rekindling of my interest in

⁴ A *ricercar* is an instrumental composition of the Renaissance era, either rhapsodic and homophonic in texture, or polyphonic, as a precursor of the fugue. It often had a "preludial function, 'seeking out' the key or mode" of the following piece (Randel, 1986, p. 706).

KM and (2) the precipitation of my “retirement” from piano instruction. Although my students generally performed well, they did not excel as pianists. I liked teaching piano, but I did not love it – not as passionately as my colleague. Either I needed to make a commitment to improve my teaching skills or I needed to make a change. Thus, after almost thirty years, I elected to concentrate on the subject I love. Choosing music theory transformed my teaching practice. Rather than *re-active*, it became *pro-active*. In addition to preparing students for RCM’s written examinations in December and May, I organized condensed summer courses as preparation for August exams. These courses, mostly harmony and history at grade 3 and grade 4 levels, were largely populated by the students of my “partner” colleague. Having openly discussed the matter, we agreed to support one another by teaching to our individual strengths. We shared many students and within the next few years, I was teaching music theory exclusively.

Although my pre-lesson planning and my post-lesson marking increased exponentially, I found my niche. I also found that with a more concentrated pedagogical focus, I enjoyed repeated opportunities to re-enter the thinking I had begun years earlier – about the need for overarching generalizations. With fewer distractions, I was able to keep music theory at the front of my brain, so to speak, and to develop my ideas through accumulating experiences. I considered pursuing an ARCT in theory. This comprehensive diploma program comprises twelve examination papers that cover “musical style and technique from the Renaissance to the present” (RCM, 2002, p. 44), along with a research paper and a *Viva Voce* oral defence. I attended a workshop given by Dr. Anthony Dawson (d. 2007) who was named a Fellow of the Royal Conservatory of Music when he retired in 1993. He advised me to consider a master’s degree as a more suitable alternative. Consequently, I formulated a strategic plan for professional development. It involved an ARCT in piano performance, graduate studies in music theory, then an application to RCM’s College of Theoretical Examiners.

An Examiner Perspective

My plans rarely work out the way I envision them. When I first established a connection with RCM, I was a young student. I recall receiving various communications (applications, confirmations, schedules, results, certificates) from an address on Bloor Street in Toronto – an unimaginable distance from southern Alberta. As I grew older and my perspective shifted to that of a young teacher, the distance seemed to narrow. While in Edmonton, I became an RCM Affiliate Teacher, part of a mid-1990s initiative to “support and assist independent music teachers

with services and educational opportunities” (RCM, 1995, p. 53). As my connection expanded, I dared to imagine becoming a member of RCM’s College of Examiners.

From my preliminary inquiries, I learned that theory examiners are typically drawn from the greater Toronto area (GTA). This geographic concentration facilitates regular marking meetings and ongoing professional development workshops. In Edmonton, my desire had been unrealistic but in Ottawa, it gained momentum, particularly with the urging of my teaching partner who was a piano examiner. She contacted RCM on my behalf and made arrangements for me to meet the former Chief Examiner of Theoretical Subjects at an RCM-sponsored workshop. My partner’s persistence left me with no alternative but to submit an application. I flew to Toronto for an interview and subsequently entered the apprentice program. After two examination sessions, I was admitted to RCM’s College of Theoretical Examiners.

In this role, I witnessed RCM’s assessment process from the inside out. I saw not only the official answer keys, but the deliberations behind specific questions and the debates that brought consensus. I saw genuine efforts to work in favour of examination candidates – to award marks inclusively, rather than to deduct punitively. I also recognized the expertise of my fellow examiners. Although I was initially intimidated, distrusting the comprehensiveness of my own expertise, I asked for their advice and learned from them. Within a few years, my duties expanded, both at my request and at the request of RCM. I began to mark grade 3 harmony exams as well as the grade 3, then grade 4 history exams with which I had started. In addition, I was periodically invited to participate in sampling, a peer-review process designed to ensure consistent evaluations within the College. This process follows every examination session.

However, in my quest to become a theory examiner, I had inadvertently leapt over two significant career objectives. My incomplete ARCT was professionally untidy and I had assured my RCM interviewers that it was “in progress.” Having discounted an ARCT in composition and/or theory, I chose a performer’s ARCT rather than a teacher’s, particularly after I ceased to offer piano lessons. The teacher’s exam, although less technically challenging, is divided into three parts: (1) the performance of repertoire, technical requirements, ear tests, and sight reading; (2) a *Viva Voce* portion testing pedagogical principles and applied pedagogy; and (3) a written examination (RCM, 2001). The performer’s exam, on the other hand, is evaluated as a 60-minute concert performance of six repertoire selections.

Unfortunately, my intention to complete a performer's ARCT was suspended by the sudden death of my colleague. Her presence in my life had been both personal and professional. My scores were sprinkled with her markings; I filed them away where they remained untouched until this writing. Whether or not they return to active service remains to be seen, but in an effort to fill the void caused by her death, I decided to change course. My experiences as a theory examiner provided significant insights into RCM's evaluative procedures – the end-products of my music theory teaching. But the *means* to these ends required further attention. I concluded that I could not afford to leave my teaching or my examining for graduate studies. Instead, I revisited my second “someday” desire – to write about music.

An Author/Pedagogue Perspective

The writer in me has been present since the beginning of my story but remuneration, as a commonly accepted measure of value, gave both my teacher-self and my examiner-self far greater prominence. In the early 1990s, I befriended a fellow member of AKA. We had similar ambitions. Although we lost contact after I moved to Ontario, I was delighted to see her acknowledged in the preface of Conservatory Canada's rudiments books (Cook, 2003-2004). Her vision of me as a creative person profoundly affected my own vision. I had assumed that a creative musician was a composer – which I most assuredly was not – but my friend encouraged me to look beyond this narrow definition. She gave credence to my closely guarded aspirations and coaxed my writer-self into being. We discussed my ideas about repurposing KM for the teaching of music theory, but I was not yet ready.

My intellectual independence has always been an emotionally charged topic. In my youth, it defiantly took shape as a spontaneous decision to become a writer. In later years, it was overshadowed by the dual enterprises of raising a family and running a studio. My youthful enthusiasm eventually succumbed to insecurity and self-doubt. Thus, my covert longing for an author identity became entwined with learning to trust myself. As my students worked through their music theory books, I began to document my observations, particularly in relation to the gaps produced by informational assumptions or omissions. I imagined pedagogical bridges that could span these gaps. I explored patterns/repetitions in the subject matter and experimented with charts that categorized or summarized the material. I asked questions and devised ways of *showing*, instead of *telling*, but I lacked the confidence to begin writing. What if I was wrong? What if others criticized my work as I was criticizing theirs?

Tentatively, I began to write for my piano students, first a monthly newsletter, then grade-specific technique charts and lesson assignment planners. Although these materials were organizational rather than pedagogical, they gave practical purpose to my writer's imagination. As I gained momentum, I sought alternate outlets for my ideas. Acknowledging the unwieldiness of large institutions such as RCM and Frederick Harris Music (FHM), the publishing company RCM was gifted in 1944 (Schabas, 2005), I approached the Western Board of Music (WBM) which was centred in Edmonton.⁵ To my surprise, WBM's principal accepted my recordbook proposal and gave me permission to reprint examination requirements from the piano syllabus. Excitedly, I formed TREK Studio Productions and self-published my first loose-leaf offering – *A Student's Recordbook: Grade 1* (1995). It provided students with a record of their progress through the first formal grade of piano study, while involving them in the process.

As I review my work after more than twenty years, I am especially pleased with the scales/triads pages (see **Appendix 1.1** for an example). Rather than providing notated and fingered technical requirements, I prepared reproducible charts, including *solfa* syllables, that were intended for the students' completion. Endeavouring to link theory and technique, I reasoned that students should be able to write the scales and triads they played. I also reasoned that they could create their own technical resources. The grade 1 book was professionally printed but grades 2 and 3 were done with my newly-acquired laser printer. Before I could finish the project, however, WBM ceased independent operations.

While still a member of AKA, I wrote a KM-inspired songbook (1997). Choosing *Twinkle, Twinkle, Little Star* as a well-known folksong, I devised a variety of instructional activities, both musical and non-musical, that were centred around the celestial theme of the song. Although I envisioned it as the first of many, this teaching aid remains a singular phenomenon. Even before we moved to Ontario, my attention was shifting. The *Twinkle, Twinkle* songbook had whet my pedagogical appetite. Granted, it had no specific curricular affiliation, but it inspired me to think more deeply – beyond the recording of surface details. Consequently, I returned to RCM's curriculum as my instinctual "home" and completed a collection of loose-leaf pages titled *A Student's Assignmentbook: Grade 1*, which was never published. Since I could not compete with

⁵ WBM was an examining body operated by music educators in Alberta, Saskatchewan, and Manitoba. Established in 1936, WBM granted two diplomas in association with each provincial university: Associate of Music (performance or teaching) and Licentiate of Music (performance). In 1997, WBM merged with the Western Ontario Conservatory of Music, forming Conservatory Canada (Orford & Brandhagen, 2013).

RCM or FHM, it became an exercise in working through some of my ideas. The contents, which referenced RCM's practical examinations, were ordered in four sections: technical tests, ear tests, sight tests, and repertoire tests.

With this assignmentbook project, I finally began to write about music theory. It was a small step but for the first time, I risked recording my own thoughts. I wrote concept statements in my own words. The sections on scales and triads, as well as those on melodies and rhythms, were prefaced with one-page theoretical summaries. The ice was broken, so to speak. I planned a full set of rudiments books in conjunction with the most recent edition of RCM's (1995) *Theory Syllabus*. I was determined to create interactive materials that would engage students not only in traditional exercises, but in explanatory presentations as well. I wanted active participants rather than passive receivers.

I had barely begun when Mark Sarnecki (1995) self-published his own rudiments books. Having studied every RCM-related textbook commercially available, I knew that Sarnecki's books brought together many of their best features. His books were effective – I used them in my studio for two decades – but they were not original. They contained standard explanations and illustrations which, for most of RCM's teacher population, were ideal. In 2001, FHM purchased the copyright for Sarnecki's *Elementary Music Rudiments* and added a complete volume that combined all three grade levels. Over the next few years (2001-2005), FHM also published three volumes of Sarnecki's *Harmony* books.

I abandoned my rudiments project and turned to music history. Prior to the 2002 edition of RCM's *Theory Syllabus*, the history curriculum was based on Joseph Machlis and Kristine Forney's (1999) *The Enjoyment of Music*. At the grade 3 level, examination candidates were responsible for the portion of the textbook pertaining to nineteenth-century Romanticism. I assembled a guidebook to assist my students with their reading assignments. Having acquired the industry-standard music notation software, I included excerpts from the scores of required repertoire. But rather than merely reproducing the excerpts, I left them incomplete. I asked my students to supply the notational details I had omitted, aiming to direct their attention to salient features of the repertoire. **Appendix 1.2** shows two pages designed to accompany the fourth and fifth movements of Hector Berlioz's (1803-1869) *Symphonie fantastique*. These interactive excerpts fulfilled two of my pedagogical objectives: engagement and integration. While the triad

charts (in **Appendix 1.1**) linked theory and technique, the score excerpts linked theory and repertoire.

With the 2002 *Theory Syllabus*, RCM re-organized the music history curriculum. Rather than a concentrated study of nineteenth-century Romanticism, the grade 3 examination became an overview of four historical style periods: Baroque, Classical, Romantic, and Modern. Equally momentous was RCM's official "divorce" from the Machlis and Forney (1999) textbook. In its place, three members of the College of Examiners co-authored a complete set of study guides (Lopinski et al., 2002). Exceedingly frustrated, I rewrote my grade 3 guidebook, assuming that many teachers, like me, would continue to use Machlis and Forney's book, despite its newest revisions (2003). In my updated guidebook, I added "further reflections" to address material that was new to the syllabus or to explore existing material in greater depth. These were cautious attempts to move beyond the authority of the printed text. I was challenging myself. When it came time to submit an examiner's application, my colleague suggested that I include sample pages from my guidebook – which I did – but there was no future for it.

I changed course again. In 1995, RCM's *Theory Syllabus* had instituted an introductory harmony examination to smooth the transition between grade 2 rudiments and grade 3 harmony – the same transition I had struggled with as a student. The pedagogical benefits of this exam were considerable. Its requirements included elementary harmonic vocabulary for reading (analysis), melody writing, four-part writing, and two-part writing. The inclusion of elementary counterpoint, as preparation for the grade 4 counterpoint exam, was also a welcome addition.⁶ The obstacles for this exam were largely organizational. Introductory harmony was introduced as a *recommended* examination but it was not required. Since it was neither a practical co-requisite nor a theoretical pre-requisite, it was underutilized.

A hopeless cycle of lost potential ensued. There were insufficient numbers of examination candidates, which did not warrant the development of appropriate or exam-specific teaching materials. And inadequate or non-existent teaching materials did not attract possible examination candidates. Consequently, the introductory harmony exam, and its attendant coursework, was instructionally unsupported. At long last, there was an opening for me. I began work on a

⁶ Originating in the Renaissance era, counterpoint, from the Latin *punctus contra punctum* (point against point), is a compositional technique in which two or more melodic lines are combined in a "musically satisfying way" (Kennan, 1999, p. 3). The resulting polyphonic texture emphasizes both the linear or horizontal aspects of melody and the interdependent or vertical combinations of harmony.

manuscript I titled *Tonal Relationships in Music: Introductory Harmony, Melody, and Structure*. Based on RCM's (2002) *Theory Syllabus*, it was an opportunity to finally experiment with repurposing KM for the teaching of music theory. Beyond the method's obvious surface details, I was interested in Kodály's underlying principles and practices – both his holistic integration of musical elements and his instructional progression from the known to the unknown.

I had, by this time, accumulated a fair library of harmony textbooks – some from my early years as a student, some from my work as a practicing teacher, and some from my curiosity as a writer. I scoured their pages for ideas and inspiration. As it is now, my writing then was triggered by reading. Although I had been deferring to other authors for most of my musical career, I had also been formulating my own ideas. Eventually, I understood that my pedagogical vision must be generated independently, from inside of myself. I could not expect it to be delivered – ready-made – from the outside. Ever so slowly, I began to commit my ideas to paper and my workbook began to take shape. Once I became an examiner, I was able to blend new insights with the old. Preparing for RCM's next *Theory Syllabus*, due for publication in 2009, I expected the introductory harmony examination to become compulsory.

In March 2007, I attended a collaborative conference in Toronto. It was the first joint venture between the Canadian Federation of Music Teachers' Associations (CFMTA), its much larger American counterpart, the Music Teachers National Association (MTNA), and RCM. I traveled with my partner colleague since our attendance, as members of RCM's College of Examiners, was mandatory. I was new to the College, but her professional circle was expansive. She introduced me to many of her colleagues, including the Editor of FHM for whom she had previously done review work. With their combined encouragement, I submitted a preface, a table of contents, and the first two chapters of my workbook. A year later, I received a letter stating that there was “unfortunately no room in [FHM's] publishing plan for a new addition to [its] catalogue of theory publications” (J. Verkaik, personal communication, February 11, 2008). The introductory harmony examination did not become compulsory.

Undeterred, I continued writing and resolved to self-publish my workbook. Despite FHM's position, there was still a need for introductory harmony teaching materials. When RCM's (2009) *Theory Syllabus* was released, I updated my existing manuscript to include new curricular requirements and forged ahead. I asked RCM's Subject Specialist for Junior Harmony to review my work. Without an editor, I sought a second opinion and knew that her extensive experience

would prove invaluable. Among other projects, she had assisted with the second edition of Sarnecki's (2010) harmony books and the revised edition of Wharram's (2005) rudiments book. Her suggestions were encouraging and constructive but in due course, I was obliged to acknowledge that the world of music theory was wider than RCM.

A Researcher Perspective

Concurrent with my admission to RCM's College of Examiners, I was asked to tutor several students who were enrolled in an undergraduate music program at Carleton University. Encountering an alternate harmony curriculum after almost thirty years of teaching, I was unable to rely on RCM's familiar syllabus and the comfortable reassurance of its recommended resources. I found the experience to be somewhat unsettling, but surprisingly liberating, and along with its remarkable freedom, I found my voice (Penny, 2012). I began to question the traditional sequencing of theoretical concepts. I questioned their textbook presentations. Writing instructional materials of my own, I began to actively scrutinize conventional teaching practices for tonal harmony.

My serendipitous encounter with non-RCM music theory instruction altered the trajectory of my professional career. Without the prescriptive guidelines of my customary resources, I was compelled to recognize both my personal knowledge of the subject matter and the potential merit of other pedagogical approaches. A few words, received at an opportune moment, illuminated my path. I had assumed that I could not exchange my employment for full-time graduate studies but I had not considered other options. One of my teacher colleagues, who had completed a master's degree in piano pedagogy (Babin, 2005), gifted me with the possibility of part-time graduate studies. I attended my first class within a month of our conversation and the following September, I was admitted to the master of arts program at the University of Ottawa (uOttawa). When I embarked on my graduate adventure, its formal direction was clouded in mystery. I set out to explore the subject of tonal harmony with the nebulous intention of becoming a more capable teacher/author, but very early in the genesis of a suitable research topic, I encountered the discipline of music theory pedagogy.

Having discovered a point of departure, it seemed logical that the first entry in my thesis notebook should be a definition of *pedagogy* which my dictionary identifies as the "art, science, or profession of teaching: EDUCATION" (Webster, 1983, p. 866). Intrigued by the co-habitation of art and science, I investigated further. *Art* is defined twofold as a "skill acquired by

experience, study, or observation; a branch of learning: LIBERAL ARTS; [and] an occupation requiring knowledge or skill; the conscious use of skill and creative imagination especially in the production of aesthetic objects: FINE ARTS” (p. 105). *Science* is defined as the “state of knowing . . . distinguished from ignorance or misunderstanding; a department of systematized knowledge as an object of study; knowledge covering general truths or the operation of general laws . . . obtained and tested through scientific method” (p. 1051). The common denominator, of course, is knowledge and the pursuit of this knowledge fuelled my expedition.

With the encouragement of my advisor, I decided to analyze five university-level textbooks on tonal harmony, concentrating my pedagogical comparison on a single conceptual element – the dominant 7th chord (V⁷). The textbooks I chose are: *Harmony and Voice Leading* (Aldwell & Schachter, 2003); *The Musician’s Guide to Theory and Analysis* (Clendinning & Marvin, 2005); *Harmonic Practice in Tonal Music* (Gauldin, 2004); *Tonal Harmony* (Kostka & Payne, 2004); and *Harmony in Context* (Roig-Francolí, 2003). As my research objectives began to unfold, a review of the pertinent literature revealed a significant void. Although an imposing number of publications involved the teaching of music theory, they related to procedural, rather than pedagogical or philosophical concerns. Indeed, only four relevant sources came to light, and while these sources contributed to the formation of my research project, none provided a specific context for my study.

I found myself, once again, treading an uncharted path. I was determined to follow my interest in music theory, since I had been unable to declare it as a second major at the undergraduate level, but my interest was focused on the *teaching* of music theory. How was I to reconcile this practical/theoretical duality? From my present vantage point, the solution is obvious. At the time, it was not. I briefly considered Comprehensive Musicianship (CM), a pedagogical approach that emphasizes the inter-disciplinary study of music (Choksy et al., 2001). I worried that my experience with KM was twenty years out-of-date and largely unpracticed, but I remembered its systematic approach to music education. I also remembered its scrupulous balance of artistic integrity and effective teaching practice (Cramer & Panagapka, 1998). After careful deliberation, I embraced KM as a theoretical framework for my textbook analyses.

Inspired by Kodály’s vision of universal musical literacy, I initiated my master’s inquiry (Penny, 2012) with a question of compatibility: Are the pedagogical principles attributed to the

Kodály Method congruent with teaching tonal harmony at a post-secondary level?⁷ Focused on V⁷ as a sample conceptual element, my textbook observations were organized according to three criteria that structured its pedagogical treatment. These criteria: (1) evaluated the placement of V⁷ in a conceptual sequence; (2) determined the procedure by which it was presented; and (3) investigated the inclusion of correlated musical excerpts. However, as I probed my compatibility issue on a deeper level, I began to consider a question of conveyance: How *should* conceptual knowledge about tonal harmony be taught? This second question led to more questions.

I began to entertain the possibility of doctoral studies, which would allow me to expand my master's inquiry and to incorporate wider curricular objectives. In uOttawa's School of Music my options were limited but in the Faculty of Education, a doctorate in teaching, learning, and evaluation seemed the best fit for my future research intentions. Attempting to satisfy the completion requirements of my master's program, along with the entrance requirements of a doctoral program in a new faculty, I added an empirical component to my thesis, authenticating my assumptions about the customary presentation of musical concepts in a post-secondary environment, thereby confirming my rationale.

I also took a qualitative research course in which I read and reviewed Elliot W. Eisner's (2002) *The Arts and the Creation of Mind*. This author strongly influenced my perspective as a novice researcher. I particularly appreciated his ability to illuminate the significance of arts education – a conviction I intuitively embraced but lacked the clarification to articulate. As a musician/teacher, I often faced the dismissive attitude that my profession is frivolous and trivial, but Eisner provided me with the means to defend myself and further, to argue for the centrality of my discipline in a balanced curriculum. I was perched on the precipice of another more strenuous graduate adventure. With little time to catch my breath, I took a leap of faith. I had visions of teaching music theory in a university setting but more importantly, I had questions that wanted answering. Full-time studies in a new faculty presented a number of challenges but it opened a new world of scholarly literature for my perusal.

Integrating Multiple Perspectives

The preceding narrative recounts past experiences that contributed to the unfolding of my meaning-making in music theory and its pedagogy. My experiences are multi-faceted, perceived

⁷ The subject content of RCM's grade 3/basic harmony examination is comparable with many university's first-year music theory courses.

through multiple overlapping lenses, but these lenses belong to a single set of eyes. Although each perspective observes unique aspects of music theory pedagogy, they unite to inform my composite understanding of the discipline. While generally compatible, they are sometimes conflicted.

A fairly straight line-of-succession connects student to teacher and teacher to examiner. As a student of music theory, I was primarily concerned with relevance or connectivity. There was little or no correlation between my piano repertoire and my rudiments exercises, nor between rudiments and tonal harmony. Without a known context, I lacked a framework or scaffolding for my new knowledge and without this structural support, there was no correlation between my aural perception and my intellectual perception of harmony. Essentially, I was lacking a direct link between music and theory. Although I continued to explore both practical and theoretical subjects, even extending my knowledge into the realm of contemporary idioms, they remained separate entities.

As a teacher of music theory, I gathered information – both topical and pedagogical – from many practitioners and publications. With these varied sources, I was intent on making sense of the subject matter for myself and for my students. I carefully examined what I knew intuitively and endeavoured to explain my knowledge with guiding generalizations. I assisted my students and facilitated their approach to theoretical “problems” – while continuing to expand my own understanding. I lost sight of an instructional affiliation with musical repertoire, fixing my attention instead on an internal connectivity within the subject itself. I attempted to build a bridge between the fundamentals of music rudiments and introductory harmony by proactively constructing one from the other. Without conscious awareness, my teaching of music theory was gradually infused with traces of KM.

As an examiner of music theory, I followed Cynthia Chambers’ (2004) “path with heart” and marketed myself as a theory specialist. I had become a member of RCM’s College of Examiners to serve my profession and to grow my competence within that profession. However, I was essentially gathering information from another source. Consequently, my topical understanding of the subject matter became more detailed and precise, which undoubtedly improved my teaching, but my pedagogical understanding was at a standstill. An alternate avenue, involving an alternate perspective, was necessary.

A less direct line-of-succession connects teacher to author and author to researcher. Like the student/teacher/examiner progression, my student-self permeates these experiences. While my teacher-self was experimenting with instructional improvements for my students, I was also considering other teachers of music theory, particularly beginning teachers. I wanted to share the lessons I was learning by writing supplemental teaching materials. Still, as an author of music theory, I was hesitant. My ideas were gaining strength but they were not fully formed. I felt instinctively that KM was an important part of my thinking but its pedagogical philosophy counters conventional wisdom for music theory instruction. In many respects, the two approaches are diametrically opposed. Thus, if I meant to challenge hundreds of years of teaching practices in music theory, I required more than studio credibility. I required academic or institutional credibility. I also craved further knowledge.

As a researcher of music theory, I widened my curricular allegiances – in the wake of my tutoring epiphany – and contemplated the future direction of my teaching. It soon became apparent that my future was mired in the past, both the collective history of my profession and the individual role I played within it. I chose a road less traveled for my master's inquiry, which followed an emergent design similar to that of my personal story. I investigated the compatibility of KM and music theory pedagogy, allowing the seeds of possibility that were planted long ago to finally blossom. With my doctoral inquiry, I revisit this compatibility and open a conversation that could bring its educational potential to fruition.

The conflict I must address involves my identity as a musician. Although a third line-of-succession extends from student to musician and musician to author, my artist/musician perspective is, in essence, an outlier. I often suppressed and undervalued this perspective, especially after I redefined myself as a theory specialist – or crudely simplified, a “music scientist.” Preoccupied with making rational sense of my intuitive knowledge, I tackled the harmonic syntax of musical grammar and wrestled with judgements of appropriateness. In so doing, I side-lined opportunities for creative choice and ignored the repertoire that music theory was designed to explain. My unfinished introductory harmony manuscript, while pedagogically interactive, is devoid of musical excerpts from the literature.

Thus, as a musician who teaches music theory, I feel compelled to advocate for integration and Thomas A. Regelski's (1982) preservation of the *music* in music theory. I must widen my quest for connectivity and add artistic inclusivity to my research mission. Succinctly stated, I

cannot deny my musician-self any longer. My teaching, and perhaps that of my colleagues, demands a pedagogical transformation. As Natalie Goldberg (2016) wrote thirty years ago: “You can’t divorce yourself from parts of yourself” (p. 91). So too, I cannot divorce myself from my musician-self nor can I divorce the inner workings of music from its outer legitimacy as a musical phenomenon. Sound and symbol are symbiotically intertwined and their relationship must be emphasized in my teaching of music theory – which begs the question: How?

Concluding Remarks

Chapter 1 presents a narrative rendering of my experiences with music theory and its pedagogy. These experiences are chronicled through the overlapping observations of six perspectives: student, artist/musician, teacher/practitioner, examiner, author/pedagogue, and researcher. My observations begin with my first lessons in music theory and end with my master’s research in music theory pedagogy, leaving my doctoral story to unfold in subsequent chapters. A multi-layered integration of these observations constitutes my personal/professional understanding of the topic at hand. While each perspective has informed my pedagogical interactions with music theory, I have generally adopted prevailing scientific attitudes in my teaching. With this inquiry, I wish to explore artistic attitudes by embracing my identity as an artist/musician.

According to Webster (1983), *identity* is defined both as the “sameness of essential or generic character in different instances: ONENESS” and the “distinguishing character or personality of an individual: INDIVIDUALITY” (p. 597). This dichotomous reference to conformity and diversity has often besieged my attempts to describe myself, but answering the existential question – Who am I? – necessitates the consideration of a second question: Where am I? Chambers (1999) advises that I “can only begin to answer the question as [I] write from here, from this particular place” (p. 148). In so doing, I acknowledge the role of my environment, including its inhabitants, in the construction of both my musical identity and my pedagogical beliefs. But how has my *artist/musician* perspective influenced my thinking about music theory pedagogy? How have I arrived at this time and place?

By claiming my identity as a musician, I have gained access to my artistic experiences. I have opened my inquiry to an art/science integration that brings pedagogically interactive engagements with music to the teaching of music theory. I have also gained access to the artistic experiences of my professional community. In chapter 2, I will review the scholarly literature in

music theory pedagogy. Since my field of study is comparatively new and its corpus of literature fairly small, I will expand my scholarship campaign farther afield and consult the relevant literature in surrounding research communities.

Chapter 2

Literature Review: Seeking Guidance from the Periphery

*If what is seen and experienced is portrayed in the language of logic, then it is science.
If it is communicated through forms whose constructions are not accessible
to the conscious mind but are recognized intuitively, then it is art.*

– Albert Einstein (1879-1955)

Introductory Remarks

Having embedded the rationale for my inquiry in my personal narrative, I will likewise blend my unfolding argument into my literature review. As I seek to understand the complexities of music theory pedagogy, along with its academic locus, I will align my interpretation of the literature with the scholarly communities that affect my topic. Within these communities, I will define pertinent terminology, highlight prominent viewpoints, and explore the feasibility of their scholarship for my research project.

In chapter 1, my narrative disclosed what *I* know about music theory and its pedagogy. In chapter 2, my review of the literature divulges what *we* know, as scholars within a shared musical profession. Situated in the nexus between music theory and music education, this knowledge is derived from three intersecting bodies of literature:

- music theory
- music theory pedagogy
- music education

Each of these research communities has influenced the development of my project and assisted my meaning-making in the discipline of music theory pedagogy. Before engaging this scholarship, however, I will offer a full description of my problem along with several guiding questions. The methodological literature is examined in chapter 3.

A Description of the Problem

Music theory, as a subject independent from its pedagogy, embodies a set of abstract principles that encompass the properties of single sounds and collections of sounds (Randel, 2003). Narrowing these broad parameters for my research project, I will consider the teaching of intervals and chords – specific collections of consonant or dissonant sounds – as the constituent

elements of tonal harmony.⁸ My focus on intervals and chords recognizes the importance of rudimentary pre-requisites for later studies of harmony and counterpoint.

As a theoretical examiner affiliated with RCM, I am privileged to assess examination papers written by students of music theory across Canada. Although I mark exams in the subject areas of rudiments, tonal harmony, and music history, my research interest stems from more than ten years of evaluative observations that reveal widespread student struggles with the contents and procedures of basic harmony, previously known as grade 3 harmony.⁹ Serving as an introductory application of harmonic principles, the curriculum for this course, and its official examination, builds on the knowledge of fundamental elements acquired in the study of music rudiments with an objective to address melody writing, harmonization, and analysis (RCM, 2009). The specific requirements for the basic harmony examination, as they appear in the 2009 edition of RCM's *Theory Syllabus*, are itemized in **Appendix 2.1**.

Thirty percent of the basic harmony exam is allocated to the harmonization of a given melody contextually presented in the vocal genre of a four-part (SATB) chorale or hymn that incorporates the setting of text. Limited to major keys, this task examines student comprehension of the required harmonic vocabulary, including a modulation to the dominant or fifth scale degree as a traditional goal key.¹⁰ In my experience, this harmonization is often poorly executed with many realizations receiving a failing grade – less than eighteen of the possible thirty marks. A sample student working, recreated in my penmanship so as to protect the anonymity of the exam candidate, is illustrated in **Appendix 2.2**.

Written in May 2013, this disappointing harmonization, in which the candidate has been instructed to complete the missing voices, is marred by an excess of red ink. Indeed, only the fourth measure (m. 4) is error free and remains untouched by my examiner's markings. How did this happen? Why do students who presumably perform instrumentally or vocally at an advanced

⁸ Intervals and chords classify the relationships between two pitches and three or more pitches, respectively. These pitches sound successively as melody or simultaneously as harmony and their organization with reference to a tonal center (a tonic) within a group of pitches (a scale) demonstrates the principles of tonality. This tonal system identifies Western art music from the 17th century until the beginning of the 20th century (Randel, 2003).

⁹ According to RCM's website, the 2018 national average for basic/level 9 harmony exams – written over three sessions (December 2017, May 2018, and August 2018) – is 74.2. While this mark warrants honours recognition, it does not account for the weak results of individual examination tasks, such as melody harmonization.

¹⁰ The process of modulation facilitates a change of key from one tonality to another, which may or may not require a change of key signature. The most common modulations, between closely related keys, often delineate formal structures such as sonata form (Randel, 1986).

level – given that basic harmony is a co-requisite for grade 9 practical examinations – repeatedly perform weakly on the harmonization component of their written exams? While explanations for this weakness vary with individual students, just as specific errors vary, the underlying problem is entrenched in a pedagogically detached handling of the subject matter. Music theory is frequently disconnected from the music it is intended to explain (Dirié, 2014).

Prior to 2016, RCM's formal study of music theory, along with its written assessment, was initiated concurrently with a grade 5 level of instrumental or vocal performance (RCM, 2009). While this deferral allows for the accumulation of preparatory competency, it perpetuates the segmentation of defined subject areas – with the concepts of musical thought disproportionately lagging behind the skills of musical craft (White, 2002). Furthermore, it promotes the teaching of music theory as an intellectual abstraction isolated from its practical application, or an exercise of logic removed from the physical experience of music.

José Luis Aróstegui (2003) recognizes this gap in curricular implementation as a split between positivist and interpretive views of knowledge. Although music – understood as a positivist product (a score) *and* an interpretive process (a performance) – embodies both knowledge traditions, music instruction is often confronted by a “separation of knowledge” and a “pre-eminence of positivism” (p. 109), particularly in the evaluation of educational outcomes. In music theory instruction, this privileging of positivist *science* over interpretive *art* frequently produces “paper-and-pencil” competencies that offer little or no awareness of a given progression's sound, nor its “musical sense” (Rogers, 2004, p. 16) – which is evidenced in **Appendix 2.2**. Consequently, as Rogers advises, the “study of music [theory] should include more than black dots and lines on white paper” (p. 16). It should also include the vocal and instrumental sounds of music.

My interest in music theory pedagogy is rooted in more than forty years of private teaching and almost fifteen years of membership in RCM's College of Theoretical Examiners. A desire to reflectively improve my teaching practice informs my dissertation research and prompts a question of companionship: How can the *art* of music be holistically integrated in the pedagogical communication of its *science*? My reconsideration of KM for teaching music theory motivates a second question: How can music theory pedagogy be experientially practiced? The core issue then – in my endeavour to musically enhance written competencies – is a question of correlation: Will a holistic and experiential approach to the teaching of music theory engender

auditory awareness? While the philosophical or idealistic nature of this last query renders it unrealistic as a research question, it nevertheless provides the underlying motivation for my inquiry. I am convinced that an integrated music theory pedagogy will address my correlation issue.

The Scholarship in Music Theory

The formal recognition of music theory as an independent scholarly discipline coincides with the founding of the Society for Music Theory (SMT) in 1977 (McCreless, 2010). Although music theory has been taught in academic institutions for centuries, there was a general belief among theorists that its instruction was inadequate because many of its teachers were primarily historians, composers, or performers. Therefore, one of SMT's initial objectives was the acknowledgement of music theory teachers who were professional theorists.

In the years preceding the formation of SMT, music theory was deemed to be little more than rudiments and its teaching presumed within the aptitude of any good musician (Browne, 2003). But music theorists, including Richmond Browne, were interested in more than teaching; they were interested in “speculating, explaining, [and] modeling the musical process” (para. 4). With the mastery of analytical techniques considered a core competency, early members of SMT were dedicated to speculative theory, continuing the pioneering work of Heinrich Schenker (1868-1935) in the analysis of tonal music, Arnold Schoenberg (1874-1951) in the development of twelve-tone composition, Milton Babbitt (1916-2011) in the promotion of total serialism, and Allen Forte (1926-2014) in the analysis of atonal music.

According to Browne (2003), music theorists were “no longer satisfied with purely historical answers to questions of analysis” (para. 11). They rejected taxonomical descriptions of repertoire in favour of analytical explanations based on heuristic techniques, such as Schenkerian analysis. In scholarly circles, these techniques became central to our profession's thinking as well as our teaching. In my *un*-scholarly experience, however, this was not the case. Music theory was presented to me as a set of rules to be memorized. There were no discoveries made, no problems solved, and no experimental or trial-and-error investigations. There were no questions asked – nor answered. Instead, I was directed to add, complete, explain, insert, name, solve, transpose, or write detached theoretical elements from pre-determined, fixed formulae.

The word *theory* implies differing shades of meaning. Outside academia, “music theory” is typically understood as a thing or a set of things. It is a noun. Although music theory is defined

as a “branch of scholarship that studies the materials and structure[s] of music” (Randel, 2003, p. 879), the study of music theory is commonly identified with its content – the basic or fundamental rudiments of music. While these rudiments are associated with the contemplative thinking of past theorists, and certainly represent the outcomes of such thinking, they are far removed from the *act* of theorizing, conceived as a verb. Thus, the music theory presented to me almost fifty years ago is the result of past investigations. This result (a noun), filtered through RCM’s curricular lens, is the same one I present to my students today.

Within the wider domain of music theory, Patrick McCreless (1997) identifies five distinct bodies of knowledge and their respective research agendas:

- music systems
- music analysis
- the history of music theory
- the pedagogy of music theory
- music perception and cognition

The first two categories are often inseparable in practice, given the analytical application of theoretical systems – such as those of Schenker, Schoenberg, Babbitt, or Forte – and the third traces the historical development of their practices. The last category is significant for both theoretical/analytical and pedagogical facets of music theory, but with its origin in cognitive psychology, research in music perception and cognition investigates aspects of musical *learning*, while my inquiry focuses on the *teaching* of music theory. However, despite the increased attention of late twentieth-century music theorists to the nature and quality of their instruction (White, 2002), current pedagogical practices, especially those independent of post-secondary institutions, have more in common with the past than with modern scholarly research (McCreless, 1997).

Music Theory as a Science

The separation between theory and practice plagues modern musical thought, as does the historical privileging of theoretical attitudes. Providing little encouragement for my consideration of an integrated music theory pedagogy, the underlying estrangement, for all intents and purposes, is an ancient one. But what caused the problem? My brief summary of early music theory begins with the following definitions of the terms under discussion:

- theory – from the Greek *theōria* (contemplation or speculation), abstract thought; the general principles that rationally explain a set of facts or phenomena
- practice – a Greek noun *praktikē* from the verb *praktikos* (perform), the application of beliefs or ideas (as opposed to theories relating to such applications); customary or habitual actions

In ancient Greece, music was considered both an art of performance (*melos*) and a science closely related to arithmetic and astronomy (*harmonia*). For Pythagoras (5th century B.C.E.), music was governed by the same mathematical laws that governed the universe (Mark, 2013). Rhythms were ordered by numbers (as multiples of a primary duration), and so too were intervals (as consonances generated by simple ratios). Acoustical observations found that segments of a vibrating string sounded consonant intervals – an octave when divided in the ratio 2:1, a fifth when divided 3:2, and a fourth divided 4:3 (Burkholder et al., 2014). Consequently, Pythagoras and his followers valued the scientific aspects of music, which they understood through knowledge of its mathematical proportions.¹¹ Likewise, one who understood musical proportions understood the harmony of the universe (Mark, 2013), since the planets and their movements were believed to correspond to particular musical notes, intervals, and scales.¹²

First millennium writers, such as Aristides Quintilianus (4th century C.E.), endorsed the Greek theorists' dedication to logic and abstract thought, as well as their systematic definition and classification of musical concepts. During the Middle Ages, two applications of music developed in parallel fashion: (1) *musica disciplina*, regarded as a mathematical science; and (2) *musica sonora*, an art communicated by voice or instrument. As the antithesis of disciplined contemplation, *musica sonora* was understood through the senses rather than through reason, influencing behaviour by appealing to the emotions (Mark, 2013). These divisions reflected the practical study of music, generally as a means of worship, and its purely theoretical study.

Consequently, the performance of early Christian music, although influenced by the Greek's theoretical *musica*, was not considered “true music” – for the highest level of study. This gulf between theory and practice is summarized by Geoffrey Hindley (1971):

¹¹ No writings by Pythagoras survive, while those of his followers exist only in fragments quoted by later authors.

¹² In his *Republic*, Plato's (4th century B.C.E.) “harmony of the spheres” gave this unheard music poetic form, inspiring many literary works through the Middle Ages and beyond – including William Shakespeare's (1564-1616) *The Tempest* and John Milton's (1608-1674) *Paradise Lost* (Mathiesen, 2011).

On one side there were the traditional singers who learned and transmitted important texts by memory but who were ignorant of musical theory in this rarified abstract sense. On the other side, there were the scholars for whom the study of *musica* comprised the analysis of verbal rhythm and the acoustic analysis of sounds. (p. 60)

Anicius Manlius Severinus Boëthius (ca.480-524) perpetuated the notion of theoretical authority in his *De institutione musica*, which treated music as an object of knowledge, not as a practical pursuit (Burkholder et al., 2014). Describing three categories – *musica mundana* (music of the universe), *musica humana* (human music), and *musica instrumentalis* (instrumental music) – he emphasized the ordered principles of music as a numerical science.¹³

However, discussions of music as a liberal art did not address the practicalities that concerned Medieval musicians. In the ninth century, the anonymous *Musica enchiriadis*, along with its companion *Scolica enchiriadis*, re-oriented music pedagogy by emphasizing practical matters over theoretical speculation (Burkholder et al., 2014). Gradually, the philosophies of *musica disciplina* and *musica sonora* were brought closer together, finding confluence in the treatise of Aurelian of Réôme (fl. 840-850) who was both an erudite musical theorist and a practical musician (Hindley, 1971). Indeed, his explicit treatment of musical practice initiated the separation of music theory from its philosophy (Lochhead, 2011).

While the second part of Aurelian's treatise, titled *Musica Disciplina* (ca. 843), describes the practice of 9th-century plainsong, the first part summarizes the prevailing theory of *musica*. Here, he defines music as the "science, applicable to sound and song, of correctly controlling variations of sound" (Reôme, 1968, p. 7). This older music is often thought to be founded on melody, with harmony determined by presumably fortuitous melodic concurrences (Shirlaw, 1970), whereas newer music is founded on harmony, with melody determined by guiding harmonic principles. But early polyphony, which combines two or more independent melodic lines, had its basis in the numerical science of simultaneously sounding consonant or dissonant intervals. According to Matthew Shirlaw (1970), consonances were the "pillars of harmonic structure" and dissonances were the ornamental figurations of melody (p. 3). As the theory of music evolved, the principles of chord succession developed from a "definiteness of harmonic

¹³ Compiled from Greek sources, Boëthius' text concludes that only one who has mastered *musica speculativa* (music as a reflection of the real) can "truly judge the work of a musician, whether composer or performer" – for musicians concern themselves with music as a subrational art, rather than with *musica* as a rational science (Taruskin, 2005, p. 71).

significance” within a community of sounds as a *whole* (p. 6). Thus, a tonal key-system gradually supplanted the earlier modal system, and scientific justifications of harmony, such as those of Jean-Philippe Rameau (1683-1764), were recognized for their “unprecedented concision and clarity” (Christensen, 1993, p. i).

In the eighteenth century, music “thinkers” believed that the understanding of a musical whole was generated by the reconstitution of its analyzed, classified, and labeled parts through association and interpretation (Regelski, 1982). This reductionist tradition “equated (and thus confused) factual information ... with understanding,” presuming that “to dissect is to know” (pp. 40-41). While the reassembling process was enacted inductively, intuitively, or unconsciously, it lacked a reliable method for responding to the musical whole – particularly after functioning “analytically with [atomistic] parts” (p. 40) – and was largely ignored. Since this reassembling process does not have a scientific basis, its rejection gives the false impression that a holistic perception or appreciation of music is less important than its analysis, thereby discounting the artistic basis of music.

Highlighting the underlying art/science dichotomy, David M. Thompson (1980) traces the development of harmonic theory in North America by distinguishing acoustical approaches, derived from the naturally occurring harmonic series, and observational or empirical approaches, formulated from the analysis of common practice. Recognizing the practicality of observation, he explains that repeated musical patterns often “solidify into a system of rules, which then [become] codified as music theory” (p. 129). These “rules” configure the *science* of music theory – and its pedagogy – but the *art* of music does not necessarily enter the rubric.

Interpreting Music Theory for the Purpose of Instruction

Common-practice tonality, which is based on the major and minor diatonic scales, crystallized during the Baroque era (ca.1600-ca.1750). Rameau, who is widely recognized as the founder of harmonic theory, explained the structure of tonal music in his *Traité de l'harmonie* (1722). Understood in the light of modern-era thinking, Rameau attempted to approach music as a “deductive science, based on natural postulates, in much the same way that [Isaac] Newton approach[ed] the physical sciences in his *Principia*” (1687) (Gossett, 1971, p. xxii). Following an analytic-synthetic method, Rameau treated his music and that of his contemporaries as a body of empirical evidence. Thomas Christensen (1993) elaborates: “Through astute analysis of [common] practice, he observed consistencies in its behavior, and posited a number of

provisional hypotheses and heuristic arguments to explain it... From this point, Rameau hypothesized a single master-principle to accommodate these observations” (p. 39).

Although most musical elements had been explained by earlier theorists, Rameau’s unified system described harmonic practices according to universal laws of nature, specifically the laws of acoustics. He derived triads and 7th chords (three- and four-note successions of 3rds) from naturally occurring intervals – the perfect 5th, major 3rd, and minor 3rd – and established the chords built on the primary notes of the scale as the “pillars of tonality” (Burkholder et al., 2014, p. 425).¹⁴ Relating all other chords to the primary chords, he also formulated the functional hierarchies of tonal harmony, which I encountered in my undergraduate studies.

For Rameau, music was driven forward by the dissonance of 7th chords coming to rest in the consonance of triads (Burkholder et al., 2014). The strongest example of this phenomena, illustrated in **Figure 2.1**, is the progression from a dominant 7th chord (V^7) to a tonic triad (I):

Figure 2.1: Resolution of the Dominant 7th Chord



Brought into the realm of modern music theory pedagogy, it is necessary to identify the musical concepts involved in teaching the V^7 -I progression. Since the dissonant element in any 7th chord is the 7th itself – placed here in the highest treble voice (soprano) – its intervallic relationship with the fundamental bass note or the root is discordant. In the dominant 7th chord, dissonance is also created by the interval between the leading tone or scale-degree seven (^7) and the

¹⁴ The primary notes of a key/scale are the *tonic* (or principal note), as well as the *dominant* and *subdominant* (notes a perfect 5th above and below the tonic).

subdominant or scale-degree four ($\hat{4}$).¹⁵ This interval is commonly called a tritone.¹⁶ In the progression above, the dissonant notes resolve by step to consonances, while the root falls a perfect 5th.

Consonant intervals have a “stable, harmonious sound” (Burkholder et al., 2014, p. A5). They are determined both acoustically, as the sympathetic vibration of sound-wave frequencies represented by numerical ratios, and psychologically, as a judgement of “pleasantness” that denotes aesthetic preference or a “relief of tonal tension” within the context of tonal harmony (Palisca & Moore, 2001, p. 325). Dissonance, as the antonym of consonance, exhibits the opposing condition of “unpleasantness” or “tonal tension” and music theorists use this distinction between stable and unstable intervals to discuss the temporal features of a musical work. The criteria for distinguishing consonant and dissonant intervals in music theory, both acoustical and psychological, differ with the passing of time.

For me, particularly as a student, the concepts of consonance and dissonance were inconsequential. If they were discussed, either on paper or in person, I have no recollection of them. Granted, these terms are historically burdened with semantic problems as well as problems of grammatical usage – James Tenney (1988) distinguishes *qualitive* or abstract nouns from *entitive* or concrete nouns, referring to the quality of aggregate sounds and the sounds that manifest this quality, respectively. Perhaps the absence of consonance/dissonance discourse in my education is attributable to the gradual distillation of Rameau’s theories into a concise corpus of rules and regulations. Since the work of theorizing was already complete, I had no need to concern myself with matters of origin or development. Rather, I was directed to the outcomes of this earlier work and instructed to memorize the resulting rules which I learned by rote. Could an awareness of consonance and dissonance offer a valuable glimpse at the *why* behind these rules?

Imparting the Rules of Music Theory as Pre-Determined Statements of Fact

According to Tenney (1988), the “Western musical enterprise has been characterized by an effort to *understand* musical sounds, not merely to manipulate them” (p. 103, original emphasis).

¹⁵ Scale degrees identify the numbered positions of individual notes within major or minor scales. They are labelled with Arabic numerals (1, 2, 3, etc.) that often include carets or circumflexes ($\hat{1}$, $\hat{2}$, $\hat{3}$, etc.). Scale degrees are also named: $\hat{1}$ tonic; $\hat{2}$ supertonic; $\hat{3}$ mediant; $\hat{4}$ subdominant; $\hat{5}$ dominant; $\hat{6}$ submediant; $\hat{7}$ leading tone or subtonic, depending on its intervallic distance from the upper tonic (half step or whole step).

¹⁶ Strictly defined as an interval comprised of three adjacent whole steps, the tritone has been regarded as a dissonance since the Middle Ages when it was labeled the *diabolus in musica* (devil in music) and prohibited by Medieval theorists (Randel, 2003).

Nevertheless, as a teacher, I regularly ask my students to carry out these manipulations and to do so without the corroboration of musical sounds. But I am not alone. My instructional process serves as an explanatory case in point and **Figure 2.1** provides a sample harmonic progression (V⁷-I) for the subsequent discussion.

In my initial presentation of V⁷'s resolution, I typically draw coloured arrows on an illustrative staff and recite the following litany: "The leading tone must rise and the chordal 7th or subdominant must fall." I inform my students that "if a dominant 7th chord is complete, the tonic triad will be incomplete" or conversely, "if a dominant 7th chord is incomplete, the tonic triad will be complete." This second statement requires a second example. Compare the higher bass (tenor) notes in **Figure 2.1** with those in **Figure 2.2**:

Figure 2.2: Resolution of the Incomplete Dominant 7th Chord



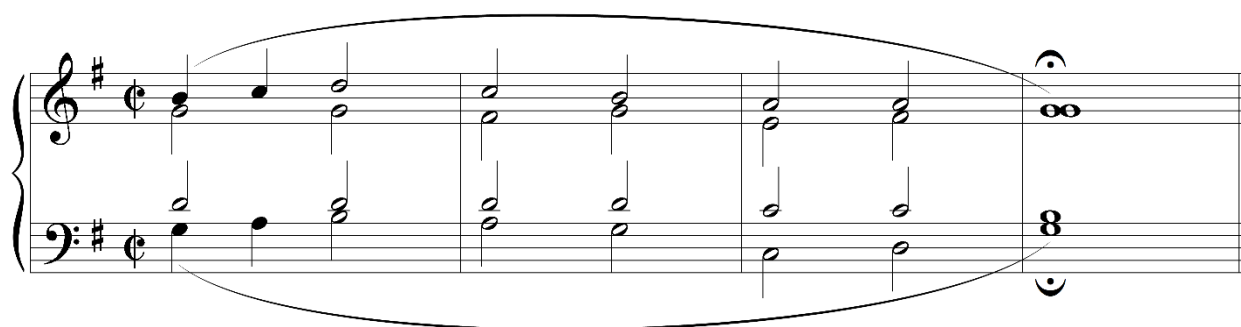
I continue with a one-sided oration that explains the harmonic tendencies of the tritone and summarizes the resulting complete/incomplete doublings. I even describe the voice-leading error caused by my unheeded advice, but my words generally wash over my "audience" with varying degrees of penetration. Of course, these words convey an understanding of the given chord progression that is synthesized from *my* personal experiences. Consequently, I am presenting an abstract distillate of *my* knowledge. How can I generate a concrete experience of V⁷'s resolution that will have meaningful significance for my students?

Obviously, I can animate the chords shown in **Figure 2.1** and **Figure 2.2** with the sounds they represent. My playing provides additional reinforcement for my students who are both seeing the progressions and hearing them. Not yet satisfied, I play the progressions again, extracting the tritone from the dominant 7th chord. I ask my students if they can hear this interval's dissonance and the inevitability of its resolution. They nod their affirmations but I soon realize that they are simply and unquestioningly accepting my conclusions. They are

passive receivers of my knowledge since I am perceived to be an authority. How can I encourage my students to become active participants in their own learning?

I can ask *them* to play the progressions, adding kinesthetic experiences to their seeing and hearing. This strategy is helpful for some students but not for others. The required sight-reading often produces considerable anxiety which negates any potential benefit. While the students' tactile interaction can be useful, it is still unsatisfactory. Whether the progression is played by me or by my students, it remains a disembodied simulation of “real” music. Therefore, I look for an example from the musical literature of the common-practice period and choose the final phrase of “Ein Choral” from *Album für die Jugend*, op. 68 by Robert Schumann (1810-1856). Reproduced in **Figure 2.3**, this phrase ends with a “textbook” resolution of V⁷:

Figure 2.3: R. Schumann, “Ein Choral” from *Album für die Jugend*, op. 68 (mm. 29-32)



Following traditional teaching practices, this excerpt is presented *after* my discussion – as proof that the rules I have stipulated are justified. But is there a more musical alternative? What if I reverse the order of presentation? Since Schumann’s voicing of the dominant 7th chord’s resolution is similar to the progression in **Figure 2.1**, I could begin with *real* music.¹⁷ I could play the entire 32-measure piece and gradually narrow my focus to the final phrase, then to the final cadence which is comprised of the chords in question.¹⁸ Recalling Browne’s (2003) predilection for explanations based on heuristic techniques, I could involve my students by asking them to help me analyze the cadence. Together, we could discover the resolution of

¹⁷ Voicing, which includes considerations of spacing and doubling, describes the ordered distribution of chord members and their vertical arrangement or placement in relation to one another (Gauldin, 2004). It can also refer to the voices or instruments that perform individual pitches.

¹⁸ A cadence is a melodic/harmonic configuration that closes a musical phrase, period, section, or composition with varying degrees of finality.

dissonance into consonance as it is exemplified by the V⁷-I progression in “Ein Choral.” From this experience, we could derive resolution procedures for ourselves. And we could test our understanding of these procedures by consulting other works of the common-practice period.

This pedagogical proposal, based on the actions of *showing* rather than *telling*, is more easily said than done. It is time-consuming, not only in its preparation but in its implementation. It requires an unconventional teaching approach which, of necessity, requires careful planning. I need to orchestrate and facilitate the discovery of every new chord. I need to place that chord in every conceivable chord progression. And I need to review an extensive body of musical literature from which to derive these new learnings. Searching for assistance, I consult a varied selection of harmony textbooks. I am disturbed – but not surprised – by the scarcity of excerpts or quotations from the musical literature.

Purposing Repertoire for Music Theory Instruction

As a component of my master’s research (Penny 2012), I analyzed five university-level textbooks on tonal harmony (Aldwell & Schachter, 2003; Clendinning & Marvin, 2005; Gauldin, 2004; Kostka & Payne, 2004; Roig-Francolí, 2003), with specific editions chosen for their comparable publication dates. Among other criteria, I explored the presence/absence of musical excerpts in each manuscript’s instructional treatment of V⁷. While all the textbooks included musical excerpts to a lesser or greater extent, I was disappointed with the excerpts’ lack of pedagogical purpose. I was looking for their participation in V⁷’s initial presentation but rarely found it beyond a cursory exemplar with a prose *telling* of its contents. Although the order of presentation occasionally corresponded with my music-first ideal (Aldwell & Schachter, 2003; Roig-Francolí, 2003), there was little active engagement with the excerpt(s). What can a written description of a musical phenomenon, such as the resolution of a dominant 7th chord, contribute to the exposition of this phenomenon – apart from proof or justification for the ensuing discussion?

Both as a student and as a teacher, I admit that I often disregard introductory musical examples because they are generally no more than *visual* images. Still-life pictures. As silent depictions of unsubstantiated *aural* events, they are non-essential elements in my rote-learning/teaching environment, particularly if the chosen repertoire is unknown to me or to my students. Without a clearly established instructional purpose, they are pedagogically meaningless. For example, Miguel A. Roig-Francolí (2003) excerpts two phrases from

Schumann's "Ein Choral" (mm. 5-8 and mm. 29-32) but his interaction with them involves a lengthy disclosure of voice-leading guidelines (a.k.a. rules) for the V^7 -I progression. I am uninterested – even as a self-confessed music theory enthusiast – until he asks me (his reader) to “identify an example of voice overlap in one of these phrases” (p. 379). Given this purposeful *doing* task, I am finally drawn into his discussion.

As a researcher, I am frustrated in my quest for musical excerpts with inherent or intrinsic pedagogical value. Their scarcity was confirmed by the textbook analyses of my master's inquiry and corroborated with empirical evidence (Penny, 2012). However, I am not willing to give up. I comb the library for additional harmony textbooks. Some of these are outdated texts: Horwood, 1948; Lovelock, 1946; Reed, 1954; and Rollinson, 1953. I recognize their historical significance but dismiss their instructional relevance for my current inquiry because musical excerpts are virtually non-existent – except for a few unidentified measures from the chorale harmonizations of J. S. Bach, acknowledging the irrefutable influence of Bach's chorale-based approach to harmony (Leaver & Remeš, 2018). Eric Rollinson (1953) colourfully describes questionable V^7 resolutions as “HIDEOUS” or “UGLY” (p. 30, original emphasis), and I worry that some of my ORMTA colleagues continue to teach from Frederick J. Horwood's (1948) succinct but outmoded missive. In his introductory chapter, Horwood writes: “Exercises in harmony should *never* be worked at the keyboard, although the student should play them afterwards to hear the musical result of his work” (p. 3, my emphasis).

Reviewing Walter Piston's (1978) textbook, I place it somewhere between my collection of historic teaching materials and the academic collection that informed my master's research. Originally published in 1941, Piston's influential text details his observations of musical practices in the common-practice period. Rejecting a mathematical or acoustical basis for tonal harmony, he extends previous ideas of harmonic function, presents a “new view of chromatic harmony,” and introduces the concept of harmonic rhythm or the rate at which chords change (Thompson, 1980, p. 131). In his comprehensive treatment of V^7 and its harmonic dissonance, Piston illustrates his practical philosophy of music theory with excerpts from the works of the following composers (listed in chronological order):

- Johann Sebastian Bach (1685-1750)
- George Frideric Handel (1685-1759)
- Joseph Haydn (1732-1809)
- Wolfgang Amadeus Mozart (1756-1791)
- Ludwig van Beethoven (1770-1827)
- Franz Schubert (1797-1828)
- Felix Mendelssohn (1809-1847)
- Frédéric Chopin (1810-1849)

Musical excerpts are interspersed with generic musical examples throughout Piston's chapter on the dominant 7th chord. While most of his excerpts are supported with Roman-numeral analyses, few are referenced in the surrounding text. The reader, therefore, must imagine their musical or topical significance. This textbook is an excellent resource but it does not provide an opportunity for my students to derive their learning from the musical literature.

I turn to my studio collection of harmony textbooks. These are associated with RCM, either directly or indirectly. Some are written by past/present members of RCM's College of Examiners (Andrews & Sclater, 1987-1988; Lawless & Podoliak, 1972; Satory, 2008) and others by independent music theory teachers (Mackin, 2002; Sarnecki, 2010; Vandendool, 2010). All are written in accordance with RCM's theory syllabi but only three are current with its 2009 edition (Sarnecki, 2010; Satory, 2008; Vandendool, 2010). I search for musical excerpts that are embedded in an introductory explanation of V^7 's resolution. I find three textbooks *without* excerpts, although two of these (Mackin, 2002; Vandendool, 2010) conclude their discussions of V^7 with analysis exercises drawn from the musical literature. The third text (Sarnecki, 2010) is completely devoid of musical excerpts in the lesson under scrutiny. It is also the text I have taught from most consistently since it was first published in 1995.

I am dismayed by my lapse of judgement and begin to realize how heavily my teacher-self relies on the experiences of my student-self. In my teens, I was introduced to resolutions of V^7 with one of RCM's recommended textbooks (Lawless & Podoliak, 1972). At the end of the pertinent chapter, the authors include three excerpted (non-continuous) phrases from Schumann's "Ein Choral," but without analysis or explanation. Deprived of meaning, these phrases – including the one I featured in my pedagogical proposal (see **Figure 2.3**) – are extraneous and irrelevant. Consequently, my learning was focused on an arrow-filled chart reproduced in **Table 2.1**:

Table 2.1: Voice-Leading Resolutions of the Dominant 7th Chord and its Inversions

	V^7-I	V^7-vi	V^7-IV^6	V^6_5-I	V^4_3-I	$V^4_3-I^6$	$V^4_2-I^6$
seventh	↓	↓	→	↓	↓	↑	↓
fifth	↓	↓	↓	↓	↓	↑	↓
third	↑	↑	↑	↑	↑	↑	↑
root	to tonic	↑	↑	→	→	→	→

(Lawless & Podoliak, 1972, p. 52)

Rightly or wrongly, my teaching is influenced by my learning. I do not, however, utilize the chart in **Table 2.1**. I appreciate its thoroughness but I do not approve its abstractness – nor its complete absence of musicality. Filling this musical void, I adopted William G. Andrews and Molly Sclater’s (1987-1988) manuscripts as teaching texts, despite their intimidating scope of 350 or more pages. These pages are filled with musical excerpts, although most are positioned in various exercises for analysis (both melodic and harmonic), keyboard harmony, and chorale-style (SATB) harmonizations. The SATB resolutions of V^7 are illustrated with plentiful author-constructed examples as well as excerpts from J. S. Bach’s *371 Harmonized Chorales*, which are universally acknowledged as masterpieces of four-part choral writing.¹⁹ The accompanying prose is comprehensive and gives prominence to the musical notation, as indicated in the preface of the first volume: “Above all, let MUSIC be your text” (1987, p. 3, original emphasis).

Unfortunately, Andrews and Sclater did not update their textbooks for the 2002 edition of RCM’s *Theory Syllabus*, or for subsequent editions. The principal stumbling block for my continued use of these teaching materials was RCM’s adoption (in 2002) of both upper-case and

¹⁹ Edited in four volumes by J. S. Bach’s son, Carl Philipp Emanuel Bach (1744-1788), the chorales were originally published between 1784 and 1787. In numerous later editions, they have served as “supreme models” for generations of music theory students (Piston, 1978, p. 164).

lower-case Roman numerals for harmonic analysis.²⁰ In 2008, Stephen Satory self-published *Basic Harmony*, a similarly music-enriched textbook. Previously titled *First-Year Harmony* (2001), it incorporates the refinements in RCM’s harmony curriculum. I used it for several years and embraced Satory’s (2008) labelling of J. S. Bach’s preferred resolution of V⁷ – with two complete doublings – as a “Bachian resolution” (p. 60), shown in **Figure 2.4**:

Figure 2.4: Bachian Resolution of the Dominant 7th Chord



Although enhanced with historical information, Satory’s manuscript is dense with prose and its organization, which clusters all the exercises at the ends of chapters, requires significant *telling* before any *doing* can occur. I recommend this textbook for adult students but I discontinued its use for younger students, returning again to Sarnecki’s (2010) text.

Bluntly stated, I use Sarnecki’s teaching materials because I have found no others more suitable. They are clearly designed for exam preparation and are fully aligned with RCM’s theory curriculum. Furthermore, I know every example and every exercise on every page. While I do not agree with Sarnecki’s pedagogy – or lack thereof – I have learned to maneuver around it. But I want more than Sarnecki’s contrived examples, I want my teaching, and its supporting materials, to be grounded in *real* music.

Theoretical vs. Practical Considerations of Music Theory

There are two classifications for textbooks on music theory: theoretical or speculative and practical or demonstrative/illustrative. The texts I have earlier deemed academic are, in fact, theoretical. By way of example, Robert Gauldin (2004) establishes a “linear, functional approach

²⁰ Roman numerals identify the position of a particular triad within a given key. Upper-case and lower-case numerals indicate the triad’s quality: upper-case for major (I); lower-case for minor (ii); lower-case with an added symbol for diminished (vii°); and upper-case with an added symbol for augmented (III+).

to tonal music,” emphasizing the horizontal relationship between melody and harmony (p. xxi). In so doing, he situates himself in opposition to the traditionally accepted approach which he identifies as a “vertically oriented system of harmonic analysis” (p. xxi) – a tradition exemplified by Piston (1978) as well as Kostka and Payne (2004). Through the correlation of harmony and interactive melodic lines, Gauldin presents the concept of linear reduction, utilizing layers of reductive analysis that derive from Schenker’s analytical theory.

There are other proponents of Schenkerian analysis: Aldwell, Schachter, and Cadwallader (2019); Clendinning and Marvin (2016); Laitz (2015); and Roig-Francolí (2019) – all with newly revised contributions to the literature. These authors incorporate Schenker’s linear approach to the structural levels of tonal music as well as his concept of prolongation, or the “expansion of a chord ... by means of one or more other chords” (Cadwallader & Gagné, 2011, p. 68). Indeed, the textbooks mentioned above have been pedagogically linked in reviews by Rohan Stewart-MacDonald (2014) and Don Traut (2006), but their theoretical manner of teaching tonal harmony limits their practical usefulness in my studio – with my RCM-oriented students.

However, Rogers (2004) decisively states that Schenker’s principles “must be fully recognized as a dominant force in the contemporary teaching of music theory” (p. 69). Almost every theory textbook published since the mid-1960s has been influenced, more or less extensively, by Schenker’s profound analytical insights. My first exposure to Schenker came with the publication of Sarnecki’s (1999) first harmony book. Although Schenkerian analysis is not explicitly referenced, Sarnecki introduces a simplified version of Schenker’s chord prolongations. Consequently, Sarnecki, who likely encountered the concept of prolongation during his studies at the Mannes College of Music in New York City, has influenced thousands of young harmony students and their teachers.

While Sarnecki’s (2010) utilization of chord prolongations seems to position his publications as theoretical textbooks, they do not satisfy the criterion of “constituting intellectual speculation” (Webster, 1983, p. 1133). They are not characterized by contemplation, conjecture, or abstract reasoning – nor were they intended for this purpose. They are practical textbooks, disposed to action or procedural usefulness, as are the other textbooks associated with RCM. But examination candidates continue to perform weakly on their written harmonizations. Despite the apparent practicality of RCM-recommended textbooks, the teaching of music theory remains disconnected from its application to music as a performative art.

Thinking Differently about Music Theory Instruction

As a young rudiments teacher, I naively accepted the prevalent tendency toward a scientific study of music theory. I followed the curricular requirements of RCM and adopted the textbooks recommended in a succession of theory syllabi (1989, 1995, 2002, 2009): Berlin, Sclater, and Sinclair, 1969; Lawless, 1975; Sarnecki, 1995; Vandendool, 1984; and Wharram, 1969. With the formal study of music theory traditionally initiated at a grade 5 level of performance, RCM's curricular model did not encourage equitable proficiencies in the comprehension of theoretical concepts and practical skills. These inequities reinforced the instructional inclination toward segmented subject areas, despite their interrelationship.

I did not fully grasp the disadvantages of this segmentation, nor did I understand the drawbacks of teaching music theory without a direct musical link. The recommended textbooks contain diagrams and illustrations, certainly, but they lack examples drawn from *real* music. For instance, intervals, which measure distances between two notes, are introduced in the textbooks cited above with variations of the visual aid in **Figure 2.5**:

Figure 2.5: Size and Quality of Intervals in the Major Scale



This image is generally preceded with instructions for determining numerical measurements by counting letter names or lines and spaces, but qualifying measurements (like perfect and major) are presented as facts to be memorized without aural associations. Therefore, intervals become increasingly complex intellectual abstractions wholly purposed for written examinations. Where is the music in this manifestation of music theory pedagogy?

To be fair, music theory is only one aspect of a comprehensive music education – musicianship skills, such as ear training and sight reading, are also essential components. In RCM's graded curriculum, the aural recognition of intervals and chords is included with every practical (performance) examination, but this auditory skill does not automatically transfer to a written context. The dots, so to speak, must be connected. Regelski's (1982) inductive, intuitive, or unconscious reassembling process could become a conscious response to the musical whole.

Intervals (and other fundamental rudiments) could be repurposed as exploratory tools for the study of genuine musical works. Like the grammatical conventions of language, these tools could elucidate the artistic qualities of music.

Of paramount importance then, is a pedagogical relationship between the abstract symbols that characterize written music and the concrete sounds they represent. RCM's theory syllabi are regularly revised for practical relevance and several of the recommended textbooks suggest an equivalent standard. Lawless (1975) provides keyboard applications of music theory throughout his text but these applications are occasionally problematic. Clearly identified as "optional," their association with the piano, while pertinent for a significant portion of the student population, discriminates against non-pianist musicians. Vandendool (1984) similarly emphasizes a correlation between music theory and the keyboard. She includes musical excerpts drawn from diverse genres but these excerpts, which generally function as exercise materials, are reduced to subliminal renderings of musicality because they lack aural interpretations. Regardless, Vandendool's pioneering analysis lessons encouraged RCM to incorporate an analysis requirement in its 2002 syllabus, establishing musical literature as an authentic point-of-contact for music theory.

The eighteenth-century rationalization and codification of common harmonic principles incongruously segmented theoretical suppositions from aural or performative experiences. This attitude permeates the modern teaching of music theory, despite Regelski's arguments against the reductionist traditions it preserves. In my RCM context, music theory is also disconnected from its *doing* or the act of musical theorizing. Consequently, an experiential mobilization is necessary. Modern music theory pedagogy requires an experientially integrated approach in which students are encouraged to relinquish their instructional involvement as passive receptors, becoming instead, active participants or "listening-and-thinking" musicians. Rogers (2004) refers to this educational awakening as "intuition enhancement" (p. 9), or the integration of conceptual knowledge and musical intuition – an instinctive consciousness of musical information accumulated through musical experience.

Perhaps the subject of music theory is better labelled musical "grammar," as a term related to systematic structures of standard usage, replacing the abstract quality of theory with the concrete reality of practice. But whatever the label, music theory instruction requires an underlying method and the most effective methods comprise the following (Choksy et al. 2001):

- an identifiable philosophy (set of *principles*)
- a unified pedagogy (well-defined *practices*)
- goals and objectives worthy of pursuit
- integrity

Taken a step further, music theory instruction should also stress the importance of *musicality* (White, 2002). To this end, SMT expanded its scope of influence to include the Music Theory Pedagogy Interest Group.

The Scholarship in Music Theory Pedagogy

The development of music theory pedagogy as an independent field of study is documented in a special issue of SMT's *Music Theory Spectrum*. In their article, Robert Gauldin and Mary Wennerstrom (1989) observe three areas of research activity: (1) pedagogy, involving analytical methods and compositional strategies; (2) aural skills and sight singing, particularly concerning the role of technology; and (3) cognition and perception, incorporating various theories and experimental findings. Situated in the first area, my inquiry is supported by the authors' emphasis on experiments that show "little connection between what [is] postulate[d] theoretically and what is actually heard," as well as their suggestion to redirect instruction away from "speculative abstractions" toward "musically significant aspects" of theory (p. 69). This musical significance requires the practical application of theoretical concepts.

Their article also features an extensive bibliography but its value as a pedagogical barometer is limited. While an impressive number of publications represent the procedural practices of teaching music theory – in recent editions such as Aldwell, Schachter, and Cadwallader 2019; Clendinning and Marvin, 2016; Kostka, Payne, and Almén, 2018; Laitz, 2015; and Roig-Francolí, 2019 – few texts explain pedagogical or philosophical practices.²¹ Of these few, Rogers' (2004) overview of pedagogical philosophies and John D. White's (2002) guidelines for integrative teaching, along with the *Journal of Music Theory Pedagogy* (JMTP), launched in 1987, offer the most relevance for my study.

Rogers (2004) discloses the "dominant thesis" of his book as the "interdependence of thinking and listening" (p. 8), which represent the conceptual and perceptual aspects of music

²¹ Conceptualized by Johann Friedrich Herbart (1776-1841) as a theory of education (Kenklies, 2012), pedagogy is distinguished from procedure, an ordered series of actions, in its theoretical perspective. It is a "practice about a practice," or a *metapractice*, that involves a theory-practice relationship (Usher, Bryant & Johnston, 2003, p. 390).

theory.²² Associated with mind training and ear training respectively, these components are linked through musical analysis to become a single entity. The resulting synergy encourages my art/science integration, as does White's (2002) "musical union" of rhythm, melody, harmony, and sound. Arguing that separate elements cannot occur independently in a musical context, he advocates a similar *pedagogical* union that synthesizes conceptual awareness and perceptual activity, for "genuine understanding of musical concepts cannot be acquired without the aural and even tactile experience of actual music" (p. 147). Nevertheless, this pedagogical union frequently meets with objections, commonly associated with the time-constraints of teaching, despite the general acceptance of a musical union in analysis.

In her doctoral dissertation, Linda Schwartz (2009) surveys 187 articles in the first twenty volumes (1987-2006) of JMTP. Thirty-two of these relate to topics in aural musicianship and eighteen to music cognition and perception, which are Gauldin and Wennerstrom's (1989) second and third areas of research. The remaining articles are divided between procedural topics – related to tonal music, post-tonal music, jazz and popular music – and pedagogical topics, confined to twenty-seven "critically reflective" articles (Schwartz, 2009, p. 153). Since 2006, a growing number of submissions in JMTP have investigated the *metapractices* of music theory pedagogy, rather than the specific (how-to) practices of procedure. These include: Scott Dirkse's (2014) questioning strategies; Jonathan Dunsby's (2010) virtual and archeological known unknowns; Anna Ferenc's (2016) metacognitive reflections; Roger Mathew Grant's (2012) formalism; Joshua Groffman's (2017) guided discovery techniques; Melissa Hoag's (2013) recomposition for appreciation, Samuel Ng's (2014) recorded performances as text, and Peter Schubert's (2011) global perspectives.

Elizabeth West Marvin (2012), in her presentation of developments and pedagogical trends in music theory teaching, identifies the following six themes:

- engagement of professional music theorists in designing/teaching the core curricula
- focus on analysis and repertoire, somewhat less on part-writing
- integration of aural/written skills and increased time devoted to aural training
- increased use of technology in teaching
- growing need for remediation
- two challenges – improvisation and music outside the Western canon

²² Conceptual knowledge involves imagination, abstraction, and symbolization, while perceptual knowledge is sensory and involves a direct experience of music (Yarbrough, 2003).

Addressing undergraduate musicians' acquisition of fundamental knowledge, she highlights the function of a core curriculum in fostering both musical literacy and musicianship, for "all undergraduates should be able to read, write, and perform music with understanding" (p. 263). The broader goal, of course, is to foster increasing levels of musical artistry. While a gradual shift toward student-centered, contextually relevant instruction is evident, few research studies incorporate a *music*-centered approach to instruction, in which music theory is derived from the music itself. And none of these consider the pedagogical challenges unique to RCM's music theory curriculum since it is customarily delivered in private studios rather than institutional classrooms.

Recent Trends in the Music Theory Pedagogy Literature

The recent publication of Leigh VanHandel's (2020b) edited collection of pragmatic, "immediately useful resources for instructors of music theory" adds substantially to the scholarship in music theory pedagogy (p. xiii). Her comprehensive volume addresses "both sides" of the subject, with conceptual (pedagogical) as well as practical (procedural) discussions of effective music theory instruction. My attention was immediately drawn to chapter 2, titled *Putting the Music in "Music Fundamentals"* (Hoag, 2020), having newly published a chapter of my own with a similar title – *Where is the Music in Music Theory Pedagogy?* (Penny, 2020). Hoag's approach to teaching music fundamentals, or the rudiments of music, is governed by two "mindsets." She "connect[s] everything with sound, constantly" and "integrate[s] repertoire as much as possible" (p. 14). Her advocacy for the centrality of music in her teaching, both musical experience and musical literature, mirrors my ambition for this inquiry.

Following Schwartz' (2009) lead, my survey sampling of the collection's sixty-eight chapters boasts twenty-one critically reflective (pedagogical/philosophical) discussions of music theory pedagogy. One or two, including Hoag's, are dedicated to each of these topics:

- fundamentals
- rhythm and meter
- diatonic harmony
- chromatic harmony
- aural skills
- post-tonal theory
- form
- popular music

An itemized accounting of pedagogical approaches, in order of presentation, includes working memory (VanHandel, 2020a), perception (Kleppinger, 2020), small-scale improvisation (Rogers, 2020), cognitive/communicative constraints (Shanahan, 2020), morphology and syntax (Davis, 2020), functional solmization (Karpinski, 2020), language training (Mariner & Schubert, 2020), curricular diversity (Buchler, 2020), principles of form (Heneghan, 2020), and an integrated curriculum (Covach, 2020).²³ The last and largest part of the collection addresses “Who, What, and How We Teach.” These discussions involve issues of public accessibility – teaching students with a broad range of abilities and experiences in community colleges, music industry programs, and conservatories or institutional schools of music.

Focusing on pedagogy, as Gauldin and Wennerstrom’s (1989) first area of research, I narrowed my review to thirteen chapters that offer a broad range of strategies. Some, although adaptable beyond their immediate circumstances, are directed toward specific topics (Buchler, 2020; Covach, 2020; Davis, 2020; Heneghan, 2020) or specific student populations (Baker, 2020; Palfy, 2020; Snodgrass, 2020). Inevitably, the call for curriculum revision comes to the fore – adapting/rethinking music theory pedagogy for accessibility/diversity by borrowing from educational research in linguistics and mathematics, among others. Preparing undergraduates to serve a wider non-academic community, two authors explore narrative models for their students’ interactions with music theory: J. Daniel Jenkins (2020) uses program notes to improve “writing skills while engaging in music analysis discourse” (p. 383); and Justin London (2020) encourages the reading of “great writing about music” (p. 428), giving Haruki Murakami’s novel *Kafka on the Shore* (2006) as an example. Deborah Rifkin (2020), however, approaches curriculum revision from an operational perspective, presenting a case study that uses her institution’s recent curricular review process to examine “best practices [for] organizational change and collaborative communication” (p. 433).

There are pearls of wisdom to be found throughout this collection of resourceful writings, many of which are grounded in Rogers’ (2004) overview of pedagogical philosophies for the teaching of music theory. But my inquiry is most closely aligned with Hoag’s (2013, 2020) application of student-centered discoveries. Matthew Heap (2020), in his student-centered rethinking of the music theory curriculum, uses a “flipped-classroom system” in which students

²³ John Covach (2020) promotes integration by bringing popular music into the music theory classroom – either with a mild revision of the curriculum that “broadens the traditional model, leaving its foundations in place” or a fundamental revision that “rethinks the model from the ground up” (p. 332).

master the fundamental elements of specific topics *before* attending class – placing the onus for learning on the students themselves. This video-reliant redesign preserves valuable class-time for developing a “deeper understanding of each topic rather than skimming the [topic’s] surface” (p. 446). While I appreciate Heap’s pursuit of depth over breadth (see chapter 4), my pre-college/university-aged students are not yet ready to assume the level of independence his redesigned curriculum requires. But they *are* ready for engagement.

Along with developing his students’ writing skills, London (2020) aims to “stoke” their curiosity about music. Philip Duker (2020) cultivates a comparable attitude of curiosity by encouraging his students to ask meaningful/probing questions about the music they are experiencing through listening or performing. He explains:

Much of the content that is typically taught in a theory classroom answers questions that are often unasked and assumed by instructors. What harmonic progressions [characterize] this style of music? How does the outer voice counterpoint support this surprising passage? What if the composer had used a diatonic chord [in this measure] instead? These kinds of questions are often more interesting entry points ... than beginning with “the answers.” Acknowledging these questions at the outset can be a powerful way to entice students into caring about the answers discovered through analysis. (p. 463)

I am struck by a commonality of purpose that encapsulates my instructional mission: *asking* instead of *answering*. Earlier in this chapter, I wondered if intervals, or other elements of rudimentary music theory, could become tools for the exploration of musical literature. Duker’s objective is similar. And Nancy Rogers (2020), using small-scale improvisations to transform unconscious experiences of music into conscious knowledge, guides her students to discover the “principles behind their musical instincts” (p. 89). Thus, music theory is connected to musical experience (Rogers) and musical literature (Duker) through questioning. It seems reasonable to assume that the *ends* of my pedagogical aspirations are within sight, but the *means* to these ends remain elusive. While Hoag’s (2020) chapter brings together all three components – experience, literature, theory – it does not provide a unifying pedagogical/philosophical methodology for music theory instruction. How are the “dots” to be connected?

The subject of music theory pedagogy is gaining ground as an independent field of study. As practitioners within this field, we all want the same outcome: to engage our students in a holistic experience of music theory. We are experimenting in our classrooms or studios and

sharing our ideas in public forums, such as JMTP and *The Routledge Companion to Music Theory Pedagogy* (2020). The scholarship is growing but we do not yet have an effective *metapractice* of integration with which to build our individualized curricula.

An integrated music theory pedagogy is seldom addressed in the scholarly literature, particularly as an integration of art and science, leaving a significant opening for its exploration. Although my inquiry lacks the security of a long-established research community, this lack may be turned to my advantage. Embracing Vicki Kubler LaBoskey's (2004) assertion that "those engaged in the practice of a particular profession are particularly well qualified to investigate that practice" (p. 842), my inquiry is situated in the nexus between music theory and music education. Probing the historical interpretations of music theory, I scrutinized the source of my problem. Exploring the philosophical foundations of music education, I seek a solution.

The Scholarship in Music Education

Propagated by generations of music theorists who teach as they were taught, my pedagogical problem is embedded in the instructional practices of the past. Since its resolution is not immediately evident within the purview of music theory pedagogy, although this literature is expanding, I broadened the boundaries of my investigation. Briefly considering the scholarship in music pedagogy, which Sang-Hie Lee (1987) defines as the "systematic analysis of techniques for teaching performance skills" (p. 37), I found that it is typically analogous with *instrumental* music pedagogy – and primarily for the piano. As an important contribution to the growth and development of this field, piano pedagogy research is active both in music and in related areas, including cognitive sciences, education, engineering, health sciences, neurosciences, psychology, and technology (Comeau, 2009). But the physical emphasis of instrumental music pedagogy confines the topic of music theory, with its intellectual emphasis, to the periphery.

Consequently, I turned my attention from music pedagogy to music education. Referencing the historical interpretations of J. Paul Green and Nancy F. Vogan (1991), Betty Hanley (2012) associates music education with public (formal) schooling.²⁴ This "school music" often implies a *general* music education which is superficially understood as music appreciation or the survey sampling of musical repertoire. In contrast, Regelski (2004) defends general music as the "core curriculum" for all music studies, or the "curricular means" by which music

²⁴ Hanley (2012) also recognizes that *informal* music education occurs in homes, churches, and communities.

contributes to a “general education” (p. 1). Adopting Regelski’s argument, I will regard music education as the field of study connected with musical training in schools.

My examination of the pertinent literature generated an extensive list (Beynon & Veblen, 2012; Bowman & Frega, 2012; Elliott, 2005; Hermida & Ferreo, 2010; Jorgensen, 2003; McPherson & Welch, 2012; Moore, 2012; Reimer, 2009; Swanwick, 2012; to name a few), although this literature, often American, is associated with school music – and frequently elementary school music.²⁵ Many academic journals are devoted to music education research, as are several research manuals (Clements, 2010; Conway, 2014; Hartwig, 2014; Phelps, 2005; Thompson & Campbell, 2009), but music theory, as a subject independent from general music, receives little more than a cursory nod.²⁶ However, there are lessons to be learned from the field of music education, despite a fundamental disagreement between music scholars and education scholars. White (2002) places their dispute in differing assumptions about the relative importance of substantive knowledge (musical skill) and methodological or philosophical knowledge (teaching skill), citing lower musical standards in the education field. A brief exploration of the philosophical basis for White’s argument will precede my examination of the current literature.

Early Philosophies of Music Education

Several European educators influenced the evolution of American music education. These were John Amos Comenius (1592-1670), who formulated a naturalistic conception of education; Johann Heinrich Pestalozzi (1746-1827), who emphasized child-centered methods; and Friedrich Fröebel (1782-1852), who recognized the importance of self-expression through play (Mark, 2013). Inspired by the work of these educators, Lowell Mason (1792-1872) persuaded the Boston School Committee to adopt music as a curricular subject. A portion of the committee’s report, published in 1838 by the *Boston Music Gazette*, states: “vocal music seems to have a natural place in every system of instruction which aspires . . . to develop man’s whole nature” (quoted in Mark, 1982, p. 17). Early in his career, John Dewey (1859-1952) wrote similarly

²⁵ Canadian music education is grossly under-represented in the literature – of the nine books cited in my text, only one (Beynon & Veblen, 2012) engages the subject of music education from a Canadian perspective.

²⁶ Scholarly journals in music education include: *Action, Criticism, and Theory for Music Education*; *Bulletin of the Council for Research in Music Education*; *Contributions to Music Education*; *International Journal of Music Education*; *Journal of Historical Research in Music Education*; *Journal of Music, Technology and Education*; *Journal of Research in Music Education*; *Research Studies in Music Education*; *Music Education Research*; *Music Educators Journal*; and *Update: Applications of Research in Music Education*, among others.

about aesthetic feeling, claiming that the “end of art is to produce a perfect harmonized self” (1886, p. 318). His concern for the individual’s development as a social being resembles Plato’s justification for education in the arts – as does Mason’s (1834) writings which extol the benefits of music education for the development of intellectual discipline, moral character, and improved health.²⁷

These three attributes (intellectual, moral, and physical) became the standard criteria for justifying American music education.²⁸ However, the decline of progressive education, associated with Froëbel, Jean-Jacques Rousseau (1712-1778), and Maria Montessori (1870-1952), along with the societal changes brought about by world events in the mid-twentieth century, such as World War II, the Cold War, and the subsequent “Space Race,” precipitated the Music Educators National Conference to appoint the Commission on Basic Concepts for the purpose of addressing the philosophical and theoretical foundations of music education (Mark, 1982). Ironically, the commission’s work, which was to provide future direction, resulted in the culmination of thousands of years of utilitarian philosophy.²⁹ Only one contributor to the commission’s publication thought otherwise. Allen P. Britton’s article, characterized by an emphasis on aesthetic development, rejected utilitarian or extra-musical values as the philosophical justification for music education – citing Plato as the “original offender” (Henry, 1958). Consequently, Britton instigated the emancipation of music education from the servitude of social usefulness.³⁰

Breaking this link with societal fulfillment, music education philosophy was soon dominated by aesthetic philosophy. Originating in the Age of Enlightenment, aesthetics was

²⁷ Music was a crucial component of Plato’s plan for citizenship education (Mark, 2013). Inheriting the Pythagoreans’ mathematical conception of music, Plato (ca.429-347 B.C.E.) viewed its orderly relationships of pitch and rhythm as fundamental proponents of good temper (*euharmonia*) and gracefulness (*eurhythmia*) (Abraham, 1979).

²⁸ Herbert Spencer (1820-1903), an English philosopher, anthropologist, and sociologist, promoted the power of music to further emotional development in his *Education: Intellectual, Moral, and Physical* (1861).

²⁹ Most authors in the commission’s publication, *Basic Concepts in Music Education* (1958) – including C. A. Burmeister, E. Thayer Gaston, Robert House, Thurber H. Madison, George Frederick McKay, and John H. Mueller – referred to the instrumental usefulness of music education (Mark, 1982).

³⁰ Early in the fifth century, Martianus Capella described the educational properties of seven liberal arts: grammar, dialectic, rhetoric, arithmetic, geometry, astronomy, and harmony (music). The first three, which became the *trivium* (three paths), were considered the verbal arts and comprised the elements of language as well as the training of logic and expression (Stahl, 1971). The remaining four, identified by Boëthius as the *quadrivium* (four paths), were the mathematical arts unified by arithmetic as the science of number. Thus, the *quadrivium* (including music) taught the secrets of the universe through theoretical contemplation, while the *trivium* included music only as a utilitarian or practical application (Mark, 2013).

philosophically bound to the *art* of music (involving imagination, perception, and sensation), rather than music education.³¹ As such, categories of aesthetic analysis, including referentialism, expressionism, and formalism, enabled philosophical inquiries into the “problems” of art – problems of feeling and form (Allsup, 2010). While modernist composers, like Arnold Schoenberg (1874-1951) and Igor Stravinsky (1882-1971), used aesthetic philosophy to shape elitist university programs, Bennett Reimer (1932-2013) established aesthetic philosophy as the principal rationale for music education in North America.

Aestheticism vs. Praxialism in Music Education

The emergence of aesthetic education was grounded in the writings of Dewey (1934), Susanne K. Langer (1942), and Leonard B. Meyer (1956), as well as an interest in cognitive psychology (Bloom, 1956/1964; Bruner, 1963; Goodman, 1968). Assuming that music (and the arts) are “basic modes of cognition,” Reimer espoused their nonconceptual ways-of-knowing and their ability to engage experiences of feeling or sentience (Allsup, 2010, p. 52). He adopted Meyer’s theory of absolute expressionism, in which the meaning of art is a function of its internal qualities (including artistic/cultural influences), rejecting formalism (an intellectual experience of art) and referentialism (the valuation of art derived from non-artistic meaning).³² Reimer (1970) believed that the nature of “art as art” must be affirmed and the relation of “art to life” must be recognized (p. 24), converging the relationship between philosophy and advocacy. While I support Reimer’s focus on the *art* of music, his approach – which I experienced in my elementary schooling – is essentially theoretical.

Defending music education as aesthetic education (MEAE), Forest Hansen (1990) asserts that “[t]here is a ‘knowing how’ to music appreciation just as there is to music making” (p. 7), but I would argue that an experience of appreciation, lacking participatory insightfulness, provides *indirect* knowledge of music. According to David J. Elliot (1991a), it is a musical/interpretive performing experience that provides direct knowledge of music, since artistic proficiency contributes to the depth of knowledgeableness. Nevertheless, aesthetic education gained full acceptance by the music education profession, although Abraham A. Schwadron

³¹ Alexander Gottlieb Baumgarten (1714-1762) used the term *aesthetics* to describe the science of perception (knowledge acquired through the senses) in art theory (Labuta & Smith, 1997).

³² For Leo Tolstoy (1828-1910), an ardent referentialist, the function of art is to “transmit specific emotions from the artist to the recipient in the most direct and most powerful way the artist can devise” (Reimer, 1970, p. 16).

(1967) recognized the limitations of its narrow focus in the realities of a pluralistic society, and Douglas C. Lemmon (1977) similarly challenged its cultural uniformity:

Either we must believe that all musicians . . . work according to the principles of Reimer's theory of art . . . or only those works and activities of musicians that can be shown to conform to the conditions laid down by Reimer's theory of art can be justifiably included in . . . a curriculum in music. (p. 8)

Christopher Small (1977) questioned the philosophical veracity of aesthetic education, revealing its historical development as a scientific worldview, while Howard Gardner (1983) postulated the existence of a cognitive form of musical “intelligence.” Therefore, as the 1980s progressed, this loss of confidence brought the philosophical unity of MEAE to a close.

The emergence of a praxial philosophy inspired Elliott (1995) to integrate multicultural and sociological perspectives on music in the act of *musicing*.³³ Drawing on Aristotle's notion of *praxis* (as action rooted in practice rather than theory), Elliott criticized the widespread doctrine of musical consuming, or the abstract contemplation of music as an aesthetic object, and offered instead, musical performing – not as the actualization of an autonomous object, but as an act of music making. Aristotle (384-322 B.C.E.), who refuted the Pythagorean “harmony of the spheres” and debunked the idea of number as reality, viewed the “propriety of music (and education in music) [as] a relative matter, depending on time, place, purpose, age, and station” (Mathiesen, 2011, p. 259). This contextualization of music education precipitated an Aristotelian Renaissance in twentieth-century educational philosophy (Curren, 2010).³⁴

According to Elliott (1991a), a “musical/interpretive performing [experience] involves both *generative* thinking and *evaluative* thinking” (p. 33, original emphasis), which jointly provide direct knowledge of music. Likewise, the inclusive teaching of musicianship, which he describes horizontally as procedural knowledge and vertically as artistic proficiency (p. 29), simultaneously develops the “attitudes and critical skills of perceptive listeners” (p. 34). Thus, musical

³³ Small (1998) uses the word *musicking*, which he defines as a present participle (or gerund): “To music is to take part, in any capacity, in a musical performance, whether by performing, by listening, by rehearsing or practicing, by providing material for performance (what is called composing), or by dancing” (p. 9).

³⁴ Distinguishing moral virtues, defined as “dispositions to feel and be moved by our desires or emotions,” from intellectual virtues, as “capacities or powers of understanding, judgment and reasoning,” Aristotle treats moral virtues as “states of the irrational part of the psyche” that lay the developmental foundation for intellectual virtues (Curren, 2010, p. 547). The former arise mainly from habit and the latter, from teaching. Aristotle's “unity of virtues” thesis asserts their interdependencies, as moral virtues establish the perception of end pursuits, while intellectual virtues enable the achievement of these ends.

performing or *musicing* is “both a *form* of knowledge and a *source* of knowledge” (p. 37, emphasis added), referring to a state of knowing attained conceptually as well as perceptually. By way of explanation, Cornelia Yarbrough (2003) describes conceptual knowledge as “ideational” – involving imagination, abstraction, and symbolization – in contrast with perceptual knowledge, which is sensory and involves a “direct apprehension of the environment through the five senses” (pp. 5-6). Consequently, *musicing* embodies the union of theory and practice that I am seeking.

Elliott (1991a) severely challenged Reimer's philosophical emphasis on the musical *product* rather than its *process*. In *musicing*, he suggests that “thought and action are interwoven like themes in a fugue” (p. 25), but practical or procedural knowledge (knowing how) often remains secondary to propositional or declarative knowledge (knowing that). Propositional knowledge is supported by logical evidence, whereas procedural knowledge is exercised through practical success, but an artistic musical performance – or “cognition in action” (p. 29) – is derived from a complex integration of both generative and evaluative “knowings” (Scheffler, 1988). This direct knowledge or musicianship, similar to Dewey's (1934) *readiness*, also enables knowledge of that “other” musical work – the interpretive performance itself (Elliott, 1991a). My craving for practical relevance is satisfied but Elliot's approach, while fulfilling my desire for artistic correlation, is philosophically polarizing.

A public dialogue, which began with articles in the *Quarterly Journal of Music Teaching and Learning* (Elliott, 1991b; Reimer, 1991), fueled an aesthetic/praxial debate that continued unabated until Reimer's death. Proponents and detractors of both philosophies contributed their perspectives. Regelski (1997) approved the praxial intersection of deliberate thinking and doing but advocated an openness toward all forms of musical activity (ceremony, entertainment, recreation, ritual, and therapy), extending praxis beyond the Western art tradition; while Maxine Greene (1995) celebrated praxial experiences of an aesthetic nature, enabling the “poetic use of [one's] imagination” (p. 4). Philip Alperson (2010), attempting to resolve the tension, suggested “robust” praxialism as an inclusive encompassing of aesthetic interests that concern both the musical product as well as the productive and receptive processes involved in the creation of the product. Similarly, Elvira Panaiotidi (2005) acknowledged the complementary relationship between aestheticism and praxialism, arguing for the “multidimensionality” of musical praxis. Other scholars did not directly engage the debate, such as Estelle R. Jorgensen (1997) who

adopted a dialectic stance (reminiscent of Socrates) instead.³⁵ My own support for Elliot's approach is less enthusiastic than it once was.

I am not convinced that Elliott's emphasis on musical performing completely addresses the teaching/learning of music theory. While performance is important, "performance alone does not constitute an education in music" (Choksy, 1999b, p. 190) – nor does Reimer's "music appreciation movement" which perpetuates an ideal of connoisseurship through the study of history, theory, and other information *about* music, constituting "training for understanding" as a prerequisite for "appreciating" (Regelski, 2006, p. 285). But an integrated theoretical/practical approach would unify both the conception and perception of musical wholes – as imagination, abstraction, and symbolization derived from a direct experience of music.

Experiential Music Education

Elizabeth Gould (2004) poignantly claims that the essentialist philosophies of both aesthetic education and praxial education are "irrelevant in and irreducible to the lived experiences of music education practitioners" (p. 291). Rejecting the aesthetic/praxial dualism, she adopts Gilles Deleuze and Felix Guattari's (1987) "nomadic wandering" as the forming, inventing, and fabricating of new concepts through experimentation and affirmation – or a philosophy of experience. As such, educational practitioners, exercising intentional ways of thinking and acting – not necessarily associated with a particular method or approach – "create their own music education philosophy as they solve the problems of their everyday lives" (Gould, 2004, p.296). Philosophy as experience then, provides an alternative perspective for the resolution of both theoretical and practical problems.

This musical experience, consistent with Dewey's (1938) pragmatic premise of "learning by doing," attempts to reverse the habitual creation of written competencies that lack auditory awareness. Rogers (2004) describes music theory not as a subject but as an activity of musical *theorizing*, which he explains as "thinking about what we hear [or play] and hearing what we think about" (p. 7). This hearing/thinking balance, enabled by the aural imagining of a visual or notated representation, is the essence of music theory conceived as praxis. Thus, an integrated

³⁵ Contradicting the universalist philosophies of the pre-Socratics (including Pythagoras), Socrates challenged the order and predictability of natural laws through a method of dialogue that emphasized the cultural and contextual ethics of human conduct. This dialectic process fostered critical thinking and launched the conflict between rote learning and child-centered learning (Allsup, 2010).

approach to its teaching offers a paradigmatic “middle ground” that allows for the navigation of music theory pedagogy as a science as well as an art, since both disciplines are included in the definition of *music* itself – the “science or art of ordering tones or sounds in succession, in combination, and in temporal relationships” (Webster, 1983, p. 781). The definition of *pedagogy*, as the “art, science, or profession of teaching” (p. 866), further implicates the instructional cohabitation of art and science.

Admittedly, this dichotomy has coloured my review of the music education literature. Although I read articles reporting research studies (Nielsen, 2009; Roulston, 2006; Yarbrough, 2003), instructional applications (Andrews, 1990; Espeland, 2010; Luce, 2001), knowledge traditions (Aróstegui, 2003; Elliott, 1991a; Hansen, 1990; Regelski, 2006), philosophical paradigms (Jorgensen, 2009), and valuation theories (Westerlund, 2008), my readings were often preoccupied with the prevalence of opposing educational approaches, such as means/ends behaviours, concrete/abstract ideals, practical/aesthetic understandings, intrinsic/extrinsic values, and interpretive/positivist paradigms. For example, Aróstegui (2003) illustrates the confrontation between a teaching/learning process conducted by an external authority, relatively independent of the learner’s experience, or a teacher/student interaction in which the learner actively constructs subject meanings – an opposition that encourages me to choose an interactive posture on behalf of my students.

Given this instructional posture, I am inspired by Kathryn Roulston’s (2006) exploration of qualitative studies in music education, where “researchers are involved in knowledge construction to examine *meanings* from participants’ perspectives, with findings emerging from data analysis in an ‘inductive’ or bottom-up, rather than a ‘deductive’ or top-down way” (p. 155, original emphasis). Although not specific to teaching strategies, this interpretive methodology can be re-imagined in an instructional context, where *teachers* are involved in knowledge construction from *students’* perspectives. And just as interpretivist research draws on the notion of *Verstehen* or understanding, associated with the German sociologist Max Weber (1864-1920), so too can inductive teaching strategies that Roulston, citing Michael Crotty (1998), contrasts with “research [and instruction] that aims to ‘explain,’ or focuses on causality” (Roulston, 2006, p. 161).

From a student viewpoint, Michael J. Prince and Richard M. Felder (2006) describe inductive learning as an “umbrella term” that encompasses active learning, inquiry learning,

collaborative learning, discovery learning, and others. Despite identifiable differences, these inductive methods are all characterized as constructivist, building on the widely-accepted belief that students construct their own version of reality, rather than simply absorbing the teacher's version. David W. Luce (2001) carefully delineates collaborative learning from cooperative learning, which maintains traditional structures of hierarchical authority, and collaborative learning from collaborative projects, which differ in philosophy and methodology. Regarding inductive learning, Luce identifies a significant instructional challenge: "Shifting from traditional learning approaches to a collaborative learning style entails ... [a] curriculum shift from textbook-based deductive reasoning to a student-focused inductive process [that] question[s] the utility of textbooks" (p. 21). In this statement, I recognize the epiphany that altered the course of my professional career and subsequently awakened my researcher-self.

Heidi Westerlund (2008) explores the justification of music education through Dewey's (1939) pragmatist theory of valuation. Distinguishing intrinsic from extrinsic values, or the means and ends of educational practice, Westerlund suggests that musical activities and concrete acts of music, as the *means* for enhancing understanding and experience, are intrinsically valuable musical events in themselves, or the *ends* of what Dewey calls "consummatory experiences" (Westerlund, 2008, p. 83). Approaching the notion of value from the learner's perspective – as an experience of personal interest – conventional teaching tends to undermine the "experiential value of means" (p. 81), particularly in music evaluation. These pedagogical practices, aligned with Aróstegui's (2003) "pre-eminence of positivism" or the dominant understanding of music as a positivist *product*, endorse instructional outcomes that measure the least essential components of music rather than aesthetic comprehension. But Westerlund's advocacy for student-centeredness, which stands in marked contrast with the prevailing teacher-centered approach, reinforces the proposition that knowledge should be introduced through experience.

Thus, the inherent value of musical *action* in education, or a "means-ends integration" (Westerlund, 2008, p. 86), assumes a constitutive role in creating a life-long interest in music. Elliott (1991a) maintains that the "integration of a specific body of informed actions and understandings is the *essence* of 'music' conceived as a verb" (p. 27, emphasis added). Throughout his contemplation of music as knowledge, Elliott criticizes the indoctrinated view of musical performance as "secondary and subservient to 'music-as-object'," favouring instead its

manifestation in *musicing* or the doing of music (pp. 24-25). Regelski (2006) similarly champions the inductive notion of music as praxis – intended “not [only] to be *understood*, but to be *used*” (p. 291, original emphasis). Referencing three types of knowledge that gained philosophical prominence in the ethics of Aristotle, Regelski describes *theoria*, knowledge considered for its own sake, *techne*, knowledge involved in artisanship or technicism, and *praxis*, the “adaptable knowledge needed to serve the idiosyncratic and ever-changing needs of people” (p. 292). This integrated notion of praxis holistically unites mind and body, as physical manifestations of theory and practice, with pragmatic effectiveness.

The Nexus of Music Theory and Music Education

Redirecting my literature review toward integration, I soon discovered that music integration is subsumed within the larger enterprise of arts integration. Described by Lynne B. Silverstein and Sean Layne (2010) as an “approach to teaching in which the arts leverage learning in other subject areas” (p. 1) – such as geography, history, language, math, and science – arts integration enables cross-curricular or interdisciplinary instruction that enhances academic success, creative problem solving, and multicultural awareness (May, 2013). But the frequent occurrence of artificial/superficial arts activities tends to devalue or undermine meaningful artistic objectives, especially in music (Cosenza, 2005; LaJevic, 2013), and arts integration rarely involves music theory because of its propensity for science. While the interdisciplinary integration of math and music theory is a notable exception (Douthett et al., 2008; Johnson, 2003), this too is generally predisposed toward intellectual reasoning (science) rather than aesthetic expression (art).

My inquiry, therefore, requires a modified form of integration. Since instructional integration is frequently multi-disciplinary, I adopted instead the integration of multiple *perspectives* (artistic and scientific) within the single discipline of music theory. The scholarly literature demonstrates this art/science integration in a broad range of subjects, including anthropology, archaeology, cognitive development, counselling, criminology, cybernetics, education, medicine, nursing, psychology, and technology. Offering a representative example in mathematics education, Robert W. Peck (2014) suggests that integration – as a “credible pedagogical ambition” – corrects the imbalance between “practical exercise and theoretical understanding” (p. 147). For music theory educators, this imbalance is deeply rooted in the division between skill acquisition and concept inference.

An additional imbalance, between objective and subjective views of knowledge, is also corrected with an integrated pedagogy. For instance, consonance and dissonance are determined both acoustically and psychologically, as numerical sound-wave frequencies and judgements of aesthetic preference (pleasantness/unpleasantness). In the teaching of music theory, a modern integration that combines acoustical explanations and psychological interpretations could bridge the ancient gap between scientific and artistic understandings of music. The creation of this acoustical/psychological bridge is the goal of my research project. KM provides a structural framework for achieving my goal.

In the twentieth century, three distinct approaches to music education attained international prominence: Jaques-Dalcroze Eurhythmics (Switzerland), teaching elements of rhythm, tonality, and structure through expressive movement; the Kodály Method (Hungary), deriving musical concepts through experiences of singing, hearing, reading, writing, and creating; as well as Orff Schulwerk (Germany), combining music with dance, drama, and speech through activities of instrumental play (Choksy et al., 2001). The common denominator that connects these three approaches is an integrated, activity-based experience of music.

A fourth approach, Comprehensive Musicianship, developed in the United States in the late 1960s. Intended for the education of performing musicians, music consumers, and college music teachers, CM synthesizes conceptual and musical experiences through performance, analysis, and composition (Choksy et al., 2001). David Willoughby (1990) summarizes its core philosophies:

- to develop competencies in creating and performing music, as well as critical listening and analyzing competencies
- to bring into a common frame of reference the totality of musical styles, particularly those in the twentieth century and in a wide variety of non-Western styles
- to integrate musical content and musical experience
- to actively involve students in the application of concepts with emphasis on music making and discovery, rather than on routine memorization in a passive learning environment

CM's premise that musical literature should be the source of all music learning is another principle of its approach that is especially relevant for my study. But the application of CM, in its purest conceptualization, did not gain a firm foothold in the music education profession. Although it promoted an expansion of traditional attitudes, CM's pursuit of educational change created problems, too often resulting in feelings of defensiveness or protectiveness for long-

established music educators (Willoughby, 1990). Our profession was not yet ready for the idealistic aspirations of CM.

As an undergraduate student, I was exposed to the pedagogies of the three European approaches, but my practicum, under Choksy's supervision, utilized the principles and practices of KM. I was impressed with Kodály's holistic educational philosophy, which balances artistic integrity with a systematic approach to music instruction, but I struggled with the applicability of his classroom-oriented methodology in my private studio. How could KM be adapted for my teaching of music *theory*? While I was unable, at the time, to articulate an answer to this question, my experience with KM intuitively shaped my teaching practice and Choksy's influence lingered well beyond my practicum.

The Kodály Method in a North American Context

In North America, KM is generally associated with early-childhood music education, despite the initial implementation of Kodály's methodology at the highest level of musical tuition in Hungary – the Franz Liszt Academy of Music. As a member of the institution's faculty, Kodály was disappointed with his students' deficiencies in musicality. He undertook to improve their hearing, reading, and writing, which inevitably heightened the inadequacy of their preparatory training. In response, KM was introduced in Hungary's kindergartens and while it remains particularly effective in that setting, its pedagogical principles are equally effective beyond an elementary level (Choksy et al., 2001).

The North American adaptation of KM, while the product of many dedicated practitioners, is attributed to Choksy (1981; 1991; 1999a; 1999b). Her career began in Baltimore, Maryland, where she was both a teacher and a music supervisor for the County Board of Education. While attending the Peabody Conservatory of Music in Baltimore, she encountered KM for the first time and was encouraged by her instructor, Katinka Dániel (1913-2010), to travel to Hungary. There, in 1968, she met Erzsébet Szőnyi (1924-2019), artistic director of the Danube Bend Summer University at Esztergom, and it was Szőnyi (1998) who suggested that Choksy spend an academic year in Hungary. This she did, from 1970 to 1971, earning a Kodály certificate from the Franz Liszt Academy of Music in Budapest. She subsequently taught at Holy Names College in Oakland, California, then moved to Canada in 1979. Joining the music faculty at U of C, she later taught at the Mount Royal University Conservatory as well.

Recognized as an international authority, Choksy was instrumental in the North American dissemination of Kodály's principles and practices. A founding member of the International Kodály Society (IKS), the Organization of American Kodály Educators (OAKE), and the Alberta Kodály Association (AKA), she served as president of the Kodály Society of Canada (KSC) from 1984 to 1988. Academically, she pioneered a graduate diploma in fine arts for Kodály certification, designed a master's degree in music with a Kodály emphasis, and while head of the music department at U of C (from 1993 to 1998), spearheaded the creation of a doctorate in music with a specialization in the Kodály concept of music education – the first such degree in English Canada (Cramer & Panagapka, 1998).

As a distinguished educator, Choksy worked diligently, until her retirement in 1998, to adapt Kodály's principles and practices for implementation in an English-language context. Utilizing traditional music appropriate for North America and pedagogical strategies suitable for North American students, she authored several textbooks that incorporate Kodály's educational philosophy. The first of these was written in the year following her extended trip to Hungary and although she admits it was conceived "more to clarify [her] own thinking than to offer curricular advice to others" (1999a, p. xiii), Choksy's pedagogical prose has influenced both pre-service and practicing teachers across the North American continent. While she did not have an opportunity to meet Kodály before his death in 1967, Choksy's adaptation of his methodology has provided a contextualized "translation" of KM for thousands of music educators.

In 1999, *The Kodály Method I: Comprehensive Music Education* was released in its third edition, along with a new companion volume, *The Kodály Method II: Folksong to Masterwork*. This second publication is devoted to the continuity of music education for older students. But what is it that initially attracted Choksy to KM? Simply stated, it was the *quality* of its pedagogy (Choksy, 1999a). In 1950, the first singing school was established in Keszthely, Kodály's birthplace, under the direction of his longtime friend Márta Nemesszeghy (1923-1973). Students received music instruction via KM every day and by 2000, fifty years after the success of this educational "experiment," there were more than 240 such singing schools.

Promoting a sequential hierarchy of overlapping and recurring musical concepts, KM elicits conceptual inferences through the presentation of carefully selected educational experiences. The instructional tools that facilitate this methodology, which include moveable-*do* solmization, hand signs, and rhythm-duration syllables, are enhanced with authentic musical

materials of recognized or unquestioned artistic value. Adopting these tools and materials, Kodály and his colleagues formulated an instructional sequence that is child-developmental, rather than subject-logical, opposing conventional content-oriented sequencing. But KM transcends the instructional tools, materials, and sequencing with which it is often identified. Embedded in its methodology is a four-step pedagogical process that directs the acquisition of every new concept, whether rhythmic, melodic, harmonic, or analytic. The four steps of this process are (Choksy, 1999a):

prepare → make conscious → reinforce → assess

Applied repeatedly, the four steps are supplemented with a series of musical skills that facilitate the assimilation of each new concept. These skills are also ordered in a pedagogical sequence (Choksy, 1981):

hearing → singing → deriving → writing → reading → creating

By way of explanation, the readiness or preparation stage of this process requires the rote-teaching, through hearing and singing, of a core song repertoire from which the new conceptual learning is to be derived. It also implies the internalization of previously-learned concepts that are necessary for the understanding of the unknown element. The procedural or make conscious stage involves the transfer of a subconscious musical experience to conscious awareness. Through careful questioning, students are led to the derivation of the new conceptual learning in a familiar song. Given accurate answers, the teacher names and notates the new element. In the reinforcement stage, the new learning is located in the remaining repertoire of the preparation stage. Within these known songs, students practice writing with their newly acquired conceptual understanding and learn new song materials that contain the relevant concept. The final stage of the instructional process involves assessment and evaluation which determine whether or not the new conceptual learning has taken place. Along with reading the new element in unknown repertoire, understanding is measured with the creative activities of improvisation and composition.³⁶

³⁶ An illustrative example of Kodály's four-step pedagogical process, using the dominant 7th chord (V⁷) as a sample conceptual element, is outlined in the opening chapter of my master's thesis (Penny, 2012).

The Application of Kodály's Methodology

Widespread recognition of KM began in 1964 when the International Society for Music Education (ISME) held its biennial conference in Budapest. Kodály, elected Honorary President of the Society, addressed the conference attendees who also witnessed the phenomenal results of KM firsthand. In 1975, the composer's widow founded the Kodály Institute of Hungary at Keszthely, which was primarily tasked with the training of foreign teachers. Consequently, music educators from all over the world have travelled to Hungary and KM is currently practiced on every continent – with translations in Chinese, Estonian, French, German, Japanese, Latvian, Polish, Russian, Spanish, Swedish, as well as English (Choksy, 1999a, p. 4).

In Canada, KM's first programs were established in Halifax and Nanaimo, but it was in Calgary that Choksy spent a significant portion of her teaching career – finding her “path with heart” and dedicating her professional activities to “research that matters,” (Chambers, 2004, p. 1). She taught public school children, gifted instrumentalists, classroom and music teachers, as well as undergraduate and graduate students. Believing that those who would teach teachers should also teach children, Choksy maintained her connection to the classroom and positioned her research in the lived experiences of her students. Continually seeking the best teaching materials and the most effective pedagogical practices, she modelled her conviction that “[t]eaching children keeps one in touch with reality” (Choksy, 1999a, p. xiii).

The child-developmental aspect of KM's instructional process is influenced by the theories of Jean Piaget (1896-1980) and Jerome S. Bruner (1915-2016). In Choksy's (1991) psychological grounding of KM, she describes Piaget's (1969) four stages of cognitive development (sensorimotor, preoperational, concrete operational, and formal operational), acknowledging developmental diversity in both the acquisition of musical skills and the inference of musical concepts.³⁷ Piaget reasoned that children mentally organize new information into schema, psychological structures used to understand reality, through a process of *assimilation*, and create new or modify old cognitive structures through a process of *accommodation* (Cornett & Smithrim, 2001). Interacting with their environments, children develop intellectually by

³⁷ Bruner (1966) warns against the misinterpretation of Piaget's pioneering work as principally psychological, insisting that it is deeply *epistemological* in its concern for the “nature of knowledge ... as it exists at different points in the development of the child” (p. 7).

experimenting – making discoveries that alter their perceptions of the world through sensory stimulus. These experiments, and the discoveries they generate, are essential components of KM.

Along with Piaget's learning theory, Choksy (1991) references Bruner's theory of instruction as a means for "achieving *improvement* in learning" (p. 15, original emphasis). Bruner's (1966) theory, comprising four characteristic features (predisposition, structure, sequence, and reinforcement), presumes that "any subject can be taught in some intellectually honest form to any child at any stage of development" (p. 33). Made up of propositions that simplify information, generate new propositions, and increase the "manipulability" of a body of knowledge, Bruner's "optimal structure," follows an "optimal sequence" through *enactive*, *iconic*, and *symbolic* modes of representation as actions, images, and symbols (p. 41). Accordingly, early musical experiences should be concrete, immediate, and obvious (enactive), but with repeated reinforcement at increasingly complex levels, later experiences can become abstract, remote, and subtle (iconic then symbolic).

Incorporating the repeated reinforcements that characterize Bruner's (1963) "spiral curriculum," KM reinforces musical concepts with increasingly complex musical experiences. These experiences, progressing from concrete to abstract, precede symbolization. Since conceptual understandings – as abstract generalizations derived from concrete events – are acquired experientially, they are not only intellectualized, but are developed and internalized (Choksy, 1981). Therefore, from a pedagogical perspective, KM's approach differs fundamentally from standard educational traditions in music teaching. These traditions exercise a form of direct instruction characterized by lectures or demonstrations of the subject matter, often without aural renderings, and allow teachers to rush through an overwhelming number of concepts in their determination to present as much musical information as possible. Consequently, students become acquainted with a vocabulary of superficial facts about music, but they do not develop musical knowledge. As an alternative, Choksy (1999a) suggests that "teachers must stop trying to cover the vast subject of music and begin to uncover it a little bit at a time" (p. 171).

Providing a means to this end, Kodály's pedagogical sequencing, rather than being rigid or inflexible, is pliant and adjustable – a living method that evolves according to the circumstances for which it is intended. Despite the complexity of integrating multiple concepts at differing stages of the instructional process, the emphasis of the process merely shifts. Thus, instead of

developing a curriculum that comprises “hierarchies of skills and concepts . . . arranged from simplest to most complex” (Choksy, 1999b, p. 77), which is often the case, Kodály insists that the music itself must dictate the instructional sequence. A thorough analysis of a chosen work determines “what the students need to know in order to listen to it with understanding” (p. 78), which in turn, determines how teachers prepare their students for the new learnings to be derived from the work.

Although older students are capable of learning more quickly and intellectualize conceptual knowledge more easily than younger students, intellectualization and internalization are not the same process. Accordingly, a well-trained Kodály practitioner is unobtrusive, speaking sparingly and never describing or explaining musical concepts. Instead, these concepts are “demonstrated by the teacher or inferred and derived by the students” from musical experiences (Choksy et al., 2001, p. 138). This experiential immersion enables students’ involvement in the educational process, fostering both their intellectual development and their emotional fulfillment.

Since its presentation to the international community in 1958, KM has weathered the “test of time” (Bernstorff, 2014), forging connections beyond elementary music education (Gallo, 2010; Towner, 2011). Micheál Houlahan and Philip Tacka (2008) offer a “practical guide for teaching” (p. 5), which Brent Gault (2009) praises for its detailed application of Kodály’s educational philosophy. However, comparing their text with Choksy’s (1999a), Corrie Box (2015) highlights differing curricular goals – the former focused on *implementation* and the latter on *development*. Box’s findings corroborate my interpretation of Houlahan and Tacka’s (2008) offering as somewhat formulaic, although the authors defend their model lesson plans in response to concerns voiced by teachers for a “lack of specificity” (p. 4). In contrast, Choksy’s emphasis on the foundational precepts of teaching allows for the development of an individual, and contextually appropriate, implementation of KM.

Consequently, Choksy’s North American adaptation of KM derives an integrated curriculum from the inner logic of music itself, carefully preserving Kodály’s pedagogical principles and practices, along with his sentiment that a love of music is supported by knowledge about music which in turn, is accumulated through the experience of music. A re-imagining of this adaptation for RCM’s curriculum – as an instructional integration of scientific theory and artistic practice – could benefit examination candidates (see **Appendix 2.2**) by reconciling a

theoretical or written representation of tonal harmony with a practical or sensory experience of its meaning.

Noting that “many individuals never reach [Piaget’s] final stage of development” (Cornett & Smithrim, 2001, p. 16), which involves abstract and hypothetical problem solving, I am compelled to question the effectiveness of conventional, non-experiential teaching practices for music theory pedagogy. Bernard W. Andrews (1990), utilizing a “Deweyan approach to music instruction” (p. 5), proposes an alternative discovery learning approach that emphasizes practical exploration over theoretical experimentation.³⁸ With this inductive method, instructional objectives shift from a “quest for certainty to [a] quest for credibility,” highlighting the fluidity of hypotheses as “warranted assertion[s]” that are subject to future reformulation (p. 6) – through Piaget’s developmental processes of assimilation and accommodation.

A guided approach to the discovery of music rudiments has the potential to introduce new theoretical elements via investigative means. Groffman (2017) proposes an instructional model derived from Process Oriented Guided Inquiry Learning (POGIL), commonly utilized for the teaching of STEM subjects (science, technology, engineering, and mathematics) in higher education. Groffman’s adaptation of discovery techniques for the teaching of music theory, which includes a three-part learning cycle (exploration, concept formation, and application), is predicated on student engagement, “emerging at the intersection of ... active learning and motivation” (p. 35). Although the basic tenets of music rudiments – as with science – are “not particularly open [to] re-invention,” there is value in “having students ‘discover’ [rudimentary] concepts for themselves” (p. 25). Thus, his groupwork-based guided inquiry method enables students to reprise the musical/theoretical work of professional theorists from generations past.

While Groffman’s (2017) student-centered approach is intentionally aligned with the scientific methodology of POGIL, it is also rooted in a social constructivist paradigm influenced by Dewey and Piaget (Webster, 2011). Consequently, in its proclivity for the student’s active engagement in guided discoveries, Groffman’s method resembles Kodály’s, with its concept formation cycle roughly equivalent to the conscious awareness stage of KM’s instructional

³⁸ Disparate views of discovery learning, an educational philosophy often attributed to Bruner (1961), has provoked a controversial un/assisted debate in recent research. Richard E. Mayer (2004) distinguishes *pure* discovery, in which the learning is acquired “without constraint or intervention” by an instructor, from *guided* discovery, in which the instructor provides assistance that is “dynamic and responsive to the learner’s current state of experience and ability” (Honomichl & Chen, 2012, p. 615) – similar to the concept of instructional scaffolding. I position myself with the latter view.

process. So too is a guided discovery approach evident in Choksy's (1999a) uncovering of music a little bit at a time. Although the term *discover* implies a slightly more serendipitous "finding" than *uncover*, defined as making known or bringing to light (Webster, 1983), it is usually necessary to *un*-cover something in order to *dis*-cover it. Therefore, the music teacher's provision of rich concrete experiences enables a natural and sequential progression toward more complex thinking, fuelled by the student's motivation to make sense of the subject matter. This holistic ideal, rather than dissecting and analyzing theoretical elements that are detached from a practical engagement with music (either auditory or kinesthetic), integrates these elements into a *whole* that illuminates the collaborative role of each *part*.

Re-Imagining the Kodály Method for an Integrated Music Theory Pedagogy

An integrated approach to the teaching of music theory may be likened to the notion of *Gesamtkunstwerk* (total artwork). As a synthesis of all the arts (music, poetry, drama, and visual spectacle), this term was coined by Richard Wagner (1813-1883) to describe his concept of German opera (Forney & Machlis, 2011). Wagner's music dramas, as he labelled them, are non-sectional – they are fashioned from recurring *leitmotifs* (leading motives) that represent persons, places, objects, or ideas. These *leitmotifs*, which replace the arias, ensembles, and choruses of conventional operas, undergo variation and development through a process of continual transformation. Similarly, the conceptual elements of music theory recur within the context of performative experiences. In this experiential context, they are continually subject to processes of assimilation and accommodation (Piaget, 1969), through increasingly complex reinforcements (Bruner, 1963).

My inspiration for an integrated music theory pedagogy is drawn from Kodály's words:

Music must not be approached from its intellectual, rational side, nor should it be conveyed ... as a system of algebraic symbols, or as the secret writing of a language with which [the student] has no connection. The way should be paved for direct intuition. (1974, p. 120)

Suggesting that content knowledge emerges as a consequence of situational interactions, Aróstegui (2003) contends that musical understanding is reached through a complementary combination of intellectual and experiential knowledge. Recognizing the unbalanced application of these opposing views in curriculum implementation, I set out to bridge the instructional gap

that traditionally separates music theory and music practice by deriving content knowledge (science) from aesthetic interaction (art).

My inquiry disrupts traditional curricular models that introduce the formal study of music theory with a grade 5 level of instrumental performance. Given that music theory, as an object of historical theorizing, was initially derived from an oral/aural experience, contemporary music theory pedagogy could be informed by the same derivation process through an integrated instructional approach. To this end, I embraced Choksy's adaptation of KM and its holistic teaching practices, which unite the mind and body (theory and practice) with symbiotic effectiveness. KM's instructional integration could benefit RCM's music theory students, both mine and those of the wider musical community, not only by enhancing their theoretical achievements, but by enriching their practical appreciation for – and enjoyment of – music as an aural artform.

For many years, I envisioned this holistic outcome. RCM's carefully sequenced theoretical requirements could be integrated at *every* practical (performance) level. Rather than delaying the start of music theory training until grade 5, a spiralled course of study could begin with the preparatory grades (A and B) – a recommendation that I included in an early draft of my research proposal. As it happened, RCM did just that, instituting an expanded music theory curriculum with the 2016 *Theory Syllabus*. This implementation of theory co-requisites at every level, particularly the early levels, enables an interactive exchange between the art of music, embodied in perceptual experiences, and the science of music, expressed in conceptual explanations. It is an interaction that allows practice to inform theory while it also encourages theory to inform practice. Thus, theoretical content is reciprocally related to practical experience. But beyond a curricular re-organization, how is a theory/practice integration to be accomplished?

Within the larger context of RCM's curriculum, I wondered if conceptual understandings could stem from instructional modules cumulatively linked with repertoire or technical requirements (ear training, sight reading, and technique). And if these concepts could be drawn from the students' own instrumental or vocal repertoire, Kodály's insistence that music should dictate the instructional sequence is satisfied. But knowing *what* to do is not the same as knowing *how* to do it. In the first years of my doctoral studies, which pre-date *The Routledge Companion to Music Theory Pedagogy* (2020), I began to experiment. Relying on past

experiences, my author-self designed a series of music-centered lessons intended to explore the potential of a KM/RCM integration.

To demonstrate, I chose a familiar work that my youngest daughter was preparing for her grade 2 piano examination. The specific requirements for this exam are duplicated in **Appendix 2.3**. My experimental lessons are based on KM's four-step instructional process (prepare, make conscious, reinforce, and asses) as well as its progressive series of musical skills (hearing, singing, deriving, writing, reading, and creating). These sequences, which epitomize the active or practical pursuit of musical knowledge, provide a framework for my interactive analysis of Christian Gottlob Neefe's (1748-1798) *Allegretto in C Major* (included in **Appendix 2.4**). A sample worksheet that highlights the composition's theoretical content – in preparation, conscious awareness, reinforcement, and assessment stages – is reproduced in **Appendix 2.5**.

As a readiness procedure, the preparation stage incorporates both performative experiences and the internalization of previously-acquired concepts. The first activity presupposes that my hypothetical student is learning to play the *Allegretto in C Major* but is unfamiliar with the composer's historical background. A simplified version of Neefe's biography, requiring minimal student research, opens the sample worksheet. The make conscious stage involves the transitional moment when an unconscious experience becomes conscious knowledge – when the unknown becomes known. Having observed that my examination candidate (in **Appendix 2.2**) did not recognize the modulation from G major to D major in the third phrase of the given harmonization (mm. 5-6), I chose to engage the concept of tonicization as the precursor of modulation.³⁹ With carefully selected questioning, the student is led to discern the characteristic tendency of a leading tone to rise a half-step to the appropriate tonic. The sample worksheet attaches written symbolization to this aural phenomenon, thereby transferring the experience from sound to sight.⁴⁰

The reinforcement stage requires a guided application of previously-acquired conscious knowledge. Incorporating multiple concepts at differing stages, this process may address a number of musical elements, including melody, rhythm, harmony, texture, form, and expression.

³⁹ Tonicization is a brief “disturbance” of key in which a chord other than the tonic assumes the role of a *temporary* tonic, being preceded by its own dominant-function harmony. Modulation implies a change of key, which is established by means of several functional chords and confirmed with a cadence (RCM, 2017).

⁴⁰ The terminology used in my sample worksheet is consistent with the 2009 edition of RCM's *Theory Syllabus*, but several terms were streamlined or updated in the 2016 edition, including *leading tone*, *half step*, and *whole step*, which are used in the body of my text.

It supports or strengthens conscious knowledge through repeated discoveries of known concepts in varied circumstances, implementing notational symbolization and moving toward abstraction. With reference to **Appendix 2.5**, the topics engaged assume prior conscious awareness. The final evaluation or assessment of conceptual understanding appraises musical knowledge through the demonstration of specific skill sets. Improvisation or composition, as creating activities, exhibit comprehension by featuring the new concept in an unfamiliar context. My sample worksheet involves the subject of elementary counterpoint, or two-part harmony, motivated by my examination candidate's inability to handle the relationship between bass and soprano in the harmonization's fourth phrase (mm. 7-8).

The notable take-away from this exploration of a KM/RCM integration is its potential for a *music-first* derivation of theoretical concepts from the musical literature. Although Neeffe's *Allegretto in C Major* is a grade 2 piano piece, its harmonic language is somewhat sophisticated. The concept of tonicization, which is featured in the make conscious or teaching portion of the sample worksheet, is not introduced in RCM's theory curriculum until basic harmony, which is a grade 9 co-requisite. But the simplicity of Neeffe's two-part texture makes the resolution of three distinct dominant 7th chords easily identifiable – in mm. 9-10, mm. 11-12, and mm. 13-14. Even if the word *tonicization* is not mentioned, the leading tone/tonic relationship at the heart of V⁷'s resolution will become conscious knowledge through aural experience. And with repeated reinforcements in the intervening years, the depth of experiential knowledge that will accompany the formal introduction of tonicization at grade 9 is substantial.

The “science” of the V⁷-I progression – how it works – is important, but the “art” in this progression – how it sounds – is equally important, for it is sound that conveys the composer's craftsmanship and it is sound from which the listener derives musical meaning. A conversation with my younger son summarizes the essence of this integrated music theory pedagogy:

He suggested (or reminded me) that chords and chord progressions are *tools* to be used in the writing of music – the means to an end, not the end itself! This is such [a valuable] perspective because it enables [teachers] to see the forest! So many of us (and our students) are lost in the trees... A focus on creating or writing music gives purpose to all the little bits and pieces of music rudiments – and answers the age-old question: Why do we have to learn this? (L. L. Penny, journal entry, January 19, 2018)

The word *music* is derived from the Greek *mousikē*, which involves “any art presided over by the Muses” (Webster, 1983, p. 781), but music-theory-as-science rarely engages music-as-art.

Therefore, the question remains: How can the *art* of music be holistically integrated in the pedagogical communication of its *science*?

Concluding Remarks

Chapter 2 includes a review of the scholarly literature in three disciplines: music theory, music theory pedagogy, and music education. In music theory, I found the source of my pedagogical problem and in music education, a possible solution. While this statement may oversimplify the lessons learned from my predecessors, it is a point from which to launch my inquiry. However, the implication that music theory is “bad” (a problem) and music education is “good” (the solution) is *not* my point. From the scholarship in music theory, I discovered the answers to many of my *why* questions and from music education, my *how* questions. But there is much thinking yet to be done. It is not as straightforward as choosing practical considerations of music theory over theoretical considerations, or praxial approaches to music education over aesthetic approaches. It is about integration. Even Rameau understood that “genius may transcend ‘the rules’” from time to time (Shirlaw, 1970, p. xv). Rather than threatening to destroy scientific law, musical genius endeavours to fulfill artistic law.

From the scholarship in music theory pedagogy, I discovered a community in which to explore my ideas of an art/science integration. Like Alperson’s (2010) robust praxialism in music education, an integrated music theory pedagogy should be inclusive of music as both process and product, just as Hoag’s (2020) music-centered approach is inclusive of both experience and literature. But beyond the positioning of music at the center of music theory instruction, there is need of an overarching pedagogical philosophy that gathers together the disparate elements of procedure under the auspices of a unified, holistic *metapractice*.

Choksy’s adaptation of KM offers such a practice. The experiential nature of its four-step instructional process incorporates many facets of the educational theories I presented in this chapter. Although KM promises the comprehensiveness of integration, its classroom-oriented approach presents an obstacle for private studio implementation. But the holistic benefits of Kodály’s integrated methodology are worth overcoming this obstacle. Consequently, much of my dissertation is dedicated to the adaptation of KM for the teaching of music theory in RCM’s curricular context. In chapter 3, following my review of the scholarship in ABR, I will contextualize my research questions for specific relevance. These questions will be placed at strategic points in a full exposition of my research design.

Chapter 3

Arts-Based Research: Adopting a Musical Lens for My Inquiry

*What we see [or hear] is not simply a function of what we take from the world,
but what we make of it.*

– Elliot W. Eisner (1933-2014)

Introductory Remarks

Music permeates my life. It is my vocation, my inspiration, my leisure, my comfort. Music nourishes my spirit. I access its sustaining or revitalizing properties through varied activities: listening, performing, interpreting, analyzing, teaching – and researching. In chapter 2, it was my teacher-self who sought guidance from the academic communities that surround and support the discipline of music theory pedagogy. Now, after describing my problem and reviewing the literature, it is my researcher-self who will take the lead. With careful deliberation, I determined that ABR is the most suitable epistemological stance for my inquiry.

Aaron M. Pallas (2001) describes epistemologies as “beliefs about what counts as knowledge..., what is evidence for a claim, and what counts as a warrant for that evidence” (cited in Siegel, 2006, p. 6). But what does epistemology mean to me? It is the study of knowledge situated in the five “Ws” of investigative analysis: who, what, where, when, and why. These interrogatives address the acquisition of knowledge from the perspective of the knower (who); the content or subject matter of the known (what); its contextual placement (where); its historical position (when); and the purpose or significance of the knowledge (why). But a sixth question – How? – encourages a deeper interrogation, addressing both the means by which knowledge is acquired and the quality of the means. I am intrigued by these means. Their pedagogical nuances motivate my inquiry.

Positioned on the qualitative side of the epistemological divide, I adopted Norman K. Denzin and Yvonna S. Lincoln’s (2011) definition of qualitative research as:

... a situated activity that locates the observer in the world. It consists of a set of interpretive, material practices that make the world visible. These practices transform the world. They turn the world into a series of representations. (p. 4)

Two aspects of this definition attracted my attention. The first is its reference to a “situated activity” and the second, a “series of representations.” As my grasp of epistemology expanded, I came to appreciate James Haywood Rolling’s (2013) description of its value as an “ontologically situated point of view” (p. 33). I also appreciate his suggestion that epistemologies incorporate strategies by which propositional beliefs may be justified. Consequently, my reckoning of Pallas’ “beliefs,” which I imagine as nouns or states of *being*, has transformed into Rolling’s “situated beliefs,” which imply movement and I imagine as verbs or states of *becoming*. This “situatedness” enables the naturalistic, interpretive approaches of qualitative research and leans toward the artistic representation of these approaches in ABR.

Regarding representation, I grappled with assumptions of impossibility, both my own and those of my research community. How can I produce an artistic rendering of an inquiry in the discipline of music theory pedagogy? My master’s inquiry is situated in a constructivist paradigm but this knowledge came afterward, as reflective insight. For my doctoral inquiry, I have consciously chosen to embrace the fluidity of ABR – despite my initial hesitation – because ABR encompasses much more than the representation of research data in an arts-based medium. It is a holistic integration of the creative arts at *every* stage of the research process.

Indeed, I am compelled by my musician-self to choose ABR for my inquiry in music theory pedagogy. Derived from the blurring of specific cognitive findings and less definable aesthetic *knowings* (Greenwood, 2012), ABR resonates with my artistic personality in every sense. My epistemological becoming has given my musician-self an opportunity to step out of the shadows and together with my researcher-self, to contribute to the becoming of ABR scholarship. In this chapter, I will review the ABR literature, present my methodological framework, and explain the specific components of my research design. I will also clarify and contextualize the preliminary questions presented in the prelude.

The Scholarship in Arts-Based Research

My expedition through the ABR literature examines the epistemological/methodological foundations of ABR in the context of its potential for my inquiry. While it would be logical, and academically prudent, to create a comprehensive list of the significant features of ABR, and to proceed with a critical examination of each feature – analyzing and synthesizing the relevant literature – such a list is intrinsically biased and significant only to me. *The* list would be *my* list, but this quality of intimacy is the essence of ABR. Thus, my exploration of ABR writings arises

from an excavation of my personal beliefs. These were communicated in chapter 1 and my scholarly readings are filtered accordingly.

As my personal narrative attests, I embraced the road less travelled because my journey toward pedagogical enlightenment is also a journey of becoming. My immersion in the literature gave new meaning to my comprehension of the word *becoming*, in the sense of “coming into being.” Peter Gouzouasis (2007, referencing Overton, 1984) introduced me to Georg Wilhelm Friedrich Hegel (1770-1831), a philosopher of German Idealism who claims that the “organicist” notion of becoming is fundamental to the life-span, ontogenetic development of human knowledge. His focus on the *process* of becoming prompted an understanding that my journey is also a process – and lessons will be learned by gathering experiences along the way, not by reaching an elusive destination.

The organization of my ABR review is influenced by Patricia Leavy’s (2009) contention that the “kind of dialogue promoted by arts-based practices is predicated upon *evoking meanings*, not denoting them” (p. 14, original emphasis). This predilection for suggestion may be likened to the work of the Symbolist poets, such as Paul Verlaine (1844-1896), as well as the Impressionist painters, inspired by Claude Monet (1840-1926), who sought to capture an imaginative, dreamlike state or the effect of light on an object, rather than a realistic depiction of either. These symbols or impressions, reflected in the music of Claude Debussy (1862-1918), both violated and liberated the artistic conventions of the late nineteenth-century – in much the same way that ABR has troubled research conventions a century later.

Therefore, the characteristic tenets of ABR will not be presented as general propositions supported by specific examples. Instead, they will be woven into the fabric of my self-reflective narrative as it unfolds along the continuum of my becoming. The route may be obstructed or its passage non-linear, but I will query the scholars who have influenced my interpretation of the ABR landscape as I progress. Each step of the journey elicits new discoveries or rekindles old ones – just as Susan McClary’s (2000) contextual re/examination of musical form invites a re/reading of the standard musical repertoire. My consideration of the ABR literature establishes the contextual merit of ABR for my inquiry: a re/examination of music education for a re/reading of music theory.

A Description of Arts-Based Research

What? Since my inquiry proposes an art/science integration in music theory pedagogy, it stands to reason that an analogous integration in methodology is required. As an interpretive community within the qualitative research paradigm, ABR provides an artistic perspective that fully reflects the musical nature of my pedagogical quest. My thinking is shaped by Leavy (2015) who describes ABR practices as “emerging tools” that engage artistic media “during all phases of social research, including data generation, analysis, interpretation, and representation” (p. 4).⁴¹ Blurring the boundaries between art and science, these practices symbolize a holistic approach to research that emphasizes the “relationship the researcher has with his or her work” (Leavy, 2009, p. viii). Thus, the central precepts of the creative arts are adapted in order to conduct social or educational research.

As an alternative to traditional or experimental research methodologies, ABR practices emerged out of a “natural affinity between research practice and artistic practice” (Leavy, 2015, p. ix), drawing on narrative, poetry, music, theatre, dance, visual art, or other mediums. These mediums, enacted through short stories, novels, poems, songs, musical scores, theatrical performances, documentaries, films, dances, paintings, collages, sculptures, or other representational forms, comprise “new theoretical and epistemological groundings” that Leavy suggests are not only *expanding* qualitative research, but *disrupting* traditional research paradigms as well (2009, p. ix). This expansion/disruption facilitates the artistic approach to knowledge-building that I desire.

For Sophie Claire Ward and Carl Bagley (2010), Leavy’s re-envisioning of qualitative research, as a synthesis of artistic and research interests, is driven by a desire to “engage more fully with the sensuous array of sights, sounds and smells of [the] twenty-first century” (p. 273). But the ambiguity and diversity of ABR – elements of its own becoming – defy the reassurance of an all-purpose explanation. Continually in the “process of creation,” the ABR genre “demands an understanding of incompleteness and uncertainty” (Springgay, 2002, p. 20). Assuming that a *mis*-understanding invites skepticism and suspicion, I seek illumination in the genre’s awakening.

⁴¹ The Faculty of Education at the University of British Columbia (UBC) collected, compiled, and analyzed more than thirty dissertations that utilize ABR. This study adopted the term *practice* in place of *method*, signalling a break with conventional research (Sinner et al., 2006).

The Origin of Arts-Based Research

Who? Where? When? Tom Barone and Elliot W. Eisner (2012) claim the term *arts-based research* by linking its source with an “educational event” held at Stanford University in 1993.⁴² Organized by Eisner, this first Arts-Based Research Institute was offered to members of the American Educational Research Association (AERA) and was followed biennially by seven more such institutes until 2005. Eisner (1991), who had earlier expressed his conjecture about the artistic basis of social science, highlighted the relationship between art and educational research. Describing himself in a “prior life” as a visual artist, Eisner adapted the discipline of art criticism for the purpose of conducting inquiries in the social sciences and introduced the concept of “educational criticism” (Cahnmann-Taylor, 2008).

Based on Dewey’s (1934) notion of criticism as the *re-education* of perception, educational criticism is the critical disclosure of “significant and often subtle qualities that constitute an act, work, or object” (Eisner, 1991, p. 85). As an analytic discrimination of details, educational criticism utilizes the procedural dimensions of description, interpretation, evaluation, and generalization to make judgements that broaden public understandings. The significance of this process for arts-based researchers lies in the suggestion of a structural framework and for educators, in the ability to develop analytical skills, both for themselves and for their students.

As a doctoral student of Eisner’s, Barone (2001b) pursued his personal interest in writing and transformed educational criticism into an arts-based methodology that he labelled “narrative storytelling.” Melisa Cahnmann-Taylor (2008) eloquently distinguishes these concepts:

Where educational criticism called on the researcher to function as a connoisseur to see deeply into a situation and to reveal details that the [casual] observer would miss, narrative storytelling cast the researcher as a raconteur, who – if necessary – created facts to fill the holes in the story. (p. 6)

A raconteur, from the French *raconter* (to tell), is a skillful storyteller whose amusing anecdotes often carry the connotation of conviviality. For Barone (2008), the raconteur’s clever stories initiate “conspiratorial conversations” that are accessible and meaningful to diverse audiences. These conversations engender aesthetic experiences from which “empathy may be established,

⁴² Without explanation, Barone and Eisner (2012) abandon the hyphenation between “arts” and “based” in their most recent publication – despite the term’s consistent appearance as *arts-based research* in previous texts. To my knowledge, this renaming has not been addressed, nor has it been replicated in the current literature.

connections made, perceptions altered, emotions touched, equilibria disturbed, [and] the status quo rendered questionable” (p. 39). Whether in the moment or in the future, the artistry of the raconteur opens dialogues that transcend academia.

An additional form of arts-based methodology was developed by Sara Lawrence-Lightfoot and Jessica Hoffmann Davis (1997). Combining empiricism with aesthetic expression, their “social science portraiture” integrated “systematic rigor and evocative resonance” (Rolling, 2013, p. 16). However, their work, along with that of Eisner, was denounced. According to the National Academy of Science, which federally mandated the pre-eminence of science-based research in American education, it lacked the “key scientific concepts of reliability, replication, and generalization” (Shavelson & Towne, 2002, p. 75).

By adopting Dewey’s (1934) view that science *states* meanings while art *expresses* them, ABR practices query the privileging of scientific ways-of-knowing. This privilege denies the opportunity for artistic ways-of-knowing to engage research questions differently – to heighten consciousness, advance empathic forms of understanding, and “get at” awareness that can “neither be said in number nor disclosed in literal text” (Eisner, 1997, p. 264). Barone and Eisner (2012) argue that artistry is ubiquitous, even in fields and activities such as physics, mathematics, and law, which supposedly refute aesthetic matters altogether. Moreover, the “ubiquitousness” of art, captured in artistic forms of representation, offers “virtual sensory experience[s]” that disclose affective states of affairs through material mediums (Eisner, 2008a, p. 6), and purpose art for the sake of scholarship.⁴³

Struggling with the variability of ABR practices, I considered the meaning of the word *create*: “to produce through imaginative skill; to make or bring into existence something new” (Webster, 1983, p. 304). Thus, the “newness” realized by every creative “doing” (producing, making, or bringing into existence) implies that each piece of ABR is unique. But whether the “creativity” of this arts-based “researching” results in an exceptional *work of art* warrants examination since the literature exposes an overt tension. Stephanie Springgay (2002) vehemently defends the representation of her master’s thesis as a visual art installation by stressing that the “**art in [her] installation was research**. It was not illustrative of the written

⁴³ I adopted the metaphorical “messiness” of the term *ubiquitousness*, as opposed to the “elegance” of *ubiquity*. For me, this lack of tidiness characterizes the complexity of the issue.

text, nor was art a metaphorical backdrop to shape arguments about research” (p. 19, original emphasis). It was *art as research*.

Distinguishing ABR practices from “*arts-informed research*,” Rolling (2010) highlights the “malapropism of arts-based research outcomes as arts products” and insists that ABR practices require a “far greater creative commitment than dipping one’s toes at the water’s edge” (p. 105). This artistic commitment, which requires a balanced combination of “theoretically sophisticated understandings and artistically inspired [artworks]” (Eisner, 2008a, p. 9), is inherently practice-based (Macleod & Holdridge, 2006; Irwin & Springgay, 2008), and derived from a disciplined arts praxis (Rolling, 2010). In an ABR context, this praxis is contingent on highly-skilled and artistically-grounded practitioners.

The artistic product, symbolizing the conscious pursuit of expressive form in the service of knowledge, provides a heuristic that deepens and makes more complex an understanding of the often subtle interactions between people, places, situations, or feelings. Consequently, ABR practices do not “yield propositional claims *about* states of affairs,” they strive to “create insight[s] *into* states of affairs” (Barone & Eisner, 2012, p. 3, emphasis added). As a social activist, Susan Finley (2008) affirms this position, stating that “art, in any of its various forms, provides media for self-reflection, self-expression, and communication” (p. 110) – again purposing art for the sake of scholarship.

The Potential of ScholARTistry

Why? ScholARTistry, a term coined by Lorri Neilsen (2002) to identify blurred-genre work, is a “hybrid practice” that combines the tools of art with those of education or social science to “explore the human condition” (Cahnmann-Taylor, 2008, p. 9). ScholARTists, as dual practitioners, capture the *essence* of their findings – grounded in the experiences of data collection and analysis – in “emotionally penetrating ways” (p. 10). Therefore, arts-informed work, as Neilsen (2002) posits, is not merely “founded on the arts; the arts are integral to the conception and realization of the work” (p. 212). These artistic workings offer dynamic creative processes as a conduit for the “activation of dormant dimensions of the mind” (McNiff, 2008, p. 33). For example, Johnny Saldaña (2002) transforms fieldwork data into live-theatre scripts, producing ethnodramas such as *Finding my Place: The Brad Trilogy*, an adaptation of Harry F. Wolcott’s (1929-2012) research in educational anthropology.

Accepting Finley's (2008) argument that social change begins with "artful ways of seeing and knowing ourselves and the world in which we live" (p. 110), I recognize my artist-self in ABR practices that accept the "precedence of perception over measurement" and legitimize tacit, intuitive, or felt knowledge (Rolling, 2013, p. 26). Artistic representations of "seeing and knowing," implicit in ABR practices, lend themselves to pluralist multiplicities. They interrogate, negotiate, exchange, re/interpret, and blend meanings, while they de/re/construct research methodologies (Rolling, 2010). These intellectual "trouble-makings" provoke fresh perspectives, since a recognition of difference leads to challenge, and challenge stimulates debate (Barone & Eisner, 2012), which ultimately provides insight. In due course, these imaginative insights may topple the adverse presumption that arts-based *research* is an oxymoronic endeavour.⁴⁴

As I contemplate my epistemological becoming, I am struck by my increasing attachment to ABR – despite its academic uncertainty. Of the thirty-three chapters that comprise *The Oxford Handbook of Qualitative Research in American Music Education* (2014), three address ABR practices but only one of these (Pellegrino, 2014), with more than a casual mention. The approaches presented include case study, ethnography, phenomenology, narrative inquiry, practitioner inquiry, and mixed methods, but these approaches to music education research may not always be adequate for telling the "whole story." ABR practices, embracing the perceptiveness of subtlety, are not literal descriptions of precise referents. Rather, they illustrate/illuminate meaning through analogy, cadence, comportment, gesture, innuendo, intonation, metaphor, simile, or tempo, to name but a few artistic devices. In other words, they accept/acknowledge/applaud aesthetic expression.

A Musical Perspective

How? The distinctive nature of artistic discovery – involving serendipity and unpredictability – challenges the methodological stability of ABR. Indeed, Henk Borgdorff (2011) claims that ABR is "more like exploration than . . . following a firm path" (p. 57). But artistic practices, rather than focusing on end products, are "dynamic points of departure for

⁴⁴ Early practitioners of ABR (much like early qualitative researchers) faced harsh criticism regarding their "non-scientific" research methods. The literature surrounding these methods, aimed at enlarging the "conceptual umbrella" that defines the meaning of research (Barone & Eisner, 2012), has gradually become less *reactive* and more *proactive* in its implementation of ABR practices.

interdisciplinary experiments” that seek new forms of knowledge (Slager, 2011, p. 335). Governed by reflective perspectives, these “unexpected epistemological relations” are not determined by an established scientific paradigm or model of representation, but an undefined discipline that Henk Slager labels *nameless science* (p. 349). Katy Macleod and Lin Holdridge (2011) disagree, proposing an *aesthetic* of arts methodologies that “arises from an artist being ‘inside’ the processes of research” (p. 354).

The preceding collection of authors, who I encountered in my perusal of *The Routledge Companion to Research in the Arts* (2011), speaks to my fledgling ideas of methodology. But I query their reluctance to identify ABR practices as an *artistic* paradigm. Such a paradigm, while exhibiting a model of continual change – without “ready-made” or “off-the-shelf” procedures – could also model Macleod and Holdridge’s (2011) “insider” research in which relevancy “within subject domains must arise from within the subjects themselves” (Biggs & Karlsson, 2011, p. 423). The literary, visual, and performing arts could offer imaginative openings that generate a fresh synthesis of approaches to the collection, analysis, and representation of research data.

Embedded in the innovative junctures of art, research, and education is an emerging “culture of art” which is challenging the notion that all educational research must conform to the standards associated with a “culture of science” (Piantanida et al., 2003). Through my investigation of ABR in music education, I encountered a/r/tography as a specialized genre within ABR practices. While not specific to music, this genre aligns beautifully with my musician’s sensibilities. A/r/t is a metaphor for “artist-researcher-teacher,” an integration that creates an “in-between” or *third space*, merging “knowing, doing, and making” (Leavy, 2015, p. 4, quoting Pinar, 2004). Recognizing its “neither-here-nor-there” perspective, I welcome the a/r/tographer’s identity merger because it enables the fluid becomings of my musician-, teacher-, and researcher-selves. Indeed, I cannot imagine one without the others.

Since each identity requires an equal measure of expertise or competence, few musicians choose to practice a/r/tography – or any other form of ABR. Joe Norris (2013) describes Leavy’s consideration of music as the “weakest chapter in [her] book” (p. 258). Rationalizing its weakness as coming “not from the book itself but from the lack of research being conducted through the medium of sound (music),” he concedes that a musical medium is “difficult to produce on the printed page” (p. 258). Liora Bresler (2005) addresses the complexity of translating music’s “fluid form into a fixed one” by proposing “*music-informed* rather than

music-based inquiry” and enhancing her research with musical sensitivities that replace the *act* of musicianship with its *spirit* (p. 171, original emphasis). Leavy (2015) offers a musical model in which the formal dimensions of music (melody, rhythm, harmony, texture, form, tempo, and dynamics) are newly conceptualized within the application of ABR practices. But how are these musical dimensions to be represented in a work of ABR?

The mode of representation is a concern. As the medium through which the “contents of our mind[s] are shared with others” (Barone & Eisner, 2012, p. 1), a representation records sensory information about an object or a phenomenon. However, as Norma Daykin (2009) points out, there cannot be a “simple and direct transfer of [musical] meaning through the chain of creator, performer, and listener” (p. 126). Music cannot speak for itself.

The Issue of Representation

An artistic representation of music theory offers a sensory interaction that stimulates knowledge-building in an engaging or intriguing manner. As an early example, Guido d’Arezzo, an eleventh-century Italian music theorist, used the hymn *Ut queant laxi* to teach solmization syllables.⁴⁵ These syllables were later represented by the “Guidonian hand,” reproduced in **Figure 3.1**, which is a mnemonic device that locates pitches within the Medieval hexachords (scale-like sets of six pitches):

⁴⁵ The first six phrases of the hymn begin with the notes C-D-E-F-G-A in ascending order. Guido used the initial syllables of these phrases to name the steps: *ut, re, mi, fa, so, la*. Modern versions of solmization syllables substitute *do* for *ut* and add *ti* above *la* (Burkholder et al., 2014).

Figure 3.1: Guidonian Hand

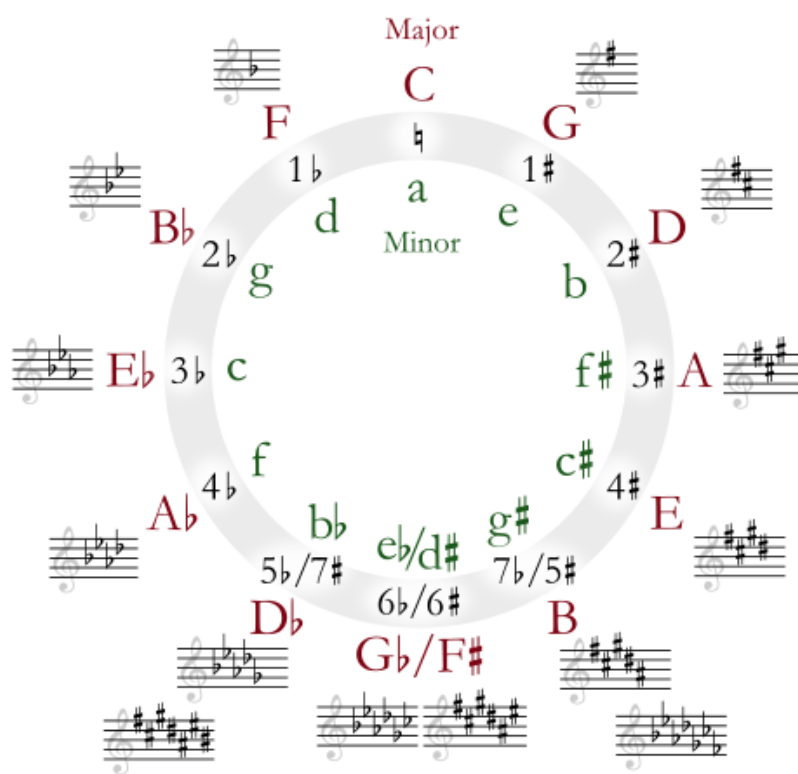


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MS Codex 1248.

Similarly, the circle of 5ths is used by modern music theorists to organize key relationships in a tonal context. The circle, shown in **Figure 3.2**, is a visual representation of the twelve tones derived from the chromatic scale.⁴⁶ These tones generate the key signatures that dictate the specific ordering of pitches associated with each major scale and its relative minor:

⁴⁶ The first circle of 5ths appeared in a late 1670s treatise, titled *Grammatika*, written by Russian composer and theorist Nikolay Diletsky (fl.1675-ca.1681).

Figure 3.2: Circle of 5ths



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As a music theorist myself, I am drawn to these artistic interpretations of theoretical data because they represent a “world of symbology, metaphor, pictorial thinking,” as well as a “visualizing, intuitive knowing” (Kaplan-Myrth & Smylie, 2006, p. 16). They also provide musical insights for the representation of my arts-based data.

In her consideration of future directions for music education research, Janet R. Barrett (2014) envisions the expanded use of music as data, both researcher- and participant-generated. Arguing that research reports seldom capture or convey the sounds that shape participants’ experiences and identities, she anticipates that technological advances will afford an imaginative profusion of representational forms (including audio, visual, and digital media), which will lead to a “deeper, richer engagement” with music as the “primary source” of data (p. 644). Although music-making as a potential data source is an under-explored topic in music education research, Kristen Pellegrino (2014) discusses the collection of “music-in-the-moment” data and

differentiates three data types: *process-of-music-making*, *product-of-music-making*, and *meanings-of-music-making*. (p. 307).⁴⁷ She also explores the analysis of music-making data through verbal/non-verbal interactions, musical/non-musical responses, and social interactions/connections, examining music therapy research to inspire broader analysis categories.

“Thinking musically” in an a/r/tographic context, Gouzouasis (2007) places a theoretical analysis of the first movement of Beethoven’s Piano Sonata in E major, op. 109, at metaphorically significant points throughout a self-reflective discussion of arts-based educational research (ABER). The musical form, sonata-allegro, is an interpretive component of the research intended to inform the reader in much the same way that formal structures in music “overtly and subliminally” inform the listener (p. 34). I confess that I find Gouzouasis’ textual analysis of Beethoven’s sonata less invigorating than his philosophical ruminations – an appalling confession for a music theorist – but I admit that the unravelling of his structural interpretations is thought-provoking. I have returned to Gouzouasis’ (2005, 2006, 2007) ABR writings many times, discerning new layers of meaning with each engagement, as if perfecting the performance of a musical composition.

However, in Barrett’s (2014) words: “The central body of work in music education is inextricably bound to words as prompts for the journey” (p. 645). Metaphor and metonymy, as analogical renderings of a/r/tography, enable *artistresearcherteachers* to look at research data and make sense of the world (Gouzouasis, 2007). As a *musicianresearcherteacher*, I view my world through a musical lens. Even when music is not overtly present, I sense the ubiquitousness of it. I hear the formal dimensions of Leavy’s (2015) musical model, including melody, rhythm, harmony, texture, form, tempo, and dynamics, in everyday interactions – in words.

Remembering an interview I conducted in early 2013 for a course in qualitative research, I can still hear my interviewee’s voice replaying in my mind – lifting off the type-written pages of my transcript.⁴⁸ I recall audible moments when her portrayal of other hypothetical voices was

⁴⁷ Pellegrino (2014) cites several studies in her discussion of music-making data: McCarthy, 2009; McNair, 2010; Stanley, 2008; and Wu, 2010.

⁴⁸ My interviewee chose “Anne” as a pseudonym. She is a Ph.D. graduate with a background in the visual arts. She is also an arts-based researcher who, at the time, was teaching arts education as a part-time professor in an urban university’s teacher education program. I was presented with the opportunity to interview a researcher with extensive expertise in the area of literacy, but I selected Anne because of her identification with a medium other than language.

delivered in a song-like fashion, including obvious changes of register. At times, she excitedly rushed forward, speaking so quickly I could hardly make out individual words. At other times, she haltingly searched for the next phrase, stumbled to articulate an idea, or interrupted herself as another thought occurred to her. Toward the end of the interview, there was a rapid exchange in which our two voices overlapped one another in a simultaneous flow.

Pondering the communicative possibilities of textual representations, I experimented with a metaphorical representation of Anne's recorded, pre-transcript text. To facilitate my experiment, I extracted a quotation from the interview that characterized her point of view regarding ABR practices. I considered the musical element of melody, summarizing its definition as a "succession of pitches," and represented its imaginary contour with Anne's words, shown in **Figure 3.3**.

Figure 3.3: Melody, Musical Line

"...there are multiple points of view, and that's OK."

Texture, or the interweaving of melodies, is represented in **Figure 3.4**. This rendering is intended to create the illusion of polyphony, which "combines several distinct melodic lines simultaneously" (Randel, 2003, p. 669).

Figure 3.4: Musical Texture

"...there are multiple points of view, and that's OK."

Figure 3.5 represents rhythm – the temporal movement of music. In a Kodály-led elementary music setting, rhythm is associated with song materials and described as the "way the words go" (Choksy, 1991, p. 109).

Figure 3.5: Rhythm, Musical Time

"...there are multiple points of view, and that, ah, that's OK."

Dynamics, which indicate the volume of music, are contextually derived and relationally dependent. Therefore, they are expressed as general gradations of softer and louder, or gradual developments of one from the other. **Figure 3.6** represents a *crescendo*, commonly defined as “becoming louder” (RCM, 2016e, p. 13).

Figure 3.6: Dynamics, Musical Expression

“...there are multiple points of view, and that’s OK.”

Tempo, or the pace of music, is also relationally dependent. **Figure 3.5** represents faster and slower speeds, respectively.

Figure 3.7: Tempo, Musical Expression

“...there are multiple points of view, and that’s OK.”

“...there are multiple points of view,”

My dissertation is rooted in the element of harmony or “musical space,” which involves simultaneous musical events or a dimension of music comparable to perspective in visual art. Depicting both the process and the product of my research – teaching music theory with, about, in, and through music (Cornett & Smithrim, 2001) – my harmonic metaphor adopts Leavy’s (2009) reference to the “*tonality* of lived experience” (p. 262, original emphasis). Indeed, the musical depiction of an event, a scene, a literary text, or a work of art is not a new phenomenon. Program music, which is prominent in nineteenth-century instrumental music, evokes extra-musical ideas or images that are often indicated by a suggestive title or a narrative preface (Randel, 2003).⁴⁹ In much the same way that program music represents an imaginative musical/extra-musical correlation, I am interested in a musical/theoretical correlation for the interpretation of my research findings.

I am encouraged by Marla Morris’ (2009) statement that “music opens spaces in which to dream” (p. 42). Musical ontologies, embedded in a multiplicity of artistic practices, have the

⁴⁹ Examples of program music include: Antonio Vivaldi’s *The Four Seasons* (1721); Ludwig van Beethoven’s *Pastoral Symphony* (1808); Hector Berlioz’s *Symphonie fantastique* (1830); and Richard Strauss’ *Don Juan* (1888).

potential to shape educational research – for example, Ted Aoki (2005) advocates a “sonorous” curriculum in which aural metaphors dwell with the visual; Walter Gershon (2006) experiments with the implementation of collective improvisation as a “theoretical lens for classroom observation” (p. 104); and Peter de Vries (2006) engages in music to enhance self-study. ABR, as a holistic integration of the creative arts at all stages of inquiry, enables the examination of *any* topic through an artistic lens. Although music remains one of the least explored art forms within ABR practices, music is, for me, omnipresent. It informs all facets of my life and by extension, my research.

An Integrated Research Methodology

The integrated practices of ABR warrant the implementation of an integrated methodology. Distinct from methods, which include the specific practices, procedures, or processes of inquiry, methodologies refer to “broader theoretically informed framework[s]” (Barndt, 2008, p. 359). Deborah Barndt advises against the reduction of arts-based inquiries to the tools and techniques of art-making. Instead, she highlights the deeper potential of these inquiries to touch minds *and* hearts, engaging “full human beings” (p. 359). Methodologies involve interpretive communities, often related to societal issues, that provide a “pervasive lens or perspective” for all aspects of a research project (Creswell, 2007, p. 24). This explanation enables me to see that the crux of my research project is the study of an arts-related topic through an artistic lens – or more specifically, a music-related topic through a musical lens.

However, my musical approach may be overly simplistic. Frede V. Nielsen (2009) confronts the contentious relationship between “music pedagogy as a field of research and the practice of music education” with an understanding that pedagogical research is a *science* that serves educational practice (p. 22). Nielsen’s statement conjures the reappearance of both science/art and theory/practice incompatibilities. Concerning the latter, Jorgensen (2005) equates theory with philosophy in its handling of conceptual and abstract entities that are separate from the phenomenal world. But distinct from philosophy, theory is formulated for explanatory purposes, testing and refuting claims through “qualitative descriptions and quantitative assessments of observable phenomena” (p. 22). Regarding practice, she confronts its ambiguous interpretations both descriptively, as something generally done in the phenomenal world, and normatively, as something desirable or ideal. But is integration pedagogically possible? Can the hypothetical nature of theory inhabit the experiential realm of practice?

LaBoskey (2004) promotes the “interrelationship of theory and practice” as a viable alternative to customary teaching traditions (p. 827). In a musical context, Jorgensen (2005) suggests that the intersection of theory and practice provides an understanding of the “wholes and parts that comprise the work of music education” (p. 32). Inspired by the curricular potential of Jorgensen’s philosophical models – as the means for translating ideas into the actions of music instruction – I am also struck by her “improvisatory and rhapsodic” view of teaching (p. 30). This realistic focus, which is dynamic rather than static, encourages the functionality of teacher/student interactions and creates a space for the self-study aspect of my inquiry.

Positioned between the pillars of analytic/intellectual theory and aesthetic/emotional practice, my inquiry emphasizes the inclusivity of integration and the unity of an integrated pedagogical praxis. By embracing Regelski’s (1982) plea to “[p]reserve the music in music theory” (p. 40), I am also joining his petition for an “explicitly stated preliminary or over-reaching theor[y] to guide, organize, and synthesize” the objects of musical analysis (p. 41). Elliott (1995) promotes an integrated *musical* praxis with the intent that music theory “ought to be understood in relation to the meanings and values evidenced in actual music making and music listening” (p. 14). Quoting American philosopher/theologian Nicholas Wolterstorff (b.1932), Elliott (1991a) recognizes that “[b]efore ever there were *works* of music, there was music” (p. 23, original emphasis). Elliott’s pioneering concept of music as knowledge offers my inquiry an artistically grounded methodology. And his praxial philosophy, as an analytic/aesthetic blend of musical experiences, offers music educators a purposeful and situated form of action.

The Self-Study of Professional Practice

David E. Gullatt (2007) emphatically states that “[a]rtists learn by doing” (p. 216). This is surely true of many professions. Teachers learn by doing. Since my teacher-self is inextricably enmeshed in my inquiry, I will briefly explore pertinent portions of the self-study scholarship in music education – with Gullatt’s guiding premise informing my exploration. Although Chad West (2011) does not use the term *self-study* in his synthesis of the literature, I recognize many of its inherent qualities in his examination of both action research and teacher research, particularly his assertion that a “systematic and intentional inquiry carried out by teachers could offer rich information about real-life issues facing today’s arts programs” (p. 93). Since reflective teachers continually search for ways to improve their teaching, action research enables an intentional and

systematic process that can “help bridge the gap between theory and practice” (p. 89), recognizing the authority of teachers in their own right.

West offers a study by Janet Robbins, Mary Kathryn Burbank, and Heidi Dunkle (2007) as a musically oriented illustration, but he criticizes the authors’ failure to indicate new directions for further investigation. Without a generalizable application beyond the study itself, I turned to Tim Cain’s (2010) consideration of teacher action research and its capacity to generate new knowledge. While this research genre “tends to exist in the margins of mainstream educational research,” which is certainly true in the field of music education, proponents argue that the action research process has much in common with the process of teaching (p. 159). Cain also suggests that action research has similarities with musical processes – such as practicing an instrument – that require “intelligence” and the “ability to listen to oneself” (p. 160).

Distinguishing Little K knowledge, reflected in an individual’s education and experience, from Big K knowledge, cumulatively passed from one generation to the next on a global scale, Cain (2010) emphasizes the potential of teachers’ action research to generate the latter, influencing both musician-teachers and their educational communities. His discussion of Big K knowledge in relation to several outstanding musician-teachers of the twentieth century – including Kodály, Carl Orff (1895-1982), and Shinichi Suzuki (1898-1998) – holds the greatest significance for me, since my doctoral inquiry is committed to bridging the instructional gap between music and music theory by incorporating the philosophical underpinnings of KM.

de Vries (2006) proposes an experiential engagement with music to enhance both teaching and researching processes. His self-study recounts the revelation he experienced as he performed the C Major Prelude from Bach’s *Well-Tempered Clavier* (volume 1) – “emotions that opened [his] mind [and allowed him] to reflect on [his] teaching” (p. 249). By utilizing improvisational playing to enhance concentration, de Vries became aware that he had not engaged his students in music-making. Instead, he was “telling them what to do with music..., how to do it, [and] when to do it” (p. 247), without allowing them the opportunity to do it for themselves. This disclosure resonates deeply with the self-reflective discernments of my own inquiry, aligning the self-reflective relationship I have with my work and the holistic emphasis of ABR practices.

The story of my epistemological/methodological becoming “traces a [personal/professional] trajectory something like a quest narrative” (McClary, 2000, p. 66). The theme of my narrative is an integrated music theory pedagogy. My participants’ narratives will

vary this theme either by augmentation or diminution.⁵⁰ Metaphorically, my inquiry creates a “musical bridge” for the holistic teaching of both rudiments and tonal harmony. Infused with the aesthetic of a/r/tography, it is inspired by Kodály’s vision of musical literacy. But what might *my* integrated music theory pedagogy look/sound/feel like?

The Research Design

Encouraging the pedagogical enhancement of written competencies in music theory with auditory awareness, my inquiry is linked with the most recent edition of RCM’s (2016e) *Theory Syllabus*. In this most recent edition, the graded curricular requirements are re-organized to support the concurrent study of music theory at *every* practical level, from preparatory to associate. The momentousness of this re-organization is not to be underestimated. After 130 years of formally instituting the study of music theory at a grade 5 level, RCM’s decision to restructure the music theory curriculum not only enables a significant instructional transformation, but it facilitates an essential pedagogical improvement as well.

These revisions eliminate a previously impenetrable barrier, allowing my researcher-self to look beyond the usual confines of RCM toward a contemporary world of educational thought. Since RCM’s traditionally segregated curriculum gives way to a newly integrated program of study, its established corpus of music theory textbooks/workbooks no longer suffice. Therefore, RCM’s teaching materials require extensive modifications. But instead of simply re-ordering existing materials, there is a tremendous opportunity to learn from the modern scholarship in music education and to incorporate the principles/practices of its findings. New materials – pedagogically integrated materials – are now institutionally viable. The time is ripe for bringing my ideas to fruition.

The integrated music theory pedagogy that I propose is filtered through my experiences with KM. My research process, which is also rooted in these deeply influential experiences, is a creative adaptation of KM’s instructional process. Comprising four steps that direct the acquisition of every new concept, these steps – prepare, make conscious, reinforce, and assess (Choksy, 1999a) – are applied repeatedly, ensuring instructional continuity and development in the manner of Bruner’s (1963) spiral curriculum.

⁵⁰ In music theory, augmentation (from the Latin *augere*, to increase) is the lengthening of a note or the expanding of an interval. Diminution, having the opposite outcome, shortens a note or contracts an interval.

Each stage of the process, which serves a well-defined procedural purpose, fulfills a pedagogical purpose as well. The readiness or *preparation* stage requires the internalization of previously learned concepts necessary for the understanding of a new conceptual element. It also entails musical engagement with a repertoire of songs in which the new learning is prominent. The presentation or *conscious awareness* stage empowers the moment of discovery. It involves the mental shift from subconsciousness to consciousness, or unknown to known, and enriches the aural experience with its visual representation – as a corroboration of sound and symbol. In the *reinforcement* stage, the new learning is located in both known and unknown repertoire, which facilitates its generalization. The *assessment* or evaluation stage determines whether or not the new learning has taken place, but rather than measuring intangible intellectual capabilities like comprehension, KM focuses on student behaviours, appraising conceptual learning through the demonstration of specific, often creative, skill sets.

Derived from the four stages of KM's instructional process, my inquiry involves formative, interrogative, reflective, and summative interactions. Each interaction is associated with the pedagogical purpose of the corresponding stage in KM's process. My preliminary research questions are similarly aligned:

- formative (preparation) – How can the teaching of music rudiments be integrated with repertoire?
- interrogative (conscious awareness) – How can an integrated pedagogy be implemented?
- reflective (reinforcement) – How can the implementation be improved?
- summative (assessment) – How can the teaching of harmony be enhanced by an integrated rudiments pedagogy?

These questions are further elaborated in the ensuing discussion.

However, before I explain the design of my research project, I must narrow the sizeable subject of music theory and extract a workable component. Within the subject's domain, three principal areas of study are recognized by RCM: rudiments, harmony, and history.⁵¹ Although these subject areas are clearly delineated, they also intersect. For my master's thesis, I chose

⁵¹ With RCM's (2016e) *Theory Syllabus*, the term *rudiments* replaced the more generic *theory*. This re-labelling became necessary when basic elements of harmony and history were included in both the elementary (up to level 4) and intermediate (levels 5 through 8) theory curricula. Nevertheless, I will avoid confusion by continuing to refer to the "rudimentary" elements of music as *rudiments*.

tonal harmony as my central focus, albeit at a comparatively rudimentary level. For my doctoral dissertation, I planned to broaden and develop the concluding affirmations of my master's research, but I came to understand that while the ineffective teaching of harmony undoubtedly elicits regrettable examination results (see **Appendix 2.2**), the problem may be more complex and widespread than I had supposed. It may originate with the ineffective teaching of elementary/intermediate rudiments.

Presuming that deficiencies in students' harmonization tasks arise from inadequacies in their preparatory studies, I settled on rudiments as the central focus of my doctoral research. Within this topic, the curricular content is generally divided between two main categories or subtopics: pitch and rhythm. Of these subtopics, I chose pitch content, which further divides into the basic elements of scales, intervals, and chords. With intervals derived from scales and chords derived from intervals, these elements are progressively generated one from the other. Likewise, a cumulative amassing of theoretical knowledge builds through RCM's elementary and intermediate rudiments programs, then continues through the advanced study of harmony and history, which begins at level 9.

Accordingly, I decided to concentrate my inquiry on intervals and chords as precursors of level 9 harmony – known as basic harmony prior to RCM's (2016e) *Theory Syllabus*. Specifically, I wanted to query teaching approaches for the tritone and the dominant 7th chord, with particular interest in the resolution of dissonance to consonance and its subsequent contextualization in the repertoire. Attempting to preserve the music in music theory (Regelski, 1982), I set out to search for the integration of aesthetic experience, as a subjective determination of un/pleasantness, and analytic inference, as an objective implementation of harmonic principles. While the preceding statement certainly articulates my research intentions, it is not an entirely accurate description of the events that transpired.

The Formative Interaction

In Kodály's methodology, the instructional objectives that prepare, make conscious, reinforce, and assess new learnings are verbs. They suggest the “goings-on” or “doings” that structure the active pursuit of conceptual goals. The musical skills that facilitate each new learning – hearing, singing, deriving, writing, reading, and creating – are also participatory *doing* words. KM's instructional process integrates these musical skills at specified stages, although

their integration is fluid and not confined by rigid product-driven boundaries. The following list outlines their common process-oriented interactions:

- prepare through hearing and singing
- make conscious through deriving
- reinforce through writing
- assess through reading and creating

By means of hearing and singing activities, the preparation stage of the process incorporates two related procedures: the attainment of preliminary conceptual understandings and the acquisition of a core musical repertoire – both of which function as catalysts for prospective or future understandings. In my research context, “conceptual understandings” are roughly represented by the conclusions I reported in my master’s thesis. Briefly summarized, I considered KM as a pedagogical model for the teaching of tonal harmony. Although I found little evidence of its instructional process in my data (Penny, 2012), I was encouraged by the contemporary spiralled approach of Jane Piper Clendinning and Elizabeth West Marvin (2005), as well as their desire to ensure that music theory is “absolutely relevant” for music practice (pp. xxiv-xxv). My sampling of university-level textbooks and my interviewing of university professors, brought into the context of my present inquiry, function like gathering activities that establish prevalent pedagogical practices in music theory instruction. However, these “conceptual understandings,” which metaphorically set the stage for my doctoral research, require the accumulation of a “core musical repertoire.”

To satisfy this component, I constructed four Listening Guides based on required works in RCM’s (2016e) intermediate theory curriculum, one for each of levels 5 through 8. The specific works I chose are:

- level 5 – Mozart, “Der Hölle Rache kocht in meinem Herzen” from *Die Zauberflöte* (1791)
- level 6 – Bach, Invention No. 1 in C Major, BWV 772 (1723)
- level 7 – Mendelssohn, Overture to *A Midsummer Night’s Dream* (1826)
- level 8 – Josquin, *El grillo* (1505)

Inspired by Choksy’s (1981, 1999b) long-range Listening Strategies, each LG comprises a series of brief teaching segments that facilitate directed listening experiences for students of rudimentary music theory. These experiences are purposed for *active* listening rather than a passive encounter with the repertoire. They encourage listening as a conscious engagement –

rather than an unconscious diversion or a washing-over of sound while the mind is otherwise occupied (Choksy, 1981). Designed to incorporate repertoire selections (art) in music theory instruction (science), my LGs experiment with the teaching of intervals and/or chords, providing *preparatory* data for an expanded version of my first question:

- formative – How can the teaching of intervals and chords be integrated with repertoire from the Royal Conservatory’s (2016e) intermediate theory curriculum?

In the formative or readiness stage of my inquiry, the LGs gave substance to my ideas about teaching music theory as a derivative of musical experience. They illustrate my imaginings of an integrated curriculum and provide opportunities to mesh – in the sense of “bringing into *harmony*” – both theoretical and practical experiences of music. The specific subject content of the LGs will be fully disclosed in chapter 4.

The Interrogative Interaction

The conscious awareness stage of KM’s instructional process facilitates the moment of discovery when a subconscious musical experience becomes conscious knowledge. At this “ah-ha” moment, the previously unknown is exchanged for the presently known. Through carefully selected questioning, the new learning is derived, labelled, and symbolized, thereby transferring awareness from sound to sight – or from practice to theory. Given the significance of this transfer, I endeavoured to adopt/adapt it for my inquiry. Traditionally, the presentation of information, particularly in music theory instruction, is delivered through the teacher-centred practice of *telling*. But the learning in KM’s conscious awareness stage is derived from the active student-centred practice of *doing*, which circumvents the habitual passivity of *receiving*.

To include this active doing in my research process, I associated the second stage of my inquiry with questioning and chose to identify it as an *interrogative* interaction because of this grammatical parallel. Just as new learning in a Kodály context is derived from “carefully selected” questions, so too is the new learning I am seeking with my inquiry. While I naturally gained new insights from the construction of the LGs, my thinking was limited by the boundaries of my personal experience. Therefore, it was necessary to engage a community of music theory teachers, to circulate the LGs, and to ask questions.

For this community interaction, I expected to draw participant teachers from RCM’s College of Theoretical Examiners which numbers approximately thirty members. Once I

received ethics approval, I sent a recruitment letter to RCM's Senior Director of Academic Programs who granted me formal permission. The letter, copied in **Appendix 3.1**, was sent by the Academic Office Coordinator to all members of the Theory College in September 2016. Distributed as an e-mail attachment, it summarized my research intentions and outlined the details of participation. My recruitment criteria, corresponding with RCM's examiner qualifications, included a post-secondary degree/diploma in music, five years of professional teaching experience in music theory, and knowledge of RCM's theory curriculum. Four participants were to be selected on a first-come, first-serve basis to review my LGs – *made conscious* as new instructional elements. In my estimation, fewer than four participants would have restricted the richness of my data while more than four would have restricted its cohesiveness.

I received two responses almost immediately: one examiner declined my invitation to participate and the other accepted. Without additional responses, I made arrangements for the letter to be redistributed a week before RCM's professional development workshops in November 2016. At the workshop itself, another of my colleagues agreed to participate, despite her distant location in Vancouver. I had enlisted two of the four participants I required. After consulting with my doctoral supervisors, I chose to broaden the parameters of my recruitment process and requested ethics approval to modify my research project. In addition to RCM's College of Theoretical Examiners, I decided to draw participant teachers from the Ottawa Region Branch of ORMTA, increasing my potential participant pool by more than two hundred members. Receiving approval, I sent a revised recruitment letter to the Ottawa Region Branch President. This letter, with highlighted revisions, is copied in **Appendix 3.2**. In January 2017, it was distributed by Ottawa's Website Convenor to all local members as a link in a regularly circulated e-mail. My recruitment criteria remained unchanged.

Meanwhile, my request for participation was accepted by a third examiner at RCM's marking meetings in December 2016. A fourth examiner also expressed interest, asking for more information about the content of the LGs. I sent him a preview of level 5 and he responded favourably a month later. By January 2017, I had a full slate of participants. Although it was no longer necessary to broaden my recruitment parameters, I chose to proceed for two reasons: (1) the ORMTA teachers, given their various backgrounds, would likely bring less homogeneity to my data and (2) the process had already been set in motion. Within several days, I heard from

nine Ottawa-area teachers, either electronically by e-mail (three) or personally at community events/meetings (six). One of these teachers is a former ORMTA member who was apprised of my research project by word-of-mouth. One declined participation because she had few intermediate-level students.

In the end, I was able to form three groups of four participants each: one based in the GTA, with the Vancouver participant accessible by Skype; one on the east side of Ottawa, in Orleans; and one on the west side of Ottawa, in Kanata. While all my participants teach music theory, the disposition of each group is unique. The Toronto group participants, which include two men and two women, are all theory examiners as well as theory teachers. All four teach/examine mostly advanced music theory subjects (level 9 to ARCT). Two are also instrumental teachers but only one is a pianist – the others play accordion, guitar, and viola, with varied levels of piano proficiency. The Orleans group participants, all women, are long-established instrumental teachers who include music theory in their practical lessons. Three are pianists and one is a cellist. None teach music theory beyond an intermediate level. The Kanata group participants, also women, are nearer the beginning of their teaching careers. All are pianists and three have completed graduate studies at the master's level. Two have recently become members of RCM's College of Practical Examiners. These same two teach some advanced music theory subjects as well as intermediate-level rudiments. The other two participants confine their teaching to elementary/intermediate levels.

In February 2017, I circulated the four LGs to all my participants as e-mail attachments. Soliciting both negative and positive feedback, I asked the participants to review each document with an eye/ear for their potential effectiveness as supplemental teaching materials. In March 2017, I moderated three introductory focus group discussions that I envisioned as analyzing/interpreting/critiquing “conversations.” Prompted by questions that I sent along with the LGs, each group discussion was intended to initiate an open dialogue in which my teacher colleagues could critically examine the LGs and interact with one another. The questions, itemized in **Appendix 3.3**, were designed to guide the reviewing process but they were not meant to be exhaustive nor to limit the participants' responses. Written feedback was suggested as an option but it was not required. Our collaborative discussions were recorded, providing audio and some video data, as well as written observations from field notes, for an expansion of my second question:

- interrogative – How can an integrated pedagogy for the teaching of intervals and chords according to the Royal Conservatory’s (2016e) intermediate theory curriculum be implemented?

The interrogative interaction was designed to incorporate the unknown/known progression of a guided discovery approach. Although the musical repertoire and the theoretical subject matter I addressed in the LGs were known elements for all the participants, my KM-inspired presentation was unknown. By giving my participants an opportunity to explore the LGs and to interact with one another, I hoped to engender a pedagogically stimulating experience for everyone, including me. I valued and continue to value the expertise of my teacher colleagues, both as individuals and as a collective. Their observational insights strengthened my own. While the personal narrative at the center of my dissertation is the product of my thinking over many years, it was significantly influenced by my participants’ experiences. A full description of the data collected from both introductory and concluding focus group discussions is found in the interlude that precedes chapter 5.

The Reflective Interaction

The reinforcement stage of KM’s instructional process involves a practical application of the newly-acquired conscious knowledge over an extended period of time. Through writing activities, this stage implements the notational symbolization of the relevant musical concept and moves toward its abstraction. An examination of the known repertoire from the preparation stage leads to repeated discoveries of the new element in multiple and varied settings. The new knowledge may also be reinforced by learning and notating unknown repertoire that contains the conceptual element.

An integral part of this process is the “practical application” of a theoretical concept. The LGs represent my conceptualization of an integrated pedagogical theory, but this theory requires applied practice in order to establish its efficacy. During the reflective interaction, the participants were encouraged to use one or more of my LGs to *reinforce* or practice the teaching of intervals and chords in their classrooms or studios. Over the course of the trial period, determined by the teachers’ scheduling of interval and/or chord presentations, each participant was asked to describe her/his experience(s) in a Google Docs file shared with the group. I posed questions for contemplation, suggested in **Appendix 3.4**, and the remaining participants were invited to respond to their colleagues’ descriptions, providing reflective insights drawn from their

own experiences. I, too, expected to respond from my experience, continuing the dialogues that began with the first focus group discussions. The participants' stories, including those rendered from the transcribed data of the previous interactions, were to be woven into my story. This aggregate narrative was meant to probe the elaboration of my third question:

- reflective – How can the implementation of an integrated pedagogy for the teaching of intervals and chords according to the Royal Conservatory's (2016e) intermediate theory curriculum be improved by the participants in my research study?

The “continuing dialogue” I had imagined did not become reality. Although I documented my experiences with one of my level 8 students and posted them in Google Docs files as sample entries, there were no further postings. But I was not deterred. I had received ample feedback at the interrogative stage and I was assured by participants in each group that the LGs were being utilized. I resolved to wait for the final stage of my research process.

The Summative Interaction

The assessment stage of KM's instructional process is an indispensable component of Kodály's methodology. It involves a synthesis of conceptual knowledge, which confirms the understanding of new musical concepts through reading and creating activities. The evaluation of this conceptual or intellectual understanding is laden with the complexities of personal interpretation. Therefore, rather than measuring intangible signs of comprehension, KM focuses on tangible student behaviours, appraising musical knowledge through the demonstration of specific skill sets, such as performing, analyzing, identifying, and notating (Choksy, 1999a). Comprehension may be exhibited by the recognition (reading) of a new conceptual element in unknown musical materials, or the improvisation and composition (creating) of new materials. These creative activities, which place the concept in unique contexts, are pedagogically imperative because they confirm the transferability of the relevant conceptual knowledge.

At the summative stage of my research process, I was interested in the assessment or evaluation of my LGs. To some extent, this appraisal was carried out at the interrogative stage when the LGs were reviewed by my participants. However, these reviews were fixed on the LGs as a printed *product*. At the reflective stage, the LGs were to be animated by my participants – just as a musical score is brought to life by the musicians who perform it. Essentially, my product was to become a *process*. Through this transfer, I wanted to establish the instructional

viability of the LGs. Therefore, I placed them for use in multiple and varied contexts, then collected the resulting data.

In August 2017, I conducted three concluding focus group discussions that were prompted with the questions outlined in **Appendix 3.5**. Acknowledging the limitations of my singular experience, I sought recommendations for the artistic/scientific integration of music and music theory from the collective expertise of the group as a whole. Although the LGs were not used by every participant, all three focus groups were represented. Our communal effort, derived from recorded audio data and written observations, augmented my narrative with articulations of the participants' individual meaning-making, or *assessment* of value. Their idiosyncratic teaching styles brought the element of creativity to the summative stage of my research process. From a synthesis of this creative element, I extracted generalizable conclusions.

My dissertation, as a piece of ABR, is deliberately open to tacit or intuitive knowledge. It embodies the integration of artistic expression and scientific analysis since my story is layered with critical scrutiny. The unfolding of my enriched narrative shapes its validity, satisfying Barone and Eisner's (2012) criteria for relevance by arguing that: "The story rings true. The analysis is cogent and credible. The tale is coherent. The meanings are generalizable." (p. 162). Thus, my exploration of music theory pedagogy suggests an integrated beginning – for which there is no end – inspired by an elaborated version of my fourth question:

- summative – How can the harmony component of the Royal Conservatory's (2016e) advanced theory curriculum be enhanced by an integrated artistic/scientific pedagogy at the intermediate level?

The analysis of my story, relying on Eisner's (1991) concept of educational criticism, involves four dimensions: description, "making vivid" the experience; interpretation, accounting of/for the experience with theory; evaluation, appraising the merit of the experience; and generalization, deriving a thematic from the experience – for "in the particular resides the general" (Barone & Eisner, 2006, pp. 100-101). My analysis of the empirical data will occupy chapters 5 and 6.

Concluding Remarks

My research project arose from an artistic longing for something more in my teaching of music theory – something more engaging; something more musical. Although my LGs are products (ends) of this longing, as is my dissertation itself, they represent the *process* (means) of

my becoming on behalf of my profession. It is not a static endeavour, nor is it finite. “I knew from the beginning of this project that I couldn’t see the end! It’s ... an evolutionary progression” (L. L. Penny, journal entry, July 23, 2018). ABR practices enable a continual process of creation that inspires artful ways of seeing and knowing. While these intuitive insights express empathic forms of understanding, their artistic nature sometimes proves elusive – certainly compared to quantifiable numbers or literal texts. At this preambular stage of my inquiry, when the end result was unknown, my ABR commitment required dedication and a condition of trust. But I had faith in my capacity to recognize and interpret my findings, for these collaborative aesthetic/analytic capabilities would be drawn from my experiences as both a musician/pianist and a music theorist.

My quest for pedagogical integration in music theory is long-lasting and on-going. ABR practices allow for a holistic approach to research that emphasizes the relationship I have with my work (Leavy, 2009). This relationship is clearly evident in every stage of the research design, since my multi-faceted experiences/perspectives are inextricably linked with the LGs as well as the focus group discussions. I am not a neutral creator, nor facilitator. But the living lens of a/r/tography encourages the personal stance of my inquiry. Rather than circling the topic of music theory pedagogy from the outside, looking in, I am positioned on the inside, looking out. From this internal vantage point, I am seeking guidance from an external community of music theory educators. Chapter 4 explains the LGs from my design perspective, but it will be my participants who ultimately determine whether or not the LGs are pedagogically *sound* from a usefulness perspective – pun intended.

Chapter 4

Listening Guides: Choosing Depth over Breadth

*To listen is an effort, and just to hear is no merit.
A duck hears also.*

– Igor Stravinsky (1882-1971)

Introductory Remarks

From the outset, I intended to design integrated instructional materials for the teaching of music theory. As my inquiry settled into its present form, my pedagogical ideas began to take shape as LGs. But intention alone is not sufficient motivation for such a project – it requires both purpose and opportunity. The first three chapters of my dissertation convey my purpose which is fully entrenched in my understanding that the science of music theory is pedagogically disconnected from the art of music – the very phenomenon it was intended to explain. The LGs constitute my attempt to fill this pedagogical gap by infusing music theory instruction with repertoire. However, the reconnection I am advocating is considerably more disruptive than simply sprinkling a theoretical exposé with musical examples. I want to *reverse* the instructional process by placing music at the centre of music theory teaching.

As I mentioned in chapter 2, a curricular shift from textbook-based teaching approaches is not without its challenges (Luce, 2001). Criticizing the *status quo* is relatively easy. Envisioning a solution or creating instructional materials to replace traditional textbooks is a far more difficult task. In chapter 3, I explained the specific components of my research design and introduced the LGs. In chapter 4, I will give a detailed description of the LGs' content and disclose the countless pedagogical decisions that led to their development as distinct entities. Although the LGs are products of my imagination, they are grounded in decades of educational experiences and observations. They combine my long-held interests in music theory and music education – initially fuelled by the undergraduate teachings of Bell and Choksy.

The LGs' specific content is associated with the newest edition of RCM's (2016e) *Theory Syllabus*. This association lends relevance to my inquiry, both for me and for the wider teaching community. RCM's syllabus, subject to an ongoing review process, provides a well-sequenced music theory curriculum intended to enhance and enrich musical literacy. It also provides a comprehensive listing of level-by-level requirements from which to select particular musical

concepts. Emphasizing elements of pitch, the LGs provide preparatory data in answer to my formative question:

- How can the teaching of intervals and chords be integrated with repertoire from the Royal Conservatory's (2016e) intermediate theory curriculum?

Experimenting with the musical/theoretical conventions surrounding the teaching of intervals and chords, my LGs are purposefully constructed for the pedagogical integration of music (art) and music theory (science).

An Opportunity to Effect Change

My vision of an instructional reversal is inspired by words attributed to E. Kim Nebeuts: “To state a theorem and then to show examples of it is literally to teach backwards.”⁵² In such an environment, the instructor traditionally introduces a given concept through lecturing, using general principles to derive a model, showing illustrative applications of the model, giving practice in similar derivations and applications, then testing for the same on exams (Prince & Felder, 2006). This *deductive* style of teaching involves a logical process that infers particular instances from general laws or principles. But in their campaign for an alternative teaching approach, Prince and Felder (2006) argue that “people are most strongly motivated to learn things they clearly perceive a need to know” (p. 123) – a well-established precept of educational psychology.

With an extensive survey of neurological and psychological research, John D. Bransford, Ann L. Brown, and Rodney R. Cocking (2000) provide strong support for *inductive* teaching methods that encourage deep learning as a precursor for intellectual development (Prince & Felder, 2007). Inductive teaching, rather than employing a “top-down” logic, utilizes a type of “bottom-up” reasoning that constructs or evaluates general guidelines from specifics such as case studies, experimental data, or observations. Through the analysis and interpretation of data, students “generate a need for facts, rules, procedures, and guiding principles, at which point they are either presented with the needed information or helped to discover it for themselves” (Prince & Felder, 2006, p. 123). Thus, generalized conclusions are inferred from particular instances and complex problems are solved.

⁵² It is generally accepted that E. Kim Nebeuts is a pen name for Michael Stueben, co-author of *Twenty Years Before the Blackboard: The Lessons and Humor of a Mathematics Teacher* (1998). E. Kim Nebeuts read backwards is Mike Stueben.

Aróstegui (2003), confronting this same deductive/inductive opposition, criticizes a teacher-centered process that focuses on the particular knowledge or operational criteria of a domain and fails to account for students' experiences. Alternatively, he recommends a teacher/student interaction that encourages students to interpret the subject matter according to their own experiential circumstances. This collaborative approach to pedagogy is consistent with my belief that knowledge should be introduced through experience – as an intangible concept presented through a tangible event. It also reinforces Kodály's (1974) petition for nurturing students' "direct intuition."

As my purpose evolved and my inductive posture solidified, I began to ponder the execution of my pedagogical plan. An opportunity to "audition" my ideas dawned in early 2013 when I was invited, along with music theory teachers from across Canada and the United States, to respond to a survey conducted by RCM. Subtitled "Looking to the Future," it was initiated as a catalyst for the preparation of an updated theory syllabus, originally slated for release in 2015. The survey queried the perceived strengths and weaknesses of RCM's theory curriculum and broached the topic of integration with these questions: "Do you think that the curriculum would benefit from being separated or divided into ... specific courses? Or would a more integrated approach to material increase effectiveness?" (J. Ringhofer on behalf of RCM, e-mail questionnaire, February 6, 2013). Preferring integration, I suggested a re-alignment of subject content for advanced harmony and history courses to coincide with practical levels from grade 8 to ARCT.

Although my survey response pre-dates my formal research proposal, it foreshadows my quest for theoretical relevance:

These [courses] could be organized around the “lists” that categorize practical repertoire – such as list A, B, C, D/E.⁵³ Therefore, history and harmony at the grade 8 level could comprise Baroque composers and genres as well as counterpoint and figured bass. Beginning the study of harmony with counterpoint allows for a melodic (horizontal) focus, which strengthens the concepts of voice-leading and tonal tendencies. This focus is also less intimidating for vocal or single-line instrumental students. At the grade 9 level, the co-requisite theory components could introduce Classical composers and genres as well as four-part harmony, including Schenkerian [analysis]. At grade 10, the focus could be on the Romantic period and chromatic harmony; at the associate level, all the modern “-isms” and post-tonal theory.⁵⁴ (L. L. Penny, e-mail response, February 16, 2013)

Despite the emphasis of my response on harmony and the subsequent re-orientation of my inquiry toward rudiments, I recognized a significant correlation between RCM’s syllabus preparations and my burgeoning research interests.

The survey, in conjunction with additional data collected by RCM, precipitated an expansion of its theory curriculum to *all* levels, from preparatory to associate. The rudiments curriculum (through level 8) was also enriched with melody writing and music history components, providing a creative context for music theory and offering a basic introduction to composers, genres, and musical styles (RCM, 2016e). At a professional development meeting in the fall of 2013, the proposed syllabus expansion was disclosed to all theory examiners in attendance. Struck by a commonality of purpose, I approached RCM’s Senior Director of Academic Programs and communicated my uncharacteristically bold desire to become involved in the project. Shortly thereafter, I was contracted to review the first draft of the new theory syllabus for both elementary-level and intermediate-level rudiments.

While elementary theory levels (preparatory to 4) are not formally tested by RCM, intermediate-level examinations require cumulative knowledge from all previous levels. Beginning with level 1 theory, there are nine concept streams:

⁵³ RCM (2015c) divides performance repertoire into lists according to stylistic periods: list A, Baroque; list B, Classical; list C, Romantic; list D, Post-Romantic, Impressionist, and early 20th-century; list E, 20th- and 21st-century.

⁵⁴ My suggestion was influenced by the underlying philosophy of CM, the curricular approach that brings together “discrete elements and ideas from the various branches of music study” so that music may be understood as a “unified whole rather than as detached fragments” (Rogers, 2004, p. 20). Ideally, a CM program combines music history, harmony, counterpoint, analysis, orchestration, and even applied (performance) studies, with topics in music theory.

- pitch and notation
- rhythm and meter
- intervals
- scales
- chords; broadened to chords and harmony from level 5 onward
- melody and composition
- analysis; form and analysis from level 5
- music terms and signs
- music history/appreciation; focused on music history from level 5

Within each stream, musical concepts – as “abstract or generic idea[s] generalized from particular instances” (Webster, 1983, p. 272) – are systematically introduced and explored. Preparatory theory, which precedes level 1, does not include melody and composition, analysis, or music history/appreciation components.

In my review of the proposed syllabus, I welcomed its increased scope and its incremental dispensing of musical concepts at progressive levels of complexity. Exhibiting the continual “turn[ing] back on itself” of Bruner’s (1963) spiral curriculum, it repeatedly revisits basic ideas and builds upon them until the “full formal apparatus” has been grasped (p. 13). While this spiralled approach is not new to RCM’s theory program, the fundamental concepts previously introduced with basic rudiments – as the co-requisite for grade 5 practical examinations – were now sequentially developed through five levels of preparatory/elementary study. These concepts provide the foundation for intermediate-level understandings of music theory and later, for advanced levels of musical literacy.

For comparative purposes, the former distribution of musical concepts for intervals is outlined in **Table 4.1**. As measures of distance, intervals classify the spatial relationships between pairs of notes or pitches. Specific concepts defining these relationships are presented gradually, with new terminology highlighted in bold type:

Table 4.1: Previous Syllabus Distribution of Musical Concepts for Intervals**Level-by-Level Theory Requirements: Intervals**

basic rudiments	<i>write/identify:</i> perfect, major, and minor intervals (harmonic and melodic) within an octave above a given note in [major] keys up to/including four sharps or flats <i>identify:</i> melodic intervals below a given note
intermediate rudiments	<i>write/identify:</i> all intervals and inversions within an octave (above and below) in all [major] keys
advanced rudiments	<i>write/identify:</i> all intervals and inversions (simple, compound, and enharmonic equivalents)

(RCM, 2009)

To illustrate RCM's expanded curriculum, **Table 4.2** outlines the redistribution of musical concepts for intervals in the new syllabus. Basic, intermediate, and advanced rudiments exams – formerly co-requisites for practical examinations at grades 5, 6, and 7/8, respectively – are reorganized for concurrent study as four intermediate theory exams (levels 5, 6, 7, and 8). Additionally, the distinction between reading and writing activities is eliminated, with some reading or identifying applications re-allocated to the analysis stream:

Table 4.2: Present Syllabus Distribution of Musical Concepts for Intervals**Level-by-Level Theory Requirements: Intervals**

preparatory theory	repeated notes, steps, and skips in C major			
	level 1	level 2	level 3	level 4
elementary theory	half steps (same or different letter names) whole steps melodic and harmonic intervals up to/including an octave in C, G, F major (numerical size)	half steps whole steps numerical intervals in C, G, F major	perfect and major intervals above a given tonic (key signatures or accidentals) in C, G, D, F, B-flat major minor thirds	perfect, major, and minor intervals in major keys up to/including three sharps or flats

	level 5	level 6	level 7	level 8
intermediate theory	diatonic and chromatic half steps whole steps diatonic intervals: perfect and major in major keys up to/including four sharps or flats chromatic intervals: minor	diatonic intervals in all major keys chromatic intervals: diminished and augmented enharmonically equivalent intervals	diatonic and chromatic intervals below a given note inversions of intervals enharmonic equivalents	simple intervals compound intervals up to/including a fifteenth (above or below) inversions

(RCM, 2016e)

By way of explanation, intervals may be derived from horizontal melodic movements – repeated notes, steps, skips, and leaps – or from the simultaneous sounds of vertical harmonies. Their identification requires two components: a number that measures distance or the span between letter names and an adjective (like *perfect*) that indicates quality or the nuanced span between specific pitches. Intervals may be diatonically associated with major scales or chromatically altered with accidentals, such as sharps and flats. They may be enharmonically “respelled,” using different letter names with the same sound (C-sharp and D-flat, for instance), or inverted by reversing their position and turning them upside down. They may be simple or compound – smaller or larger than a perfect octave (8th) – and measured either above or below a given note.

As such, intervals are the constituent elements of triads and chords, which are the fundamental pitch components of melody and harmony. Thus, a continual broadening or deepening of conceptual understanding is essential, for as Bruner (1966) emphasizes, “unless certain basic skills are mastered, later, more elaborated ones become increasingly out of reach” (p. 29). This comprehensive spiralling augments and strengthens previous knowledge, rendering new competencies useful or worthwhile beyond immediate circumstances.

In conjunction with RCM’s expanded music theory curriculum, I was contracted to co-author five elementary-level rudiments books (preparatory to level 4) for a new theory series. These books, published in 2016, were eventually titled *Celebrate Theory*. But in March 2015, I was part of a two-person team, responsible for pitch content in the following subject streams:

- pitch and notation
- intervals
- scales
- chords
- melody and composition

This contract was the fulfilment of my adolescent ambition to write music theory textbooks. Its timing, however, was unfortunate – I was also a full-time doctoral student, preparing to write my research proposal. But the opportunity to contribute to RCM’s inaugural theory series was enormously compelling. Besides, I was sure to learn something more about music theory pedagogy, perhaps something I could use for the LGs.

In the end, I learned a great deal. I changed my student classification to part-time and travelled to Toronto bi-weekly to consult with my partner who worked in RCM’s Academic Office. He tasked me first with writing about scales for the preparatory-level manuscript, since he had written about notes on the staff before I became involved. This seemed straightforward enough, given that I was fully conversant with the material, but as I sat down to write, I could not get started. There were things I needed to know. What had already been said? – by my teammate and by others? More importantly: Where does the “story” of scales actually begin? The answers I sought were not historical or even philosophical, they were pedagogical. I wanted to build a suitable foundation for both present and future learnings about scales. I also wanted to provide a framework that would connect scales with interrelated musical elements.

Eventually, I understood that I was looking for the instructional processes of preparation, conscious awareness, reinforcement, and assessment. With this realization, I concluded that I was unable – or maybe unwilling – to participate in the authoring of RCM’s theory series without incorporating the pedagogical lessons I had learned from KM. I resurrected the first chapter of the preliminary rudiments book I had begun in the late 1990s (see chapter 1) and sent it to my writing partner. To my amazement, he agreed to adopt my Kodály-inspired approach. I had abandoned my rudiments books when FHM purchased the copyright for Sarnecki’s (2001b) *Elementary Music Rudiments* series. But fifteen years later, RCM’s *Celebrate Theory* series, including my contributions, would replace Sarnecki’s.

Mid-way through the manuscript for level 2, my partner was forced to leave the project because of circumstances beyond his control. I was deeply distressed but duty-bound to complete my obligation. I continued to write pitch content. Several of my examiner colleagues

joined me as co-authors and/or reviewers. One of these, an experienced composer, took over the melody and composition stream while others assumed my partner's portion of the content. An earlier set of manuscripts by Brenda Braaten and Crystal Wiksyk, both affiliated with the Victoria Conservatory of Music (VCM), was added to the mix. Consequently, my carefully crafted pitch content was comprehensively edited and modified.

Although I am disappointed that KM's principles and practices are not clearly visible on the surface of the *Celebrate Theory* books, they undeniably form the substructure on which the series is constructed. RCM's willingness to implement pedagogical change, even a modicum, is remarkable. My involvement in this change is also remarkable – but there is further work to be done. While I endeavoured to derive musical concepts from level-appropriate repertoire, my efforts were only partially utilized in the final publications. Teaching for active student participants is much more time-consuming (and space-consuming) than teaching by rote for passive student receivers (Hoag, 2020). Consequently, many excerpts from the musical literature were either dropped or moved to the ends of units and repurposed for summarizing analysis exercises. Thus, my quest for repertoire at the centre of music theory instruction was still largely unrealized. My LGs are next steps toward the achievement of this aim. Although their writing was delayed by my work on RCM's (2016) *Celebrate Theory* series, the LGs are certainly informed by the experience and would not have materialized as they did without it.

An Adaptation of the Kodály Method for Music Listening

In the educational setting for which KM was initially designed, a new conceptual learning is prepared through extensive rote singing experiences. The concept becomes conscious knowledge, then undergoes a lengthy period of reinforcement through the reading and writing of folk song materials, both known and unknown. Later, the learning is assessed through sight-reading as well as improvising and composing activities (Choksy, 1999b). For older students, particularly those with previous musical training, the pedagogical emphasis shifts from folk music to composed music. In this older-student context, KM is modified to embrace the teaching of art music and by extension, the teaching of music theory. Choksy (1999b) outlines her adaptation of the instructional process as follows:

The “make conscious” stage might be viewed as the first time the students actually listen to the work. The music is then reinforced through repeated listening, each time with a specific focus.

Assessment may take many forms. At a simple level, students might compose a short work incorporating some techniques learned through the particular composition. (p. 78)

How are students prepared for this process? Of the various activities through which elementary-aged students learn music, Choksy (1991) lists singing, moving, playing instruments, musical reading/writing, listening, and creating. In many classrooms, listening – the activity commonly associated with teaching art music – is reduced to a “drop the (now proverbial) needle” exercise. Yet, there is a considerable difference between “being in the presence of sound ... and being totally conscious of that sound” (p. 72). The first, of course, is *hearing* and the second, *listening*. But music listening skills are not innate, they are cultivated and developed through careful guidance.

In a KM classroom, early listening experiences involve direct oral transmissions or personal exchanges. The teacher sings multi-versed story songs that are prepared with guided questions, then repeated many times – like a child’s favourite bedtime story. Once good listening skills are established, the teacher may substitute singable themes from masterworks, such as the “Romanze” from Mozart’s *Eine kleine Nachtmusik* (Choksy, 1991). After several listenings, a recording of the work may be played. With this intentional preparation, the students bring familiarity to their formal music listening experiences.

As an intermediate step toward analytical listening, teachers David Brummitt and Karen Taylor (1996) developed a five-year Kodály-inspired music listening program. Intended for school-wide broadcast, it comprises a comprehensive series of listening lessons in which a complete work or movement is repeated daily for five successive days. Each listening, of approximately five minutes, is prefaced with a brief narration that provides information about the composer and the featured composition. The script changes from day to day. It both reinforces the previous day’s narration and incrementally adds new information. Representing every historical period, musical genre, and instrumental/vocal ensemble, this non-directed approach to music listening provides anecdotal exposure to art music – sometimes the students’ *only* exposure – but it does not replace a directed approach that guides students through a musical analysis of the selected work *prior* to its listening (Scott, 2009).

This prior analysis is a key component of the experience, as Choksy (1981) clarifies: “It is not so much the music used as the way of approaching it that differs from the old-fashioned ‘music appreciation’ class” (p. 88). In Hungarian singing schools, fourth grade students are musically conversant in diatonic tonal/modal systems and have an extensive rhythmic vocabulary as well as basic knowledge of harmonic and structural analysis. They are ready for focused analytical listening. Consistent with all facets of KM’s pedagogical approach, this listening begins with singing (Choksy, 1981).

Hungarian students’ earliest listening experiences generally include settings of known folk songs by Kodály or his contemporary Béla Bartók (1881-1945), a fellow composer and ethnomusicologist. But the students do not listen to recorded music until the main theme(s) have been notated and sung in *solfa*. The initial presentation of themes varies, as the following sample preparatory activities illustrate (Choksy, 1981):

- the notation may be shown and read by students
- the theme may be taught by rote with the *solfa* derived by students and notated from memory
- the theme may be given as melodic dictation and sung from the students’ written notation

In keeping with the vernacular practices of the Hungarian model, music listening experiences in North America are typically centered around North American folk songs. Early vocal experiences are gradually expanded to include instrumental settings of the songs, such as Aaron Copland’s (1900-1990) rendition of “Simple Gifts” from his orchestral suite *Appalachian Spring*. The principal instruments of the orchestra are introduced one at a time, ideally through live performance.

From this starting point, the music of the Viennese Classical composers provides a wealth of material for directed listening experiences, particularly that of Franz Joseph Haydn (1732-1809) and Wolfgang Amadeus Mozart (1756-1791). But Choksy (1999a) intentionally avoids compositions with accompanying stories, like Haydn’s *Surprise* Symphony, *Clock* Symphony, or *Farewell* Symphony, for in her words, “too many [students] have listened to amusing – and largely untrue – stories in ‘music appreciation’ lessons rather than to music” (p. 124). At the fourth-grade level, Choksy suggests Mozart’s keyboard variations on “Ah! Vous dirai-je, Maman,” a melody recognizable as “Twinkle, Twinkle, Little Star,” Haydn’s Cello Concerto in D

Major, op. 101, and Schubert's *Trout* Quintet, based on his *Lied* "The Trout."⁵⁵ Since each listening selection should be heard many times, she chooses to listen in depth to a few works rather than to "hear" many.

In North American schools, given the twenty-first-century prominence of STEM subjects (science, technology, engineering, and mathematics), fourth grade students do not possess the same level of readiness for analytical listening as their Hungarian peers. But even with limited instructional time, KM-inspired music listening is possible. It does not involve listening to recordings in every class. Rather, it occupies a portion of several class periods in preparation for a single listening experience, and then several more with follow-up for the same listening. Admittedly, this scenario may seem like a substantial investment of time for very little return. But in every preparatory activity, there are multiple learnings – some old, some new – and it is in these activities that the elements of music theory reside.⁵⁶ When the recorded listening takes place, theoretical elements are connected to *real* music and their practical relevance is explicitly revealed.

A well-balanced music listening program is categorized by four basic criteria: composer, era/style, genre/structure, and instrumentation (Choksy, 1999a). It incorporates a healthy variety in each category, moving backward and forward from the Classical era – to the Baroque era or earlier as well as the Romantic era or later. Representative Baroque composers include Johann Sebastian Bach (1685-1750) and George Frideric Handel (1685-1759). Later composers may include Ludwig van Beethoven (1770-1827), Johannes Brahms (1833-1897), Claude Debussy (1862-1918), Igor Stravinsky (1882-1971), and others. This list of composers is not exclusive and a specific composer, once introduced, is not "dropped." Each composer is revisited in subsequent years, sometimes with the original work studied in greater depth or sometimes with another work (Choksy, 1999a).

⁵⁵ The term *Lied*, plural *Leider*, commonly refers to a nineteenth- or late eighteenth-century setting of German Romantic poetry for a solo vocalist and piano accompaniment. "The Trout" (*Die Forelle*), composed in 1817 by Franz Schubert (1797-1828), is based on a poem by Christian Friedrich Daniel Schubart (1739-1791), originally published in 1783.

⁵⁶ For example, consider the second movement or "Romanze" from Mozart's *Eine kleine Nachtmusik*. The opening rhythm may be spoken in duration syllables (*ta, ti*, etc.), its structure derived, the rhythm memorized and notated. At a later lesson, the violin melody may be added to the rhythm. This melody may be read and sung in *solfa* syllables, memorized, notated, and harmonized with the root-singing of primary chords. Still later lessons may add the viola and cello melodies, which may be read and sung in parts, then Mozart's harmonization analyzed (Choksy, 1999a, p. 155).

Despite its pedagogical complexities, the listening framework I have described *is* feasible, but it requires a dedicated KM practitioner and a scholastic environment that recognizes the value of music education. Frequently, one or the other is absent. Even if the tools and materials of KM – rhythm syllables, *solfa* syllables, hand signs, and folk songs – are utilized at lower elementary grades, there is little evidence at upper grades or in secondary schools that teachers are progressively developing students’ musical understandings (Choksy, 1999b). According to Choksy, these older students “become more able at [musical] skills they already possess, but they do not generally add new skills; and rarely are they led to infer more advanced concepts or to acquire further musical knowledge” (p. 1). Consequently, if publicly accessible school systems are unable/unwilling to provide adequate musical training for their student populations, specialized institutions must step forward to fill the gap.

Students of RCM’s music theory curriculum may be in a better position to exhibit aspects of readiness for analytical listening. But their theoretical knowledge is often experiential and therefore, subconscious – since music theory is customarily distanced from music performance. However, with RCM’s recent restructuring of music theory co-requisites for all levels of performance, students’ theoretical knowledge may now be lifted to the realm of consciousness and its practical relevance made more obvious.

Considering the Repertoire

As I contemplated the teaching of music theory with, about, in, and through music (Cornett & Smithrim, 2001), I imagined the ideal repertoire as the students’ own. While this ideal is pedagogically optimal, its application is realistically impossible. RCM’s instrumental and vocal syllabi include lengthy lists of repertoire.⁵⁷ As an example, there are a total of 181 selections for level 5 piano alone: 22 list A (Baroque) pieces; 28 list B (Classical) pieces; 114 list C (Romantic/Modern) pieces; and 17 technical studies or *études* (RCM, 2015c). Of these, 42 are included in RCM’s *Celebration Series: Piano Repertoire 5* (2015b) and *Celebration Series: Piano Etudes 5* (2015a). While RCM’s publications increase the probability of performance for this small segment of the repertoire, only *five* selections – chosen by individual students and/or their teachers – are required for examinations. While some students learn to play multiple works

⁵⁷ RCM publishes examination syllabi for the following instruments/voices: accordion, brass, cello, clarinet, double bass, flute, guitar, harp, harpsichord, organ, percussion, piano, recorder, saxophone, trumpet, viola, violin, voice, and woodwinds.

in each category from various sources, others focus exclusively on their specific exam repertoire. Either way, I cannot choose a piece of music that all level 5 piano students will have learned. And by choosing a piano piece, I have already excluded vocal students as well as those of every other instrumental discipline.

Therefore, in order to satisfy KM's mandate for *known* repertoire, I decided to embrace the music history component of RCM's (2016e) rudiments curriculum as my source of repertoire – despite my apprehension about its lack of historical/theoretical depth. In my review of the pre-publication content, I had petitioned for pedagogically robust listening selections but by the time I became involved in the project, RCM was academically invested in an agenda of broad exposure.⁵⁸ **Table 4.3** lists the elementary-level repertoire requirements, as well as suggested topics for focused listening, with new composers and compositions highlighted in bold type. Music history/appreciation is not included at the preparatory level:

Table 4.3: Syllabus Distribution of Repertoire for Elementary Music History

Level-by-Level Elementary Theory Requirements: Music History/Appreciation

level 1	level 2
Telling a Story through Music	An Introduction to Mozart
• Camille Saint-Saëns: <i>Carnival of the Animals</i> (<i>The Elephant, Kangaroos, Aquarium, The Swan</i>) • instruments • descriptive titles • Sergei Prokofiev: <i>Peter and the Wolf</i> • storyline and characters	• Wolfgang Amadeus Mozart • life (childhood) and music • Twelve Variations on “Ah vous dirai-je, Maman,” K 265 • changing theme • Horn Concerto No. 4 in E-flat Major, K 495 (Rondo) • recurring theme

⁵⁸ I reviewed the proposed content for RCM's (2016e) *Theory Syllabus* in two segments: the elementary theory requirements (preparatory to level 4) in December 2013; and the intermediate theory requirements (levels 5 to 8) in April 2014.

level 3	level 4
Bach and Music for Dancing • Johann Sebastian Bach • life (family) and music (<i>Anna Magdalena Notebook</i>) • Christian Petzold: Menuet in G Major, BWV Anh. 114 • French Suite No. 5 in G Major, BWV [816] (Gavotte, Gigue) • Baroque dances (character) • harpsichord	Getting to Know the Orchestra • Benjamin Britten: <i>The Young Person's Guide to the Orchestra</i> • Pyotr Il'yich Tchaikovsky: <i>The Nutcracker</i> (<i>Waltz of the Flowers, Dance of the Sugar Plum Fairy</i>) • instrumental families • range and colour

(RCM, 2016e)

At first glance, the introduction of stand-alone topics in a string of isolated presentations belies the opportunity to build new understandings on previous experiences. While an *overlapping* interaction of composers/compositions could combine both known and unknown learnings – reminiscent of KM's reinforcing and making-conscious activities – RCM's elementary-level presentations may be interpreted as preparing activities. For instance, the Rondo from Mozart's Horn Concerto No. 4 in E-flat Major includes an easily singable theme, even though its 6/8 meter is not formally introduced until level 5.⁵⁹ And Petzold's Menuet in G Major (from the *Anna Magdalena Notebook*) is graded for level 3 piano, making it readily playable, although the Gavotte and Gigue from Bach's French Suite No. 5 in G Major, graded for levels 7 and 10, are not (RCM, 2015c).⁶⁰ Regardless, students' early exposure to music for listening paves the way for later, more in-depth music listening experiences.

Since the LGs encompass rudiments topics from levels 5 to 8, I scrutinized the co-requisite music history content with greater purpose. **Table 4.4** lists the intermediate-level repertoire requirements:

⁵⁹ The third movement of Mozart's Horn Concerto No. 4 in E-flat Major is the subject of Choksy's (1999b) "Listening Strategy 1." It is one of several Classical-era works recommended for students' first directed listening experiences because the thematic repetition of its rondo form (labeled ABACABA) is clearly audible.

⁶⁰ The Menuet in G Major is a keyboard piece found in the second *Notebook for Anna Magdalena Bach* (1725). It was attributed to Johann Sebastian Bach (BWV Anh. 114) until the 1970s when Christian Petzold (1677-1733) was recognized as the composer. The *Notebook*, written for Bach's second wife, is a compilation of late seventeenth- and early eighteenth-century works by various Baroque composers, including François Couperin (1668-1733), Georg Böhm (1661-1733), J.S. Bach himself, and his son Carl Philipp Emanuel Bach (1714-1788).

Table 4.4: Syllabus Distribution of Repertoire for Intermediate Music History

Level-by-Level Intermediate Theory Requirements: Music History

level 5	level 6
Voices in Song	An Introduction to Musical Styles of the Baroque and Classical Eras
• George Frideric Handel: “Hallelujah Chorus” from <i>Messiah</i> • oratorio • chorus (soprano, alto, tenor, bass) • Wolfgang Amadeus Mozart: “Queen of the Night” from <i>The Magic Flute</i> • opera • aria • Harold Arlen: “Over the Rainbow” from <i>The Wizard of Oz</i> • verse-chorus structure	Baroque Era (ca.1600-ca.1750) • Johann Sebastian Bach: <i>Invention in C Major</i>, BWV 772 • invention • polyphonic texture • motive and sequence • <i>Brandenburg Concerto No. 5</i>, BWV 1050 (first movement) • <i>concerto grosso</i> Classical Era (ca.1750-ca.1825) • Wolfgang Amadeus Mozart: <i>Eine kleine Nachtmusik</i> (first movement) • chamber music • homophonic texture • sonata form (exposition, development, recapitulation)

level 7	level 8
Introduction to Musical Styles of the Romantic and Modern Eras Romantic Era (ca.1825-ca.1900) • Felix Mendelssohn: Overture to <i>A Midsummer Night's Dream</i> • program music • concert overture • Frédéric Chopin: “Revolutionary” Etude in C Minor, op. 10, no. 12 • <i>étude</i> • nationalism • chromatic harmony Modern Era (ca.1900 to present) • Igor Stravinsky: <i>Petrushka</i>, “The Crowd Revels at the Shrovetide Fair” (first tableau) • ballet • rondo form • polytonality • pentatonic scale • Hugh LeCaine: <i>Dripsody</i> • electronic music • Duke Ellington: <i>Ko-Ko</i> • jazz • twelve-bar blues	Expanding Musical Horizons Introduction to Music of the Medieval Era (ca.476-ca.1450) • Hildegard von Bingen: <i>Ordo virtutum</i>, “Quae es, aut unde venis?” (Scene 4) • plainchant • monophonic texture • Anonymous (13th century): <i>Sumer Is Icumen In</i>, “Reading Rota” • canon • polyphonic texture • <i>ostinato</i> Introduction to Music of the Renaissance Era (ca.1450-ca.1600) • Josquin des Prez: <i>El grillo</i> • <i>frottola</i> • word painting Global Music Styles • Javanese gamelan: <i>Kaboran</i> (gamelan prawa) • gamelan • metallphones • Indian raga: “Bhopali” (evening raga) • <i>raga</i> • <i>tala</i> • sitar

(RCM, 2016e)

Given both the prominence of vocal music in KM and its pedagogical sequencing from voice to instrument, “Voices in Song” is a welcome starting point. However, the chosen repertoire does not necessarily meet KM’s “singable” criterion – despite the classification of each work as a specific vocal genre. In chronological order, the “Hallelujah Chorus” from Handel’s oratorio *Messiah* (1741), with its four-part choral setting for soprano, alto, tenor, and bass (SATB), is the most accessible. The “Queen of the Night” aria from Mozart’s opera *The Magic Flute* (1791) is the least accessible. It is written for a dramatic *coloratura* soprano with great agility and flexibility in the high upper register. Few female voices occupy this range and fewer still are capable of elaborate ornamentation with sufficient sustaining power. For young students, Mozart’s aria is aurally recognizable but orally impossible to reproduce.

Harold Arlen's (1905-1986) ballad "Over the Rainbow" is from the musical fantasy film *The Wizard of Oz* (1939). Winning an Academy Award for Best Original Song, it was sung by actress Judy Garland in her starring role as Dorothy. Although the song opens with a large interval, the ascending octave (or perfect 8th) is easily discernible and many teachers use this opening as an auditory illustration for interval-recognition training. Its singability is established by RCM's (2019) *Voice Syllabus*, where "Over the Rainbow" is categorized as a list C selection for level 6. Other practical connections include Dan Coates' intermediate-level arrangement of the song for piano, which is a popular selection in RCM's (2015c) *Piano Syllabus* for level 5. And in a more challenging arrangement by jazz pianist George Shearing (1919-2011), "Over the Rainbow" is a list D selection for level 9.

In RCM's (2016e) *Theory Syllabus*, the four historical periods that comprise the common-practice period are divided between levels 6 and 7. Bach's Invention in C Major and the first movement from his *Brandenburg Concerto No. 5* both represent genres, structures, and textures that typify Baroque music, just as the first movement of Mozart's *Eine kleine Nachtmusik* typifies Classical music with a "textbook" version of sonata form. The Invention is also a teaching piece. Initially written for harpsichord, it appears in RCM's (2015c) *Piano Syllabus* at level 7. And because the level 6 composers have been previously introduced – Bach at level 3 and Mozart at both level 2 and level 5 – there is finally the potential for reinforcement.

At level 7, the Romantic era is exemplified by Frédéric Chopin (1810-1849) and Felix Mendelssohn (1809-1847). Exhibiting nationalistic and programmatic features respectively, the chosen works are appropriately storied since extra-musical associations characterize much Romantic music. Chopin's Etude (1831), a virtuosic ARCT-level selection (RCM, 2015c), was inspired by the Russian invasion of his native Poland during the November Uprising (1830-1831).⁶¹ Mendelssohn's Overture (1826), although not initially associated with the play's performance, was written for William Shakespeare's (1564-1616) *A Midsummer Night's Dream*.

The Modern repertoire selections represent a variety of twentieth-century musical genres and styles. All three selections have been included as required works for prior advanced-level history exams: *Petrushka* (1911) for the equivalent of level 9 history (RCM, 2009); *Dripsody* (1955) for an early version of ARCT history (RCM, 1995); and *Ko-Ko* (1945) for a later ARCT

⁶¹ An *étude* is a genre designed to emphasize the technical aspects of performance. In the hands of Romantic composers such as Chopin and Franz Liszt (1811-1886), the *étude* gained concert status but retained its practice of perfecting a particular technical skill.

history equivalent (RCM, 2002). Their composers are similarly heterogeneous. Igor Stravinsky (1882-1971), widely considered to be one of the most influential twentieth-century composers, is notable for the stylistic diversity of his compositions. These include Russian nationalism, of which his ballet *Petrushka* is a prime example, neo-classicism, and serialism.⁶² Both Hugh LeCaine (1914-1977) and Edward Kennedy “Duke” Ellington (1899-1974) originate closer to home – LeCaine from Port Arthur (now Thunder Bay) in northwestern Ontario; and Ellington from Washington, D.C. Their North American roots lend an element of familiarity to their “histories” as well as a sense of national kinship.

At level 8, the focus is outward – “Expanding Musical Horizons” in both time and place. I queried the Medieval and Renaissance repertoire, since unprepared listenings to these early works are likely to “wash over” students as hearing exercises that do not support conceptual/theoretical understandings of the music. So, too, for the global music. *Kaboran* is a classical overture connected with the elaborate all-night *wayang kulit* theatre in Cirebon, an ancient cultural centre on the northern coast of Java.⁶³ Often played before the audience arrives, *Kaboran* is performed for the “entertainment of the spirits – and for the enjoyment of the gamelan musicians” (North, 2010). “Bhopali” is an evening raga by part-time Canadian resident Irshad Khan. But given the improvisatory nature of this selection, it is a singular occurrence. And without adequate knowledge of the cultural, spiritual, and emotional associations linked with the raga, I am ill-equipped to interpret this work for myself or for my students. The majority of my colleagues are similarly disadvantaged.

As it is no-doubt evident, I have some reservations about the music history component of RCM’s (2016e) rudiments curriculum. There is also a concept/fact dichotomy to consider. For instance, “Melodies may move higher or lower, or they may repeat.” is a *concept* concerning melodic contour. In contrast, “The first two pitches of ‘Yankee Doodle’ are repeated notes.” is a *fact* (Choksy, 1991). The concept statement is transferable to multiple musical settings but the fact statement is not. Thus, the gathering of surface facts about a piece of music is often an inconsequential endeavour. We, as music theory teachers, must encourage our students to

⁶² Stravinsky popularized neo-classicism, which imitates eighteenth-century genres and forms, and later adopted serialism, which extends the systematic ordering of twelve tones to parameters other than pitch – all the while projecting a “single personality” in every style he embraced (Burkholder, et al., 2014, p. 840).

⁶³ *Kulit* refers to the rawhide material, usually water buffalo, from which the shadow puppet figures are carved and punched with holes.

gather/observe historical phenomena that will support transferable generalizations – for without transferability, we do not have a secure footing on which to build subsequent teachings.

In an article that documents his personal journey toward a skills-based approach to teaching college-level music appreciation, Robin Wallace (2013) admits:

The idea that a one-semester music appreciation course should try to cover a little bit of everything was, I decided, pedagogically destructive. It was better to teach a few things in depth than to spread the net too wide. (p. 162)

For the first time since RCM's founding in 1886, the music theory curriculum provides an opportunity to completely contextualize theoretical knowledge – to bridge the gap that has traditionally separated theoretical knowledge from practical knowledge. RCM's (2016e) expanded curriculum could facilitate a theory/practice integration. By contextualizing the traditional elements of music theory with historical content, students could build constructive, functional knowledge that intrinsically combines music theory and music practice. I am convinced that a meaningful encounter with the musical literature is didactically viable, as well as both theoretically and practically valuable. But how do we, as music theory teachers, initiate these enriched musical experiences?

Fine-Tuning the Instructional Process

In October 2018, I entered the following reflection in my writing journal:

I think I may be confusing two issues: RCM's music history problem and my own teaching-music-theory-through-repertoire problem. They're obviously connected, since I'm using the history repertoire for my Listening Guides, but whose problem am I trying to solve? Good question! The answer may be both. In looking for a PhD-appropriate project, I took on a pedagogical problem that was not mine. But I suppose all research stems from a need of some sort – concrete or abstract, real or perceived. (L. L. Penny, journal entry, October 3, 2018)

Although I disagree with RCM's selection process, the chosen works constitute *required* listening for all students wishing to obtain a Comprehensive Certificate of Successful Completion from level 5 onward. If I cannot change the current syllabus requirements, perhaps I can change the way students experience the required repertoire. Perhaps I can bring these works from the instructional periphery to the centre of music theory pedagogy – where they can relinquish their decorative role and inform my teaching as well as that of my colleagues. Choksy (1999b)

considers the “peripheral” approach to be counterproductive. She explains:

To look through art music for an example of, for instance, the harmonic minor scale, is simply backward. In any core of well-chosen art music, the harmonic minor scale will appear some place. When it appears it can be studied. (p. 77)

The implication being that “everything we want to teach” may be found in a core repertoire of judiciously selected music (p. 77).

Having completed my planning, I set out to create four LGs, one for each level of RCM’s (2016e) intermediate theory curriculum (levels 5 through 8). These are modelled on the Long-Range Listening Strategies that Choksy (1981, 1999b) derived from her early observations of KM in Hungary. Intended to foster students’ understanding and enjoyment of art music, they comprise a “series of relatively short teaching segments that take place over many lessons” (1999b, p. 78), including preparatory activities as well as the listening activities themselves. As a student of Choksy’s, I wrote two such strategies: one for the fourth movement of Franz Schubert’s (1797-1828) *Trout Quintet* (Piano Quintet in A Major, D 667), and the other for *Vltava (The Moldau)* from Bedřich Smetana’s (1824-1884) set of symphonic poems *Má vlast (My Homeland)*. At the time, I sensed the potential usefulness of these lessons and filed them away – both figuratively and literally – for safe-keeping. Now, they form the core of my pedagogical approach to the musical literature.

Following her description of a representative Listening Strategy, Choksy (1999b) concludes with this paragraph:

The approach suggested here is very different from the ones commonly in use... The focus is on the music, throughout. It is better to study two works a year in this kind of depth than to listen to ten works superficially, because this analytical approach makes generalizations possible. The student who has studied Mozart’s Symphony No. 40 in G Minor, who knows the work thoroughly, can sing its themes, follow its form and its ... key changes, can then listen with much greater understanding to all Mozart and Haydn symphonies. He or she is able to transfer the knowledge acquired and, even more importantly, the appreciation that goes with the knowledge to other works in the same style and period. (p. 79)

Although my purpose was clear and a pathway chosen, there were many pedagogical hurdles to overcome. Of the four criteria that constitute a well-balanced music listening program

– composer, era, genre, and instrumentation – I forefronted era, moving backward and forward from the Classical period, while simultaneously incorporating sufficient varieties of genre and instrumentation. I chose the following repertoire from RCM’s (2016e) *Theory Syllabus*:

- level 5 – Mozart’s “Queen of the Night” Aria from *The Magic Flute*
- level 6 – Bach’s Invention in C Major, BWV 772
- level 7 – Mendelssohn’s Overture to *A Midsummer Night’s Dream*
- level 8 – Josquin’s *El grillo*

At level 5, I had no alternative because Mozart’s aria is the only Classical work on the list of required repertoire. At level 6, there are two Baroque choices: Bach’s invention and the first movement of his *Brandenburg* Concerto No. 5. Having encountered a vocal soloist and an orchestral ensemble in “Der Hölle Rache kocht in meinem Herzen” (Mozart’s aria), I selected the invention as an example of a solo keyboard work. For level 7, the Romantic repertoire includes Chopin’s “Revolutionary” Etude in C Minor and Mendelssohn’s overture. Since the *étude* was written for piano and Bach’s invention for harpsichord, I opted for an orchestral selection rather than another keyboard work, despite their stylistic diversity. Mendelssohn’s concert overture also gave me an opportunity to explore the components of sonata form, which are introduced at level 6 with the Classical repertoire. For level 8, my choice was limited to Josquin’s four-part choral *frottola* as the only Renaissance representative.

Designed to facilitate students’ understanding of the repertoire, the LGs modify aspects of KM for the teaching of music theory through art music. They comprise four to six activities, each with a clearly delineated focus. The activities are laid out on single-sided worksheets, with specific tasks to be completed during the lesson and written exercises to be assigned as homework. The teaching segments are student/teacher interactions, meant to be approximately five minutes in duration. They were intended to be introduced with preparatory activities that make conscious or reinforce theoretical concepts the students must grasp before listening to the chosen work with understanding. But once again, I could not choose preparatory repertoire that would be familiar to all students at all levels.

A compromise was necessary. I decided to bypass the first stage of KM’s instructional process. Despite this concession, my commitment to KM was undaunted. Rather than preparing relevant concept inferences with extraneous repertoire, I chose to create self-contained LGs. I embraced Choksy’s (1999b) pedagogical adaptation, viewing pre-listening tasks as “preparation” activities, the first listening as a “conscious awareness” activity, repeated listenings as

“reinforcement” activities, and creative tasks as “assessment” activities. I also accepted Choksy’s non-chronological stance that Classical music is the “easiest point from which to embark on [a] journey into music” (p. 76), since its fluid melodies, steady meters, and uncomplicated forms are most accessible. From this central point, I extended the sequence of study to include increasingly complex works from a widening historical continuum.

In the context of KM, Choksy’s (1999b) Listening Strategies are “ends” in themselves. They provide access to the “world of art music” (p. 76). This is not to say that they do not have a broader purpose. Asking, “What can be taught from this music?” Choksy replies, “*everything*” (p. 77, my emphasis). Indeed, all elements of music can be explored: rhythm, melody, harmony, texture, structure, and expression. My pedagogical aspirations lie in the outcome of this exploration, in the music theory that resides behind/beyond the listening. I believe that guided listening activities can be the “means” to an end. They can provide access to the world of music theory – with, about, in, and through art music (Cornett & Smithrim, 2001).

For this exploratory means/end purpose, I created, in the fall of 2016, the four LGs that illustrate my instructional objective. They are included as appendices:

- **Appendix 4.1** – level 5 LG for Mozart’s aria
- **Appendix 4.2** – level 6 LG for Bach’s invention
- **Appendix 4.3** – level 7 LG for Mendelssohn’s overture
- **Appendix 4.4** – level 8 LG for Josquin’s *frottola*

They represent my best attempt to bring art music to the centre of music theory pedagogy. In their creation, I endeavoured to: (1) “get inside” each piece of music to discover the music theory it holds; (2) facilitate the accessibility of this music theory; (3) establish its relevance by connecting music theory to the music it was intended to explain; and (4) teach *music*, not just music theory.

Level 5: Mozart’s Aria

Die Zauberflöte (*The Magic Flute*), K 620 is an opera in two acts by Wolfgang Amadeus Mozart (1756-1791) on a *libretto* by Emanuel Schikaneder (1751-1812). It is a *Singspiel*, literally “song-play,” which is a German-texted opera with a comic or romantic plot that includes spoken dialogue. The work premiered in Vienna on September 30, 1791 at Schikaneder’s theatre, the *Freihaus-Theater auf der Wieden*, just a few months before the composer’s premature death. “Der Hölle Rache kocht in meinem Herzen” (“The vengeance of hell boils in my heart”)

is an emotionally expressive aria for solo vocalist with orchestral accompaniment. Sung by the Queen of the Night in the opera's second act, it depicts the character's fury as she threatens her daughter Pamina with abandonment. If Pamina does not kill Sarastro, the Queen's rival, she will be her "*Tochter nimmermehr*" (ENO, 1980).

In collaboration with Schikaneder, Mozart conceived the Queen of the Night's role for his sister-in-law, Josepha Hofer (1758-1819), and wrote this demanding aria for her remarkably high tessitura. It begins in D minor – a key often associated with tragedy and prevalent in Mozart's unfinished Requiem, K 626 (Plumley, 2013). The vocal line is often chromatic, modulating to F major soon after the opening measures and covering a range of two octaves (from F₄ to F₆). It includes grace notes, rapid arpeggios, and virtuosic high notes. Undoubtedly, the gap between Mozart's aria and a typical level 5 student's musical experience is substantial. This gap, which threatens the aria's accessibility, requires an instructional bridge.

Following Choksy's (1999b) recommendation, I asked myself: "What do students need to know before listening to this work with understanding?" Music of the Classical period tends to be homophonic, melodic or singable, and predominantly diatonic. Meters are regular, forms are balanced and symmetrical, dynamics are moderate, with either sudden or gradual changes. Of these characteristic traits, the selected aria is homophonic, with a single vocal line supported by orchestra, the meter is common (4/4), and the dynamics fluctuate frequently between *forte* (loud) and *piano* (soft). However, the melody is mostly disjunct, the harmony is unsettled, and the form does not follow a standard structure. Customarily, these *un*-characteristic or exceptional traits are not recommended for study until the "norm" has been established, but in this particular piece, the exceptions are its salient features.

Aligning the Score with Examination Requirements

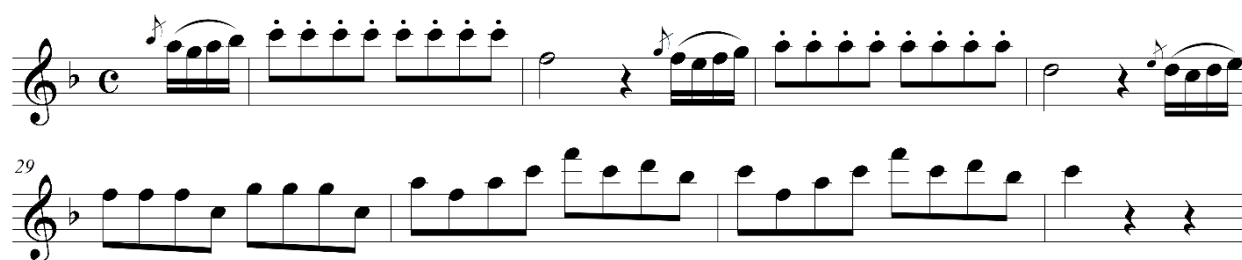
Resigned to a seemingly untenable pedagogical task, I sat with a full score of "Der Hölle Rache kocht in meinem Herzen," attempting to understand its stylistic nuances with a thorough analysis.⁶⁴ Next, I proceeded to reconcile the score's contents with the subject requirements for level 5 theory (RCM, 2016e), listing applicable topics and highlighting level-specific concepts in bold type:

⁶⁴ "Der Hölle Rache kocht in meinem Herzen" is the second of the Queen of the Night's arias. In the first, "O zittre nicht, mein lieber Sohn" ("Oh, tremble not, my dear son"), she tells Prince Tamino the misleading tale of Pamina's abduction by Sarastro and pleads with him to rescue her daughter.

- pitch and notation
 - ledger lines
 - enharmonic equivalents
 - octave transposition
- rhythm and meter
 - upbeat (anacrusis)
- intervals
 - **diatonic** and **chromatic** half steps
 - whole steps
 - major, minor, and perfect intervals (above tonic)
- scales
 - major and minor (natural, harmonic, and melodic) scales
 - relative keys
 - scales degrees: tonic, subdominant, dominant, subtonic, and leading tone
- chords and harmony
 - tonic, subdominant, and dominant triads
 - root position and **inversions**
 - **dominant 7th chords** (root position)
 - functional and root/quality chord symbols
- melody and composition
 - stable and **unstable** scale degrees
- form and analysis
 - **identification of key** (with key signature)
 - same, similar, and different phrases (a, a₁, and b)
- music terms and signs
 - *allegro*
 - common time
 - *crescendo*
 - *fermata*
 - slur (*legato*)
 - *staccato*
- music history
 - composer: Mozart
 - genre: **opera** and **aria**
 - performing forces: **soprano** and **orchestra**
 - **relationship between text and music**

Rather than focusing on the opening melody, as is generally recommended, I chose the most recognizable passage of Mozart's aria, which begins at the end of measure (m.) 24:

Figure 4.1: Mozart's "Der Hölle Rache" from *Die Zauberflöte* (mm. 24-32)



Although there are no conspicuous markers to indicate its location within the aria as a whole, the melody is both melodically and rhythmically distinct, repeating at m. 35 and again at m. 74 with a variant. However, this passage is rife with pedagogical complications: it is in F major, instead of the opening D minor; it is essentially textless; and the second phrase – beginning at the end of m. 28 – is musically unfinished. A third phrase follows but it is only three measures instead of the usual four.

Ideally, I would have liked to incorporate the surrounding text:

Figure 4.2: Mozart's "Der Hölle Rache" from *Die Zauberflöte* (mm. 20-35)

so then bist you du will mein' be mei - ne Toch - ter nim - mer -
be my daugh - ter ne - ver -

mehr;
more,

mei - ne Toch - ter nim - mer - mehr.
be my daugh - ter ne - ver - more.

While this text appears for the first time even earlier, at m. 17, the key of F major is not stable until m. 20. Even so, the melody writing component of RCM's (2016e) intermediate theory curriculum encompasses a period of two four-measure phrases. If my LGs are to be usable in an RCM setting, I must work within the confines of an eight-measure period – not the fifteen measures shown here. Consequently, I started with the excerpt shown in **Figure 4.1**.

The level 5 LG includes six activities. The first two are preparatory activities intended to be completed *before* the work's first listening which takes place in Activity #3. Although subsequent activities do not necessarily involve further listenings, a recording is required for the fifth activity's assignment. I addressed as many of the syllabus requirements as possible, endeavouring to link activities with accumulating theoretical knowledge. The relevant concepts, gathered from the preceding list, are summarized for each activity:

- Activity #1 – common time; upbeat (anacrusis); same, similar phrases (a, a₁)
- Activity #2 – identification of key (with key signature); octave transposition
- Activity #3 – Mozart; opera; aria; soprano; *legato* and *staccato*; relationship between text and music
- Activity #4 – tonic triads; root position and inversions
- Activity #5 – diatonic and chromatic half steps; whole steps; stable and unstable scale degrees; dominant 7th chords (root position)
- Activity #6 – major and minor (melodic) scales; relative keys; orchestra

In a KM context, the teacher/practitioner is unobtrusive, speaking sparingly and deliberately avoiding the usual *telling* or *explaining* behaviours. Instead, musical skills and concepts are “demonstrated by the teacher or inferred and derived by the students” from immersive musical experiences (Choksy et al., 2001, p. 138). Consequently, students derive musical concepts or infer conceptual understandings for themselves – from evidence and reasoning rather than from the teacher's definitive statements. As Choksy (1999b) attests: “Concepts cannot ... be ‘taught’” (p. 25). In my role as a music educator, I can teach musical skills, such as singing, moving, playing instruments, reading/writing, listening, and creating, but I cannot teach understanding. I *can*, however, present carefully sequenced musical experiences through which students may be led to extrapolate their own conceptual understandings about music.

Maintaining an unobtrusive teaching model in my LGs was the first of many instructional challenges. To this end, I limited the amount of introductory text, giving concept statements in short sentences, using language that is direct and uncomplicated. Each statement or set of

statements is accompanied by one or more *doing* tasks for the student. These are either analytical questions or musical/physical actions that support and strengthen the pedagogical focus. They interactively encourage the student's involvement in the learning process by presenting carefully sequenced musical experiences that promote conceptual understandings.

Negotiating the Pedagogical Details

Although my pedagogical focus emphasizes pitch content, I decided to approach Mozart's aria through rhythm, intending to help the student become familiar with the work so as to approach her/his first listening with preparatory knowledge. Carefully analyzing the eight-measure melody (see **Figure 4.1**), I noticed considerable rhythmic repetition. Reminded of a rhythm-erase game that Choksy (1999b) suggests for introducing the main theme of the Rondo in Mozart's Horn Concerto in E-flat Major, K 495, I ventured a similar activity. I laid out the rhythm, without pitch distractions, in a slightly unorthodox presentation:

Figure 4.3: Rhythmic Reduction of Mozart's "Der Hölle Rache" from *Die Zauberflöte* (mm. 24-32)

a

C

ti-ka-ti-ka ti - ti ti - ti ti - ti ti - ti too ti-ka-ti-ka

ti - ti ti - ti ti - ti ti - ti too ti-ka-ti-ka

ti - ti ti - ti ti - ti ti - ti ti - ti ti - ti ti - ti

ti - ti ti - ti ti - ti ti ta

By stacking two-measure segments vertically, I was able to align rhythms that are the same in a way that makes their "sameness" immediately obvious. I labelled the opening motive (**a**) and asked the student to label repeated (**a**) or extended (**a₁**) motives, bringing the rhythmic structure to conscious awareness. The simplicity of this structure aids the rhythm's memorization which in turn, facilitates its internalization – for a memorized rhythm is a known rhythm. The take-home

assignment places the rhythm on the staff in a more typical presentation of two four-measure phrases. This activity also introduces/reinforces melody writing terminology such as motive and phrase.

In a KM classroom, rhythms are often presented in stem notation or a type of rhythmic short-hand that dispenses with note-heads, except for half notes and whole notes. Customarily, rhythm syllables are not written, they are voiced. These syllables, which are similar to the ones used in French *solfège*, originated with the work of Emile-Joseph Chevé (1804-1864). Purposed for rhythmic reading, they express duration rather than metrical identity, allowing the chanting or speaking of rhythms – in the correct rhythm. This is impossible using note value names. For example, if the five-syllable pattern “*ta ta ti-ti ta*” is read with note values, it becomes “quar-ter note, quar-ter note, eighth note, eighth note, quar-ter note,” a five-beat or thirteen-syllable pattern that does not resemble the original rhythm whatsoever (Choksy, 1999b). In the LGs, I decided to minimize instructional elements that may be unfamiliar to RCM students or teachers. As a result, I included both note-heads and syllables in the rhythmic notation for Activity #1 (in **Figure 4.3**).

The second preparatory activity adds pitches to the given rhythm, but in a singable range an octave below Mozart’s melody:

Figure 4.4: Transposition of Mozart’s “Der Hölle Rache” from *Die Zauberflöte* (mm. 24-32)



Once again, I needed to make a decision about syllables. Recognizing the debate between an absolute system of fixed-*do* and a relative system of moveable-*do*, as well as the potential alienation of one user population or the other, RCM formally abstains from an association with either system. But KM, recognizing the educational benefits of a relative system, uses moveable-*do* solmization.

In his travels, Kodály observed the application of moveable-*do* in the training of English choristers. This system, originally developed in the eleventh century by Guido d’Arezzo (ca.990-

1050), was developed by Sarah Glover (1785-1867) and refined by John Curwen (1816-1880) in the nineteenth century. Moveable-*do* solmization associates each syllable with a scale degree rather than a specific pitch. As such, it has proven to be especially advantageous for the teaching of vocal sight-reading, particularly in the context of *a cappella* or unaccompanied singing.⁶⁵ In KM, *solfa* syllables are supported by hand signs, also credited to Curwen, as both a physical and a visual representation of intervallic relationships.

For my LGs, I adopted moveable-*do* solmization for three reasons: (1) its general acceptance in English-speaking communities; (2) its central position in KM; and (3) my own belief in its effectiveness as a teaching tool. The syllables (*do, re, mi, fa, so, la, ti*) are abbreviated to consonants (*d, r, m, f, s, l, t*) for melodic reading and writing.⁶⁶ These letters, combined with stems, assist the efficient transcription of melodic/rhythmic dictation, providing an intermediate step toward staff notation. They often distinguish a higher octave with superscripts (*d^l, r^l, m^l*) and a lower octave with subscripts (*s_l, l_l, t_l*) but again, I chose to minimize unnecessary complications.

My primary goal with Activity #2 is the melody's memorization/internalization as an aid to its transfer from unknown to known. I used the preceding activity's assignment as a jumping-off point, giving melodic contour to the static rhythm. With this separation of rhythm and melody, the student is encouraged to focus on one element at a time. Having previously established the phrase structure, it is now possible to analyze melodic markers, such as beginning, ending, highest, and lowest notes, in a tonal context. The transposition assignment moves the melody to the higher register in which it will be heard. The question – "Is it possible for you to sing the melody in the transposed register?" – promotes reflection and demonstrates the application of transposition tasks beyond extraneous exercises for examination purposes.

In every activity, I made a concerted effort to ensure student success by addressing inconsistencies or ambiguities and by anticipating challenges. Without assuming an extensive awareness of notational details, I used the writing tasks as "teachable moments." For example, in Activity #1, the eighth notes are beamed in quarter-note groupings that reinforce the meter but in

⁶⁵ KM's association with moveable-*do* is not exclusive. Fixed-*do* is utilized for advanced sight-singing of modern repertoire that involves complex modulations or ambiguous tonalities.

⁶⁶ Francophones generally use fixed-*do*, naming the notes of the C major scale with the seven syllables – but adopting the earlier *si* instead of *ti*. Anglophones use Glover's nineteenth-century conversion to *ti*, which enables abbreviation by ensuring that every syllable begins with a different letter.

Activity #2, they are beamed in half-note groupings that reflect their presentation in the score. This adjustment is indicated in the introductory text prior to the melodic excerpt. I also attempted to facilitate student success by including reminders like “Adjust the stem directions, if necessary.” – to prevent common errors and misunderstandings.

Directing the student’s attention to the transposed melody from her/his previous assignment, Activity #3 contains the first formal listening to Mozart’s aria. Since the melody’s register now corresponds with the score, details of articulation can complete the notation. I added grace-note embellishments and asked for *legato/staccato* markings to be supplied by the student. But rather than requesting definitions of these terms, I questioned their specific performance applications: “How should these notes be sung?” In so doing, I created an opportunity to discern the relevance of articulations by discussing the relationship between text and music – one of RCM’s specific examination requirements. This musical connection is imperative since much of the activity, of necessity, is devoted to historical information.

The presentation portion of Activity #3 briefly references the composer, opera, aria, character, and voice type. It also extends to the student’s individual listening experience by asking for the performer’s name. A short description of the scene prefaces the only open-ended questions in the level 5 LG: “How do you think the queen feels?” and “How does Mozart show her feelings in the music?” Although I generally avoid such questions, they are included in RCM’s (2016a, 2016b, 2016c, 2016d) *Celebrate Theory* publications. In the level 5 book, the following request concludes the section on Mozart’s aria: “Describe your experience listening to this work. What did you like best about it?” (RCM, 2016a, p. 66). Many students have difficulty or are uncomfortable with this personal reflection.

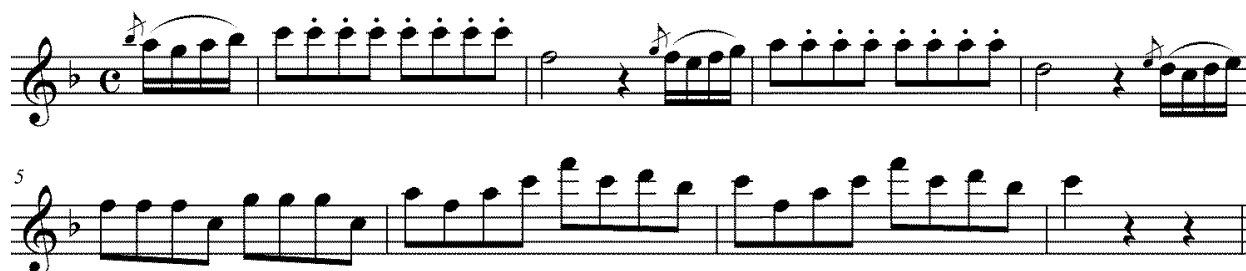
I am not opposed to reflective questioning *per se*. I am opposed to *unprepared* reflective questioning. Accordingly, I narrowed my questions, hoping that the experiences leading up to them would provide the student with the context and the vocabulary he/she requires to answer with confidence. The take-home assignment suggests watching an animated plot summary (MPR, 2014), which offers additional context for the aria as well as an audio clip of the highlighted melody. This activity is followed by a matching task that supports the student’s comprehension of the plot and a translating task that supplies the English version of the aria’s title. The translation may be found in *Celebrate Theory* (2016a), in the animation, or in a readily available translation application.

With the preparation activities and the first listening completed, the student is ready to delve into specific theoretical elements derived from the melody. In Activity #2, the student identified the significant melodic markers, or beginning, ending, highest, and lowest notes, as *mi*, *so*, *do*, and *so* respectively. These notes are members of the tonic triad. Indeed, they comprise most of the melody. The arpeggiations in the second phrase also outline this triad. My first impulse was to create a make conscious lesson around the tonic triad:

Figure 4.5: Proposed Content for Activity #4 of Mozart’s “Der Hölle Rache” from *Die Zauberflöte*

Mozart’s melody is based on a triad. The three notes of a triad are separated by thirds.

- Circle the first note in each of measures 5, 6, and 7. Measure numbers are counted from the first complete measure.



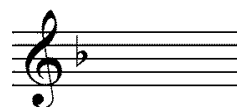
This is the tonic triad of F major in broken form. It is built on the first note of the scale.

- Write the circled notes on the first staff. Use whole notes.
- Transpose the circled notes down one octave on the second staff.



Triads may also be written in solid or blocked form.

- Write the transposed triad as a stack of harmonic thirds.



The lowest note of a triad is the root. The highest note is the fifth. The middle note is the third. What is the numerical size of the interval from the root to the fifth? _____

What is the size of the interval from the root to the third? _____

- Complete the following chart for the tonic triad of F major.

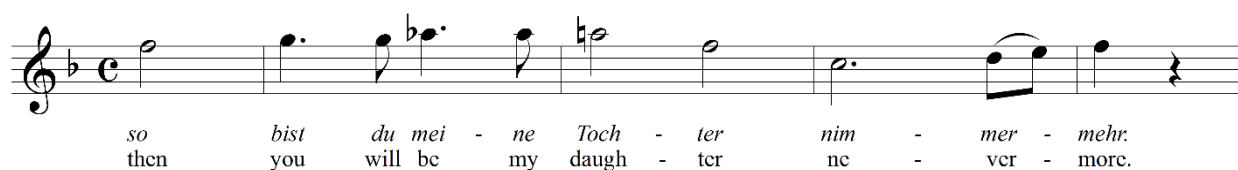
	<i>solfa</i> syllables	letter names
fifth	_____	_____
third	_____	_____
root	_____	_____

I soon realized that my impulse was inappropriate since tonic triads, introduced at the preparatory level, are well-known at level 5. Triad inversions, however, are new. The first note in each of measures (mm.) 29, 30, and 31 generates the tonic triad of F major in broken form (see **Figure 4.1**).⁶⁷ Drawing attention to these notes, I asked for them to be extracted from the excerpt and placed on a separate staff. Once the triad has been derived from the melody, we can proceed with our theoretical experiments, observing and recording the results. Consequently, the broken triad is rewritten as a solid/blocked triad in root position, then re-organized in first and second inversions (refer to Activity #4 in **Appendix 4.1**).

Wanting to reinforce the consistent labelling of triad members despite their positioning, I vertically stacked the words “root,” “third,” and “fifth” according to each presentation. These labels, which correspond to numeric interval measurements above the root or fundamental, were introduced at level 1. Assuming them to be known, I asked for the tonic triad’s *solfa* equivalents (*do, mi, so*). Relating these back to the melodic markers from Activity #2, I asked for the same notes (beginning, ending, highest, and lowest) to be labelled as triad members – third, fifth, root, and fifth. The concluding assignment connects this triad to the following activity with a four-measure melody-writing task.

Activity #5 is dedicated to the third phrase of Mozart’s melody since the second phrase is tonally unfinished. The melody-writing assignment from Activity #4 included a given rhythm that was taken from the second iteration of the third phrase:

Figure 4.6: Mozart’s “Der Hölle Rache” from *Die Zauberflöte* (mm. 43-47)



Because the parameters of the assignment limited the available pitch content to the notes of the F major triad, the students’ melodies will be unavoidably angular. This result opens a space to discuss the compositional technique of “smoothing out” the melody with non-chord passing

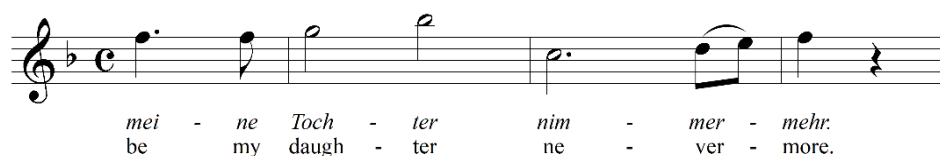
⁶⁷ In the student’s copy of **Figure 4.1**, on page 4 of the level 5 LG (**Appendix 4.1**), the measure numbers are given as if this excerpt was taken from the beginning of the aria. My deviation from the printed score corresponds with analysis exercises that typically present the opening measures of a given work. It also isolates the anacrusis or upbeat as a singular complication, unobscured by measure numbers.

tones. While this terminology is not introduced until level 7, I can prepare for its introduction by describing the phenomenon without actually labelling it: “Most melodies use notes from the scale to fill the skips or leaps between triad members.”

My pedagogical difficulty with this phrase involves Mozart’s use of a chromatic pitch (A-flat) that does not belong to the scale of F major. Confronting the problem, I created an interval exercise around whole steps, diatonic half steps, and chromatic half steps, utilizing most of the melody notes. My derivation of this exercise from the melody itself illustrates the practical application of interval measurement tasks. The reason I included the third phrase at all relates to melody writing and the understanding of stable/unstable pitch endings as preparation for the future disclosure of cadences.

However, I also needed to address the three-measure phrase. Besides its condensed length, the harmonic content of this phrase is inconsistent with the four-measure version. Instead of the descending tonic triad from m. 45 to m. 46 – made prominent with longer note values – the condensed melody arpeggiates a non-linear dominant 7th chord from m. 33 to m. 34:

Figure 4.7: Mozart’s “Der Hölle Rache” from *Die Zauberflöte* (mm. 32-35)



Since the dominant 7th chord is a new theoretical element at level 5, this shortened phrase proved to be quite valuable. But because the chord’s presentation is incomplete, I decided on a more traditional teaching approach. In the assignment for Activity #5, I asked for an intellectual, albeit tonally contextual, derivation of the dominant 7th chord in F major. Equipped with this information, the student is asked to aurally complete the melody based on her/his listening to Mozart’s version.

Although roughly two-thirds of the aria is in the key of F major, it begins and ends in D minor. Sharing the same key signature (B-flat), these relative keys use the same pitches, with some alterations, but the tonic or tonal centre is shifted. Recognizing their sameness, KM uses *la*-based minor solmization in order to maintain consistent interval relationships between

syllables. Whole steps and half steps, shown in **Table 4.5** with more or less separation, are both aurally and visually evident:

Table 4.5: Comparison of Solmization for Major and *la*-Based Minor Scales

Relative Scales: F Major and D Minor (Natural Form)

major		F		G		A	B $\flat$	C	D	E	F
		<i>d</i>		<i>r</i>		<i>m</i>	<i>f</i>	<i>s</i>	<i>l</i>	<i>t</i>	<i>d</i>
minor	D	E	F	G	A	B $\flat$	C	D			
	<i>l</i>	<i>t</i>	<i>d</i>	<i>r</i>	<i>m</i>	<i>f</i>	<i>s</i>	<i>l</i>			

Altered notes for harmonic or melodic minor scales use altered syllables, as shown in **Table 4.6**:

Table 4.6: Chromatic Alterations in Solmization for *la*-Based Minor Scales

D Minor Scales: Natural, Harmonic, and Melodic Forms (Ascending)

natural	D	E	F	G	A	B $\flat$	C	D
	<i>l</i>	<i>t</i>	<i>d</i>	<i>r</i>	<i>m</i>	<i>f</i>	<i>s</i>	<i>l</i>
harmonic	D	E	F	G	A	B $\flat$	C $\sharp$	D
	<i>l</i>	<i>t</i>	<i>d</i>	<i>r</i>	<i>m</i>	<i>f</i>	<i>si</i>	<i>l</i>
melodic	D	E	F	G	A	B	C $\sharp$	D
	<i>l</i>	<i>t</i>	<i>d</i>	<i>r</i>	<i>m</i>	<i>fi</i>	<i>si</i>	<i>l</i>

Comparing the placement of *so* and *si* in relation to *la*, the difference between the subtonic (C) and the leading tone (C-sharp) is also reinforced – the subtonic being a whole step below the tonic and the leading tone, a half step below.

Once the new key has been established and the pertinent *solfa* introduced, the aria's opening melody is given in Activity #6 as a reading exercise:

Figure 4.8: Mozart's "Der Hölle Rache" from *Die Zauberflöte* (mm. 2-6)



I used only one four-measure phrase since Mozart begins to modulate away from D minor almost immediately. Like the passage from mm. 24-32, this melody is largely triadic, providing an opportunity to transfer the tonic triad and the dominant 7th chord to another key context.

Partially influenced by RCM's (2016a) inclusion of mm. 1-8 in *Celebrate Theory*, most of the content for this last activity is aimed at circumventing the erroneous conclusion that the aria is in F major. I was also intent on addressing the accompaniment. RCM's excerpt is understandably given as a piano reduction because the presentation of an orchestral eleven-staff system is prohibitive, both practically and pedagogically. Similarly limited, I chose to reinforce the level 4 music history component, which focuses on families of orchestral instruments, as an encouragement for both the student and the teacher to explore the full score for Mozart's aria.

Finally, wishing to widen the constraints imposed by RCM's examination requirements, I decided to conclude Activity #6 with a challenge question: "What musical mistake is made by the Queen of the Night at the end of her aria?" The prominence of masonic symbology in *Die Zauberflöte* is widely accepted since both Mozart and Schikaneder were Freemasons (Chailley, 1971; Gammond, 1979). But David J. Buch (2004) refutes the pervasiveness of this influence, citing fairy-tale *Singspiel* or *Märchenoper* as the historical/theatrical context for the opera. Indeed, Peter Gammond (1979) quotes a 1948 publication that describes it as "no doubt the most fantastic mixture of the sublime and the ridiculous ever put on the stage" (p. 10). While freemasonry and fairy-tale symbolism are far beyond the experience of a typical level 5 student, the emotional content of the chosen aria is surely accessible.

The Queen is furious. Mozart expresses her anger in an extreme tessitura with wide intervals, ascending arpeggios, and prolonged *staccato* vocalises supported by constant orchestral motion and the absence of formal repetition (Chailley, 1971). According to Gammond (1979), the "venomous" character of the aria is convincingly depicted with a "dagger-like" delivery of the repeated notes (p. 81), included in **Figure 4.1**. For me, the Queen's emotional distress is evident in her musical mistakes. Beyond rational thought, she seems to forget or ignore melodic/harmonic conventions. The aria ends abruptly, after a chromatic Neapolitan (E-flat major) chord resolves to the dominant. But in her tempestuousness, the Queen does not complete the expected authentic cadence. She exits the stage in a clap of thunder while the orchestra brings her aria to its "brutal, raging termination" (Chailley, 1971, p. 252).

Level 6: Bach's Invention

The inventions and sinfonias, commonly known as two-part and three-part inventions, were written by Johann Sebastian Bach (1685-1750) for his oldest son Wilhelm Friedemann Bach (1710-1784). Begun in 1720, they were unpublished during the elder Bach's lifetime. A complete manuscript, the *Autograph of 1723*, resides in the Berlin State Library and a facsimile of its title page appears in Willard A. Palmer's (1991) modern edition with the following translation (p. 1):

Sincere Instruction

in which lovers of keyboard music, and especially those desiring to learn to play, are shown a clear way not only (1) to learn to play cleanly in two parts, but also after further progress (2) to proceed correctly and well with three obligato parts, and at the same time not only to compose good inventions, but to develop them well; but most of all to achieve a cantabile style in playing, and to acquire a taste for elements of composition.

Prepared by
Joh. Seb. Bach,
Chapel Master to His Serene Highness,
the Prince of Anhalt-Cöthen

Unlike *Das wohltemperierte Klavier* (*The Well-Tempered Clavier*), in which Bach embraced the newly-developed equal temperament tuning system, his inventions and sinfonias were intended to be playable on keyboard instruments tuned with the older *meantone* temperament. Both volumes of *The Well-Tempered Clavier* contain 24 preludes and fugues, one in each of the twelve major and minor keys, arranged chromatically in ascending order. But in a meantone system, sharps and flats are not enharmonically equivalent – meaning that C-sharp and D-flat, which are produced by depressing the same key, do not sound the same. Consequently, there are only fifteen inventions and fifteen sinfonias arranged in the following order (C = C major, Cm = C minor, etc.):

C Cm D Dm E-flat E Em F Fm G Gm A Am B-flat Bm

With two exceptions (E major and F minor), the resulting key signatures use a maximum of three sharps or flats. According to Palmer (1991), the character of F minor in a meantone temperament is “considerably more ‘doleful’” than its equal temperament counterpart because there was “no true A-flat available” (p. 2). Nor was there a true D-sharp.

Bach's Invention No. 1 in C Major, BWV 772 is uniformly acceptable in either tuning system and although it was likely written for harpsichord, it is easily playable on a modern piano.⁶⁸ But what do students need to know before listening to this work with understanding? Music of the Baroque period tends to be melodic, predominantly diatonic, and polyphonic, with two or more melodies sounding simultaneously. Rhythms are often motoric, forms are repetitive, and dynamics are generally constant, excepting terraced dynamics that change suddenly from one level to another. Baroque music also tends to express a single affect, emotion, or mood in each piece/movement. Bach's invention conforms to every one of these characteristic traits while impressively displaying the composer's contrapuntal genius.

Aligning the Score with Examination Requirements

Utilizing the level 5 LG as a template, I enthusiastically immersed myself in the score for Bach's Invention No. 1 in C Major. Finding contrapuntal manipulations of the opening motive abundantly represented, I examined the score's contents in relation to the subject requirements for level 6 theory (RCM, 2016e). Applicable topics are listed below, with level-specific concepts highlighted in bold type:

- pitch and notation
 - transposition up by **any** interval (major keys)
- rhythm and meter
 - **thirty-second** notes and rests
- intervals
 - major, minor, perfect, **augmented**, and **diminished** intervals (above **any** note)
- scales
 - major and minor (natural, harmonic, and melodic)
 - relative and parallel keys
 - scales degrees: tonic, **supertonic**, **mediant**, subdominant, dominant, **submediant**, subtonic, and leading tone
- chords and harmony
 - major and minor triads in **major** and **minor (harmonic) scales**
 - dominant 7th chords (root position)
 - **close** and **open position**
 - functional or root/quality chord symbols for **implied harmonies** (I/i, IV/iv, and V)

⁶⁸ In the Baroque period, the German "*Klavier*" (English "*Clavier*") was a generic term for keyboard. It indicated a variety of stringed keyboard instruments, including the harpsichord, clavichord, and fortepiano, in "contradistinction to the organ" (Randel, 1986, p. 176).

- melody and composition
 - antecedent and consequent phrase pairs (parallel period) **given first two measures**
- form and analysis
 - identification of key (with or **without** key signature)
- music terms and signs
 - *fermata*
- music history
 - composer: Bach
 - genre: **invention**
 - performing forces: **harpsichord**
 - **associated style traits: Baroque, polyphonic texture**, motive, and sequence

Before proceeding with the listening activities, I needed to determine the exact boundaries of the invention's opening motive. In *Celebrate Theory* (RCM, 2016b), it is identified as a seven-note motive but I objected to the ending of this shorter motive on the weakest portion of the beat – without a cadence. And from my analysis, I recognized statements or manipulations of an eight-note motive, isolated by rests before and after, from measures 7 to 10. Therefore, after much deliberation, I decided to adopt the longer motive:

Figure 4.9: Opening Motive of Bach's Invention No. 1 in C Major (m. 1)



Although I remain firmly committed to my decision, the eight-note motive presented a distinct set of challenges because the last note, despite its rhythmic consistency, is melodically *in*-consistent.

The level 6 LG contains four activities. I fully intended to include preparatory activities, as I had done for level 5, but the brevity of the motive made extensive preparation unnecessary. The first three activities involve directed listening experiences and the fourth, an audio/visual interaction. Since the score contains only 22 measures, it is reproduced in its entirety on pages 5 and 6 of the LG (see **Appendix 4.2**). Beginning with the second activity, students are instructed to use coloured highlighter pens to identify contrapuntal manipulations of the opening motive directly on the score provided. This reproduction is intended to limit annotations or visual distractions on students' performance scores, if they should happen to have them.

Much of the learning derived from Bach's invention is focused on the compositional techniques associated with polyphonic textures. The theoretical concepts I gathered from the preceding requirements are addressed in passing – as intermediate steps toward the understanding of these techniques. In the *Theory Syllabus* (RCM, 2016e), *motive* and *sequence* are the only required terms beyond *invention* but in *Celebrate Theory* (RCM, 2016b), the discussion extends to *imitation* and *inversion*. My LG extends this analytical discussion even further by including *fragmentation* and *augmentation*. The pertinent concepts are summarized for each activity:

- Activity #1 – Bach; invention; motive; transposition (major keys); identification of key (with key signature); perfect intervals
- Activity #2 – stable and unstable scale degrees; functional chord symbols for implied harmonies (I); major and minor intervals; major and minor (melodic) scales
- Activity #3 – inversion; counterpoint
- Activity #4 – imitation; sequence; fragmentation; augmentation; polyphonic texture

While I was eager to create listening experiences for Bach's invention that were consistent with those for Mozart's aria, I found that I could not. Both works are distinguished by the very criteria I utilized in their choosing – composer, era, genre, and instrumentation. Consequently, with few common elements, my theoretical exploration of the invention was dictated by the piece itself, not by my pre-suppositions. Unlike the aria, it required a much closer, more detailed analysis. Although the LGs for both works involve key identifications, major/minor scales, and stable/unstable scale degrees, none of these recognition tasks are any more complex at level 6 than they were at level 5. The only concept I revisited with increased complexity is transposition, progressing from the movement of a melody/motive by one octave to more complicated movements by any interval within an octave. This manipulating of the motive led to other manipulations characteristic of contrapuntal works, such as imitation and sequence, inversion, fragmentation, and augmentation.

An additional consideration for the level 6 LG is the playability of Bach's inventions. Before their appearance in the final *Autograph of 1723*, all fifteen inventions were contained in the *Clavier-Büchlein vor Wilhelm Friedemann Bach* – a manuscript intended as a music instruction book for Bach's son and probably for his younger children as well. Thus, the inventions were written as both keyboard exercises and composition exercises. Invention No. 1 in C Major is listed in RCM's *Piano Syllabus* (2015c) with the Baroque repertoire at level 7. Its

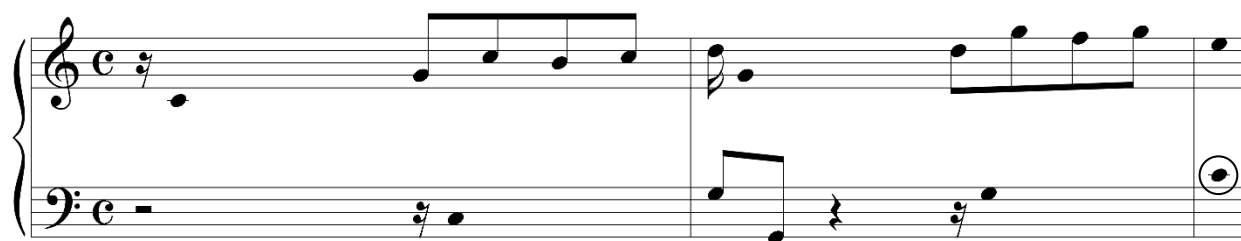
inclusion in the *Theory Syllabus* (RCM, 2016e) at level 6 allows for a pre-acquaintance with the work prior to its potential performance at this later level.

Negotiating the Pedagogical Details

A motive, as a distinct melodic/rhythmic pattern, is often used as a compositional building block. In Bach's Invention No. 1 in C Major, the eight-note motive (see **Figure 4.9**), which is stated at the outset, becomes the source of virtually all subsequent material. My annotated score, which contains markings beyond those required by the LG activities, is included as **Appendix 4.5**. While the motive's rhythm is somewhat non-descript, its melody or melodic contour is unique. Consistent with KM's approach, my first objective with Activity #1 was the memorization of this motive, achieved through the vocalization of *solfa* syllables provided by the student; at level 5, these syllables were provided by me. Once the motive is memorized, the student can listen for its prevalence in the invention. At this early stage, I wanted only to establish that the motive can be heard throughout the work and that it is not always the same.

Next, I created a transposition task as the first of many motivic manipulations. In moving the motive up by the interval of a perfect 5th, the student is following Bach's compositional plan. Since standard transposition exercises involve a change of key, I asked for the new key signature to be supplied – despite the fact that it does not affect any of the pitches in the transposed motive. As a take-home assignment, the student is directed to complete the first two measures of Bach's invention by writing the motive and its perfect-5th transposition on both treble and bass staves, using the given starting/ending pitches as guides:

Figure 4.10: Motives and Transposed Motives of Bach's Invention No. 1 in C Major (mm. 1-3)



Two problems presented themselves in Activity #1: first, the possibility that transposed motives remain in the original key; and second, the probability that transposed motives are

frequently altered for harmonic clarity. Both needed to be addressed in Activity #2. Regarding the former, I invited the student to label the transposed motive with *solfa* abbreviations in G-*do* as well as in C-*do*. By singing the motive with both sets of syllables, its sameness can be ascertained in both contexts. But the latter problem required a more sophisticated solution. In the previous activity's assignment, I circled the final note on the bass staff because it does not accurately fit the transposition. The "corrected" note appears in Activity #2, along with an inquiry about its stability. Once D is established as an unstable pitch (see the transposed motive on the treble staff in **Figure 4.10**), the altered C is given harmonic purpose and the implied harmony on the downbeat of m. 3 can be identified.

The recognition of this altered motive facilitates the analysis of all subsequent motives. Following a second listening that includes a simultaneous reading of the score, the student is instructed to highlight eighteen complete statements or transpositions of the motive. The rhythmic importance of the ending note is established and the assignment queries its various alterations. Of the eighteen motives highlighted, only five end with the ascending perfect 5th of the original motive. Three end with the perfect 4th that concludes **Figure 4.10**. Six major 2nds and three minor 2nds account for most of the remainder, while a single perfect octave (8th) completes the list. Just one transposition alters the shape or contour of the motive by ending with a descending minor 2nd on the downbeat of m. 8.

Along with its multiple endings, I directed the student's attention to the motive's assorted beginnings. These include all the pitches of the C major scale except the subdominant (F) and the leading tone (B), forming a major pentatonic scale. Referring back to the "possibility that transposed motives remain in the original key," there is a second possibility in that transposed motives may modulate to *new* keys. Five of the eighteen motives contain accidentals that do not belong to the key of C major. A strong authentic cadence confirms G major at m. 7, suggesting a structural division between **A** and **B** sections, and another confirms A minor at m. 15, beginning a third **C** section – see **Appendix 4.5**. While I find these underlying structural details fascinating, they are likely too subtle for my target audience. As a result, I opted for a "treasure hunt" that locates, in m. 13, a transposed motive on the dominant of A minor, which uses the scale's melodic form.

In Activity #3, the compositional technique of inversion is introduced. Summarizing the fundamental attributes of transposition as a melodic/motivic statement of different pitches with

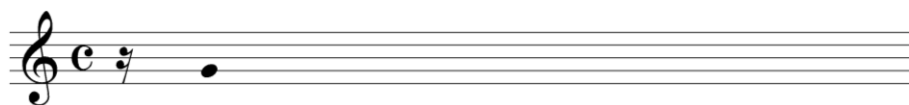
the same contour, I presented inversion as the opposite – a statement of the same pitches with a different contour. This approach offers a connective thread from one topic to the next. Of course, the inversion technique is more precise than my generalization implies because the resulting contour is *specifically* different. It requires a mirrored or upside-down version of the motive that may or may not involve the same pitches. But rather than simply presenting the motive's inversion as a finished product, I outlined a series of deliberate tasks that enable the student to derive her/his own inverted motive:

Figure 4.11: Derivation of Inverted Motive for Activity #3 of Bach's Invention No. 1 in C Major

- Analyze the original motive from Bach's invention. Label the direction and interval (size only) between each pair of notes.



- Invert the motive by changing directions. Keep the numerical intervals the same. Use the given note as your starting pitch.
- Sing the inverted motive with *solfa* syllables in C-do.



This derivation process is an essential aspect of KM. It allows the student to participate in her/his learning as a *doer* instead of a *receiver*. It also encourages a sense of ownership and may spark an interest in further explorations. The inverted motive derived by the student appears on the lower staff at m. 9, but with an altered ending. Indeed, all inversions and transposed inversions use major- or minor-2nd endings. To reinforce the learning from Activity #2 – that transpositions may modulate to new keys – this same concept is applied to transposed inversions since eight of the nineteen complete inversions contain accidentals that do not belong to C major. The take-home assignment asks for an inverted transposition that *starts* with an accidental, unlike the transpositions from the previous assignment. There are two such inversions, in measures 11

and 21, but they are identical, despite their differing placements on the lower staff and the upper staff, respectively.

Preparing for the discussion of imitation in the next activity, the assignment's focus narrows to mm. 9-10. These measures contain four successive statements of the inverted motive arranged imitatively in a sequence of ascending 5ths. While this analysis is factual, its language is much more appropriate for level 10 harmony and counterpoint, where diatonic sequences are studied in depth. At level 6, the analysis is excessively complicated and threatens the student's understanding of *sequence* by using the word in a harmonic context rather than the known melodic context. But by utilizing appropriate language, I can lead the student through these two measures in readiness for future learnings – a preparatory process Bruner (1966) describes as the “mastery of those simpler skills that permit one to reach higher skills” (p. 29).

From the student, I derived the interval separating the first two inversions (in m. 9) and the last two inversions (in m. 10). This is a relatively straightforward task because the second inversion in each pair is a perfect 5th higher than the first, although the change of clef on the lower staff in m. 9 requires observation. The interval separating the middle inversions, however, is more difficult to determine. It is a descending perfect 4th that needs to be inverted before the ascending pattern becomes evident. Since this conclusion is beyond the scope of RCM's (2016e) level 6 curriculum, I asked the student to extract the starting pitches from the score and to arrange them on the worksheet in the order of their appearance. In this unencumbered presentation, the perfect 5th is solvable and the sequential pattern is made more obvious. The pattern is not labelled but the student may notice that all the inversions are separated by perfect 5ths. If so, my objective has been met. If not, there will be many more such patterns to be detected. And if a “solving” process has been established for the future, so much the better.

In RCM's (2016e) *Theory Syllabus*, the term *motive* is introduced in the melody writing stream at level 1. *Sequence* appears in the music history stream at level 6, although the concept is used in *Celebrate Theory* from level 2 onward. At level 6, it is defined as a motive that “repeat[s] at a higher or lower pitch in the same voice” or part (RCM, 2016b, p. 75). Imitation repeats the motive in a *different* part. It is my experience that many students confuse the concepts of imitation and sequence. Therefore, the matching exercise at the beginning of Activity #4 is designed to elucidate the matter, with assistance from the teacher. By this stage, the student's

score will be highlighted with two colours – one for motives and one for inversions. These visual clues will aid the identification of imitations and/or sequences from the given descriptions.

To expand the student's analysis of Bach's invention, I decided to address the motive's accompaniment. It is not always consistent but there are patterns to be discerned nonetheless. The discussion requires further contrapuntal manipulations: first, the fragmentation of the motive; and second, the augmentation of the fragment. Once again, I had the student derive the augmented fragment for herself/himself. **Figure 4.12** shows a completed version of the exercise:

Figure 4.12: Derivation of Augmented Fragment for Activity #4 of Bach's Invention No. 1 in C Major

- Write the first four notes of Bach's original motive from memory. Use the first staff.
- Rewrite these same pitches on the second staff with longer note values. Use eighth notes.



The term *counterpoint*, from the Latin *punctu contra punctum*, meaning point against point, indicates a polyphonic texture that weaves together two or more melodic lines. The assignment for Activity #4 is designed to explore this texture. Although the augmentation is essentially a series of four ascending eighth notes, its rhythmic placement coincides with the motive's since they both cadence or conclude on the same beat. However, augmented fragments accompany inverted motives while descending or inverted augmentations accompany the motives themselves, but only in the final section. The student is invited to notice these details by answering specific questions. In addition, all augmentations or inverted augmentations appear on the lower staff, excepting those in mm. 11-12. This placement is the source of my challenge question: "What kind of counterpoint does Bach use to exchange the parts in measures 3-4 and measures 11-12?" This exchange – in which the higher part becomes the lower part and the lower part becomes the higher part – is known as invertible counterpoint.

Wishing to explore an alternative listening/analyzing experience, I included a link to a computerized analysis of Bach's Invention No. 1 in C Major by José Rodríguez Alvira (2005). In this aural/visual presentation, which is found on a music theory website called *teoría*, Alvira constructs the invention's score. Using a graphic image of the motive, he illustrates the derivation of each contrapuntal manipulation. As these derivations are placed in numbered

measures, pre-set audio clips connect the notational symbols with the sounds they represent. Once the entire score has been assembled, the invention is played without interruption. The instrumentation – acoustic or synthesized – is not specified, but the resulting sound resembles a harpsichord.

Alvira's (2005) analysis, which proceeds without comment or explanation, may be supplemented with a more detailed exploration of Bach's score. This later analysis (Alvira, 2015) is offered in five segments: first measures, measures 3-6, measures 7-8, measures 9-12, and final measures. Alvira uses the same graphic image to animate the motive in imitation, inversion, augmentation, sequence, and invertible counterpoint. Interactive audio icons allow the student to engage these contrapuntal manipulations, to aurally recognize them, and to compare their interactions in mm. 3-4, mm. 7-8, and mm. 19-20. A *coda* summarizes the invention's contrapuntal techniques and its harmonic plan with links to pertinent terminology. Another electronic analysis of Bach's Invention No. 1 in C Major (Solomon, 2002) informed the creation of my level 6 LG but it is no longer available on-line.

Level 7: Mendelssohn's Overture

On November 19, 1826, seventeen-year-old Felix Mendelssohn (1809-1847) and his older sister Fanny Mendelssohn Hensel (1805-1847) performed the Overture to *A Midsummer Night's Dream*, op. 21 as a four-hand piano duet at their family home in Berlin. The orchestral version, conducted by Carl Loewe (1796-1869), premiered on February 20, 1827 in Stettin – capital of the Prussian province of Pomerania, now Szczecin, Poland. It is unclear whether the duet was an arrangement of the orchestration or whether it pre-dates the orchestral version (Hinson & Nelson, 2013). Either way, the overture was inspired by the composer's reading of William Shakespeare's (1564-1616) play of the same name in a German translation by August Wilhelm Schlegel (1767-1845) and Johann Ludwig Tieck (1773-1853).

W. Gillies Whittaker (1939) describes Mendelssohn's overture as a "perfect piece of music, so original in conception, so remarkably novel in scoring, so completely representative of every phase of the play" (p. i). In 1842, King Friedrich Wilhelm IV of Prussia commissioned Mendelssohn to compose incidental music as accompaniment for Shakespeare's drama. The earlier overture (op. 21) was incorporated into the later, larger work (op. 61). Its motives were distributed throughout, overtly divulging Mendelssohn's original descriptive intentions. The

incidental music was first performed with a production of *A Midsummer Night's Dream* at the *Neue Palais* in Potsdam on October 18, 1843 (Whittaker, 1939).

While Romantic in character, Mendelssohn's overture is Classical in structure. Initially conceived as a freestanding concert overture, independent of the play's performance, it is a fine example of Romanticism in its programmatic depiction of Shakespeare's comedy. Its Classicism is conveyed by the organization of themes into an eighteenth-century sonata form that consists of three main sections: exposition, development, and recapitulation. In the exposition, three principal themes are stated, representing the fairies, the young lovers, and the clowns. These are varied in the development section and restated in the recapitulation. The work is also notable for its instrumental effects, emulating the fairies' fluttering wings, the clowns' rustic dance, the donkey's braying, and other elements of the play. These effects are thought to have been influenced by Adolf Bernhard Marx (1795-1866) who was a music critic, composer, and friend of Mendelssohn's (Hinson & Nelson, 2013).

Given the overture's imaginative appeal, what do students need to know before listening with understanding? Music of the Romantic period tends to be homophonic, melodic or lyrical, and often chromatic. Rhythms are varied and flexible, with frequent indications of *tempo rubato* (robbed time), forms are loosely defined and sometimes dependent on extra-musical associations, dynamics are wide-ranging and often abruptly contrasting. In an era that valued freedom of expression above all, there was an increasing middle-class interest in public concerts and concert venues. The Industrial Revolution enabled the development of cheaper, more responsive instruments. As a result, the orchestra increased in size, adding wind instruments, percussion, and a larger string section. Of these characteristic traits, only the form of Mendelssohn's overture is *un*-characteristic, although it is typical of the concert overture genre. But Mendelssohn modifies the Classical sonata form, particularly its key structures, for his own descriptive purpose.

Aligning the Score with Examination Requirements

With disparate LGs as models, I approached the orchestral score for Mendelssohn's Overture to *A Midsummer Night's Dream* with an open mind. However, in the end, I had few options. It was apparent from the scope and size of the movement that the listening activities needed to be structural. Reconciled to this less comprehensive analysis, I scrutinized the score in

search of the subject requirements for level 7 theory (RCM, 2016e). Applicable topics are listed below, with level-specific concepts highlighted in bold type:

- pitch and notation
 - transposition up or **down** by any interval (major and minor keys)
- rhythm and meter
 - **double** dotted notes and rests
 - **irregular groupings** (triplets)
- intervals
 - all intervals and inversions above or **below** any note
- scales
 - **chromatic**, **whole-tone**, and **octatonic** scales
 - **major** and **minor pentatonic** scales
- chords and harmony
 - triads built on **any** scale degree (major and minor scales)
 - dominant 7th chords (**all** inversions)
 - **leading-tone diminished 7th chords** in minor keys (root position)
 - functional and root/quality chord symbols
 - **authentic** and **half cadences** in major and minor keys (keyboard style)
- melody and composition
 - **passing** and **neighbor tones** (unaccented)
 - **contrasting** periods
- form and analysis
 - implied harmonies of **one chord per measure** (I/i, IV/iv, and V)
- music terms and signs
 - *più, sempre*
 - **tutti** (div., unis.)
 - *arco, pizzicato, ritenuto* (level 8)
- music history
 - composer: **Mendelssohn**
 - genre: **concert overture**
 - instrumentation: orchestra
 - associated style traits: **program music**

As I created the level 7 LG, I struggled with my conscience. Pedagogically, I am dedicated to the philosophical principles of KM, but I am also influenced by the utilitarian practices of RCM. In my search for a compromise, I sacrificed – in part – two significant precepts of KM: (1) its basis in singing, and (2) its pursuit of depth over breadth. Regarding the latter, the considerable length of Mendelssohn’s overture, which requires more than ten minutes to perform, is prohibitive. Either a small segment of the work becomes well known or a larger segment becomes less well known. Having decided to focus on the structure of the overture, which is

closely aligned with its programmatic content, I chose to address themes in relation to characters, pertinent details of orchestration, and accessible elements of harmony. Regarding KM's emphasis on singing, the orchestral configuration of Mendelssohn's overture is not especially conducive to vocal renderings.

The LG for the Overture to *A Midsummer Night's Dream* contains six activities. The first two are preparatory activities designed to precede the first listening in Activity #3. They provide an analytical/theoretical encounter with the four prolonged chords that comprise the overture's introduction. Activities #3, #4, and #5 present the exposition's three principal themes as well as the transition theme. Given the work's sizeable length, only brief listenings to the opening material are suggested. After the exposition is fully introduced, the assignment for the fifth activity recommends a complete listening. Once the ending has been heard, Activity #6 engages the *coda* or concluding section.

The theoretical concepts I incorporated in each activity are summarized below:

- Activity #1 – primary triads; functional and root/quality chord symbols; close and open position
- Activity #2 – Mendelssohn; orchestra; instrumental families; transposition
- Activity #3 – program music
- Activity #4 – concert overture; sonata form; identification of key; major and minor (harmonic) scales; parallel keys
- Activity #5 – scale degrees; exposition, development, and recapitulation
- Activity #6 – leading-tone diminished 7th chords, dominant 7th chords, augmented and diminished intervals; *poco ritenuto*

Concepts that were used more than once have been listed with the most relevant activity. While several of these are little more than identification tasks, as was the case for Bach's invention, others function as reinforcement for past learnings or preparation for future learnings – in keeping with KM's instructional process. The touches of chromaticism throughout Mendelssohn's overture give its analysis an enhanced level of complexity. As with Mozart's aria, the programmatic or storytelling aspects of the overture warrant exploration. They are neatly organized by the structure of the work.

Negotiating the Pedagogical Details

The three main sections of sonata form – exposition, development, and recapitulation – are sometimes prefaced with an introduction. The introductory material may be related to one or more of the movement's themes but often it is not. Mendelssohn's introduction consists of four

sustained chords marked by *fermatas* (pauses) that impede the work's *Allegro di molto* (very fast) tempo. These chords “open the portals to the realm of the fairy king Oberon and his queen, Titania” (Machlis & Forney, 1990, p. 100). The texture gradually thickens as instruments are added to each successive chord: flutes; clarinets; bassoons and horns; oboes. The chords themselves thicken from two notes to ten. Their tonal ambiguity underlines the introduction's mysterious mood as the first chord is incomplete, suggesting either C-sharp minor or E major, and the third, an A minor chord, is not consistent with the major key that is eventually established. This example of modal mixture is the first of many such shifts between major and minor keys (CIE, 2012, p. 6).

While the preceding description is factually accurate and supported with references, it does not engender an interactive experience with the introductory chords. Intending to guide the student to her/his own observations, I noticed that the highest notes in each chord, when read melodically or horizontally, outline an E major triad in broken form. This known element provides an instructional entry into Mendelssohn's overture since the student is able to identify the triad's root, quality, and position, as well as the key in which it is the tonic triad. Once these initial steps have been taken, the discovery work of analysis can begin.

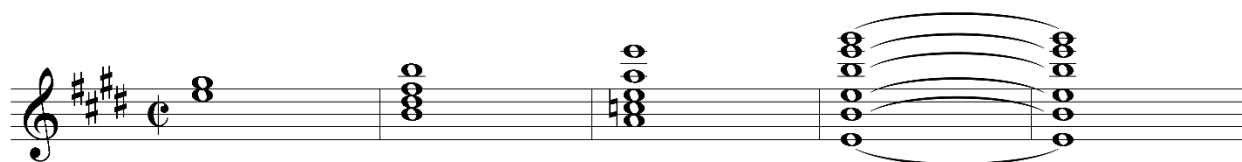
Although it is possible to harmonize each note of the broken triad melody with the tonic chord, Mendelssohn chooses otherwise. The resulting progression gave me an opportunity, in the first activity, to introduce the concept of shared scale degrees, or common tones, which will figure prominently in the voice-leading techniques of future harmony learnings. By writing the subdominant (IV) and dominant (V) triads on either side of the tonic (I) triad, the student is led to observe that the first scale degree (tonic) is shared by subdominant and tonic triads, while the fifth scale degree (dominant) is shared by tonic and dominant triads.⁶⁹ Thus, Mendelssohn's triadic melody is harmonized with the following chords: tonic, dominant, minor subdominant, and tonic. In the assignment for Activity #1, the student is asked to label each chord with both functional chord symbols (I, V, iv, I) and root-quality chord symbols (E, B, Am, E).

In Mendelssohn's orchestration, the broken triad melody is played by the flute, which places it well above a singable range. Consequently, I suggested that the melody be played on a

⁶⁹ It is recommended that the subdominant triad be written *below* the tonic and the dominant triad *above*. This placement gives prominence to the common tones and reinforces the relative positions of the dominant, a 5th above the tonic, and the *sub*-dominant, a 5th below the tonic.

piano, so as to be heard in the proper register. For the first assignment, I added the accompanying chords below the melody, but arranged them on the treble staff only:

Figure 4.13: Introduction (Treble Staff Reduction) of Mendelssohn's Overture to *A Midsummer Night's Dream* (mm. 1-5)



Ordinarily, melody notes are played on the piano by the right hand and harmony notes are played by the left hand. As such, the left-hand accompaniment becomes impossible to play – presenting an instrumental/orchestral problem to be solved.

For Activity #2, I expanded the introductory chords to their full range and added performance details:

Figure 4.14: Introduction (Grand Staff Reduction) of Mendelssohn's Overture to *A Midsummer Night's Dream* (mm. 1-5)

Of course, the expansion is even less playable than the previous treble staff reduction, but it is manageable with a student/teacher duet. Their cooperative performance leads to Mendelssohn's orchestration of the introduction for pairs of woodwinds and French horns. Since this is likely to be the student's first exposure to an orchestral score, a brief statement presents the concept of transposing instruments, which will be addressed in RCM's (2016e) intermediate theory curriculum at level 8. But at level 7, a relatively simple transposition exercise places the clarinet parts in G major and the French horn parts in C major.

However, the matter of transposing instruments is somewhat messy. At level 8, the *Theory Syllabus* (RCM, 2016e) requires transposition to concert pitch for instruments in B-flat, such as the trumpet and the clarinet, and instruments in F, such as the French horn and the English horn, a double-reed woodwind instrument. With few orchestral experiences beyond examination requirements, students may assume that all clarinets are B-flat instruments and all French horns are F instruments. While the B-flat clarinet is by far the most frequently used, particularly in jazz bands, concert bands, and marching/military bands, the A clarinet is widely used in orchestras from the eighteenth century onward.⁷⁰ Likewise, the French horn is typically in F, although early horns were pitched in B-flat, A, A-flat, G, F, E, E-flat, D, and C. But with the invention of valves in the early nineteenth century, the French horn became fully chromatic and this new “mechanical” horn gradually replaced its natural predecessor. Therefore, an analysis of Mendelssohn’s overture, written for clarinets in A and horns in E, will broaden the student’s knowledge of orchestral instruments and prevent erroneous assumptions.

The first listening experience takes place in Activity #3. As I summarized for the student, Shakespeare’s play “involves four young lovers and a group of clownish tradesmen who are manipulated by woodland fairies. The characters are connected by events surrounding the wedding of Theseus (Duke of Athens) and Hippolyta (Queen of the Amazons).” The focus for this listening activity is Mendelssohn’s programmatic depiction of the fairies’ realm in the introduction, and the fairies themselves in the exposition’s first theme. From prior activities, the student is well-acquainted with the introductory chords and after listening to the overture’s opening measures, should be prepared to answer an open-ended question – “How does Mendelssohn create the mysterious mood?” – with specific musical details.

Theme 1 is introduced as a reading exercise because its range and tempo are not suitable for singing:

⁷⁰ All clarinets, which are single-reed woodwind instruments, have the same written ranges and the same fingering systems. The sound produced when a specific pitch is played depends on the particular instrument. All clarinetists read as though their parts are written in C (concert pitch) and the “instrument itself transposes according to its size” (Adler, 1982, p. 180).

Figure 4.15: Theme 1 (Fairies' Theme) of Mendelssohn's Overture to *A Midsummer Night's Dream* (mm. 8-15)

The musical score for the Fairies' Theme (measures 8-15) is presented for Violin I, Violin II, Violin I, and Violin II. The key signature is D major (two sharps) and the time signature is 2/4. Measures 8-11 show the first violin part with a 'divisi' instruction and a 'pp' (pianissimo) dynamic. Measures 12-15 show the second violin part with a 'div.' instruction. The music is characterized by lively eighth notes in a close three- and four-part texture.

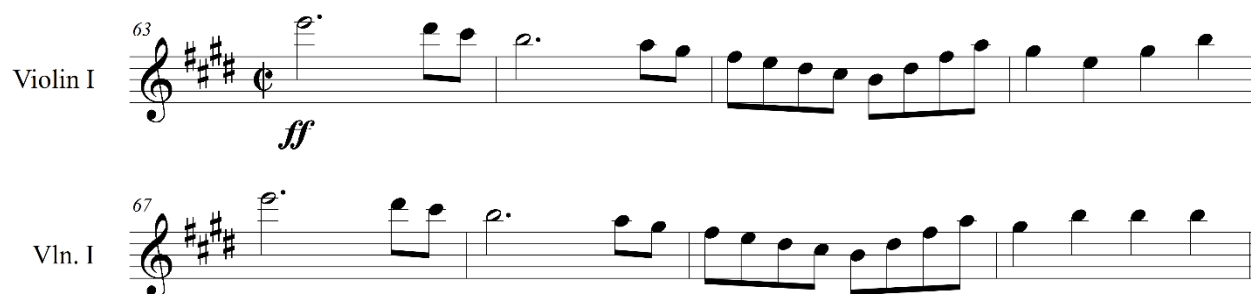
The student is directed, with assistance from the teacher, to listen from the beginning of the movement to the end of the fairies' theme where there is a sudden *fortissimo* (very loud) chord that breaks the *pianissimo* (very soft) "mood of elfin enchantment" (Machlis & Forney, 1990, p. 100). "How are the fairies' fluttering wings depicted?" From a recording as well as the excerpt provided, the student should be able to supply some of the following musical details: lively eighth notes are played high, soft, and *staccato* (detached) by divided first and second violins in a close three- and four-part texture.

The take-home assignment for Activity #3 presents a video summary of Shakespeare's comedy (BN, 2010). Several questions confirm the student's comprehension of the characters, the interconnecting plots, and Puck's mischievous pranks. The synopsis provides a basic understanding of the play and the characters that Mendelssohn presents as contrasting themes. It also provides a prelude for the next activity in which the genre and its structure are revealed. The student is asked to recall the three main sections of sonata form. These are required elements at level 6, although they are not featured in my preceding LGs because neither Bach's invention nor Mozart's aria utilize this form. At level 7, a brief naming task reviews the pertinent information.

While Activity #3 was concerned with a descriptive interpretation of the fairies' theme, Activity #4 delves into its theoretical components, but now as the first theme of the exposition.

Since it is not in the key of E major, as expected, the student is invited to gather consistent accidentals from the excerpt in the previous activity, to write the resulting E minor scale in harmonic form, and to determine its parallel relationship with the expected key. This scale exercise cues the transition theme which begins with a descending E major scale:

Figure 4.16: Transition Theme of Mendelssohn’s Overture to *A Midsummer Night’s Dream* (mm. 63-70)



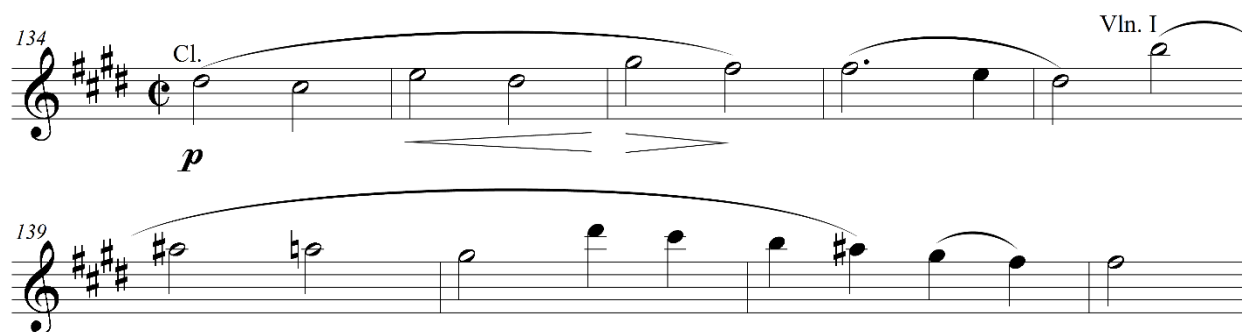
Meant to portray the regal majesty of Theseus and his Athenian court, it functions as a modulatory bridge between the key of theme 1 and the dominant key of the second theme group. Beginning immediately after the sudden *fortissimo* chord mentioned earlier, the energetic transition incorporates a sequential variation of the fairies’ theme and foreshadows the hunting calls that will be heard later in the movement (CIE, 2012). In addition to the scale that descends for more than an octave, the transition theme clearly outlines the dominant 7th chord of E major. This observation reinforces the notion – introduced in the level 5 LG – that melodies are often based on triads or chords.

Wanting to offer the student a KM-inspired creative task, I revisited the composition assignment from Activity #4 in the LG for Mozart’s aria. But rather than confining the pitch palette to the notes of the tonic triad, I suggested using portions of the B major scale. As it was for the aria, the given rhythm is taken from the theme to be introduced in the next activity. The student’s melody presents an opportunity – finally – to sing. This singing has both pedagogical and practical benefits: it re-acquaints the student with *solfa* syllables and provides a mechanism for self-assessment since an unsingable melody is generally not a good melody, especially in student work.

Theme 2a represents two pairs of young lovers, Hermia and Lysander, Helena and Demetrius. They are separated by Puck’s interference but are re-united at the end of the play.

The young lovers' theme is lyrical and expressive, in contrast with the detached buoyancy of the fairies' theme. It combines two four-measure phrases that are each repeated (**aabb**). My excerpt is extracted from the middle phrases:

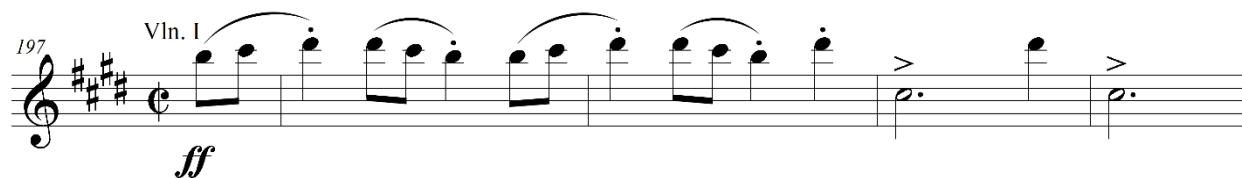
Figure 4.17: Theme 2a (Young Lovers' Theme) of Mendelssohn's Overture to *A Midsummer Night's Dream* (mm. 134-142)



Taking advantage of the theme's singability, I instructed the student to write *solfa* abbreviations below each note. The chromaticism in m. 139 posed a problem that ultimately gave me occasion to introduce a chromatic syllable. Having established in the previous activity that A-sharp is a necessary accidental in the key of B major, the A-natural is now an alteration. This lowered *ti*, or seventh scale degree, becomes *ta*.

Theme 2b is more difficult to sing. Its wide leaps suggest the "hee-haw" or braying of a donkey:

Figure 4.18: Theme 2b (Clowns' Theme) of Mendelssohn's Overture to *A Midsummer Night's Dream* (mm. 197-201)



The boisterous character of the theme is associated with six clown-like tradesmen – a bellows mender, a carpenter, a joiner, a tailor, a tinker, and a weaver (Bevington, 1988). These amateur actors are preparing a play for the wedding of Theseus and Hippolyta. Puck happens upon their rehearsal and with a magic spell, fastens a donkey's head on Bottom the weaver, who provides

comic relief throughout Shakespeare's play. The clowns' theme is initially accompanied by both tonic and dominant pedals, suggesting drones. The theme's rustic nature is also demonstrated in its simplicity and its extensive use of repetition (CIE, 2012). The donkey's brays are another significant feature of theme 2b. The rhythm is conspicuously accented throughout the orchestral parts and the melody is awkwardly disjunct. The falling 9ths, which widen to 10ths, are beyond RCM's level 7 requirements but in this context, it is sufficient to recognize them simply as intervals larger than an octave. And when compound intervals are studied at level 8, the student will have already experienced them in a memorable musical setting.

A *codetta* concludes the exposition of Mendelssohn's overture with hunting calls in the horns and trumpets, representing Theseus and his royal hunting party. At this point in the work's formal structure, after almost four minutes of music, the central characters and their respective themes have been introduced. The student is ready to listen to the entire movement but its length requires that this listening be done at home, so as not to monopolize her/his valuable lesson time. To guide the student's independent listening, there are questions in the assignment for Activity #5 that request specific thematic comparisons. These questions review articulations and dynamics for the fairies' theme, the lovers' theme, and the clowns' theme. Their differences are aurally evident from the student's listening experiences and, referring back to Activity #3, visually evident from the analyzed excerpts.

The last questions in the take-home assignment are more difficult to answer since they are not supported by visual evidence. The student must aurally identify the following phenomena: the fairies' theme featured in the development section; the introduction returning at the beginning of the recapitulation; and the transition theme missing from the recapitulation. Without specific guidance, this identification task may be too daunting – not the recognition of themes necessarily, but the detection of boundaries between exposition and development sections, as well as between development and recapitulation sections. However, if the student makes an individual effort, he/she will either succeed or bring inquiries to the teacher, which will initiate a more informed, collaborative discussion of the overture's structure.

Listening to the end of the exposition likely would have been enough for this level, but I decided to press on to the end of the movement for Activity #6. While all the themes are presented in the exposition, the sonata structure is not complete. Furthermore, there is no opportunity to re-hear the themes or to hear them in varied keys/statements. The *coda*, which

follows the recapitulation, invites the exploration of an obviously varied or transformed theme. The *coda*'s harmonic content also gave me a chance to *do* music theory more explicitly since the theory is often buried beneath the structure.

The fairies' theme reappears in the *coda* and like the exposition, is interrupted by a *pianissimo* chord. Analysis reveals it to be a leading-tone diminished 7th chord, which is a new theoretical element for level 7. I re-arranged the orchestral parts so as to present the chord in root position because its inversions are not yet known. And since RCM's (2016e) *Theory Syllabus* confines diminished 7th chords to minor keys at this level, I asked for the root/quality chord symbol in order to avoid its function as a tonicization of the major dominant. Following the diminished 7th chord, a slow-moving E minor scale descends to a dominant 7th chord played by the clarinets and French horns. A level 5 requirement, this chord can be more fully scrutinized.

The transition or royal theme also reappears but it is transformed quite significantly:

Figure 4.19: Transition Theme from the Coda of Mendelssohn's Overture to *A Midsummer Night's Dream* (mm. 663-670)

The assignment for the last activity calls for another listening of the full movement but directs the student's attention to the *coda*. Again, the focus is comparative, referencing the transition theme as it appeared in the exposition (see **Figure 4.16**). The transformed version is missing the lower portion of the scale as well as the arpeggiated dominant 7th chord. I excerpted two phrases to show the theme's rhythmic alteration. This gradual "deterioration" coincides with the tempo marking *poco ritenuto*, which means a little slower or held back. My questioning leads the student to consider the theme's transformation as a heightening of the tempo change – or a corroborating of Mendelssohn's descriptive intent.

The final challenge question explores an interesting feature of the overture's orchestration. It is scored for two flutes, two oboes, two clarinets, two bassoons, two horns, two trumpets,

ophicleide, timpani, and strings. Of these, the *ophicleide* is sure to be unknown. It is a “large keyed bugle” with a conical bore (Midgley, 1997, p. 74). Patented in 1821 by French instrument maker Jean Hilaire Asté (1775-1840), the *ophicleide* was the foundation of the brass section in Romantic orchestras. Its name comes from the Greek *ophis* (serpent) and *kleis* (keys) since it replaced the Renaissance serpent – an outdated bass wind instrument with a snake-like shape. As unpredictable and difficult to play as the serpent, the *ophicleide* was eventually succeeded by the modern tuba. Through internet articles, pictures, and sound bites, it is hoped that the student will be inspired to discover these largely “extinct” instruments for herself/himself.

Level 8: Josquin’s Frottola

Presumably written by Josquin des Prez (c.1450-1521), *El grillo* is a *frottola* (plural, *frottole*) published in 1505 by Ottaviano Petrucci (1466-1539) in his *Frottole libro tertio* (*Third Book of Frottole*). The *frottola*, as the principal predecessor of the Renaissance madrigal, is a genre of Italian secular song that was popular in the late fifteenth and early sixteenth centuries. Often amorous, comical, or satirical, it typically has four voice parts with the melody in the highest part. The lower parts are either sung or performed by instrumentalists. Avoiding contrapuntal complexities, the *frottola* favours homophonic textures with clear-cut rhythmic patterns, narrow melodic ranges, and simple diatonic harmonies (Burkholder et al., 2014). Its poetic form, including a rhymed refrain and one or more stanzas, is likely descended from the fourteenth-century *ballata* or *barzellatta* (Randel, 1986), while its predominantly chordal style anticipates the seventeenth-century practice of monody, denoting a single melodic line with instrumental accompaniment.

Josquin des Prez is widely considered to be the first master of polyphonic vocal composition in the High Renaissance.⁷¹ Although little is known about him, recent research has clarified some of his biography. As the central composer of the Franco-Flemish School, from the geographic region that presently combines northern France, Belgium, and the southern Netherlands, Josquin’s musical style was influenced both by his early training in France and the many years he spent working in Italy. He composed vocal music in all the important genres of

⁷¹ The *High Renaissance* is a term associated with a brief period of exceptional artistic production at the turn of the sixteenth century. It is also characterized by a cultural movement toward humanism, compelling artists to infuse their works with more resonant expressions of human emotionality. Musical aesthetics of the time preferred consonance, clarity, and natural declamations of text, providing direct emotional appeal for listeners (Burkholder et al., 2014).

the time – masses, motets, *chansons*, and *frottole*. Encountering the Italian *frottola* in Milan, where he served the Sforza family, he wrote at least three such songs: *Scaramella*, *El grillo*, and *In te Domine speravi*.⁷² They are generally simpler in texture than his French *chansons*, being primarily syllabic and homophonic.

However, according to David Fallows (2003), *El grillo* (*The Cricket*) is “not at all typical of the *frottola* repertory” (p. 391). Its ascription to “Josquin Dascanio,” sometimes interpreted as “Josquin d’Ascanio,” prompted a misconstrual of its authorship (McDonald, 2009). The notion that Josquin des Prez and Josquin Dascanio are one and the same was not put forward until the mid-twentieth century. To further complicate the song’s history, Fallows mentions several mistakes in Petrucci’s (1505) print, which is the only early source for *El grillo* – besides an unchanged reprint that appeared two years later. As an example, there is a missing note in the *altus* (alto) part that was added to the original manuscript, held in Munich at the *Bayerische Staatsbibliothek*, when Gaetano Cesari (1870-1934) transcribed all thirteen of Petrucci’s *frottola* books between 1904 and 1907 (Fallows, 2003). An astonishing infringement of modern protocol, Cesari even initialed his addition/correction.

Fallows (2003) himself offers potential solutions for the notational problems in Petrucci’s manuscript and illustrates these in a revised edition of *El grillo*. Marianne Hund (2006) refutes many of Fallows’ emendations, proposing revisions of her own. As it happens, Fallows (2005) chose to abandon his more ambitious suggestions when he edited *The Collected Works of Josquin des Prez*, adhering to the work of previous scholars as well as the recommendations of his editorial board. Yet, in spite of these problematic details, along with Fallows’ suspicion that *El grillo* was included in Petrucci’s collection as “filler,” it remains one of the most popular works in Josquin’s canon.⁷³

What do students need to know before listening to *El grillo* with understanding? Music of the Renaissance period tends to be modal, although generally consonant, melodic, and predominantly polyphonic, emphasizing blend rather than contrast. Rhythms are metered and increasingly complex, forms are primarily vocal, and dynamic markings are non-existent, relying instead on the work’s musical character. With the invention of the printing press in the fifteenth

⁷² A singer named Carlo Grillo was also employed at Sforza. Some scholars suggest that Josquin wrote *El grillo* as a tribute to this singer, or “perhaps even a joke at his expense” (McDonald, 2009, p. 39).

⁷³ The manuscript for Petrucci’s (1505) *Frottole libro tertio* contains eight gatherings of eight leaves each for a total of 64 leaves. *El grillo* is found near the end of the book at ff. 61v-62 (Fallows, 2003).

century, and the subsequent printing of sheet music from movable type, it became cheaper and easier to distribute music on a wider scale. Accordingly, the demand for music as entertainment escalated, along with an emerging bourgeois class and a greater number of musically educated amateurs.

El grillo conforms to this summary of Renaissance characteristics in all but its texture. RCM (2016d) defines *frottola* in *Celebrate Theory* as a “polyphonic vocal genre” and describes the texture of *El grillo* as “polyphonic, with frequent homorhythmic passages” (pp. 107-108). These statements support the era’s tendency toward polyphonic vocal composition as well as Josquin’s compositional style. However, based on my analysis, I believe that both definition and description are inaccurate. While it is true that vocal music of the Renaissance, both sacred and secular, is predominantly polyphonic, the *frottola* is less complicated – perhaps because it was meant for amateur performance. Regardless, RCM’s explanations are misleading and potentially confusing for students who have little or no prior experience with early music.

Aligning the Score with Examination Requirements

As with Mozart’s “Der Hölle Rache kocht in meinem Herzen,” I resigned myself to the pedagogical task at hand, despite my concerns about the chosen work. Without a printed score for *El grillo*, I consulted the International Music Score Library Project (IMSLP), which is an online or virtual repository of public-domain music scores. Also known as the Petrucci Music Library, after the Renaissance publisher, it is a subscription-based venture that launched in February 2006. My preliminary search elicited four scores for Josquin’s *El grillo* deposited between 2008 and 2012. In order of appearance, these were contributed by the Choral Public Domain Library (CPDL), Les Editions Outremontaises, Alessandro Simonetto, and Sardus Orpheus.

My search for the score pre-dated my search for peripheral information *about* the score. Naively assuming there to be a single definitive version of *El grillo*, I rapidly discovered otherwise. Simonetto’s copy claims to be urtext, as part of the Werner Icking Music Archive (WIMA) before it merged with IMSLP. The note values are halved but there is no attempt to impose meter nor the requisite bar lines. Apart from Simonetto’s diminution, a footnote mentions one additional alteration – a note that replaces what Fallows (2003) describes as a “perfectly pointless rest in the middle of a word” (p. 393). The CPDL copy, edited by Rafael Ornes (1999), is less true to the original. Referencing Petrucci’s (1505) source manuscript,

Ornes' lists a number of editorial changes: halved note values; added bar lines, tempo indications, and slurs; inserted accidentals; as well as modernized Italian text and underlay. In comparison, however, the copies by Les Editions Outremontaises and Sardus Orpheus take great liberties with the notation, such as exchanging the alto and tenor parts in the final section, rather than allowing them to overlap one another as the composer intended.

At present, I understand these subtleties but at the time, I was unfamiliar with the song and ill-equipped to choose the “right” version of *El grillo* for my LG. Wishing to make a thoroughly informed decision, I ordered a print score from a reputable publisher – the Oxford University Press – but this too was disappointing. It turned out to be an *adaptation* of Josquin's *frottola* that was thoroughly edited and “Englished” by Marlin Merrill (2010). In the end, it was necessary to consult the original imprint for myself. I found an electronic scan of Petrucci's (1505) manuscript on the IMSLP website and a scholarly transcription of the source in volume 28 of Fallows' (2005) *The Collected Works of Josquin des Prez*. At long last, I was ready to analyze the music that was hidden behind the song's notational irregularities.

I reconciled the score's contents with the subject requirements for level 8 theory (RCM, 2016e). Applicable topics, with level-specific concepts highlighted in bold type, are listed below:

- pitch and notation
 - **alto** and **tenor** clefs
 - **modern vocal score** (**short** and **open**)
 - transcription to **any** clef
- rhythm and meter
 - breve
- intervals
 - **compound** intervals (inversions)
- scales
 - **diatonic modes**
- chords and harmony
 - authentic, half, and **plagal** cadences
- melody and composition
 - passing and neighbor tones
 - contrasting periods
- form and analysis
 - **types of motion: parallel, similar, contrary, oblique, and static**
- music terms and signs
 - *D.C. al Fine*

- music history
 - composer: **Josquin des Prez**
 - period: **Renaissance**
 - genre: **frottola**
 - performing forces: SATB, *a cappella* (level 10)
 - associated style traits: word painting

Having wrestled with the previous LGs, particularly the polarity in analyses that range from the smaller motivic details of Bach's invention to the larger structural elements of Mendelssohn's overture, I was anxious to find middle ground in Josquin's *frottola*. I was also anxious for an opportunity to incorporate KM's emphasis on singing, especially after the instrumental/orchestral focus of the Overture to *A Midsummer Night's Dream*.

The LG for *El grillo* contains four activities and a score. *Celebrate Theory* (RCM, 2016d) includes the song's refrain (mm. 1-21) written in cut time (2/2) rather than the original 4/2. This is the case for all the modern transcriptions I encountered. Caught between my desire to construct an authentic, historically faithful score and my need to be consistent with modern editorial practices, I decided to reproduce Fallows' (2005) score, but in cut time with halved note values. Beyond this metric modification, I made only one editorial change: I added an accidental in the soprano part at m. 23, in compliance with the modern transcriptions I studied – all but Simonetto's – as well as the recordings I heard.

Despite the myriad decisions to be made about its notation, Josquin's *frottola* provides students with a unique listening experience – one that will likely be entirely new to them. Consequently, I chose to explore the score in depth, attempting to demystify as many notational elements as possible. I also chose to embrace the score's unique elements by encouraging the student to examine Petrucci's (1505) original manuscript. These explorations are enhanced with listening assignments in Activities #3 and #4. Shaded boxes provide brief historical descriptions of the *frottola* and Josquin des Prez, assuming both to be unfamiliar.

The theoretical concepts I incorporated in each activity are summarized below:

- Activity #1: breve; Renaissance; *frottola*; SATB (*a cappella*); modern vocal score (short and open)
- Activity #2: C clefs (alto); transcription to any clef
- Activity #3: diminution; homorhythmic texture; syncopation; word painting
- Activity #4: Josquin des Prez; major and minor triads; authentic cadences (chorale and keyboard style); root/quality chord symbols; passing and neighbor tones; modal scales

While the modal system that typifies Renaissance music does not function in the same way as the tonal system that replaced it during the Baroque era, there are similarities. Josquin's approach to melody and harmony foreshadows many compositional techniques of the later common-practice period. Although his creative process was almost certainly melodic or horizontal, the simultaneous sounding of these melodic lines was carefully crafted. Indeed, they combine to produce the harmonic or vertical chord structures that are the central focus of modern tonality. By extracting these known elements from music that is presumably unknown, students are encouraged to make connections that will bridge the gap between past and present – a bridge that will render *El grillo* more readily accessible.

Negotiating the Pedagogical Details

As with levels 5, 6, and 7, I attempted to introduce Josquin's *frottola* one musical element at a time. I began with the breve which is durationally valued as the equivalent of two whole notes, requiring a 4/2 time signature. In spite of my preference for consistency, as well as a pragmatic desire to align myself with RCM's 2/2 decision, I started with the original 4/2. Without it, an occasion to experience this little used and often misunderstood meter, as well as an opportunity to explore a facsimile of Petrucci's manuscript, would have been lost. Furthermore, I wanted to provide the student with evidence that the breve exists in real music – that it is not just a hypothetical note value found in a music theory textbook.

As illustration, I chose the five-measure melody that both opens and closes the *frottola*'s refrain:

Figure 4.20: Soprano Refrain of Josquin's *El grillo* (mm. 17-21)



By choosing the closing phrase, which ends with a *fermata* or pause marking, I was able to prepare – as the first step in KM's instructional process – for a future discussion of cadences. But for this first activity, I placed the soprano melody in a four-part texture that RCM labels modern vocal score:

Figure 4.21: Four-Part (SATB) Refrain of Josquin's *El grillo* (mm. 17-21)

Superius
El gril - lo, el gril - lo, è buon can - to - re.

Altus
El gril - lo, el gril - lo, è buon can - to - re.

Tenor
El gril - lo, el gril - lo, è buon can - to - re.

Bassus
El gril - lo, el gril - lo, è buon can - to - re.

The excerpt in **Figure 4.21**, illustrates a type of open score in which each vocal part is written on a separate staff. The voices are indicated by their original Latin designations, but these are easily translated into the modern soprano, alto, tenor, and bass.

As preparation for later listenings, each part should be sung by the student with registral adjustments, if necessary, to accommodate her/his vocal range. However, the modality of the excerpt presents a problem. It opens with an F major chord but closes with a cadence that suggests G major, and because neither chord belongs to the other's key, choosing appropriate *solfa* syllables is a challenge. Consequently, a third key – C major – is the most plausible choice since F major is its subdominant chord and G major, its dominant. Although the soprano part requires a chromatic alteration of *fa* to *fi* in m. 20, the F-sharp functions as a temporary leading tone to the dominant, which is a regular occurrence in tonal settings – recall Neefe's *Allegretto in C Major* (**Appendix 2.4**). While none of this reasoning is offered to the student, it may emerge through discussion with the teacher but if not, Josquin's text is provided to facilitate the student's singing.⁷⁴

Once each part has been vocalized, the assignment for Activity #1 asks for a transcription of the open score into short score which condenses the excerpt from four staves to two. An exercise such as this is customary for RCM's level 8 theory examination, although it seldom

⁷⁴ KM practitioners sometimes use a neutral syllable, such as *lu* (loo), to introduce unknown songs for listening or to aid in memory training (Choksy, 1981, 1999a).

includes text. As a result, there are often misunderstandings about the length of the bar lines. Exam candidates tend to extend them through all four staves but in modern vocal score (see **Figure 4.21**), these extensions interfere with the text. So too in short score. By having the student write words between the treble and bass staves, I mean to show her/him that short bar lines are a necessity for vocal scoring.

In Activity #2, I introduced the student to Petrucci's (1505) manuscript, included here as **Appendix 4.6**. At first glance, it looks quite foreign. The page layout, for instance, isolates the individual parts in a format that twenty-first-century singers are not accustomed to seeing or reading. But with closer scrutiny, the manuscript reveals many recognizable elements. The bass part uses an early form of the F clef which marks the position of F below Middle C on the fourth line of the staff. Coincidentally, the phrase I selected for the previous activity is clearly visible at the beginning of the basses' second system. Directing the student to this line, I asked several comparative questions, guiding her/him to both similarities and differences in the notation.

The soprano, alto, and tenor parts use early C clefs, which mark Middle C on the first, second, and third staff lines, respectively. Two modern C clefs – alto and tenor – are introduced in RCM's (2016e) theory curriculum at this level. But in Petrucci's manuscript, the positioning of C clefs has not yet been standardized to correspond with specific voice types. Consequently, the tenor part utilizes a modern *alto* clef, with Middle C positioned on the middle (third) line:

Figure 4.22: Tenor Refrain of Josquin's *El grillo* (mm. 1-10)

El gril - lo, el gril - lo è buon can - to - re, Che
tie - ne lon - go ver - so.

The assignment for Activity #2 invites the student to rewrite the opening of the tenor's refrain on the treble staff at the same pitch. In modern vocal score, the tenor part is written on the treble staff an octave higher than it sounds. The demand for excessive ledger lines in the student's transcription will demonstrate the rationale that justifies this practice.

Having explored the original manuscript for Josquin's *El grillo*, it is necessary, in Activity #3, to prepare for the exploration of my modern transcription. This transcribed version, which vertically aligns the separated voice parts, is located on pages 5 and 6 of the LG (see **Appendix 4.4**). Facilitating the student's shift to shortened note values requires a conversion of the *frottola*'s meter from 4/2 to 2/2 or cut time. To that end, the rhythm from mm. 17-21 of the soprano's refrain is reproduced for a diminution exercise (refer to **Figure 4.20**), with the first measure given as an illustration. By clapping both old and new rhythms, the student should recognize their sameness.

While Petrucci's (1505) manuscript enables a historical analysis of Josquin's *frottola*, it does not support a theoretical analysis. The song's texture, for example, is impossible to discern from the original layout – without extensive and painstaking comparison. But in open score, its predominantly homorhythmic texture is fairly obvious. Characterized by a blocked chordal presentation, in which all parts simultaneously utilize the same or similar rhythmic patterns (RCM, 2016d), a homorhythmic texture is best exemplified by a vertical alignment of text. With few exceptions, the text for *El grillo* is sung by all four members of the vocal ensemble at the same time. The exceptions are notable since composers use elements of rhythm, melody, or harmony to reflect the meaning of the words.

RCM's (2016e) *Theory Syllabus* highlights word painting as a stylistic trait associated with Renaissance music. This type of musical pictorialization reflects the text either through the depiction of visual images or the expression of emotions/moods (Burkholder et al., 2014). For instance, Josquin uses long notes in mm. 7-10 to suggest the cricket's ability to sing for an extended period, and onomatopoeic exchanges between soprano/alto and tenor/bass (mm. 11-14) to suggest cricket sounds. A slight syncopation in m. 30 derives from Fallows' (2003) "perfectly pointless rest in the middle of a word" (p. 393), but a more elaborate syncopation or rhythmic displacement highlights the final word "*amore*" (love). The assignment for Activity #3 asks the student to translate *El grillo*'s Italian text to English. As it was for Mozart's aria, the translation may be found in *Celebrate Theory* (2016d) or in a readily available internet application. Using the translated text, the student is equipped to detect examples of word painting when he/she listens to a recording of the song.

Activity #4 is focused on chords and by extension, on cadences. The four parts of Josquin's *frottola* combine to create both major and minor chords in root position. Most phrases

of text end with cadences but most of these cadences end with incomplete chords. Regardless, I wanted to take advantage of the opportunity to extract a chorale-style cadence from a four-part vocal work and asked the student to reproduce the authentic cadence that crosses the bar line from m. 4 to m. 5. This same cadence concludes the refrain in mm. 20-21 (see **Figure 4.21**), as well as both phrases of the repeated section in mm. 23-24 and mm. 26-27. Acknowledging the incomplete chord-of-arrival, the student is asked to rewrite the cadence in keyboard style – assisted by Josquin’s voicing of both chords in close position – and to complete the second chord by supplying its missing third. The student’s identification of the implied key and cadence enables her/him to similarly name the cadence in mm. 36-37. But because the key of this latter cadence is less straightforward, it is accompanied by a suggestion to “check the surrounding measures for clues.”

The final assignment, beginning with a listening task, is occupied with several aspects of a formal harmonic analysis. First, the student is directed to write root/quality chord symbols above the staff for every change of bass note (F, G, Dm, C, etc.) – an exercise that is not reliant on the functional classifications of tonality. And recognizing the frequent occurrence of incomplete chords, I asked for these chord symbols to be bracketed (). Although the addition of brackets is not a conventional analytic procedure, their absence/presence provides a visual means of distinguishing complete and incomplete chords. With this detailed chordal analysis in place, the student can now identify decorative notes that do not belong to the specified chords. In *El grillo*, these non-chord tones are either passing tones or neighbor tones. While both varieties are approached and resolved by step, passing tones fill the gap between two *different* chord tones and neighbor tones embellish the *same* chord tone (RCM, 2017). As unaccented decorations, their rhythmic placement between vertical chord structures provides an element of mild dissonance, compared with the harsh dissonance of their accented counterparts in later eras.

Additional elements of music theory can be extracted from the transcribed score, but I chose to highlight only those with salient or pedagogically significant features. The Dorian mode that descends in the tenor part at mm. 35-36 reinforces the student’s introduction to modal scales at level 8. The exchange between alto and tenor parts in mm. 7-9 prepares for future discussions of voice-leading in level 9 harmony. In the challenge question, I addressed the structural organization of *El grillo* since the student is likely to encounter differing interpretations of its formal structure in her/his listening experiences. One of the notational discrepancies noted by

Fallows (2003) is the positioning of an elaborate double-repeat sign in the source manuscript. Separating mm. 17-21 (*El grillo, el grillo è buon cantore*) from the opening refrain, it places these measures in the following section. But because this configuration makes little sense, either musically or textually, it is rarely observed in performances. The student is encouraged to explore an assortment of structural interpretations.

From her/his chordal analysis, the student can also be led to comparative observations that lay the groundwork for generalized conclusions. This foray into the subjectivity of analysis is likely to be uncomfortable for many students – and their teachers. My intention is to open a discussion on the topic of chord qualities and to make space for speculation. In my own analysis, I noticed that Josquin's blocked chordal style produces the following inventory of root-position chords: C, Dm, D, Em, F, G, Am, A. All but D and A, which are chromatically altered versions of Dm and Am, can be found in the key of C major. Earlier, I mentioned that the D major chord, with *fa* raised to *fi*, functions tonally as the dominant (D) of the dominant (G) in C major. Using the same reasoning, the A major chord, with *do* raised to *di*, functions as the dominant (A) of the dominant-once-removed (Dm). In addition, I noticed the absence of a chord on B, presumably because it would be diminished.⁷⁵ Unlike major and minor chords, which are consonant, diminished chords are dissonant and were judiciously avoided in most Renaissance music.

A Re-Evaluation of Purpose

My inquiry is fuelled by an awareness that the science of music theory is pedagogically disconnected from the art of music. The LGs represent my attempt to fill this instructional gap by reconnecting music and theory – by placing music at the centre of music theory pedagogy and reversing long-standing instructional practices. This reversal is not offered as an arbitrary or casual alternative. It is grounded in Kodály's educational philosophies as well as Bruner's instructional theories.

Specifically, I embraced Kodály's resolve to develop students' musical literacy and to make accessible the world's great art music. As Choksy (1999a) elaborates, musical literacy is embodied in the ability to read, write, and create within the traditional language of music.

⁷⁵ In a diminished triad, the outer interval is a diminished 5th or tritone. This unstable interval is generally considered an inharmonious or harsh-sounding dissonance, but not so for Leo Kraft (1976). He counters convention by claiming that the term *dissonant* does *not* mean discordant or unpleasant. On the contrary, he believes that the "most interesting and beautiful sounds in music are usually the dissonant ones" (p. 29).

Through the actions of listening, performing, and analyzing, an appreciation for musical masterworks is enriched by the gradual accumulation of knowledge about music. Consequently, the *thinking* associated with the science of music is interconnected with the *interpreting* associated with its art. Of course, these activities are not mutually exclusive, nor are they the exclusive province of one discipline or the other. Still, KM fully integrates their unique perspectives in a carefully sequenced progression of holistic musical experiences.

My interest in Bruner's educational psychology is specific to his concepts of scaffolding and curricular spiralling. Instructional scaffolding, as a form of structured interaction between student and teacher, provides gradually decreasing quantities of teaching assistance as students become more knowledgeable and independent learners. In its early stages, this scaffolding guides students' acquisition of knowledge by limiting nonessential options and focusing on required skill sets. Bruner (1966) believes that with appropriate representation – following a progression from enactive, through iconic, to symbolic – any subject can be accessible to any student. In a spiral curriculum, the subject is repeatedly revisited at successively higher levels of sophistication, reinforcing principles introduced at lower levels. Bruner's instructional theories are intrinsically woven into KM. They are exhibited in KM's scaffolded support for students and its spiralled approach to music curriculum.

Within a KM framework, the “frequency of occurrence of specific melodic turns and rhythmic figures” establishes the hierarchical sequencing of its musical skills and concepts (Choksy, 1999a, p. 174). Thus, the rhythmic/melodic/harmonic content of the music literature governs the conceptual content of the music instruction. This contextually derivative content is positioned in a spiralled exploration of its substance, which builds conceptual awareness through scaffolded musical experiences. As the scaffolding is reduced, these experiences move systematically toward abstractions of the musical concepts.

The four stages of KM's instructional process (preparation, conscious awareness, reinforcement, and assessment) are interwoven with a series of musical skills (hearing, singing, deriving, writing, reading, and creating), then further entwined with the musical concepts of rhythm, melody, harmony, texture, structure, and expression. However, this process is not the usual *modus operandi* for music theory pedagogy. While KM's overlapping or “polyphonic” approach may seem exceptionally complex, its planning, which involves the simultaneous progression of distinct conceptual inferences, is logical and rational (Penny, 2012). Musical

elements do not exist in isolation – a factor that should be reflected in their multi-faceted presentation.

The most prominent pedagogical disparity between traditional forms of music theory instruction and KM's instructional process is in their handling of the subject's specific elements. One teaches tidy self-contained topics and the other, messy overlapping/spiralling topics. The study of compositional techniques is given as an example. Until recently, at least in an RCM context, this topic was not addressed until it became necessary for the completion of melody writing exercises in the study of basic harmony at level 9. And even then, the discussion generally involved a superficial sampling of techniques that required minimal student involvement. But in a KM context, students experience a tangible array of compositional techniques by listening to artworks, singing the main themes, and analyzing the composers' artful manipulations of these themes. As they prepare for future creative activities, the students' own musical palettes are augmented by the fruits of their analytical discoveries.

In readiness for these improvisational or compositional tasks, Choksy (1981) suggests having the students experiment by applying the compositional techniques they have studied to known songs, such as *Frère Jacques*. Depending on the extensiveness of the students' exposure to repertoire, Choksy illustrates her point by altering the song with the following techniques:

- augmenting or diminishing it
- singing it in a minor key or in a mode, such as Dorian
- changing its meter
- ornamenting it
- substituting its smooth rhythm with a jagged one (using dotted notes or adding repeated notes)
- changing its *legato* phrasing to *staccato*
- inverting it
- singing it in retrograde (backwards)
- changing the intervals of its canonic repetition, both melodically and rhythmically
- harmonizing it with broken chords
- placing it simultaneously in two different keys (producing bitonality)
- reconstructing it with a whole-tone scale
- adding chromatic notes between its melody notes
- accompanying it with dissonant chords

To re-iterate, students are encouraged to experiment with compositional techniques they have *previously* learned. This is not an introduction process, it is an application process. The techniques are put forward by the students, in response to the teacher's question: How might

Frère Jacques be handled by a composer? (Choksy, 1981). This process encapsulates one of the underlying premises of KM – “to invent is to understand” (p. 94).

In view of the preceding model, I believe that students of music theory derive far greater benefit from a deep investigation of its constituent elements than from a broad survey of its subject matter. Without the complexities of depth, a surface examination of theoretical elements compromises not only the richness of significant conceptual understandings, but their transferability as well. Depth emerges at the intersection of music and theory – for theory without music is superficial and trivial, particularly if it is taught with paper and pencil as the positioning of black dots on a set of evenly-spaced lines. These technical or scientific maneuverings must be reconciled with the artistic phenomena they represent. Sound and symbol must be brought together if there is to be an integration of art and science in music theory pedagogy.

Integrating Art and Science

In an ideal world, all things are possible but in the real world, there are practical limitations. Do the LGs accomplish their goal? In my estimation, they do. Did they take shape as I had imagined? They did not. I succeeded in connecting music and theory, but KM’s instructional process is not as obvious as I would have liked. I incorporated Choksy’s (1999b) adaptation of its four stages by reinterpreting preparation activities as pre-listening tasks, conscious awareness activities as first listenings, reinforcement activities as repeated listenings, and assessment activities as creative tasks. But because every student brings a variable or unpredictable level of knowledge to the process, I needed to ensure that the LGs were suitable for a general student audience. Therefore, I was limited to reinforcing known musical elements, rather than introducing unknown elements. In effect, I was not able to *teach* with the LGs as much as I had hoped.

Nevertheless, I was able to address some of my lingering concerns about music theory teaching by fore-fronting the reasoning behind its many “rules.” Sometimes the reasoning is explicitly presented in the discussion, as in writing the tenor part an octave higher than it sounds. Sometimes it is implicitly communicated, as in using short bar lines for vocal scores. This sub-surface communication allows students to think for themselves. And by encouraging student autonomy, I positioned myself to ask not only *what* questions, which are fairly straightforward

observational exercises, but *why* questions as well, which are generally more complex and require some thought.

Student autonomy allows an element of subjectivity to enter the topic of music theory, which is largely objective, particularly at rudimentary levels. Influenced by personal feelings and opinions, the awakening of subjective discernment is a natural consequence of knowledge acquisition. It is also nurtured by artistic experience. But subjective discernments, like music listening skills, are not innate. They are cultivated and developed through careful guidance, in the manner of Bruner's (1963) instructional scaffolding. Left to their own devices, many students struggle with subjective questioning. They simply do not know how to respond because they have not been properly prepared. Frequently, they have no concrete experiences from which to derive meaningful answers.

In the music history component of RCM's (2016) *Celebrate Theory* series, students are asked subjective questions with little preparatory assistance. Under "Personal Reflection" subheadings, the following questions or directions conclude the relevant commentaries:

- level 5: Mozart's "Queen of the Night" Aria from *The Magic Flute* – "Describe your experience listening to this work. What did you like best about it?" (RCM, 2016a, p. 66)
- level 6: Bach's Invention in C Major, BWV 772 – "Baroque music is often based on a single idea or emotion, referred to as an 'affect.' In your own words, describe the musical character conveyed in the performance you heard." (RCM, 2016b, p. 77).
- level 7: Mendelssohn's Overture to *A Midsummer Night's Dream* – "Record your impressions of this musical composition." (RCM, 2016c, p. 91)
- level 8: Josquin's *El grillo* – "Record your impressions of this listening experience. Comment on the relationship between the text and music." (RCM, 2016d, p. 109).

For levels 5 and 7, there is no attempt to contextualize students' reflections as the same direction is given for every work at the applicable level. For level 6, there are two sets of directions – one for the Baroque works and one for the Classical work. Only the directions for level 8 are slightly more repertoire-specific, excepting those intended for the global music selections.

I appreciate RCM's desire to broaden students' musical experiences through an introduction to music history. But without establishing a pedagogical basis on which to build relevance, the repertoire, including its artistic association with personal subjectivity, is often meaningless. I am not saying that questions like "How does this piece make you *feel*?" should not be asked. I am saying that students should be prepared – with appropriate knowledge and

vocabulary – to answer. One of my Orleans group participants, imitating one of her students, gave this reply to such a question (PG-2O):

I feel like I'm twirling in the sunshine in a meadow of flowers.

Similar replies are quite common and often describe pieces of vastly dissimilar musical character. My LGs are intended to deepen students' subjective experiences of music with objective elements of music theory. This pedagogical integration of art and science is intended to develop the meaningful subjectivity of musical literacy.

Concluding Remarks

Chapter 4 introduced the LGs that will provide instructional materials for my participants. Throughout the exposition and analysis of these materials, I disclosed the many decisions that influenced their final configurations. My observations are offered as an informal critique that revolves around my formative question:

- How can the teaching of intervals and chords be integrated with repertoire from the Royal Conservatory's (2016e) intermediate theory curriculum?

Although direct references to KM's instructional process tended to lessen from one LG to the next, Kodály's principles and practices are ever-present. They intrinsically informed every decision I made, particularly regarding the inclusion of preparing and reinforcing activities. In relation to the musical skills that facilitate these activities (hearing, singing, deriving, writing, reading, creating), I emphasized *deriving* because it is the skill that most closely exemplifies KM's pedagogical approach. And by encouraging students to derive the elements of music theory from the music itself, I established an art/science link.

My LGs are purposefully constructed for the pedagogical integration of music (art) and music theory (science). Guided listening experiences provide access to music theory – just as theory is accessible with, about, in, and through music (Cornett & Smithrim, 2001). Whether (or not) the LGs are useful representations of my art/science integration within the discipline of music theory pedagogy is a question for my research participants. In chapter 5, the participants' stories will be woven into my story. Our aggregate narrative will then undergo a formal critical analysis in the final chapter. But before engaging the interrogative/reflective data, I will expand my methodological discussion from chapter 3 in order to address the complexities of data analysis in ABR and to disclose the specifics of my data collection.

Interlude

Musical values are not absolutes.

– Lewis Rowell (b.1933)

Data Analysis in Arts-Based-Research

H. Porter Abbott (2002) contends that “[o]ne of the ancient functions of narrative is that it gives us sufficient understanding to make up our minds about things” (p. 174). His words remind me that I can derive musical/theoretical/pedagogical meaning from writing as well as from reading. Abbott goes on to ask: “[I]s it out of the question that wisdom leaks in from the world of feelings, actions, and consequences?” (p. 174). My experiences with music theory pedagogy – as student, artist/musician, teacher/practitioner, examiner, author/pedagogue, and researcher – attest to the certainty that this “leakage” is powerful. Although my personal/professional experiences may not be perfect, they have value, here and now.

In chapter 3, I mentioned an article by Nielsen (2009) in which he harnesses the contentious relationship between “music pedagogy as a field of research and the practice of music education” (p. 22). Considering research questions involving identification and formulation, result development, and application, Nielsen presents four models of correlation in music education that describe teaching and researching as separate, co-operative, integrated, and parallel. Illustrating his integrated model with a reflective practitioner, Nielsen cautions that practical relevance may erode scientific rigour and therefore, reduce the validity of the research result. In its place, he suggests a *parallel* model, which implies a simultaneous “closeness and distance” (p. 37), distinguishing music education in practice from the practice of research in music education and nurturing this research on its own scientific premises.

Nielsen (2009) regards music pedagogy as an analytical *science* that serves educational practice. While I acknowledge his scientific view of pedagogy, I cannot reconcile my artistic predisposition with his post-positivist stance. I recognize its legitimacy but even with Nielsen’s caution about reduced validity, I am firmly committed to the concept of integration – for my teaching, my researching, and the intersection of teaching/researching in my inquiry. Seeking a research model that accepts the validity of artistic interpretation, I am inclined toward Roulston’s (2006) exploration of qualitative studies in music education. In Roulston’s interpretive methodology, where “researchers are involved in knowledge construction to examine *meanings*

from participants' perspectives (p. 155, original emphasis), findings emerge from data analysis inductively rather than deductively.

Earlier, I had imagined Roulston's (2006) inductive or "bottom-up" posture in an instructional context – with teachers involved in knowledge construction from students' perspectives – but I would like now to re-instate her original research context. Citing Crotty (1998), Roulston (2006) contrasts interpretivist research with "research that aims to 'explain,' or focuses on causality" (p. 161), preferring inductive strategies that draw on the notion of *Verstehen*, an empathetic, intuitive understanding that is associated with German sociologist Max Weber (1864-1920). Just as Kodály (1974) advocates paving the way for "direct intuition" in music education (p. 120), I will embrace the authenticity of direct intuition in both music theory pedagogy and my research on the topic. However, with my investigative approach centered on an amorphous process of *intuiting*, how can I ensure an acceptable level of validity in my data analysis?

Establishing Validity

According to Barone and Eisner (2012), there are two types of validity in ABR: internal and external. While internal validity pertains to the reliability of conclusions drawn from the research premise, external validity involves the relevance of these conclusions for the community or condition it addresses. Both types of validity enable the research to "withstand logical scrutiny" (p. 162). In an ABR context, reliability or credibility is equated with truthfulness and trustworthiness – qualities that Leavy (2015) associates with the concept of *resonance*. Unquestionably, every researcher hopes that her/his project will resonate with its audience, but this is a particular concern for ABR practitioners whose work is frequently met with resistance.

Barone and Eisner (2012) present two concepts that promote credibility in ABR: structural corroboration and referential adequacy. Defining structural corroboration as a "gathering of many pieces of evidence that enable one to create a compelling whole" (p. 162), the authors rely on this evidence not only to support the study's conclusions, but to deepen its analyses as well as the conversations it generates. Referential adequacy refers to the meanings engendered by the study. In my own quest for meaning, I have rephrased Barone and Eisner's criteria for credibility as guiding questions:

- Does the story ring true?
- Is the analysis cogent and credible?
- Is the tale coherent?
- Are the meanings generalizable?

In ABR, there are no operational rules that determine next steps and the criteria listed above cannot be applied as such. Instead, these criteria must be deliberated and discussed – for “one needs to exercise judgement in the absence of rule” (Barone & Eisner, 2012, p. 163). While there are general guidelines for the practice of ABR, and standards within each artistic genre, they cannot be uniformly implemented or evaluated.

As Leavy (2015) warns: “*This is a messy terrain*” (p. 268, original emphasis). Like Eisner before her, she argues for the *utility* of ABR – not just its novelty. By applying the concepts of coherence (Baron & Eisner, 2012), comprehensiveness, congruence, and internal consistency (Cole & Knowles, 2008), the holistic or synergistic quality of ABR is strengthened (Leavy, 2015). But for ABR to be effective, especially in an educational setting, it must be useful and accessible to significant stakeholders. It must illuminate a “pathway of education” that is both personally and professionally relevant (Siegesmund & Cahnmann-Talyor, 2008, p. 241). To that end, Richard Siegesmund and Melisa Cahmann-Taylor (2008) support the term *scholARTistry* (Neilsen, 2002), because it captures the integrated purpose of art for the sake of scholarship. They believe that *all* researchers, regardless of prior artistic training, can “develop artistic sensibilities in data analysis and draw on artistic craft to elicit data and share findings” (p. 243). In this light, I will position myself as a researcher whose artistic sensibilities stem from extensive musical experiences.

For data analysis in ABR, Leavy (2015) proposes four strategies: having an external dialogue, having an internal dialogue, using theory, and using literature. I have implemented all four strategies, both in the analysis of my data and in its describing/interpreting. An internal dialogue (Tenni et al., 2003) forms the nucleus of my narrative. This dialogue, threaded through every chapter of my dissertation, is supported by relevant literature and theory. It is also supported by a writing journal that I began in November 2015 when I was preparing my research proposal. An *external* dialogue, informed by the feedback I garnered from my peers, is the focus of chapter 5. According to Leavy (2015), this peer feedback is “particularly salient” for research projects that use autobiographical data (p. 269).

I am reasonably satisfied with my application of ABR practices. All but one. I am unsettled again by the issue of an artful representation. What *is* my art product? How can I respond to Leavy's (2015) prompt for validity – "What is this art good for?" (p. 277) – if I cannot explain the aesthetic value of my work? And even more unsettling is Johnny Saldaña's (2011) query: "But is it *art*?" (p. 203, original emphasis). I had assumed, somewhat smugly, that my identity as an artist/musician essentially guaranteed an artistic product. Surely the artful reporting of my research in a beautifully constructed dissertation would more than suffice.

Eventually, I abandoned my assumption and began to unravel the problem of artfulness in my inquiry. A central feature of ABR, the aesthetic quality of my work is intimately tied to audience response and therefore to its utility/validity (Leavy, 2015). In other words, artfulness begets usefulness. But in order to achieve "aesthetic power," my artistic rendering must "get to the heart of the issue" and present its essence in a coherent form (p. 278). The audience must then experience my representation as truthful and trustworthy (Chilton & Leavy, 2014). Indeed, if I am to achieve rigour, my work must have "deep aesthetic impact" (de Freitas, 2004, p. 269). It must be a work of art.

Is my narrative an artwork? And if so, am I a qualified narrator? Leavy (2015) insists that I must pay attention to the artistic craft from which I am borrowing. While I am not trained in the craft of narrating, I am trained in the craft that serves the content of my narration, and since my experiences in this capacity are genuine, they are expressed with authenticity. Leavy, arguing that the authentic *is* aesthetic, quotes Michael A. Franklin (2012): "[T]he best art is the most honest, authentic art" (p. 89). Consequently, if my artistic representation conveys meaning for my audience, it may be considered aesthetic regardless of its adherence to the conventions of the borrowed genre (Leavy, 2015). This possibility provides a partial solution for my problem.

However, I must also keep in mind that the concept of artfulness is related to the unique perspective every artist-researcher brings to her/his work (Leavy, 2015). Since all artistic practices are *crafts* – without formulaic prototypes – each practitioner brings a personal fingerprint or signature to her/his research project, which may be used to assess its validity (Barone & Eisner, 2012). Filtered through my personal/professional experiences, my "signature" is manifest in the words I choose to express my observations. These words are shaped into a form that suits my research premise and the resultant form constitutes my work of art. As Leavy

suggests, “[a]rtistic works have a *voice*” (p. 280, original emphasis). Artful credibility involves finding and expressing a *resonant* voice.

Are my LGs artworks? If an artwork is an “artistic production” (Webster, 1983, p. 106), they are certainly products that include art (music) content. If an artwork is an aesthetic entity of artistic creation, generally with a physical form (Arts3 Network), they are surely physical entities created with artistic subject matter, but they are not necessarily *aesthetic* entities – except in the sense that they embody an underlying set of creative principles and these principles influence my work. While the LGs are primarily pedagogical, they are also crafted with artistic intent. Perhaps even a modest portion of artfulness can be useful.

According to Siegesmund and Cahnmann-Taylor (2008), arts-based researchers “seldom make an ‘art-for-art’s-sake’ claim” that their work stands alone – independent of its analysis (p. 233). Unlike many conventional artists, they explain their work and offer cues to its reading. As Barone (2001a) argues, these artist-researchers are capable of playing “two games at once” (p. 171). By assuming dual roles as artist and analyst, the arts-based researcher can both “create and critique, challenge and explain” (Siegesmund & Cahnmann-Taylor, 2008, p. 234). This duality invokes the German concept of *freischwebend*, which literally means “free-floating” or hovering above (Bauman, 1992). It also calls for epistemological humility since “[k]nowing requires not knowing: a state of being lost in order to find” (Siegesmund & Cahnmann-Taylor, 2008, p. 234). Arts-based researchers, disinclined to accept the implied closure of static knowledge claims, find reflective wisdom in the openness and ambiguity of uncertainty. Eisner (2008b) describes this knowing process as a “fluid stream rather than a fixed rock” (p. 25).

ABR practitioners must think conceptually, symbolically, metaphorically (Saldaña, 2011), and thematically (Leavy, 2015). This “artist thinking” applies to the research process as well as the representation of the research data. But if an artwork is a material (non-textual) medium prepared for reproduction in a printed publication (Webster, 1983), I can satisfy only part of the definition. True, the LGs are prepared for my dissertation, but they are creative products of *both* textual and non-textual content. However, if art is “something made, not something found,” as Arthur Bochner and Carolyn Ellis (2003, p. 507) contend, then the LGs are the result of my pedagogical “makings” – but makings that are designed to be used. As such, they provide material data for my inquiry, while the participants provide empirical or experiential data.

Disclosing My Data Collection Process

Along with the artistic legitimacy of the research product, the transparency or explicitness of the research process is also a notable criterion for credibility (Rolling, 2013). In chapter 3, I divulged the four interactions of my research design – formative, interrogative, reflective, and summative – which are derived from the four stages of KM’s instructional process. For the interrogative interaction, I asked my participants to review the LGs, considering their potential effectiveness as supplemental teaching materials. Soliciting both negative and positive feedback, I conducted three introductory focus group discussions in March 2017. These discussions involved the Toronto group, the Kanata group, and the Orleans group, in this order.

As I remarked in chapter 3, the individual make-up of each focus group is unique. Although unintentional, they represent distinct populations within the larger music education community. And the distinctive experiences of each group ultimately influenced our discussions, as well as my analysis of the discussions. The Toronto group, originally comprised of four teacher-examiners (two men and two women), was reduced to three on the day of our meeting. We were scheduled to meet in Guelph but the logistics of our gathering were complicated by a snowstorm the previous day. One of the participants, unable to travel from his home near Barrie, offered to host our discussion through AnyMeeting, which he utilizes for on-line teaching.⁷⁶ The west-coast participant, who was to attend via Skype, was prevented from doing so by of a power outage in Vancouver. Her explanatory message was the last communication I received from her, despite my efforts to contact her after the meeting by e-mail. Given that she is no longer a member of RCM’s College of Examiners, further interaction is unlikely.

The discussion with my remaining Toronto group participants took place in Guelph as planned. We met at one of the participant’s homes on Monday, March 13, 2017. I sat at the dining-room table with two of the participants – one on either side of me – facing my laptop computer. Once the AnyMeeting link was shared and a few technical difficulties resolved, we could see the third participant on my computer screen. In front of me, I had clean paper copies of the LGs which I shared with the participant on my left. The participant on my right had electronic copies on his own screen. Part way through the discussion, we stopped for lunch,

⁷⁶ AnyMeeting, a subsidiary of Intermedia (<https://www.intermedia.net/products/anymeeting-webinars/pricing>), is a web-based software application that provides webinar services for small businesses. It enables users to host video conferences or on-line meetings and to share screens remotely.

although we did not break the web-connection. Having just completed our review of level 5, the remote participant played several YouTube versions of Mozart's "Queen of the Night" Aria, including one by an astonishing fourteen-year-old Robin Schlotz (Su, 2006). After lunch, we continued our discussion with a systematic review of levels 6, 7, and 8. At the discussion's conclusion, the remote participant sent me an e-mail link to the audio/visual recording of our meeting.

This recording, which reproduces 2:41:42 hours of dialogue, is the only data I collected from the first focus group discussion. Since I knew that our conversation was being recorded by the remote participant's computer, I did not make a second recording with my own audio device. In retrospect, I wish I had overridden my reluctance to use this second device because the quality of the AnyMeeting recording is sometimes deficient, causing occasional words or phrases to be unintelligible. Additionally, the audio and video components are seldom properly synchronized, making lip-reading nearly impossible. I did not take notes at the time of the meeting because I was sharing my LGs with one of the participants. While this needless display of timidity compromised my data collection for the first focus group discussion, I learned a valuable lesson. All the remaining discussions were recorded on my Sony MP3 IC Recorder and I took notes during the meetings.

The Toronto group participants are distinguished from the others by their membership in RCM's College of Theoretical Examiners. As a result, they are generally more familiar with the curricular requirements for *all* music theory subjects. And because most of their theory teaching involves the advanced subjects of harmony and history (levels 9 to ARCT), they are more apt to understand the requirements for intermediate rudiments (levels 5 to 8) as preparation for later theoretical studies. Furthermore, they are intimately involved in RCM's theory examination process – not only in preparing students for exams on a studio scale, but in observing students' responses on a conservatory scale. This positioning allows them to recognize a much wider range of potential difficulties/misunderstandings for music theory students.

While none of the three Toronto group participants mark rudiments examinations as I do, we met to review the LGs as examiner colleagues. My interactions with the other groups were recognizably different as my role shifted from that of examiner to teacher. The Kanata group participants (four women) are all younger piano teachers who supplement their practical lessons with theory, two of them beyond the level of intermediate rudiments. The same two are recent

inductees to RCM's College of Practical Examiners, but neither is associated with theoretical examinations at any level. These examiners, along with another of the Kanata group participants, have completed master's degrees in music. With similar levels of education, as well as shared involvements with RCM, we should have met on an equal footing as peers – and we did, to some extent – but my many years of teaching and examining inevitably tipped the balance. My age, approximately twenty years beyond theirs, may have been another factor.

One of the examiner participants offered her Kanata home for our introductory focus group discussion on Wednesday, March 22, 2017. This arrangement circumvented the necessity for child-care since her four-year-old daughter could be supervised in our midst. As it happened, the participant who is neither an examiner nor a master's graduate, but a certified Music for Young Children (MYC) teacher, was unable to attend because of illness.⁷⁷ Consequently, I conversed with the three remaining participants around the dining-room table, each of us reading individual paper copies of the LGs. I gave a brief introduction that explained my research premise and reiterated the purpose of our meeting. We proceeded more-or-less systematically through all four LGs. I asked questions sparked by the discussion, or my experiences writing the LGs, and the participants asked questions of me. Much of the discussion was carried by one participant – as was the case with the Toronto group – but everyone who was present contributed.

From the Kanata group, I collected data in both audio and written formats: an MP3 recording containing 1:03:24 hours of conversation and observational field notes jotted on my clean copies of the LGs. Although it was not a requirement, I suggested in the e-mail message I circulated along with the LGs that written feedback was an option. As a result, I received three additional pieces of data: two sets of annotated LGs, one from the participant at whose home we gathered and one from another of the participants, as well as brief comments in an e-mail from the participant who missed our meeting. I collected similar data from the Orleans group: 2:06:54 hours of recorded conversation, field notes, one of the participant's written observations – titled "Random Thoughts" – and another's written answers to the formal questions I posed before the introductory discussions (see **Appendix 3.6**).

⁷⁷ Since 1980, MYC has empowered its students, ages 2-10, to be creative and expressive through music. Designed by early-childhood specialist Frances Balodis, MYC's multi-sensory approach develops children's musical skills, such as playing and reading, as well as their cognitive, physical, and social skills (<https://www.myc.com>).

The Orleans group participants (four women) are older teachers, three of piano and one of strings. Although they also supplement their practical lessons with theory, one more than the others, none of them teach music theory beyond intermediate levels. I was acquainted with all the Kanata group participants as fellow ORMTA members, since we all held positions on the Ottawa Region Branch council at the time of our first focus group discussion. However, I was much better acquainted with the Orleans group participants. In addition to ORMTA membership – either past or present – all of us are current members of the Gloucester Music Teachers' Association (GMTA), a smaller, more intimate group of music teachers in Ottawa's east-end. These women, one of whom inspired my graduate studies with her own mid-life master's degree, are my friends as well as my colleagues. These friendships are rooted in a sincere respect for one another's expertise.

When RCM (2016e) released the newest edition of the *Theory Syllabus*, many teachers – including my participants – had questions. To address these questions, I was invited by GMTA and Steinway Ottawa, whose manager is also one of my teacher-colleagues, to give a series of music theory workshops during the 2016-2017 academic year. My presentations addressed four specific topics: rhythm, pitch (including scales, intervals, and chords), melody writing, and music history – the last two being new requirements for intermediate-level examinations. Two of the Kanata group participants and all four of the Orleans group participants attended one or more of my workshop presentations. Coincidentally, the music history presentation occurred just a few days before our focus group discussion in Orleans.

Because of the participants' relative proximity to my home, the Orleans focus group discussion took place around my kitchen table on Monday, March 27, 2017. All four participants were in attendance. I discovered early in our meeting that one of the participants had inadvertently forgotten to bring her LGs, so I stopped the recording and made duplicate copies for her. Again, the conversation proceeded more-or-less systematically from level 5 through level 8, with roughly equal contributions from all participants. While the Kanata group was fairly critical of my approach to music theory pedagogy, the Orleans group was more liberal. It is reasonable to assume that their openness is attributable to our personal rapport, but their comparative maturity may also have been a significant factor. Essentially, the younger teachers were focused on the *quantity* of supplemental instruction in the LGs, as well as the relevance of this instruction for exam preparations, while the older teachers were focused on the *quality* of the

instruction and its potential for a meaningful experience of examination requirements. In contrast, the Toronto group participants were focused on theoretical accuracy and the relevance of the instruction for advanced-level requirements in harmony and history, analysis and counterpoint.

Prior to the introductory focus group discussions, I considered expanding my research project to include four additional participants from RCM's College of Theoretical Examiners. Two teacher-examiners had indicated interest when my recruitment letter was distributed for the second time in November 2016. Another had approached me before my proposal was completed, but none of these could participate fully because of time constraints. Optimizing their interest, I wanted to offer an abridged form of participation that excluded the group activities. Consequently, in February 2017, I filed a second request to formally modify my project. The new participants would be asked to critically review my LGs over a two-week period and to provide written feedback, increasing the richness of my data with insights that are unique to this specialized educational community. Although I would have appreciated my colleagues' wisdom, I did not proceed with this modification, despite the receipt of ethics approval to do so. Following the introductory focus group discussions, I decided – with input from my supervisors – that I had more than enough data from the existing groups of participants.

The introductory focus group discussions represent the second stage of my research process, or the interrogative interaction. At this stage, I was attentive to the potential *implementation* of the LGs. During the third reflective stage, I intended to concentrate on the *improvement* of the implementation. My reflective interaction is modeled on KM's reinforcement stage. This reinforcing instruction involves the practical application of a theoretical concept over time, moving toward abstraction through various writing activities. In my research context, I had asked the participants to describe their application(s) of the LGs in written form, and to share their descriptions by way of a Google Docs file. To encourage this reflective writing, I also posted questions for contemplation (see **Appendix 3.7**) and invited the participants to respond to their colleagues' reflections as a continuation of the introductory focus group discussions. I was seeking insights drawn from the participants' experiences, both as individuals and as groups.

I documented my own experiences with a student who was working through the level 8 LG and posted these reflections as sample entries in the Google Docs file I created for each focus

group. There were no further entries. **Appendix 5.1** records my diarized postings, but even these remain unfinished. Lacking reciprocity from any of my focus groups, I was unmotivated to reflect on the last activity, although I wish I had persevered, if only to present a complete data set. The participants' absence of engagement may have been a consequence of busyness, but it was also dependent on each teacher's scheduling of interval and/or chord presentations during the trial period – with students at the appropriate levels of study. In the end, their pedagogical insights were merely packaged in a different way. Rather than circulating written submissions via Google Docs, they waited for an opportunity to engage one another in face-to-face conversations. As a result, the concluding focus group discussions, instead of the summative interactions I had envisioned, became reflective interactions. This adaptation inevitably transformed the summative stage of my research process as well. Its metamorphosis will be fully scrutinized in chapter 6.

The concluding focus group discussions, with one exception, took place in August 2017. As reflective interactions, they were generally philosophical in nature – compared with the predominantly practical nature of the introductory discussions. Without intention, the order of the concluding conversations was the opposite of the introductory conversations: Orleans, Kanata, and Toronto. The Orleans group participants gathered around my kitchen table on Wednesday, August 9, 2017. One of the participants was unable to attend because her presence was unexpectedly required elsewhere. But with the renewal of my ethics approval certificate, she and I met separately on Wednesday, November 22, 2017 at my home. From these two meetings, I collected audio recordings of 1:48:35 and 0:37:22 hours, respectively.

The Kanata group participants met on Friday, August 11, 2017 around the same dining-room table as our previous meeting. This time, we were joined by the MYC participant who had missed the introductory discussion. Her two young sons accompanied her, playing with the daughter of our hostess in an upstairs room. She enthusiastically entered the initial conversation but as the dialogue continued, she fell silent. Anticipating the possibility of a child-care intervention, the hostess participant asked to speak first. As one of the RCM examiners and a master's graduate, she is quite articulate – her thoughts were presented with confidence and an easy fluency. I was unaware of the MYC participant's growing unease until I invited her to speak and she flatly refused. She collected her children and left the meeting, despite my attempts

to dissuade her. Afterwards, I discovered that one of her students had recently quit her studio and begun lessons with the other examiner participant.

Although the emotional turmoil of this presumed “defection” contributed to the MYC participant’s hasty departure, as well as her subsequent departure from ORMTA council, it was not the only factor. She had earlier expressed her reluctance to join the Kanata group, fearing that both her education and her experience were insufficient to offer a credible viewpoint. I assured her that she was a valued member of the group and erroneously downplayed her fear with the assumption that she was surrounded by her friends. This was partially true, but the group dynamic was not as I had assumed. The MYC participant felt intellectually inferior to the other participants and seeking to relieve her discomfort, she fled. I was shocked. The others, with whom she was better acquainted, were less so, having previously observed similar reactions from her. But before leaving the meeting, the MYC participant gave me her annotated LGs, for which I am deeply grateful.

It occurred to me – after the fact – that the MYC participant’s opinion was, in actuality, the most pertinent for my inquiry. Not to diminish her competence nor that of the others, she personifies the average teacher for whom the LGs were written. *Her* judgement of their usefulness or non-usefulness was paramount. I reached out to her many times over the next year, but she politely refused my requests for an interview, which gave her annotated LGs all the more significance. Along with her annotations, I collected 0:58:37 hours of audio data and another participant’s written answers to the formal questions I circulated before the concluding discussions (see **Appendix 3.8**). But every time I listen to the second Kanata recording, I am filled with sorrow and regret for the MYC participant’s anxiety. I am also embarrassed because “I didn’t see it coming and I was powerless to stop it” (L. L. Penny, journal entry, April 18, 2019). However, like most of life’s lessons, the knowledge gained from the experience could not have been gained otherwise.

Comparatively less eventful, the Toronto focus group discussion yielded 1:33:44 hours of audio data but no written data. I met with my examiner-colleagues on Wednesday, August 16, 2017, following RCM’s history marking meeting which we attended together. The Administrator for the College of Examiners kindly arranged a quiet room for us on the fifth floor of the Royal Conservatory building, located on the University of Toronto’s downtown campus. The three remaining Toronto group participants were all present.

Analyzing the Data

By way of summary, the data sets I collected to substantiate my inquiry are as follows:

- AnyMeeting audio/visual recording: 1 discussion of 2:41: 42 hours
- MP3 audio recordings: 6 discussions for a total of 8:08:36 hours
- transcripts from recordings: 252 pages
- LGs annotated by participants: 4 sets
- written responses/reviews from participants: 4 documents
- field notes from introductory focus group discussions: 2 sets
- LGs completed by my students: 1 set, levels 5-7 by one student and level 8 by another
- diarized reflections on my student interactions: 1 set for level 8 (incomplete)
- journal entries: from November 24, 2015

My formal analysis of the empirical data began with the recordings and proceeded loosely in the order given above, approximately one year after the concluding focus group discussions took place. But informally, my analysis began immediately. Ideas came to me with the first of the introductory discussions and continued to percolate throughout the research process. Although I intended to isolate individual groups of participants from the others, I could not. I was a member of each group – a common denominator – and because I learned from every interaction, my contribution to the group experience was not static. My percolating fragments of understanding invariably entered each successive conversation. Perhaps I was simply excited to share my newfound cognizance, but it also seemed intellectually dishonest to withhold the insights I was gathering. Besides, I was anxious to explore these insights collaboratively.

From this rather esoteric process, I derived meaningful outcomes, particularly for my teacher-self and my author-self. However, an inquiry of this sort is expected to resonate with a much wider audience. The research process must be *exoteric* and it must be academically trustworthy. To this end, I began my formal analysis by listening to the audio recordings. The MP3 files were copied to a CD that I could play while I was driving. As a result, the group discussions gradually permeated my consciousness, since I often listened during my weekly trips to Kanata for teaching. But the most fruitful listening experiences occurred during my longer trips to Toronto for marking or sampling, especially one such trip in September 2018.

From these purely auditory encounters, I extracted six themes that are associated with my six personal perspectives:

- singing – artist/musician
- analyzing – researcher
- deepening – author/pedagogue
- layering – teacher/practitioner
- preparing – examiner
- connecting – student

The order of their presentation corresponds with the order in which they were revealed in the data. Their association with various aspects of my person came later, in an interesting “ah-ha” moment. The first theme – singing – was immediately obvious to me. The other themes, which generally overlap, were revealed more slowly, with each new theme seeming to emerge from its predecessor.

Once the themes were established and settled, I proceeded with the active work of analysis, although my older daughter, as research assistant, had begun transcribing the audio data long before. In the early months of 2019, I started to read her transcriptions while listening to the recordings with headphones at my computer. She had highlighted in red type the passages of which she was unsure – either because the conversation was indecipherable, or the terminology was beyond her musical experience. I addressed each passage, adding my interpretation to hers, then tidied the transcription documents with consistent formatting. I also named the participants by substituting her generic labels (participant 1, participant 2, etc.), with abbreviated identifiers. This editing process enabled me to actively internalize the recorded data which enhanced my previous, more passive listening experiences.

Wanting to fully appreciate the subtleties that differentiate the interrogative data and the reflective data, I decided to analyze them separately. I printed the transcripts for the three introductory focus group discussions and gathered six coloured highlighter pens, assigning a specific colour to each of the themes as follows:

- singing – pink
- analyzing – orange
- deepening – yellow
- layering – green
- preparing – blue
- connecting – purple

I read the introductory transcriptions in chronological order and coloured the participants’ comments according to their thematic applicability. The boundaries between themes were not

always clear-cut and many comments were relevant for more than one theme. Consequently, my choice of colour was frequently influenced by the neighbouring dialogue. As I read, the boundaries between themes gradually became more definitive.

With the colouring of the introductory transcriptions completed, I opened six new Word documents, one for each theme. I systematically copied the coloured comments into the appropriate files, in the order presented above, capturing pertinent fragments of the surrounding dialogue – including my own – to provide context for the participants' comments. I also included repeated statements of similar ideas or opinions since the repetition of these ideas implies their relative importance. In each of the six theme files, the data was organized chronologically, both from one focus group discussion to another and within in each discussion.

Following the same order of presentation, I printed each file single-sided and cut the printed pages into discrete conversations identified by transcript and page number. Taping together the exchanges that crossed from one page to the next, I spread these conversations across my tabletop, sorted them into related topics, then arranged them in a sequence that suggested a narrative progression. When the rough sequencing was accomplished, I re-ordered each file and imported it into my dissertation document under the appropriate subheading. But as I studied the analyzing data set, which was the most plentiful, I realized that it would provide a more logical beginning for my narrative. And in compliance with this new logic, I shifted the themes into a different order: analyzing, layering, deepening, preparing, connecting, and singing. The amended order seemed to resemble a steadily expanding pedagogical process.

As I prepared to articulate the outcomes of my interrogative data analysis, I welcomed Leavy's (2015) advice:

Begin from where you are, learn as you go, trust your intuition, take risks, balance your goals and abilities, and accept that no research product can be all things to all people. We would all love to be able to make work that is simultaneously great research and great art, but that isn't always possible, nor is it always the goal. The question may be: Is it *good enough* to achieve the intended purpose? (p. 285, original emphasis)

The purpose that motivates my research project is the pedagogical reconnection of music and music theory. The feedback I gathered from my peers establishes both reliability and relevance for my project.

As Leavy (2015) contends, it is vital that ABR presents “multidimensional portrayals” of human experience (p. 281). Like ethnographer Ruth Behar (1996), my role in this *external* dialogue is that of a vulnerable observer and my vulnerability, in keeping with Siegesmund and Cahmann-Taylor’s (2008) interpretation, requires “setting aside privilege and power and assuming a stance that Barone calls epistemological humility” (p. 238). It also requires an unpretentious relationship with my research participants that does not involve a process of telling, but of sharing and listening (Siegesmund & Cahmann-Taylor, 2008). For me, this dialogical process demands a receptiveness to the open exchange of ideas, and my narrative recounting of the participants’ feedback demands a commitment to the honest portrayal of these exchanges. “Good research tells a story” (Siegesmund & Cahnmann-Taylor, 2008, p. 239). I trust that my story rings true.

Chapter 5

Data Analysis: Deriving Meaning from the Collective Experience

*Narrative is [a] way of creating order out of chaos,
or as Robert Frost said regarding poetry:
making a “temporary stay against confusion.”*

– H. Porter Abbott (b. 1940)

Introductory Remarks

The music theorist in me is well-acquainted with deriving meaning from an abstract art form. I decipher its symbols, observe distinctive features, ponder nuances, confirm structures, and translate my findings into a linguistic form. I am not troubled by this translation nor the representation of my data within the constraints of language for in many ways, a musical work functions much like a narrative. Both music and text produce “strong or subtle combinations of feeling and thought” through the rhetoric of causation, conflict, and closure (Abbott, 2002, p. 36). Both rely on the repetition of themes and motives/motifs for interpretation.

Although my theorist-self was ready, I was hesitant to begin this chapter until I chanced upon a book ironically titled *The Gifts of Imperfection* and Brené Brown’s (2010) insightfulness turned the tide. In answer to my questions – “Why am I writing a dissertation? What do I hope to gain from its completion?” (L. L. Penny, journal entry, June 15, 2018) – I found a call-to-action. And in her statement that “[i]ntuition is *not* independent of any reasoning process” (p. 87, my emphasis), I found an affirming integration of art and science. Rather than representing contradictory perspectives or conflicting ways of thinking, art and science can be complementary. As *inter*-dependents, science can explain art while art gives meaning to science.

Brown (2010) describes her work as “making connections.” Quoting William Plomer (1903-1973), she argues that creativity is the “power to connect the seemingly unconnected” (p. 96). I see my work in a similar light. In chapter 4, I gave a detailed analysis of the LGs’ content. I documented the myriad decisions that led to their creation by aligning the chosen works with RCM’s examination requirements and negotiating the pedagogical hurdles that presented themselves. In chapter 5, I will analyze the empirical data I collected from my participants, including transcriptions of both introductory and concluding focus group discussions as well as written observations – my own and my participants’. The themes are presented as verbs or the

doings that express my call-to-action. The data is rendered as an aggregate narrative that weaves the participants' stories into my story. This narrative *telling* represents our collective or communal efforts at meaning-making in the discipline of music theory pedagogy.

Chapter 4 was occupied with my formative question:

- How can the teaching of intervals and chords be integrated with repertoire from the Royal Conservatory's (2016e) intermediate theory curriculum?

Chapter 5 addresses both my interrogative and my reflective questions:

- How can an integrated pedagogy for the teaching of intervals and chords according to the Royal Conservatory's (2016e) intermediate theory curriculum be implemented?
- How can the implementation of an integrated pedagogy for the teaching of intervals and chords according to the Royal Conservatory's (2016e) intermediate theory curriculum be improved by the participants in my research study?

At the interrogative stage of my research process, I asked the participants to consider the potential effectiveness of my LGs as instructional tools. At the reflective stage, the LGs were animated by five participants and their students, transforming the *product* into a pedagogical *process*. My analysis of the resulting data provides reflective insights drawn from our shared experiences. The themes that emerged are analyzed in the context of KM's instructional process and its four stages: preparation, conscious awareness, reinforcement, and assessment.

Interrogative Interactions with the Themes

With the re-ordering of my six themes, a narrative path that explores ever greater depths of pedagogical discernment suddenly opened before me. I saw the data as gradually intensifying observations – reminiscent of Bruner's spiral curriculum. Just as Bruner (1963) argues that the effective use of basic ideas requires a "continual deepening of one's understanding of them ... in progressively more complex forms" (p. 13), so it is that my understanding of the data requires a "continual broadening and deepening of [my] knowledge" (p. 17). And the more deeply I grasped the essence of my participants' observations, the more meaningfully I could relate them to my research in music theory pedagogy. Indeed, as my narrative unfolds, it becomes evident that each new theme is not "new" at all, it is simply a variant of a familiar one.

I am mindful of Bruner's (1963) emphasis on the fundamental *structure* of a subject and the educational provision of a "general picture in ... which the relations between things encountered earlier and later are made as clear as possible" (p. 12). Not always obvious, the themes were

subtly buried beneath the introductory focus group discussions, informing the discussion topics. Naturally, the participants' commentaries influenced my detection of these recurring themes, as well as the direction/development of my data analysis. The analytical process occupied most of 2019. It followed a circular course that enabled me to revisit the themes again and again, with new insights triggered by old ones. These insights, which shaped my responses to the participants' observations, are reinforced by the principles and practices of KM. Gathered from the relevant literature, they encompass all the instructional accoutrements of KM's approach, which is discovery-based, experiential, interactive, holistic, spiralled, and student-centered, to name but a few of its descriptors.

The following list gives an overview of the interrogative themes and their subthemes:

- analyzing – extra-curricular/new concepts; analytical flexibility; pedagogical relevance; guided discoveries
- layering – sequential instruction
- deepening – Mozart's "Queen of the Night" Aria; Bach's Invention No. 1 in C Major; Mendelssohn's Overture to *A Midsummer Night's Dream*; Josquin's *El grillo*
- preparing – intermediate applications; advanced applications
- connecting – practical relevance
- singing – extra-curricular concepts

The analyzing data comprises the participants' methodical examination of the LGs and refers to the pedagogical feasibility of the surface content, particularly concerning details of constitution and structure. The layering data emphasizes the reinforcing element of the LGs' organization and highlights the participants' views regarding the acquisition of theoretical knowledge through listening activities. With the deepening data, the layering discussion narrows to considerations of interpretation and the participants' reactions to the LGs' subjective components. The preparing data involves the pedagogical attribute of readiness, or preparation for future learnings, and the participants' observations of this attribute in the LGs. While the preparing data is focused on a readying relationship between rudiments and more advanced theoretical subjects, the connecting data is concentrated on filling the gap between music theory and music performance. It accentuates the participants' responses regarding the LGs' potential for practical relevance. The singing data explores the issue of connectivity from the opposite point of view by probing the participants' feedback about singing as a viable experiential conduit for student interactions with music theory.

Analyzing from a Researcher Perspective

The rationale for my selection of analyzing as a theme arising from the data is twofold: it involves both the participants' methodical examination of the LGs and my methodical examination of their feedback. An analyzing point of departure seemed logical because my experience as a music theorist, including the detailed examination of works from the musical literature, could prove useful. Additionally, it seemed that analyzing was the work of my researcher-self and it was a timely opportunity for this perspective to step forward. In hindsight, my selection was most likely influenced by curiosity. I simply wanted to know what the participants thought of my LGs and the pedagogical approach they illustrate.

However, as I immersed myself in the data, I began to worry about the general orientation of analysis toward the “separation of a whole into its component parts” (Webster, 1983, p. 82). What can separation offer my inquiry? The underlying premise of my pedagogical approach is integration – I am arguing *against* separation. But in order to explain and interpret my data, I needed first to determine the essential elements at its core and to distill their essence. I was interested in the details my participants extracted from the LGs and subsequently chose to address during our first focus group discussions. These details, which include attributes of constitution and structure, relate to the LGs' potential for implementation according to my second (interrogative) research question:

- How can an integrated pedagogy for the teaching of intervals and chords according to the Royal Conservatory's (2016e) intermediate theory curriculum be implemented?

Fixed on the LGs' surface content, my analyzing theme provides a foundation on which the remaining themes are constructed.

On the surface, my inquiry is occupied with issues of compatibility between KM and music theory pedagogy. Below the surface, I am looking for an art/science integration that unites them as interdependent parts of the same whole. Since analysis scrutinizes the nature of the relationships that connect autonomous parts of the whole, my analyzing theme forms a pedagogical bridge that connects the art of music and the science of music theory. Rogers (2004) places analysis at the center of music theory teaching as the “activity that links mind training [and] ear training” (p. 74) – in other words, the thinking and doing of conceptual and perceptual interpretations of music. For Rogers, musical analysis includes the following characteristics:

- explanations – how and why a piece of music works
- connections – the causal logic behind musical events
- relationships – how events affect one another
- patterns – the grouping together of individual events
- hierarchies – levels of connection or relationship between events
- comparisons – similarities and differences, both internal and external

In my research context, these characteristics guide the whole of my data analysis.

Although the part I have identified with an analyzing theme is primarily concerned with explanation, my interaction with the data does not end there. Rogers (2004) warns against confusing analysis with description, which he defines as a “preliminary fact-gathering enterprise that answers ‘*what* happens?’ and ‘*where* does it happen?’” (p. 74, original emphasis).

Description then, is an indispensable first stage of analysis but is not complete in itself. Thus, the whole of my data analysis exhibits a continual broadening and deepening as I move from one theme to the next.

In a musical setting, Rogers (2004) distinguishes style analysis from critical analysis. The former seeks to understand the “general principles that govern typical stylistic procedures” while the latter “uses these general principles to explain how and why particular events in a specific composition are actualized” (p. 77). Adopting a critical stance, my analyzing data begins to explain the *how* and *why* of the LGs’ implementation from the participants’ perspectives. The following table summarizes their comments across the LGs (levels 5-8):

Table 5.1: Summary of Introductory Analyzing Data

Participants’ Reviews of the Listening Guides				
	level 5	level 6	level 7	level 8
extra-curricular/new concepts	musicianship skills rhythm syllables motives	motivic analysis	score reading	Renaissance notation
analytical flexibility	the A/B-flat argument	literal interpretations abnormalities	contextualization melody/harmony disconnections major/minor key discrepancies	tonal elements in a modal work

pedagogical relevance	sound and symbol associations an interval- measuring exercise	measure-number prompts	key relationships the diminished 7th chord	short score passing/ neighbouring tones modal scales C clefs
guided discoveries	leading questions simplified representations	challenge questions	transposing for orchestral instruments lowered <i>ti</i> as <i>ta</i>	complexities levels of meaning digging

From the participant who hosted the Kanata group meetings, I received an unexpected gift – the categorization of her contributions to our introductory discussion as the “five things [that she] said a lot” (ABs-1K). Having conducted her own research for a master’s degree, she was somewhat familiar with the process of data analysis. Therefore, in her review of the LGs, she offered a summary in the form of these five criticisms:

- no scores (for Mozart’s aria or Mendelssohn’s overture)
- no labels or titles for the activities
- unexplained concepts (from the syllabus) in the activities/assignments
- non-syllabus concepts in the activities/assignments
- weak connections (occasional) between the activities and the assignments

Recognizing the spirit of collegiality from which they were offered, I accepted her observations without offence. It was only later, when I began to internalize the content of our discussion, that I noticed a hint of opposition. I had asked for negative feedback – and received it. I realized, however, that there were two mitigating factors: (1) I had not properly explained the LGs’ underlying premise; and (2) my Kanata group participants had not necessarily delved beneath the LGs’ surface content.

In any case, the hostess participant’s criticisms were helpful. Concerning the absence of full scores for longer works, she suggested including links to the IMSLP database, particularly for Mendelssohn’s Overture to *A Midsummer Night’s Dream*. Depending on the publisher, the length of this score can be prohibitive – 188 pages, in my participant’s estimation – but because Mendelssohn’s work is in the public domain, such a link is not an infringement of copyright or

intellectual property laws.⁷⁸ Another of the participants mentioned micro-scores and a third participant, for Mozart's "Queen of the Night" Aria, suggested including only the first three or four phrases. This would suffice for some repertoire but as the hostess participant pointed out, the melody I excerpted for most of the level 5 activities is in the middle of the aria (mm. 24-47).

The remaining criticisms were similarly organizational in nature. It became immediately obvious, as a topic of discussion for all three focus groups, that I should have prepared explanatory Companion Listening Guides (CLGs) to assist the teacher. Because my ideas have been brewing for many years, they seem ordinary to me, but they may not seem ordinary to others. One of my Orleans group participants described my pedagogical approach as "organic" (AC-10), implying qualities of inevitability or instinctiveness, but these qualities do not automatically guarantee comprehension. And while I am fully committed to a process of guided discovery for the student, it is imperative that the participating teacher understand the conceptual focus of each activity or assignment *prior* to its teaching. Somehow, by labelling or some other means, he/she must be let in on the pedagogical plan.

Regarding unexplained syllabus concepts or non-syllabus concepts in the activities/assignments, these are the outcomes of deliberate decisions made at the time of the LGs' construction. The first complaint results from the reinforcing or supplemental function of the materials, instead of a making conscious or presenting function. The second is from my choice to use pitch and rhythm syllables, drawn from KM's instructional "tool kit," for the facilitation of specific conceptual understandings. My participants' reactions to the use of rhythm syllables are addressed in the next section, and *solfège* or *solfa* syllables are addressed with the singing data under a later subheading. Regarding activity/assignment connectivity, the Kanata group hostess felt that "[s]ometimes the connections between the activities and the assignments were really strong, and then sometimes [they weren't] as strong" (ABs-1K). From this observation, I recognize that my connections may be too subtle for some users and may need fortification, but I am not convinced that they must always be clearly evident. Some assignments are intended to bridge activities by connecting forward rather than backward, but these intentions could be fully explained in the teacher's CLGs.

⁷⁸ The link I would use is: <http://ks4.imslp.info/files/imglnks/usimg/a/a6/IMSLP27213-PMLP60228-Mendelssohnop21fullscore.pdf>. It accesses a scan of Mendelssohn's Overture to *A Midsummer Night's Dream* in an 1874 publication by Breitkopf and Härtel (Leipzig), edited by Julius Rietz (1812-1877). The .pdf file is 56 pages in length.

Happily, the participants' comments were occasionally complimentary. The first statement from one of the Toronto group participants summarizes his overall thinking that the LGs were "quite good" (CP-1T). He opened with: "I liked the kind of meat-and-potatoes aspect of it. Like kind of getting to the heart of things, and identifying them for the [students], and not going into it with any expectations that they know the particular term or anything like that" (CP-1T). Of course, the perfectionist in me is always striving for more but at this early stage, I gladly accepted "quite good."

The remaining analyzing data is organized according to the subthemes listed in **Table 5.1**: extra-curricular/new concepts, analytical flexibility, pedagogical relevance, and guided discoveries. Each subtheme is illustrated with subtopics most salient for the implementation of an integrated music theory pedagogy. Although an effort has been made to give voice to all the participants in all three focus groups, some participants were more vocal than others. Following my consideration of the subthemes, I inserted a brief section titled "Analyzing for Understanding," which constitutes my summarizing examination of the participants' reviews. It is intended to further distill aspects of *how* and *why* from the *what* and *where* articulations of the participants. At this explanation stage of my data analysis, the analyzing for understanding section introduces one of my findings, which involves the notion of reluctance or resistance, and begins the spiralling process of broadening/deepening that continues throughout chapter 5.

Extra-Curricular/New Concepts

Musicianship Skills: "That's the bottom line." An integrated approach to music theory pedagogy involves students' acquisition of musicianship skills. Most dictionaries I consulted (Britannica, Cambridge, Collins, Macmillan, Merriam-Webster, and Oxford) equate musicianship with musical performance skills – if it appears as an entry independent of *musician* at all. But I am interested in more than the physical act of playing an instrument or singing – I am interested in the *mental* processes that inform these performances. Dictionary.com (2019) approaches my sense of musicianship with: "knowledge, skill, and artistic sensitivity in performing music." This definition implies a synthesis of musical skills that brings together all the necessary components of a comprehensive music education.

RCM includes musicianship as one of four main areas of development for a well-rounded musician – the others being repertoire, technique, and literacy. For RCM, musicianship skills comprise ear training and sight reading, which are placed in a practical or performance context.

However, as stated in the *Theory Syllabus* (2016e), musicianship skills “support the goals and requirements of both [the] performance of repertoire and theoretical concepts” (p. 7). While this second provision is implicit in the listening and reading of ear/sight activities, it is seldom *explicit* – especially in the writing of music theory exercises. Accordingly, musicianship skills, which often incorporate sung pitches or spoken rhythms, are not usually associated with music theory instruction.

I expected the rhythm syllables that I used to introduce Mozart’s “Queen of the Night” Aria to be problematic. My expectation was met with the consensus that students are generally “pretty weak on the rhythm” (CP-1T). One of the Kanata group participants gave the following reason for this weakness:

KS: Because, especially in Ontario, there is no music specialist, for the most part. The kids are lucky if they get music class in school. So, *ta* and *ti-ti*, some of them know it, if they [are] lucky enough to have school music class. But other than that, they don’t know what *ta* and *ti-ti* are.
(1K)

Although the participants themselves were mostly familiar with *ta* (for a quarter note) and *ti-ti* (for two eighth notes), there were several discussions about *ti-ka-ti-ka* (for four sixteenth notes) and students’ probable lack of prior syllabification experiences. Other topics of discussion included the absence of standardized syllables for more complex rhythms and the verbalization or non-verbalization of rests. One of the Orleans group participants was taught to use *shh* along with a gesture for rests but in a KM context, rests are indicated with unarticulated gestures since verbalized sounds would obstruct the silences they symbolize. However, this non-verbal expression may not be common knowledge. Another of the Orleans group participants conveyed her confusion by asking, “Why is there nothing [or no syllable] under the rest?” (JK-1O). Her uncertainty gives further incentive for the CLGs, perhaps with an explanatory teacher page alongside each student page.

I asked the participants if they had any suggestions for vocalizations. Could the rhythm be articulated in a different, more universal way? A Toronto group participant offered rhythmic words, like “co-ca co-la,” “pop-corn,” “chips,” which she uses with her younger students, but she stresses that these words are “easily translatable,” and that “whatever they’ve been using ... absolutely works” (CM-1T). One of the Kanata group participants had a similar solution, giving “Ma-ni-to-ba” as an example for four sixteenth notes (DM-1K). In the end, the actual

syllabification is of little importance, excepting one essential component: the spoken syllables must match the rhythm. “If [the students] have a concrete example they can hear, [then] hopefully they [can] relate the symbols on the page to what they’re hearing,” which for this Toronto group participant, is the “bottom line” (CP-1T).

The same participant welcomed a rhythmic entry into Mozart’s aria (see **Appendix 4.1**), recognizing my expectation that students will “pick up on the [rhythmic] pattern” (CP-1T). One of his fellow participants also found value in this approach, describing her own training as “so focused on the other aspects of ear training, so pitch-centered” (CM-1T), that she struggled with rhythmic connections. The hostess participant in Kanata was less impressed. She “never” uses what she termed “Kodály rhythm syllables” but is “always just counting” (ABs-1K). Consequently, she “wondered if there could be sort of a fusion of ideas by having [students] list counts underneath,” particularly because I asked for a “total beat count” later in the activity (ABs-1K). One of her colleagues agreed, suggesting that the counting will help students “understand the syllables, too” (KS-1K). Therefore, by adding “space to write the numbers” and “seed[ing] it by putting ... 4, 1 – just a couple [of numbers] so they understand what [to do]” (ABs-1K), students will be able to count the beats more easily. But counting the beats is not the same as verbalizing the rhythm.⁷⁹ I was envisioning a *rhythmic* experience for the student, not a mathematical or theoretical one. In this largely unfamiliar, music-centered approach, the math/theory is derived as a by-product of the music – it is not the focal point.

The LGs are designed to cultivate musicianship skills that promote the growth of understanding through musical experience. The remote Toronto group participant made the following comment about my handling of musicianship in the first activity for level 5:

JR: I think you’ve emphasized elements of repetition, you’ve emphasized motives, you [made] it tactile by inviting clapping, it has a [reinforcing] effect with the syllables, and as you said, it doesn’t really matter what they articulate, as long as they’re creating that sound and it’s engaging. So, I think it’s great. And then you have them actually connect sound and symbol – an assignment writing it down. (1T)

He also recognized my intent to craft an integrated experience of music theory for the student.

⁷⁹ Although the terms *beat* and *rhythm* are sometimes used interchangeably, they do not represent the same musical phenomena. The beat is a regular, recurring stress that underlies most music. Beats are then metered in regular groups that are demarcated by accented beats. Rhythm comprises the patterns of longer or shorter sounds and silences that are arranged *over* the beats (Choksy, 1991).

In general, the Toronto group participants were fairly well-attuned to my pedagogical aspirations, which may have been due, at least in part, to their work as theory examiners. In this capacity, they had advance-knowledge of RCM's curricular re-organization, as well as its adoption of updated terminology and new concept streams for rudiments (music history, melody and composition). This *knowing* allowed the Toronto group participants to focus on the instructional content of the LGs while the other participants, without the same access to RCM's new curriculum, were struggling to digest the changes. Consequently, both the Kanata group and the Orleans group participants were often distracted by syllabus requirements and their revised naming or positioning.

One of the Orleans group participants commented:

JK: I needed, I myself needed, both an appendix – “What do all these new terms mean?” – and a glossary of symbols, because I'm used to writing capital A, or capital M for major. That's not the case right now, and that's just one example of so many. So, if I had both an appendix and a glossary, that would help me a lot. (1O)

This request was reiterated by one of her colleagues who also asked for “some kind of a glossary where [all the] terms are defined” (PG-1O). Another suggested “putting up ... ‘new’ signs like they do when they put a new stop sign on the road” (AC-1O). While replacing old terminology, such as *semitones*, with the new *half steps* is undoubtedly challenging, it is likely more so for the teacher than for the students.

Other participants were hesitant to implement some of the new concepts. For example, motives, which were formerly included with the melody writing component for introductory harmony (RCM, 2009), are now introduced with melody and composition at level 1 (RCM, 2016e).⁸⁰ This particular repositioning is significant for rudiments teachers who have not previously taught harmony and therefore, have not concerned themselves with concepts that are typically associated with compositional techniques. Referring again to level 5, Activity #1, a Kanata group participant asked: “Why introduce the concept of shorter phrases combining into longer phrases?” (ABs-1K). Since one of her students had expressed confusion with the activity, she felt it was “[m]aybe ... a red flag” (ABs-1K). But the confusion was generated by a

⁸⁰ A motive is a short rhythmic and/or melodic fragment that is “sufficiently well-defined to retain its identity when elaborated or transformed and combined with other material” (Randel, 1986, p. 513). Demonstrating the potential to generate complex textures, it often serves as the basic structural unit for extended compositions.

misreading of the concept statement. Shorter *motives* may be combined into phrases. While I tried to use very specific – and consistent – terminology, the concept was not easily grasped by my participant or her student. I explained that motives are the “shorter bits,” phrases are the “longer bits,” and motives combine to make phrases. Once an understanding of motives becomes more widespread, the possibility of confusion will be lessened.

The level 6 LG provides the student with a different motive and an opportunity to explore its manipulations by undertaking a full motivic analysis of Bach’s Invention No. 1 in C Major. I asked my participants if this analytical focus posed a problem. They responded very positively: “Not from where I’m sitting... You certainly have to go digging, [but] that’s good” (CP-1T). “I found this really a fun one. I liked searching for this [motive]. I hope that kids would think it was fun, too” (JK-1O). In Orleans, it was likened to “Where’s Waldo?” and “Geocaching” games, perhaps because of the highlighting activities. Several participants encouraged this use of colour-coding to identify motives, inversions, and augmented fragments. A Toronto group participant extends the practice to more advanced analytical tasks: “I like ... using colours for this very purpose. I do that with ... sonatas and [structures] like that” (CP-1T). An Orleans group participant saw this practice extending to other creative outlets: “I thought it was nice of you to let the [students] choose their own colours. It ... accommodates their inventory, and their artistic perception, and a whole lot” (JK-1O). For me, the process of *colouring* assigns visual codes to specific manipulations of the motive, facilitating classification/identification. This visual awareness then reinforces students’ aural awareness of the invention’s structure.

Analytical Flexibility

Literal Interpretations: “It’s not ... pirate’s code.” Musical analysis, like many kinds of analysis, is often troubled by ambiguity. In Bach’s invention (see **Appendix 4.2**), I was anxious about my decision to extend the motive that appears in *Celebrate Theory* (RCM, 2016b) from seven notes to eight notes, particularly since one of the Toronto group participants authored the music history portion of RCM’s publication. I need not have worried, but he brought up an interesting point:

JR: You were discussing at the start of this section of our meeting about the motive and the difficulty finding it. When it says here, “Listen to... Do you hear the given motive throughout the invention?” Well, obviously the answer is “Yes,” but is the motive the exact pitches that you’re defining or is the motive the rhythm? Because we hear “*ba-da-da-da-da-da-da-dun...*” So, are you wanting them to respond to exactly that motive with the perfect 5th at the end? Or are they going to be responding to the fact that that motive is very obvious, but sometimes the last note or last pitch is changed, or sometimes it’s inverted? How do you want them to respond? (1T)

I wanted the student to listen for the motive’s shape or melodic contour, but I had not anticipated a literal interpretation of my directive. I know – and my participants know – that the end of the motive is inconsistent and therefore, not the focus of my listening attention. But I was reminded that a first-time listener would/could not make this same judgement.

Responding to my participant, I wondered if I should ask the student to listen for the motive’s rhythm, which would include its inversions but exclude the ending interval. He replied:

JR: It would identify [the rhythm] as the nucleus. I think you could operate on two levels. You could say, “Here’s how it opens. Do you hear that? And do you hear how the template of the rhythm serves many different” – I don’t know if you want to use variations – “changes or manipulations?” Because I’m just thinking, sometimes it goes up “*ba-da-da-da-da-da-da-dun...*” So, maybe it would be nice for them to hear how that unifies the piece, but they might be disinclined to think about it if it’s not matching that perfect 5th. (1T)

These are useful suggestions, but they are reminiscent of traditional teacher-centered approaches that are deeply ingrained in current teaching practices. Their *telling* tendencies discourage student-centered, guided discovery approaches. It is unlikely that the average student will aurally identify more than a few instances of the motive’s opening without repeated listenings. Consequently, from this first listening experience, I hoped for two modest outcomes: (1) recognition that the motive appears throughout Bach’s invention, and (2) that it is not always the same. More precise “noticings” will come later, one at a time.

As the activities unfold, the student is exposed to more and more complex manipulations of the motive and her/his aural analysis is supplemented with a visual analysis of the score. Another of the Toronto group participants welcomed this approach, saying “I like the idea that they’re thinking of the kernel of the idea, the motive – how it drives the whole piece. They get to notice it a lot. They *should* notice” (CP-1T, participant’s emphasis). Although my adoption of an eight-

note motive caused a fairly lengthy instructional exploration of altered endings, the extra effort was worthwhile since the inclusion of abnormalities, or notes that do not follow rigid transpositions, is beneficial for the student. My view was endorsed by an Orleans group participant who admitted that her “difficulty with theory is [that] we’d learn the rules and then not find pure examples of them. So, starting out with impure examples, I think, is good” (AC-1O). Extending this line of thought, she suggested that music theory is not “pirate’s code, it’s just guidelines.” And an awareness or experience of altered endings may assist the student later when he/she encounters real or tonal answers in the context of a fugue.

The notion of analytical flexibility is an important part of my petition for integration in music theory pedagogy. The literal interpretation of a musical score implies the precise measurement of a scientific blueprint, but musical analysis is not necessarily precise. It requires the figurative or metaphorical interpretation of an artistic portrayal. This non-literal approach allows for a wider, more inclusive view of music as both a visual product and an aural process. It also allows for a wider view of music theory and its instruction. The LGs attempt to nudge the student – and the teacher – toward an aural/visual experience of music theory. But because this integrated experience is derived from music-as-art, it is not always precisely rendered.

A case in point involves the host participant in Kanata and her observations of the level 5 LG for Mozart’s “Queen of the Night” Aria (see **Appendix 4.1**). Focusing on the notes of the tonic triad in F major, she challenged my assumption that Mozart’s melody begins on A or the triad’s third. In Activity #2, I added pitches and corresponding *solfa* syllables to the rhythm introduced in the first activity. The student, using information that he/she was given, will have identified the melody’s beginning syllable as *mi*. In Activity #3, articulations (*legato/staccato* markings) and grace notes were added as decorations of the melody. In Activity #4, following the extraction of an F major triad from Mozart’s melody, the student is asked to re-identify the melody’s beginning note with triad-specific terminology. I wanted to emphasize that A is both *mi* and the third of the tonic triad. But in my participant’s estimation, “[t]hat’s a bit confusing because it’s actually a grace note that begins [the] melody” (ABs-1K). In her literal interpretation, the melody begins on B-flat instead of A. A less rigid interpretation is influenced by RCM’s exam culture, which customarily ignores decorations or melodic embellishments in analysis. Either way, the A/B-flat argument is not really the point. Much more significant is the activity’s potential for the fostering of analytical flexibility.

However, my participant's response leads me to ponder the pedagogical infallibility of this and similar activities. To satisfy my desire for instructional accountability through *all* the LGs, I must consider two courses of action: (1) the elimination of latently problematic exercises, or (2) the clarification of would-be problems. In this instance, if I eliminate the exercise, I also eliminate the learning it entails. In effect, I would be avoiding the problem of "impure examples." But if I take the time to clarify that grace notes, as decorative or non-essential notes, are not included in the analysis, I can create a teachable moment that will prepare the student for later learnings. This adaptable reading of Mozart's melody generates an understanding that the artistry in every piece of music obliges a modicum of flexibility.

Contextualization: *"That's the vocabulary we use."* If flexibility involves an inclination to change or more importantly, a willingness to compromise, then context provides the circumstance or the setting for said modification. The opening of Mendelssohn's Overture to *A Midsummer Night's Dream* (see **Appendix 4.3**) offers an analytical context that is ripe with pedagogical rewards – both musical and interpretive. The four chords that form the overture's introduction are particularly useful for dispelling assumptions about the relationship between melody and harmony.

The remote participant in Toronto addressed a potential melody/harmony disconnect in the LG's first activity. The following excerpt reflects the progression of his personal meaning-making as he read through the activity and its take-home assignment:

JR: ****plays the introductory chords**** So, it says, “Play...” Okay, so I guess here’s where my disconnect comes: in the context, the way we see it, [the melody] is a tonic chord, but none of the harmonies, except the first and the last... The middle harmonies are not... Do we have...? So, you’re guiding them to that [knowledge]. It says, “Some members of the tonic triad are also members...” So, that’s good. Okay, I can follow what you’re doing there, so that’s good. You’re trying to associate melody with harmonic context, and explaining that there can be choices, or ambiguity. In other words, one single note can render different harmon[ies]. So, I think that’s a good angle – to make them aware. And I like how you draw attention to the mixed mode. You know, I tell my students these opening chords are the portal to Oberon and Titania. It’s like saying in a story, “Once upon a time...” I think these really suspend our whole belief system to enter this story, this story about magic. And to me, the money chord is that third chord, and you brought attention to its quality. Do [students] know that the IV chord is normally major, but that it’s minor [here]? Are we addressing...? You said, “How did the accidental...?” Is that a surprise element? Or do they have to show root/quality [chord] symbols?

LLP: Yes, [in] the assignment at the bottom [of the page]. (1T)

The participant’s experience of my instructional process mirrors the kind of experience I hoped to initiate for the student.

Incidentally, the participants from all three focus groups mentioned my reference to *members* of the tonic triad. “What is a member?” (DM-1K). Apparently, starting with the level 5 LG, I was “throwing [them] for a loop” (ABs-1K). While I have utilized this term in my studio for many years, it seems to be an anomaly. Nevertheless, I decided to persist with its use because I have not come across another word – outside the generic *notes* – that expresses my intention as clearly. And after their initial queries, all the participants accepted my *members* label and adopted its use, at least in the context of our discussions.

A harmonic analysis of the introduction from Mendelssohn’s overture offers the student an opportunity to contextualize the primary chords of E major. Through this integrated aural/visual experience, he/she will encounter a minor subdominant chord in a major-key context. This alteration serves to open the door or to normalize other such encounters of modal mixture, since the fairies’ theme (theme 1) is not in the expected key of E major but in its parallel minor. In the third activity, the student is directed to listen for the musical depiction of the fairies’ fluttering wings. In Activity #4, he/she is guided through an analysis of the theme’s opening measures in order to determine its key (E minor). The excerpt contains C-naturals, G-naturals, and a few D-

naturals. The inconsistency of D-natural highlights the pliancy of minor keys, which may appear in natural, harmonic, or melodic forms according to various compositional circumstances. The Toronto group participants commented as follows:

CP: Good explanation for ... level [7].

CM: Yeah, I really like this. So, if [the students] find three accidentals, they'll see that sometimes it's D-natural, sometimes it's D-sharp.

JR: I'm a little confused by the question. It says here: "What two [accidentals] are consistently added?" Which ones are we talking about? D-natural, but also the G-natural?

CM: The C-natural and the G-natural. And then it's sometimes D-sharp and it's sometimes D-natural. So, the next question...

JR: Is that maybe then not three accidentals? I wasn't clear about the "two" part.

CM: No, because then the next question addresses that by saying, "Well, if it's a minor scale, ascending, descending, then what scale is [it]?"

JR: Okay, thank you.

CM: And this is done with the teacher, right?

LLP: Yes, this is done with the teacher. So [he/she] can direct them around [the accidentals]. (1T)

The assumption that there are three accidentals in the excerpt is an expected first step in the student's reasoning process since there *are*, in fact, three accidentals in m. 8. But after this first measure of the theme, all the remaining Ds are sharp. Therefore, the strategic word is *consistent*. Although one of the participants quoted above expressed confusion with the activity, his puzzlement – and subsequent clarity – illustrate the instructional progression of an integrated, process-driven approach to music theory pedagogy. Furthermore, the contextualization in Mendelssohn's theme of both the subtonic (D-natural) and the leading tone (D-sharp) encourages the student to recognize that minor keys are not limited to any one configuration. Nor is Mendelssohn limited by the Classical conventions of sonata form. A fluid implementation of parallel major and minor keys compliments his Romantic/programmatic depiction of Shakespeare's *A Midsummer Night's Dream*.

Considering the phenomenon of contextualization in a larger, more diverse historical sense, I asked the Orleans group participants how they felt about working with tonal elements, such as cadences, in Josquin's *frottola* (see **Appendix 4.4**), which is a pre-tonal or modal work. The following conversation ensued:

JK: I think that happens all the time.

ABn: I think it's unavoidable. There's tone. That's just how we're defining it and how it [is] perceived. Yeah.

AC: And our ears are going to hear common-practice harmony... Even if that isn't what Josquin was thinking.

JK: But he must have been hearing it in a certain way. He had to have heard it that way.

AC: Yeah.

ABn: We just hadn't identified it.

JK: Or thought it a necessity.

ABn: I don't know. Is that kind of ... revisionist, if we do that? If we apply what we know now or how we understand it to what they did before they had [our] vocabulary?

LLP: Maybe. But at the same time, I mean, we live here and now. And we take a certain understanding to [the piece] that we can't help.

ABn: Yes. And that's the vocabulary we use. (10)

Context provides the student with a frame of reference that enables her/him to fully understand the topic at hand – whether it be major/minor key discrepancies or tonal elements in a modal work. Revisionists support the adaptation/modification of policies or principles, which in an educational environment allows for the intellectually honest re-interpretation of subject matter. Thus, by viewing the modality of *El grillo* through the recognizable lens of tonality, unknown elements can be derived from the known. Consequently, a flexible approach to analysis heightens the student's ability to experience *El grillo* without previous knowledge of Renaissance music. It also brings Josquin's *frottola* out of the realm of unfamiliarity and establishes an informative link to familiar musical elements.

Pedagogical Relevance

Sound and Symbol Associations: “Wanting ... to draw the connection.” The basic premise behind my writing of the LGs is an instructional reliance on *showing* rather than *telling*. I am also committed to furthering the student's participation in her/his own learning process. My responsibility, as both author and teacher, is to provide activities/exercises that encourage a purposeful engagement with the learning. This engagement should create an association between sound and symbol – between musical repertoire and theoretical concepts. However, the individualized components of music theory are customarily experienced through a set of written tasks that drill examination requirements. While these drills provide repeated practice for an

eventual assessment purpose, they do not encourage a pedagogically instructive engagement with the learning. Where is the musical relevance in this detached form of teaching music theory?

In the assignment portion of the second level 6 activity, it was suggested by a Kanata group participant that I add measure numbers to some of the exercises, specifically in relation to naming the intervals of altered endings in Bach's invention. But I wonder whether her suggestion is pedagogically grounded. I entered the following paragraph in my writing journal:

I guess I'm unclear about her reasoning. Does she want me to give measure numbers to the student, which would take all the fun out of searching for altered endings, or does she want the student to give them to me, which begs the question: Why? Why would I need this information? [The exercise is] not meant to be a make-work project – contrary to what it may seem! (L. L. Penny, journal entry, May 29, 2019)

She explained: "There [were] a couple of spots where you [asked] for measure numbers in the assignments, and then other spots that I thought, 'Oh, well, maybe we could chuck a few more measure numbers in'" (ABs-1K). Adding measure numbers to the task does not necessarily serve a pedagogical purpose. It does not deepen the current learning nor move it forward.

My participant's request for measure-number prompts is likely symptomatic of a more complicated problem. Many teachers' experiences of music theory pedagogy do not mesh with the detailed workings of an integrated instructional process. This incongruity is further illustrated by the participant's review of Activity #5 in the level 5 LG. She questioned the derivation of an interval-measuring exercise from the second melody I excerpted from Mozart's aria (see **Appendix 4.1**). Part of our exchange is reproduced below:

ABs: [T]his part down here is written similarly to [the melody]. In some ways it looks like a reduced score, just jogged off by two beats. So, if we're talking about the distance between triad notes, when the F starts ... here and goes up to an A, and then drops down to the C over here... It's easy to lose the sense that [it's] a triad, just because it goes up a third and then down a sixth. And then analyzing the spaces between. I know the melody doesn't have either a B-flat or a B, that ... the drop of a sixth between the A and the C makes the tonic triad harder to visualize. Also, if you said in the previous line that the distances between members can be filled, why are we not filling the distance between A and C?

LLP: Again, very good point... What I wanted to do was to pull the exercise from the actual melody.

ABs: And we can't recreate Mozart. There's nothing between A and C. It's the way he wrote it.

LLP: Right. Well, there is actually [an] F in between...

ABs: But if we're measuring [whole/half step] distances between, no.

(1K)

I intended the similarity that my participant disapproved because I wanted there to be a *reason* for measuring half steps and whole steps – beyond the clinical drills that are routinely used for exam preparation. But perhaps I was relying too much on the word *may* in my concept statement: “The distance between triad members may be filled with whole steps or half steps.” This implies the possibility that whole/half steps may or *may not* fill the skips/leaps between triad members. She took it more literally and went on to propose that I qualify my statement by orienting it to the tonic triad, which is the triad in question. Ordinarily, I agree with as much specificity as possible. In this case, however, I wanted my concept statement to be generalizable or applicable in multiple circumstances. In this way, I can repeat the same statement, thereby contributing to its reinforcement, and avoid the invention (or re-invention) of a new statement for every similar encounter.

For me, the notion of pedagogical relevance implies a purposeful correlation between my teaching and my students' learning. Teaching, as the imparting or concerted sharing of knowledge and experience, is also a form of helping or attending to the needs of others. In this second capacity, a teacher can help her/his students grow in understanding by creating specific interventions or leading by example. Either way, the teaching must be relevant and it must be useful for long-term applications. In Mendelssohn's overture, the exposition's transition theme modulates to the dominant key in preparation for the second theme group. This modulation is typical of sonata form and therefore, a generalizable concept that can inform future analyses. But leading the student to understand structural modulations through a *showing* process is far more labour-intensive than a routine *telling*. It is also a process that is largely unexplored in music theory pedagogy.

All three focus groups addressed my handling of the key relationship in Mendelssohn's modulation. “[W]hen you're asking in this assignment [for Activity #4] to use portions of the B major scale, [you're] wanting them to draw the connection that the key signature can be four sharps, but they're writing A-sharps everywhere?” (JR-1T). According to this Toronto group participant, “[t]hat's actually a big leap.” Since one of the challenges for students is that a change of key does not always involve a change of key signature, he asked, “Is there a way of maybe making that connection? Maybe like a hint, or something?” (JR-1T). While I have guided the

student to infer this connection through careful questioning, further reinforcement will be required. My integrated or process-driven approach is foreign to most student/teacher partnerships. They will be expecting a hint, if not an outright *telling*.

It is my hope that pedagogically relevant *showing* instructions will encourage not only participatory experiences of music theory, but also meaningful associations of sound and symbol. For example, my Toronto group participants singled out the diminished 7th chord I extracted from the coda of Mendelssohn's overture because it connects the musical literature with RCM's examination requirements in music theory (for level 7) as well as in musicianship – the A-sharp diminished 7th chord is included in the *Piano Syllabus* (RCM, 2015c) as a technical requirement for level 6.

At level 8, the LG for Josquin's *frottola* provides the student with an opportunity to engage some of the more esoteric components of RCM's (2016e) theory curriculum. "Yeah, a lot of it's dealing with 4/2 and the different clefs" (CP-1T). It also allows the student to make practical sense of components such as open score, and to develop an understanding that "pitches, or the clefs, move to accommodate the music" (ABn-1O). But rather than *telling* the student, I designed a *showing* exercise:

PG: So, in that [assignment], are you expecting them to – when they rewrite it – to start with Middle C below...? The first line below the staff? Or as it is ... here?

LLP: No, at pitch. At the same pitch.

PG: Okay.

AC: Hence the last question at the bottom.

LLP: Yes. (1O)

Bringing her experience as a string player to the task, one of the Orleans group participants recognized my reasoning immediately. In answer to the question – "Why is it helpful to write the tenor part an octave higher than it sounds?" – she responded: "So you don't have too many ledger lines, which is part of the reason, I believe. It certainly is for violas and cellos" (AC-1O). While I cannot always count on a pertinent practical experience, I can surely awaken the student's curiosity and perhaps the teacher's as well.

Guided Discoveries

Complexities: "It's a leading question." Pedagogically relevant teaching practices establish a utilitarian form of applicability or connectivity for the student's learning. Rousing the

student's curiosity can instill in her/him a strong desire to pursue this learning. But as a teacher, I do not wish to leave the student's learning to chance. While I embrace unexpected encounters with the subject matter, and the personalized learning these encounters entail, I also accept my educational duty to craft a well-sequenced path of discovery for the student – one that will enable her/him to engage developmentally appropriate content in the course of her/his quest for ever greater knowledge.

Because the LGs are aligned with RCM's (2016e) theory curriculum, I must accept its institutional judgement of level appropriateness. However, the LGs' repertoire does not wholly conform to RCM's curricular requirements. In chapter 4, I outlined several of these non-conformities and described my instructional approach to them as preparation for later learnings. By avoiding the unknown labels of specific terminology, I was able to incorporate theoretical elements from more advanced levels. For example, the concept of transposing instruments, which is included in the *Theory Syllabus* (2016e) at level 8, is particularly germane for the level 7 LG since Mendelssohn's overture (see **Appendix 4.3**) is generally heard as an orchestral work, rather than the piano duet of its premiere.

One of the Kanata group participants questioned the complexity of my transposing instruments activity/assignment:

ABs: The ... abbreviations over the line are hard to read. You probably know that. Just with horn and [bassoon], it's ... hard to read it lined up.

LLP: Okay, yes.

ABs: It needs to be pushed off somewhere. And of course, the use of [a] whole note passage makes the instrumentation hard to read. "Who's supposed to play what?" It's just because we don't have stem directions to help us. So, again...

LLP: And that's... Actually, to be quite honest, I want that difficulty.

ABs: Okay.

LLP: Because that leads ... into the fact that this [passage] is really difficult to manage on the piano. So, let's spread it out and give it to a bunch of instruments.

ABs: Now, I also wondered if... This one point about transposition. You explain it well enough. You say, "Put it up a minor third." Are we, at level 7, transposing orchestral instruments?

LLP: No. Which is why I didn't go there, and I gave them the...

ABs: You told them what to do. (1K)

Not only are transposing instruments beyond the curricular boundaries of level 7, but Mendelssohn's scoring for clarinets in A and French horns in E does not correspond with RCM's level 8 requirements which limit transposing instruments to clarinets in B-flat and horns in F.

A Toronto group participant also questioned the exercise. After stating that some orchestral instruments must be transposed, I directed the student to transpose the clarinet parts up a minor third. "Do they have a reason for doing that?" (CP-1T). I also asked for the French horns' interval of transposition to be identified. "They're not expected to know that, [are they?]" (CP-1T). This participant, along with his Kanata group counterpart, automatically categorized the assignment as a transposing instruments task and reacted to its perceived misplacement at level 7. But the assignment is simply a transposing task. Although it is situated in an orchestral context, I made no mention of concert pitch and I did not expect the student to know the interval of transposition. I did, however, expect her/him to gather clues, make observations, and *derive* the interval of transposition. By placing intervals in this musical setting, I am reinforcing the utilitarian function of interval measurements for exploratory analytical purposes.

Regarding the Kanata group participant's question – "Who's supposed to play what?" (ABs-1K) – the answer is easily decipherable by investigative means. The student is encouraged to participate in this process of discovery as a preparatory experience of personal meaning-making that will ultimately pave the way for analytical independence. Although the student is not yet transposing for orchestral instruments, he/she is transposing by intervals. The application of this skill in an orchestral context prepares her/him for the more advanced concept to come. At level 8, the student's earlier experience will then expand through a process of conscious awareness to become intelligence. The Toronto group participant wondered if this process could be fast-tracked. "Can you say, 'When [the] clarinet plays a C, it sounds like [an A]. What is the [interval] difference?'" (CP-1T). There are two reasons to circumvent this accelerated approach: (1) the student requires time to absorb her/his contextualized experience of transposing; and (2) the presentation of information about transposing instruments requires a pedagogical purpose ancillary to its telling. Furthermore, skills or concepts are ideally introduced one at a time.

The participants are accustomed to viewing the subject of music rudiments as a whole, particularly those who teach harmony and history. They do not necessarily consider the intricately sequenced parts that create this whole. A topic of concern for the Kanata hostess participant was my use of what she termed "leading question[s]" (ABs-1K). In the last activity

for Mozart's aria, I asked the student to identify the type of chord that in a minor key contains *re*, *ti*, and *si*. Her response was that this could be a diminished triad on the leading tone, but that my next question – “What chord member is missing?” – made her solution incorrect. “[I]t's a leading question because you want the answer to be [a] dominant 7th [chord], but there is another perfectly acceptable answer, which [is] a diminished triad” (ABs-1K). I defended the activity with a reminder that diminished triads are unknown elements at level 5, while dominant 7th chords are known.

However, it is true that my musical analysis is not entirely correct. Mozart harmonizes the melody in m. 5 with a leading-tone diminished 7th chord that will not enter the student's vocabulary until level 7. Consequently, it may seem prudent to eliminate the exercise but once again, there is learning that will be lost. I am not suggesting a breach of intellectual honesty; I am suggesting a simplified representation of dominant-function harmony, using a chord that is known to the student. This simplification invokes Bruner's (1963) words: “Detailed material is conserved in memory by the use of simplified ways of representing it” (p. 24). In effect, I am leading the student to an elementary understanding of advanced functional harmony by referring to a known chord within a recognizable fundamental structure.

This activity was meant to open a student/teacher dialogue or to instigate a shared discovery. The take-home assignment, with its excerpt from the piano reduction of Mozart's opening melody (mm. 1-4), also generated discussion for the focus groups. One of the Kanata group participants was concerned about the presence of triad inversions in the excerpt, but inversions are known elements at this level. One of the Toronto group participants asked about the notation of half notes with thirty-second note stems, assuming this to be an unknown element for most students. While his statement is correct, the reduction's notation presents an ideal opportunity for exploration or student/teacher interaction. How can the undulating effect of Mozart's orchestral *tremolo* be reproduced by the pianist? I would have liked to ask this question and then answer it on the student's behalf – to ensure accuracy – but allowing her/him to reach an independent conclusion is significantly more valuable.

As I was writing my portion of the *Celebrate Theory* (2016) books, I endeavoured to explain every detail as thoroughly as possible, but my quest for thoroughness was overridden by the editorial team. In my exuberance, I had not left an opening for the teacher's input. With the LGs, I chose an alternate approach – as exemplified by this final assignment. A Toronto group

participant, who himself has authored a number of theory books for RCM, dismissed the unknown-ness of the pianist's *tremolo*: "Does it matter? [My writing partner] and I often run into things and we say: 'That's the teacher's job.' You can't explain everything" (JR-1T). On the topic of whether to explain or not to explain, his colleagues responded with suggestions to "[a]sk your teacher what the interesting symbols are" (CP-1T), or "how to realize the interesting symbol[s]" (CM-1T). But if the student asked her/his teacher to *play* the first two measures, no explanation would be necessary.

The teacher's participation in the instructional process may vary greatly. When the Kanata group conversation turned to the LG for Josquin's *El grillo*, one of the participants exclaimed:

ABs: What a fun piece this is! And it's such an easy Renaissance piece to teach because it's not completely foreign. And even when you had that reference to the old score, [we] can still figure out what's going on. Some Medieval scores, it's like, "I can't..." You know. (1K)

But in the next breath she admitted:

ABs: I didn't know the answer to your question, actually. You said, "Find the bass part. Compare the melody at the beginning of the second system with the bass part in our transcription." Maybe I looked at the wrong line. "Are the pitches the same?" I thought so. "Is the rhythm the same?" Yes. "What metrical element is missing?" I'm like, "Bar lines?"
LLP: Yes!

ABs: So then, my question was: "If so, why here? Why not everywhere? Why are we just focusing on [the] bass part?" (1K).

Once the participant realized that the voice parts are notated separately in Josquin's original manuscript, she understood my focus. But she did not completely understand that I wanted the student to bring musical knowledge – acquired from an interaction with part of the refrain in the previous activity – to an exploration of the manuscript. Equipped with this experience, the student will discover that he/she can read the bass melody from its original notation.

It became evident that many of my participants are unfamiliar, and therefore possibly uncomfortable, with the guided discovery processes that are embedded in the LGs. Perhaps the difficulty arises from the implication that their students' discovery *learning* requires discovery *teaching*. Or perhaps it stems from a deep-rooted assumption that teachers should know all the answers – and their feelings of inadequacy if they do not. These were my feelings as a young teacher, but over the course of my career I have learned to embrace new ideas with less anxiety.

The challenge questions were intended to encourage exploration beyond RCM's curricular requirements, but they invariably caused feelings of apprehension. Since invertible counterpoint is not officially introduced until level 10 harmony and counterpoint, my mention of the topic at level 6 initiated dialogue with every one of the focus groups. While I clearly achieved my exploratory goal, I did not anticipate the unease it generated. A similar uneasiness was caused by the matching exercise that opens the last activity for Bach's invention (see **Appendix 4.2**). According to one of the Toronto group participants, it seemed overly complicated, but he recognized the exercise as the "only chance we get to do that kind of counterpoint" (CP-1T). One of his colleagues observed: "It reminds me of our analysis exams" (JR-1T) – a correlation I was pleased to see identified. However, analysis is an ARCT-level examination. I asked whether my exercise was appropriate for level 6. He replied that "at first [glance], it looks a little overwhelming" (JR-1T), but once he realized that it was intended as a teacher-assisted exercise, he was reassured.

I received a similar response regarding the chordal analysis exercise that closes the last assignment for Josquin's *frottola* (see **Appendix 4.4**): "On the face of it, that seems complex" (CP-1T). But the exercise is actually quite straightforward because every chord is in root position – an "[a]mazing" coincidence (JR-1T). However, the scope of the exercise, which includes root/quality chord symbols for every change of bass note, may be overwhelming for some students and therefore inhibitory. Designed as a take-home assignment, this identification task occupied one of my students for most of his rudiments lesson. While an excessive expenditure of lesson-time is undesirable, the exercise provided my student with a contextualized discovery of major and minor chords that was especially useful in preparing for his level 8 theory exam. The experience also allowed him to explore the inner workings of *El grillo* as an exemplar of the Renaissance *frottola*. With every analytical task, a new level of meaning was added to his understanding of music theory – and to my understanding of music theory pedagogy.

Analyzing for Understanding

Exploration: "Little bits of extra information." A voyage of exploration conjures the image of sea/space travel through an unfamiliar environment with the idea of gathering information that will engender familiarity. This procuring of knowledge, which is sometimes unexpected, constitutes the act of discovery. In an educational context, an inquiry-based, constructivist learning process encourages the student to solve problems by drawing on her/his

past experiences and previously existing knowledge. In a musical context, an exploratory venture illuminates the elemental components of a specific composition by means of a thorough analysis. The discovery or uncovering of these components is dependent on the student's prior experiences.

Analyzing for understanding necessitates an interpretive type of analysis that exposes students to the “dangers (and delights) of speculation” (Rogers, 2004, p. 80). Rather than regurgitating the thinking of others, they are developing their own ideas. Rogers (2004) suggests that the *doing* involved in this type of analysis is more important than the result. Accordingly, he stresses the value of preliminary processes – such as testing, revising, and discarding hypotheses; weighing and weighting facts; debating with oneself. These processes “accumulate, through experience, the habits of thinking and listening that we label musicianship” (p. 80). The processes of musicianship also inform the doing of my data analysis. But in this research context, the result is of equal importance since the act of organizing and verbalizing my thoughts, albeit in written form, aids the clarity of my thinking.

Returning to the five criticisms conveyed by the host participant in Kanata, I will re-address the last one – occasional weak connections between the activities and the assignments – as I recapitulate the participants' responses to an integrated music theory pedagogy. Of the five, this criticism is the most pedagogically oriented. In relation to Activity #1 for Mendelssohn's Overture to *A Midsummer Night's Dream*, she commented:

ABs: I just wasn't sure that the assignment and the activity matched. So, in the activity, we talk about chord identifications [and] primary chord harmonizations. You know, “We can harmonize notes a certain way.” But the assignment builds into close/open positions, accompaniment vs. melody, and chromatic alterations – which are all good topics to know. But I just wasn't sure how the two things connect. (1K)

In the ensuing conversation, she acknowledged that the “first part of the assignment makes sense with the activity. It was just the last [questions]” (ABs-1K). These are listed below:

- How did the accidental in measure 3 affect the chord's quality?
- Is the final chord in close or open position?
- Is it possible to play all of the accompaniment with your left hand?

My participant may have been reacting to the interpretive nature of the questions. Her reaction exemplifies Rogers' (2004) view that some teachers feel “reluctant to pursue more

uncharted leads, preferring the safety of questions with explicit answers” (p. 79). While such questions/answers emphasize the merits of accuracy and rigour, they do not invite speculation. Consequently, the student may be learning music theory but he/she is not doing it, for there is no *theorizing* in memorized answers. The pedagogical usefulness of my last question is embedded in its potential to create awareness. If the student is physically unable to play the excerpted chord progression single handedly, he/she may discern the existence of a problem to be solved. This problem leads to an exploration of Mendelssohn’s orchestral solution in Activity #2.

The reasoning behind my instructional approach is not meant to be blatantly obvious, nor is it meant to be concealed or hidden. While my logic may be subtle, it is present nevertheless. I can explain its subtleties in the teacher’s CLGs, but the implementation of my approach will require both the student’s and the teacher’s openness to interpretive analysis. I must, however, tread carefully. I am upsetting familiar tasks within an existing culture of music theory teaching. This culture prizes formal knowledge, including “theoretical and historical information, as well as labels or terms related to music” which, according to Robert A. Cutietta and Sandra L. Stauffer (2005), “grows directly out of verbal learning” (p. 128) – rather than procedural or doing learning. Consequently, formal knowledge is often acquired without direct contact with music.

In verbally-based learning, knowledge is mediated through words. While the indirectness of this learning in a musical setting is fairly obvious, it cannot be completely discounted. The LGs contain a number of textboxes that introduce historical/theoretical information or pertinent terminology. But this information/terminology is not essential for the student’s learning. Instead, it is intended as an enhancement of her/his interaction with the listening activities/assignments. The Toronto group participants were noticeably enthusiastic about the textboxes. “I like these boxes. Little bits of extra information just for [the students’] own identification of... That’s really good” (CP-1T). This participant suggested content for additional boxes, including chromaticism and *coloratura* soprano. Some of his suggestions were quite specific. In relation to Mozart’s aria, he offered: “Note the contrast between the first part and the second part. One’s more triadic [and] one’s more linear, with some notes outside the scale. This is a stylistic feature of Mozart” (CP-1T).

Although my author-self is flattered by the participants’ responses, my researcher-self is curious about the *why* of the textboxes’ popularity. On the surface, they explain, or “clarify with a little side note” (CP-1T), some of the extraneous information that is not necessarily crucial for

the teaching of music theory. But underneath, the textboxes are effectively *telling* boxes. Their presence in the LGs may bring a sense of familiarity to the teachers who are comfortable with traditional – verbal – methods of sharing knowledge. The other side of my assumption is the teachers' possible *dis*-comfort with non-traditional – experiential – methods of instruction. While a combined approach may be advantageous, an integrated music theory pedagogy is *not* a neatly contained presentation of a singular topic. It is likely to mix chord identifications, primary chord harmonizations, close/open positions, accompaniment of melodies, and chromatic alterations, since the central focus of an integrated pedagogical approach is not an isolated musical element. It is the repertoire that connects these elements together.

If the participants were uncomfortable with my repertoire-based music theory pedagogy, they did not openly mention it in our focus group discussions. They may not even have been aware of it. But analysis for understanding is like sleuthing. It is an active *doing* process and my investigation revealed covert traces of reluctance or resistance in the participants' reviews of the LGs. I should not be surprised. After all, I am endeavouring to overturn nearly 300 years of music theory teaching. Or at least to begin the process.

Layering from a Teacher/Practitioner Perspective

It was my teacher-self who recognized the layering theme in my data because it is most closely aligned with the curricular concerns of day-to-day teaching. I was reminded of RCM's carefully sequenced program, particularly in relation to the cumulative study of music theory. As an illustrative example, RCM's examination requirements at level 5 include perfect, major, and minor intervals; at level 6, augmented and diminished intervals; at level 7, inversions of intervals; and at level 8, compound intervals – see **Table 4.2** for a comprehensive list of concept inferences for intervals across RCM's (2016e) theory curriculum. This continual broadening or deepening of conceptual understandings exemplifies Bruner's (1963) spiral curriculum.

Having explored the surface content of the LGs with the analyzing data, I dipped below the surface for further exploration with the layering data. This action of layering, or arranging in layers, expands Bruner's process of sequential instruction for the purpose of adding depth and complexity to the research process. With each successive layer comes a deeper level of understanding. At its explanation or description stage, the analyzing data opened the story of my participants' responses to the LGs. The layering data continues this story by exploring additional characteristics of Rogers' (2004) musical analysis: connections, relationships, and patterns.

Although aspects of all three characteristics are found in the layering data, I am most interested in exploring the notion of connection, which involves causal logic or the pedagogical implications of the participants' viewpoints. Specifically, I equated layering with the reinforcement stage of KM's instructional process and extracted the participants' views in relation to the reinforcing of theoretical concepts.

Reinforcement, as a supporting or strengthening practice, is not new to music theory pedagogy. The utilization of repertoire for this task is also not new, but musical examples/excerpts are often extraneous to the conceptual learning. In many written settings, they are deemed non-essential and are frequently ignored by the student and/or the teacher. They are rarely heard. Music listening, if it occurs, is generally undertaken as a separate, appreciation activity. It is seldom associated with the derivation of theoretical concepts. A case in point is illustrated by a Kanata group participant who did not recognize the interrelated, preparatory nature of Activities #1 and #2 in the level 5 LG. The first thing she did with her students was to listen to Mozart's aria. "What piece are we talking about? Okay. Well, let's have a listen" (ABs-1K). Given her prior experiences with music listening activities, "that made sense" to her, just as it did for one of her colleagues who "would completely do that too" (KS-1K).

As a young teacher, I often did the same. Although I was intent on making sense of music theory for myself and for my students, I lost sight of its instructional affiliation with repertoire. But I knew from my experiences with KM that understandings about music are constructed sequentially – one from the other. In a KM context, which incorporates Piaget's (1969) theory of cognitive development as well as Bruner's (1966) theory of instruction, the inference of musical concepts requires repeated reinforcements at increasingly complex levels.⁸¹ This comprehensive spiralling process supports or strengthens previous knowledge with repeated discoveries of related concepts in varied circumstances. It also requires interactions with repertoire, providing musical materials for the study of theoretical content. The LGs, which integrate music listening activities and music theory teachings, reinforce musical concepts with increasingly complex experiences derived from the musical literature. This non-traditional inclusion of repertoire in the teaching of music theory is the focal point of the layering data.

⁸¹ Rather than the repeated rewards of behaviourism, my use of the term *reinforcement* is associated with the repeated applications of constructivism. Consistent with the third stage of KM's instructional process, reinforcement denotes the strengthening of conceptual understandings with additional or newly learned materials (Choksy, 1999a).

My analysis of the layering data revolves around the notion of sequential instruction. This subtheme, which exhibits the reinforcement stage in KM's instructional process, itself revolves around a prominent subtopic: directed listening. Since the LGs rely on carefully sequenced aural experiences for the implementation of an integrated music theory pedagogy, I am interested in the participants' reactions to these experiences. Our layering discussions involved the topics of student/teacher collaborations and the recognition of instructional connections. The subsequent layering for understanding section then revisits the idea of reluctance or resistance that surfaced in the analyzing data. It considers the causal logic that connects the participants' views of the LGs to underlying hesitations. While these hesitations are largely unexpressed, they may signify fundamental reservations about my approach to an integrated music theory pedagogy.

Sequential Instruction

Directed Listening: "What are you hearing?" According to Dorina Iușcă (2016), "music listening [lessons] combined with interactive teaching methods form higher levels of familiarity with classical music and convey higher preference" (p. 111). Her study re-imagines Robert Zajonc's (1968) psychological theory of repeated exposure, which effects an attitude of fondness by mere exposure to a stimulus, in an educational context. Although Iușcă is primarily interested in generating the development of musical preference, Zajonc's mere-exposure effect, enacted through a series of directed listening experiences, may also generate an affective/cognitive relationship between music and music theory.

Cutiotta and Stauffer (2005) describe music listening as a "form of cognition in which one is thinking musically" (p. 126). Repeated listenings deepen this musical thinking through sensory experiences that engender increasingly insightful understandings. Thus, repetition enables a continual layering of knowledge that constitutes reinforcement. The LG for Bach's invention did not prompt discussions of instructional layering. Perhaps the analytical format of its activities did not invite deeper/richer interpretations, although I would argue that Bach's manipulation of the motive – by imitation, transposition, inversion, fragmentation, and augmentation – exemplifies a *compositional* layering process. But because the level 6 LG leads the student through aural/visual interactions with these manipulations, the cumulative work of instructional reinforcement may already be done. And since this reinforcing work occurred on the surface of the LG, it was considered with the analyzing data.

The groundwork for KM's instructional reinforcement is frequently laid at the preparation stage. In the level 5 LG, the preparatory activities are intended to introduce specific components of Mozart's aria *before* the first listening. These pre-listening engagements with both the rhythm and the melody from mm. 24-32 ensure an active listening experience for the student since he/she is tasked with recognizing the pertinent portion of the aria when it is heard for the first time. As I mentioned earlier, this did not happen for the student of a Kanata group participant, although it happened for the participant herself:

ABs: So, I had this up on the stand and we're listening away and it's all very pleasant. And then about, you know, a minute in, I'm like, "Oh! Right."

DM: There it is!

ABs: "That's the rhythm she's talking about." It's very noticeable, but I think [students] would actually miss it if they were working on their own.

(1K)

If the student has clapped the rhythm and sung the melody with *solfa* syllables, he/she is not likely to miss it. Through these early interactions, and the brief analyses that accompany them, Mozart's rhythm and melody will have become known elements. While the participant suggested adding a score as further assistance, this addition is not necessary until later, when exploratory analytical activities are undertaken.

Instead of using repertoire to illustrate music theory, I am advocating the use of music theory to explain the repertoire. Although this reversal may seem inconsequential, it is actually quite significant. The student's focus shifts from theory to music – from disembodied musical elements, like intervals and chords, to the musical whole created from a combination of these elements. Rather than reinforcing the student's grasp of a specific element with generic exercises and memorization tasks, her/his understanding is strengthened with integrated activities that include both aural experiences of a musical work and visual interactions with its notated score.

Just as the individual elements of music theory can be combined to form a musical composition, the composition can be analyzed by gradually disentangling its individual elements. This progressive analysis enables the student to accrue discrete layers of understanding that are determined by the music itself. Referring to the piano reduction from the opening of Mozart's aria (see **Appendix 4.1**), a Toronto group participant listed several musical elements that appear in the accompaniment. Besides those queried in the assignment exercises – the D minor triad, in both solid/blocked and broken form, along with the melodic minor scale fragment – he

mentioned the dominant 7th chord and pedal tones. These four measures also contain the *tremolo* discussed earlier with the analyzing data. “I’m not sure how far you go” (CP-1T). The student’s analytical interactions with theoretical elements are largely dependent on her/his prior musical knowledge. But for the LGs, they depend on practical limitations of space as well.

In order to include additional musical elements, I asked the Orleans group participants how they felt about having more activities. They responded enthusiastically:

AC: I’m big on lots of activities, more repetition.

ABn: I like things to do. And ... doing things with the kids. I find it reinforces well and it’s something that you can do with them in the lesson. I think, good. Not pages and pages, but yes. Maybe twice what you have here?

LLP: So rather than... Oh, okay!

ABn: But I don’t know, what do you think?

PG: What did you say?

ABn: I was saying maybe twice the amount.

PG: My kids love doing this stuff.

ABn: Yeah, it’s good. Find the things... And it’s good to work at it together because it can spark discussion, or prompt questions... (10)

The Toronto group participants felt similarly. In discussing the level appropriateness of specific musical elements, such as the chromaticism in the second melody from Mozart’s aria (introduced in Activity #5), they took the option of additional activities a step further. I had recommended coming back to the same repertoire at higher levels and received unanimous assent “because [the students] are already familiar with the piece. They can hear [it]” (CP-1T). But another of the group suggested “some kind of box that’s beyond,” arguing that “if you have a student who’s thirteen doing this as opposed to a student who’s six, [chromaticism *is*] something you can talk about” (CM-1T, emphasis added). Her suggestion immediately awakened my imagination. I began to envision higher-level activities at the end of each LG that would provide further exploration of the repertoire. Or perhaps a challenge question for each assignment. But these are layering ideas for another day.

In the level 7 LG, I intended to layer the programmatic elements of Romanticism and the structural elements of Classicism, just as they are layered in Mendelssohn’s compositional style. I defined program music, since it is a new concept at level 7, but I did not define sonata form because it was introduced in RCM’s (2016e) theory curriculum with Mozart’s *Eine kleine Nachtmusik* at level 6. As the overture’s formal structure began to take shape, I asked the student

to “[n]ame the three sections of sonata form.” One of the Kanata group participants suggested that a review of the form was warranted, implying that an explanatory sentence (or two) should be added. However, a reconsideration of sonata form need not be rendered as a *telling* exchange. This approach places the responsibility for re/learning on the teacher, enabling the student to passively accept the information. But by addressing the topic as an *asking* exchange, the responsibility is placed on the student, enabling an active re/learning experience.

Reinforcement, as an action of strengthening support, indicates a form of layering that requires additional information or interaction. But review, as a literal “viewing again,” does not necessarily add substance to the object/subject under consideration. Yet, a somewhat stagnant review process is the task that customarily prepares music theory students for examinations. Consequently, the non-implementation of review in the LGs, addressed by the Kanata group participant above, was also a topic of discussion for the Orleans group participants. Because I did not follow established patterns of review, they asked for clarification: “So, it’s a reminder?” (ABn-1O). In response to another participant’s query, “Any concept that’s discussed has been dealt with in an earlier level?” (AC-1O), my answer is “Yes.” If the student is unsure of the concept/skill or requires help with its interpretation, I am counting on the teacher to intercede.

There is a fairly good chance that intercession will be necessary since all four LGs place relevant musical concepts/skills in unfamiliar contexts. This unfamiliarity, which is an essential feature of reinforcing activities in KM’s instructional process, allows the student’s learning to move forward. Every transferal of knowledge from unknown to known adds another layer to the student’s previous theoretical understanding. Whether this transfer is accomplished independently or collaboratively, every student/teacher partnership embodies a unique opportunity for sharing. As an example, one of the Orleans group participants recommends that her older students read a book titled *Night’s Daughter*, which is Marion Zimmer Bradley’s (1985) re-imagining of Mozart’s *The Magic Flute*. According to my participant, the author “adds one little element, and it makes the plot make sense, or more sense than it currently does” (AC-1O). She did not divulge this element to the group but in keeping with a guided discovery approach, encouraged us to borrow her book instead.

Although making sense of the opera’s plot, including its Masonic references (Chailley, 1971), provides valuable background information for the student, I am interested first and foremost in helping her/him make sense of Mozart’s music. One of the Toronto group

participants saw my facilitation of this helping process as a “step[ping] up from rhythm to pitch to integration to application” (JR-1T). He explains:

JR: I think ... you've [built] a wonderful graduated system through igniting the awareness, cultivating the awareness, of what this music contains. And I'm just reinforcing what everyone else has said – the idea that harmony and melody are interdependent. And so, you're making that very clear, and giving them a chance to focus on elements that we all take for granted because of our training, but we're shocked when students don't. You know, we forget what it's like, and then students often just don't make the connection. You're casting a spotlight on these things, and I think it's great. And then you have the activity at the bottom, engaging them to write a melody focusing around the F major triad, ending with the root. (1T)

Avoiding the possibility of student misunderstandings is an unpredictable pursuit since even the best laid plans can go awry. “[Thinking] as a teacher, I'd be like, ‘Well, of course – yup, great’” (ABs-1K), but thinking as a student, without the benefit of related experiences, is a challenge. One of the Toronto group participants highlighted the pedagogical importance of exemplars as implements of reinforcement. By providing the student with a model, such as the melody from Mozart's aria, misunderstandings can be avoided. For instance, an exploration of the melody's component parts can introduce the student to the practices and procedures of melody writing, beginning with an awareness of patterns. “[S]o they're really looking at different parts of how a melody is put together – step-wise motion, repetition, breaking up a chord” (CP-1T). To my participant's list of patterns, I would add a well-defined set of parameters that ensure a successful melody writing experience for the student. As the teacher, I can also offer advice from my own melody writing experiences.

Naturally, the teacher is encouraged to embellish and enhance the LGs with anecdotes from her/his experiences. Although I struggled, in their writing, with how much information to include and how much to leave for the teacher, I am coming to understand that the student is better served if my materials are exercised collaboratively. However, I was reminded by one of the Kanata group participants that I must also consider the “prior knowledge of the teacher” (KS-1K), which steers me back to the need for CLGs. “You don't know what they're coming with... So, you want to give them the materials they need” (KS-1K). But “[i]t's a balancing act” (ABs-1K). How much involvement is too much?

Although I chose to focus most of the activities for Mendelssohn's overture on themes from the exposition, I decided that I could not leave the development and recapitulation sections without acknowledgement. And because it is unreasonable to expect the teacher to devote more than a few minutes of the student's practical lesson to this endeavour, the student must tackle her/his first listening to the full overture as a take-home assignment. Therefore, I am dependent on the teacher's assistance because of the potential unmanageability of my accompanying questions. The Kanata group participants questioned my assumption/expectation that Mendelssohn's themes would be audibly recognizable in unfamiliar sections of the overture. A portion of our discussion is excerpted below:

ABs: [T]his is a huge piece. I wrote [in my annotated LG]: "A complete score with themes labelled seems necessary at level 7." I just don't think they're going to be able to find all the themes...

LLP: To be quite honest, I don't ... necessarily expect them to find all [the themes]. And these questions are probably a little bit difficult for them to ... answer.

ABs: "What theme is featured in the development?"

DM: Yeah.

LLP: But in a way, that doesn't really matter to me. What matters ... more is that they have a chance to listen to [the overture] and bring knowledge to it.

ABs: And someone will get it.

LLP: And someone will. And it will open a conversation. So, even if they come to their next lesson and say, "I listened to it, but I couldn't find the theme!" ... that again, opens the conversation.

KS: [It's] a teaching moment. (1K)

I love the layering aspect of teachable moments – the fleeting, unplanned opportunities that allow me to offer insights to my students at a time when they are most receptive. However, others may be less comfortable with the conversations they generate, particularly teachers who may not be confident with their own knowledge and do not wish to appear *un*-knowledgeable to their students.

CLGs could remedy this situation. They could provide an overview of each work, including a structural analysis, and explain pertinent terminology. One of the Orleans group participants proposed the use of bold type to highlight important terms, like *concert overture*, in the LGs themselves. These visual cues draw the student's attention to essential vocabulary. In RCM's (2016) *Celebrate Theory* series, significant terms are bolded, sometimes repeatedly, but excessive "bolding" can interrupt the student's reading of the text. However, a single usage of

bold type, “just the first time” the term is presented (ABn-1O), is often beneficial. “[N]ow you know this term, we can just go ahead and use it” (AC-1O). The unknown becomes known.

It is the layered application of this terminology, and the conceptual understandings it represents, that are emphasized and reinforced throughout the LGs. But they are not necessarily quick studies, as an Orleans group participant points out:

ABn: [I]t’s just so much work sometimes, to have to do all that. But doing it one page at a time, a little bit at a time, it’s layer-by-layer. And ... then after, over a period of several weeks, or perhaps even months, listen to [the work] again and [ask], “What are you hearing?” And at this point, it’s taken ... time to absorb and to process it, and to have some vocabulary to be able to understand what [they’re] listening to. (1O)

I am grateful for this participant’s encouragement, but I appreciate even more her recognition of the process that lies beneath the listening activities/assignments:

ABn: Yeah, I think the process is important. To have, you know, a little start. Looking at it this way, and this way, and this way. Because it’s just so much to do, if you can get it within a structure that’s relatively manageable... (1O)

The LGs are structured as one-page activities that encourage student/teacher interactions of approximately five minutes. Each activity concludes with an independent take-home assignment that either reinforces the current activity or prepares the next one. Every activity/assignment features at least one aural experience of the repertoire.

“[M]usic listening is a covert form of thinking and knowing in action” (Cutietta & Stauffer, 2005, p. 124). It involves a process of layered reinforcement that I tried to use as consistently as possible in all the LGs. Although my choice of repertoire may seem arbitrary, it is organized by era, starting with Classicism in the center of the common-practice period and branching out – both before and after – from this central point. Because I chose distinct genres and instrumentations, I was able to explore diverse theoretical topics but regrettably, I was unable to connect the LGs together. Nevertheless, they follow a similar format, and according to an Orleans group participant, “you find a path” (JK-1O). In her view, I created a “neat effect, in the way [I] approach[ed] rhythm and pitch and structure, harmon[ic] structure, that carries from one to the other” – an effect she thought was “very reinforcing” (JK-1O). I was concerned that it might be too subtle, but my approach shapes my work, whether I am aware of its presence or not.

Theoretical concepts travelled forward in my mind from one LG to the next and even from one activity to the next. But I cannot assume this to be true for the student or for the teacher. In our discussion of the notational irregularities in Josquin's *frottola*, the same Orleans group participant reminded me that if students "did the first half [of the activity] before their break, or the [previous] day, they won't put two and two together" (JK-1O). Her reminder evidences another balancing act – I must negotiate the balance between too much direction and not enough. I must find a sweet spot in the middle of an overlapping presentation that connects the new learning with the student's old, well-established learning. This reinforcing connection is particularly salient for the level 8 LG and its unfamiliar Renaissance repertoire.

To illustrate, I queried the participants about my decision to begin with a 4/2 version of *El grillo* and then to transform it through diminution to a 4/4 (or 2/2) version. As a layered mixture of both old and new, this inclusiveness allowed me to access the *frottola*'s original manuscript as well as its modern transcription. A Toronto group participant responded: "I think you've addressed it well. I mean, you're trying to identify the original, and then preparing them for the modern transcription. I guess to have that duality is probably good. I think the duality is good" (JR-1T). Later, he added: "I think it would be remiss not to have had the 4/2, [and] then to have the diminution" (JR-1T). I worried about the clarity of my transformation as well as the reinforcement of tonal elements, such as chords and cadences, in a pre-tonal work. An Orleans group participant replied: "[Y]ou addressed the foreshadowing ... of tonal [elements] in the first paragraph [of] the fourth activity, so I think that kind of opens the door" (AC-1O). Her next point provides the causal logic that rationalizes the activity: "It explains why we're doing it. Why we would hear it that way" (AC-1O). Even though Josquin's *frottola* pre-dates tonality, we hear it with tonal ears and analyze it with the tools of our modern tonal system.

Layering for Understanding

Guided Discoveries: "Bread crumbs." I envisioned the LGs as instructional applications of reinforcement. Utilizing repertoire as a catalyst, they provide students with an integrated experience of music theory through directed music listening activities. These directions bring educational value to unconscious experiences of hearing by integrating purposeful actions of listening and thinking. Cutietta and Stauffer (2005) explain:

Evidence that an individual is indeed listening to music is that he or she is, at the very least, consciously attending to musical sounds. Furthermore, the focus and direction with which one listens to and for something in music implies intent, and intention is yet another critical element in the covert act of listening. (p. 126)

Thus, directed music listening facilitates a form of intentional listening that serves to reinforce the student's learning with cumulative musical/theoretical discoveries.

The layering of these discoveries creates a connection between educational events. This connection brings increasing awareness to the student's acquisition of musical knowledge. Consequently, her/his ability to recognize musical elements, such as motives, structural markers, or stylistic features, is improved – even if the elements have been modestly transformed. The recognition of these transformations is aided by the practice of analytical flexibility, as discussed earlier with the analyzing data. Although Claude McLean (1999) argues that listening is a skill “frequently challenged by the culture in which we live,” it is one that can be “finely honed through guidance” (p. 247). This guidance, which heightens awareness with repeated reinforcements, can also connect the surface elements of music to deeper levels of personal meaning-making.

The concept of word painting may serve as an example. It is a musical depiction of the text's literal or figurative meaning, which lends itself to extra-musical understandings of rhythm, melody, or harmony. An exploration of these additional understandings provides the student with an opportunity to delve beneath the surface content of the music. Presenting several straightforward applications of word painting, Josquin's *frottola* offers the student an easily accessible experience with the interpretation of musical gestures – “[w]hich leads to why you would have them translate the [text], so they're really connected to the words” (CP-1T). Once again, I want the student to be actively involved in a process of guided discovery, which would not have been the case if I had given her/him a ready-made translation.

However, the implementation of discovery teaching processes may need more guidance for the *teacher* than I have offered, as one of the Orleans group participants commented:

JK: I appreciate you leading people to discover things for themselves. But at ... first, I was swimming. I was not quite into the system. And so, I thought of my lovely Living Language book, which has a blue line across [the top of the page], [that] tells you either what's going on in the book or what's going on in the chapter. And for the longest time, I paid absolutely no attention to the blue line. Then I figured out what it was: "This is what we've covered. This is what we're going to cover." And knowing what it was, and being able to say, "Oh, I've forgotten. Oh, it's right there, I'll just leap back to that." – I call it my kind of guiding path.

ABn: Like a timeline.

JK: And it gave... It seemed to be...

AC: Bread crumbs.

JK: Yes. It seemed to be really a foundation for me, and a ready access to what I needed to review, what was coming, and the context. And so, I suggested... I picked out a lot of things, terms and things, that because I haven't taught theory as theory for so long, were new to me, or needed refreshing. So, that's a suggestion, and also the idea of an appendix that lists everything. Not just the new stuff, but every term, every composer, the whole kit and caboodle. And then a glossary for the symbols, because the symbols have changed over the years too, which is a lot of work. And I don't know if it's necessary for a supplementary thing, but I think it would be a big boon to teachers and to students. (10)

The "terms and things" suggested by this participant were added to the annotated LGs she gave me. For level 8, they include: *frottola*, open/short score, C clefs, word painting, cadences, chorale/keyboard style, and modal/tonal harmony. These topics outline the conceptual pathway that threads through the activities and assignments for Josquin's *El grillo*. To this "guiding path," she added terms for a glossary – *a cappella*, diminution, homorhythmic texture, syncopation, passing/neighbouring tones, and modes – as well as applicable symbols, (pt) for passing tone and (nt) for neighbouring tone.

Initially, I heard thoughtful, constructive recommendations in my participant's comments. Now, I hear an underlying hesitancy that is rooted in reluctance or resistance to my pedagogical approach. And she is not alone. The implementation of her recommendations will undoubtedly increase the usability of the LGs, particularly since one of her colleagues supposed that "it requires a fair amount of work on the part of the teacher before you start working [on the LGs] with the student" (ABn-10). Some of this work will be lessened when the new syllabus requirements become more familiar for teachers, but if the LGs are perceived as work intensive, their potential usefulness will be compromised. The Living Language (2011) books, mentioned in the excerpted conversation above, place a "progress bar" across the top of each page that

summarizes the course material in every unit. It indicates the user's position within the unit and how much progress has been made. This is certainly appreciated in a book of more than three hundred pages but may not be necessary for a booklet-sized LG. However, referring back to the Kanata group participant's criticism regarding the lack of labels or titles for activities, a guiding path of some sort seems justified. Perhaps a list of topics could be added to each activity/assignment – provided the list does not undermine the student's discoveries.

Deepening from an Author/Pedagogue Perspective

The deepening theme is a derivative of the layering theme, in much the same way that my author-self is derived from my teacher-self. Experimenting with instructional improvements for my students, I have wanted for many years to share the lessons I was learning by assembling supplemental materials for other teachers of music theory, particularly beginning teachers. While most of my early writings were organizational assignmentbooks or recordbooks, I also attempted *A Child's Songbook* (Penny, 1997), revolving around the English lullaby *Twinkle, Twinkle, Little Star*. Its KM-inspired activities gave substance to my first pedagogical venture. Although the assignmentbooks/recordbooks had enabled me to flirt with *who*, *what*, *where*, and *when* explanations of music theory – even some *why* connections – it was the songbook that initiated my *how* thinking. This deepening of my authorial experience into the realm of interpretation provides impetus for the deepening theme in my data analysis.

The writing project that motivated my graduate studies was a student's workbook titled *Tonal Relationships in Music: Introductory Harmony, Melody, and Structure*. As a repurposing of KM for the teaching of advanced music theory, it incorporates the method's holistic integration of musical elements and its instructional progression from the known to the unknown. It also incorporates my growing awareness that musical elements are explained or connected by their relationships. In Rogers' (2004) construal of musical analysis, relationships determine how events in one part of a piece affect or are affected by events in another part. These interactions often involve "long-range perception," including matters of "balance, temporal proportion, and retrospective hearing" which he describes as "re-interpreting past events on the basis of new information" (p. 75). Again, the notion of re/interpretation is emphasized.

With the layering data, I explored the LGs' cumulative reinforcement of theoretical concepts and the participants' views of the resulting instructional process. With the deepening data, I probe the pedagogical nurturing of interpretive skills that enable the student to make

independent judgements or come to independent conclusions. My desire to address these skills is precipitated by the open-ended questions/instructions that close the music history units in RCM's (2016) *Celebrate Theory* series (see chapter 4).

Concluding her/his level 5 study of the "Queen of the Night" Aria from Mozart's *The Magic Flute*, the student is instructed to: "Describe your experience listening to this work" (RCM, 2016a, p. 66). The nine-year-old student of an Orleans group participant, when given this and a similar instruction related to repertoire at the next level, replied, "Oh, I feel like butterflies and twirling" (PG-1O). According to my participant, her student "feels the same thing for every piece," which seems unimaginable, but "that's what she has, though" (PG-1O) – a feeling of twirling in a flowery meadow with butterflies. While the music history component of *Celebrate Theory* initiates interpretive experiences for the student, he/she is not adequately prepared to describe these experiences. Without an effective process of rudimentary analysis, along with the vocabulary necessary for communicating analytical discoveries, the student is unable to move beyond superficial descriptions of a feeling – any feeling – that may or may not relate to the music. Perhaps my participant's student experienced a feeling of pleasantness that she associates with butterflies and the memory of a family picnic. This association may be personally meaningful, but it lacks a specific theoretical connection to the repertoire.

As I mentioned in chapter 2, Tenney (1988) contends that the "Western musical enterprise has been characterized by an effort to *understand* musical sounds, not merely ... to impose upon it either a willful personal 'vision' or a timid imitation of inherited conventions, habits, assumptions, or 'assertions' " (p. 103, original emphasis). Since consonance and dissonance may be determined acoustically *and* psychologically – through subjective discernments of "pleasantness" and "unpleasantness" – their distinction within the context of tonal harmony may pave the way for other, more meaningful, interpretive experiences. Furthermore, judgements of aesthetic preference require the corroboration of musical sounds. Thus, consonant and dissonant intervals may offer a valuable glimpse at *how* music works.

The act of interpretation implies the derivation and the explanation of personal meaning, both of which require critical analysis. Based on Dewey's (1934) notion of criticism as the *re-education* of perception, Eisner's (1991; 2008) concept of educational criticism discloses the often subtle, constituent qualities of an artwork through aesthetic criteria. Within ABR practices, educational criticism utilizes description, interpretation, evaluation, and generalization

procedures to make judgements that broaden understandings. Rather than a collection of superficial details, it is an analytical discrimination of these details. Extracted from Eisner's critical approach to ABR, the process of interpretation holds promise for an integrated music theory pedagogy by providing students with the requisite tools for *seeing* and *describing*. These tools may then support *creating* activities such as melody writing.

The deepening data comprises my participants' views of musical interpretation, with all three groups stressing the pedagogical value of interpretive skills. Since the LGs are unique to the individual compositions with which they are paired, the interpretive focus of each LG is also unique. Therefore, the deepening data is organized according to individual levels with level-specific subtopics: emotion, manipulation, orchestration, and notation. Although not always applicable, programmatic or word painting elements are often prominent. In the deepening for understanding section, the participants' reluctance or resistance becomes increasingly evident. Their occasional references to "academic" tasks, like analysis, suggest a tacit belief that the science of music theory is separate from the art of music – implying that academic/scientific pursuits are intrinsically non-musical and so too, the attendant pedagogy.

Mozart's "Queen of the Night" Aria

Interpreting Emotion: "It really resonates with them." In music theory teaching, the usual tendency is to ask direct questions for which the answers are clearly evident. This is certainly true in my studio, where my students recognize recurring patterns of asking/answering. For the most part, we are comfortable with the *status quo*, but comfort does not necessarily encourage growth. I asked the Toronto group participants to consider the inclusion of open-ended questioning in the LGs and received this affirmation: "Well, you're going to confront [these questions] at some point. So, yeah" (CP-1T). At level 5 (see **Appendix 4.1**), I asked the student, "How do you think the queen feels? How does Mozart show her feelings in the music?" I invited the participants to offer alternate ways of approaching these questions. They gave me excellent suggestions, for instance:

JR: Sometimes ..., in [the] aural analysis [for our harmony books], we gave boxes [addressing] the same thing. You know, you have a clear idea of what... “Does she feel anger, or vengeance, [or] betrayal?” There are many good answers [students] could give. I think a teacher wouldn’t care as long as they’re engaging with the sentiment. And I think the kicker, of course, is the next [question] because you’re saying... Well, you’re trying to really tie the music ... to the description. So that’s wonderful, it’s reinforcing, in the user, the fact that it’s okay to make a judgment or an observation about the feeling or the emotion. “But how is [the] music reflecting this?” So that’s wonderful. You could give just maybe two or three or four boxes and give different emotions so that it points the student in the [right] direction. (1T)

At this point in the activity, I imagined that the teacher would assist the student by helping her/him with suitable expressions of emotion. But if the teacher is uncomfortable with the task or unsure of its outcome, having guidance in the form of tick-boxes would be advantageous. Another of the Toronto group participants was equally interested in modifying the exercise to make it less onerous for the student. “Can you maybe ... direct them to: ‘She feels angry. Here’s how the music reflects that.’ So they have an idea. ‘Here’s a concrete example of what I’m asking, for future reference.’” And once a concrete example has been given, “[t]hen you can start expecting them to think for themselves” (CP-1T). This recommendation was inspired by the manner in which the participant “liked things presented” to him as a young student. “Give me a good concrete example. Okay, then I can make connections when I do future work of the same type” (CP-1T).

But rather than handing it to her/him on a platter, so to speak, my inclination is to draw as much information as possible from the student. These questions can then lead to the development of autonomous conclusions. However, the questioning may not always be sufficient, or the desired pathway, sufficiently obvious:

PG: I think a good example is in that “Queen of the Night” Aria when she’s doing that little **sings the vocalise** You know. And what emotions was the queen feeling? Well, if a child hadn’t seen the little animated [summary] first, she’s not going to know the story (or he), and this sounds like a happy little dance! (PG-1O)

To some extent, the student’s misunderstanding of the queen’s emotional state is immaterial because the potential for learning in her/his *mis*-interpretation, and subsequent *re*-interpretation, is enormous. I am not advocating the acceptance of misinformation. Instead, I am promoting an

awareness of the teachable moments inherent in unintentional misunderstandings. “Ah-ha” moments are part of the discovery process. And if the student is encouraged to make interpretive discoveries, the learning will be that much more meaningful:

AC: They own it.

ABn: Yeah, it really resonates with them then, when they can relate it to something [personal]. (1O)

Discerning the meaning of the text – how the queen feels – is surely a worthy application of the student’s interpretive skills. Discerning the musical pictorialization of the text – how Mozart depicts the queen’s feelings – adds another layer of complexity to the student’s discovery. One of the Toronto group participants proposed the following:

JR: This is ..., I think, the first time you’ve matched the words with the music. So, maybe just a comment that even the English translation works well. In other words, the emphasis, the longer notes are accented notes in the melody. I know this is a harmony-based aspect, but because the words are here maybe just a comment saying, “Observe or try to say the words...” (maybe they can’t do it in German...) but, “Observe how the words are served well by the rhythms chosen.” (1T)

I had not considered this facet of the text setting, although I included words along with the melodies I used in Activities #5 and #6. The participant’s reasoning is compelling: “Because ... this is the first time you actually integrate the words with the music, and it flows well. In German and in English” (JR-1T). This “flow” is a significant feature of Mozart’s musical style, but it may be too sophisticated for my level 5 audience. While the participant’s “observe” directive is somewhat problematic because of its passive nature, my attempt to create a relationship between the text and the music may be just as elusive. I asked: “What musical mistake is made by the Queen of the Night at the end of her aria?” An Orleans group participant guessed that “she ended on *so* rather than *do*?” (JK-1O). While this is correct, the participant’s hesitation causes me to think that even though I presented my query as a challenge, I too may have overestimated my audience. The queen is furious. She does not end on a stable scale degree. “Tut, tut. Unforgivable!” (ABn-1O).

Bach’s Invention No. 1 in C Major

Interpreting Manipulation: “Is that where they make a model?” Bach’s invention does not require the same level of interpretation as Mozart’s aria. Inventions do not generally

illustrate emotions, although they are subject to the Baroque doctrine of the affections which held that the principal aim of music was to “arouse the passions or affections” (Randel, 1986, p. 16).⁸² However, the subtleties of this musical rhetoric are beyond the competencies of a typical level 6 student, except for the notion that a Baroque composition generally imparts a *unity* of affection. In RCM’s (2016e) *Theory Syllabus*, the instructional emphasis shifts from the relationship between text and music at level 5 to associated style traits at level 6. Since Baroque music is predominantly polyphonic, the level 6 LG explores polyphony in the context of Bach’s invention. Therefore, the emphasis of the deepening data shifts from emotion to manipulation, but this compositional maneuvering is better suited to the analyzing data, which incorporates the surface treatment of Bach’s motive and its single affection.

For the deepening theme, which is associated with the complexities of interpretation, I found only one application: “Is that where they make a model?” (CM-1T). I asked the student to write an inverted motive in Activity #3:

CM: Oh, so you want them to be able to say down a third, and so then they’ll follow their own instructions?

CP: Right. Size only is good.

LLP: Right. They’ve got an arrow and a number, and then all they have to do is turn the arrow upside down and keep the same number. And that way, they’ll be able to build the inversion.

CP: Yeah. That’s good, I like that. (1T)

My intention is for the student to discover the inversion for herself/himself – not for me to display a ready-made example. As an alternative to the usual presentation of exemplars, I am offering the student an opportunity to build her/his own example. While this building process involves lengthy instructions, the end result is more meaningful for the student, particularly if the objective is to “see what you hear and hear what you see” (AC-1O).

Mendelssohn’s Overture to A Midsummer Night’s Dream

Interpreting Orchestration: “We want to engage their imaginations.” At level 7, the emphasis of the deepening data shifts again – from emotion, through manipulation, to

⁸² The doctrine of the affections, or the German *Affektenlehre*, is a theory of musical aesthetics that was widely accepted in the seventeenth and early eighteenth centuries. It “embraced the proposition that music is capable of arousing a variety of specific emotions within the listener.” Influenced by the Enlightenment’s tendency toward the encyclopaedic organization of knowledge, Baroque theorists attempted to “delineate music into affective categories” (“Doctrine of the Affections,” 2014).

orchestration. In Mendelssohn's overture, the orchestral enriching of melody and harmony adds depth to both the horizontal and the vertical aspects of music. But the programmatic element of *A Midsummer Night's Dream*, as it was for the storyline in *The Magic Flute*, can be confusing for many students. "What a cast of characters and what crazy roles they played!" (JK-1O). The Orleans group participants brought up a noteworthy point about the appropriateness of this work for level 7 students:

AC: I sometimes find that for younger people, the ambiguity of who's the good guy... "No wait, he's not the bad guy, he's the good [guy]." You know. That is upsetting for some younger people if [they] don't have clear-cut good guys, bad guys – at first. "Who do you trust?"

ABn: Yeah, they like things in black and white. Black and white is good. It takes a little bit of growing, I think, before you can see the shades of grey, [doesn't] it? Black and white is how they see things in the early stages.

LLP: Right.

AC: For that reason, it may be a good choice. Confusing, but good. (1O)

In other words, Shakespeare's plot is complicated, but the introduction of these complications in the context of Mendelssohn's overture can enable the student to experience, in small measure, a broader range of characterizations – the implication being that this experience can encourage growth beyond binary, either/or thinking.

The orchestral rendering of these characters adds yet another dimension to the student's experience. A Toronto group participant disclosed his role in writing the description of Mendelssohn's overture for RCM's (2016c) level 7 *Celebrate Theory* book. He commented: "I really love seeing your fleshing-out of all the musical ideas possible. This is wonderful" (JR-1T). But because the overture did not accommodate the singing of melodies and by extension, the recognizing of these melodies in later listening experiences, I chose an instrumental focus for the corresponding LG. I began with the piano – an instrument for which most students have at least a passing familiarity – and decided that my choice was justified when I discovered that the overture was first performed as a piano duet by the young composer and his sister. It was orchestrated a year later.

With a pianistic entry into Mendelssohn's overture, I meant to demonstrate both its origin and the inevitability of its orchestration since the work cannot be played by a single pianist. Thus, the overture's orchestral texture becomes an interpretive element of the storyline's

characterization. The Orleans group participants discussed the instructional significance of this element:

ABn: I think too, just that the orchestration... I was actually going to ask, before you said you brought up the piano for the reasons you did, if it was deliberate. Because we couldn't think in terms of ... a single melody.

We had to think in terms of a number of instruments, a number of sounds that were creating the whole effect. Because you're going from ... opera to counterpoint to orchestral [music], which are very, very different genres, and different kinds of listening.

JK: And lovely to have [the students'] ears opened to it.

AC: Yes.

ABn: Just the experience of different sounds, and the different ways of making music. (1O)

Of course, the student's listening experience is paramount but as an author/pedagogue, I have an opportunity to enhance the experience by bringing theoretical knowledge to her/his listening.

Ideally, sound and symbol are integrated. However, listening and reading are vastly different activities. They are mutually beneficial but reading in an orchestral context is multi-layered and can be overwhelming for many students – as it was for one of the Toronto group participants in his youth:

JR: I had trouble with [orchestral] scores when I started at the Royal Conservatory ... and [for] me, it was hard enough to read the white part in the ... score, but to look at a score that has no highlighting? And then, I wouldn't have understood. "Why is it even in this order?" (1T)

He recommended sensitizing the student to the way a score is laid out – perhaps in the textboxes I used periodically – but this information may be better placed in the CLG for the teacher. In conversation with the Toronto group participants, it became obvious that teachers' experiences with this topic vary greatly. One of the group, who is the principal violist of a symphony orchestra in southwestern Ontario, explained that the ordering of woodwind and brass instruments in an orchestral score coincides with the conductor's sight lines. This was a revelation for the rest of us.

But once the intricacies of score reading are addressed, the orchestral setting of the various themes – each representing a distinct group of characters from Shakespeare's play – can be scrutinized. In Activity #3 (see **Appendix 4.3**), I asked interpretive questions about the

introduction and the first theme as preparation for a definition of program music. A Toronto group participant thought I could give more responsibility to the student:

JR: I love how earlier, [at level 5], you were asking the students [about] the mood of the music, and then asking how the mood was evoked. Here, you're telling them [that in] the opening, there's a mysterious realm. Maybe if [you] took out the word *mysterious* and introduced them to the realm of the fairies, and then asked, "What is the mood of this music?" Then maybe that might engage them again with the atmosphere and ... how the music creates that atmosphere. (1T)

His suggestion is definitely in-line with my intention to draw as much of the learning from the student as possible. It also allows me to reinforce the student's previous experience with the same kind of questioning that was used for Mozart's aria.

As our conversation continued, another of the Toronto group participants worried about open-ended questions that may seem too esoteric:

CP: "How are the fairies' fluttering wings depicted?" Is that too open-ended, or...?

JR: Well, I think it gives the teacher [some latitude]. I would say ... through the repeated rhythm. I would say the articulation. I would say maybe the scurrying back [and forth] or the undulating scurrying. I think there's several ways of addressing [it]. I think we want to engage their imaginations and I think there could be some nuances to their answer[s].

CP: Yeah, and they're sitting with the teacher [for] this part.

JR: Yeah, I think their teacher will probably guide them. (1T)

Despite his initial worry, the apprehensive participant concluded that open-ended questioning is a valuable component of interpretation. "I like the way it's making the [students] think and directing [them] to the recorded material" (CP-1T).

Helping the student think is my primary goal with the LGs. Helping her/him think interpretively is a deepening experience that for me is the gateway to enjoyment. But the Orleans group participants were generally more inclined to appreciate music listening in its own right – unencumbered by music theory or the need for supporting theoretical knowledge. We had a thought-provoking discussion:

ABn: There's the element of enjoyment, but there is the element of learning, too. I was saying to [another participant], I like to read a book, but I don't always like to analyze it. I don't really care about getting into what this character did and what that character did and what that word meant. And so too with music. Sometimes [I] just want to enjoy it and listen, but I do appreciate that this is an academic exercise. But sometimes the kids, or the students, where they're coming from (even an adult student), they haven't come to that stage of development. They may want to just enjoy and let it wash over [them]. And it takes some of the fun out of it when you have to get into ... analyzing it. But having said that, I do recognize it's an academic exercise. But I still always bear in mind that there's supposed to be some fun here, too. And just not thinking. Just sheer enjoyment. Just sheer listening.

PG: That's where I think that animated one, going back to *The Magic Flute*, ... I think that's the frosting on the cake there. Just to know what the storyline is, especially since it's in German... But I think the kids would really like seeing that [animation], and then being able to listen to the piece and say, "Oh, yeah!"

JK: I go through stages. First, I have that wonderful overwhelming feeling. But then, if I've analyzed the music, and I never sit down and just analyze the music – I'm searching for something or I'm looking at the music, I'm playing the music or doing it with a student. And you begin to understand it and you see the form and the structure and the melodic line and the transpositions and all this... And then when you hear the music again, it seems to add a depth to it. You're not necessarily listening for those things, but you're aware that there's been this monumental brain behind it. (10)

I am intrigued by the "monumental brain" behind every musical work, especially the works I chose to engage for my inquiry – the ones I have come to know intimately. It is this deep sense of knowing that I wish to share with my students.

Josquin's El grillo

Interpreting Notation: "I'd let them experiment." At level 8, I observed the interpretive or discovery aspect of the deepening data in discussions about the notation for Josquin's *frottola*. An Orleans group participant remarked, "Once students are at this level, I think they are intrigued by the different ways of notating. 'Oh! That's not the only way to do it'" (AC-10). Her comment initiated a conversation about the placement of accidentals in Renaissance manuscripts, which in itself is trivial, but it speaks to the issue of relevance in music theory teaching, particularly regarding musical notation or the standardized/systematized representation of musical sound. As a student of music theory, I was presented with a series of "this is..."

statements. This is a half note. This is a sharp. This is where the sharp is placed on the staff. I accepted these statements without question or comment. As a teacher of music theory, I make a concerted effort to explain the reasoning that supports each statement. While the terminology occasionally defies logic – Why is a sharp called a sharp? – the placement of musical symbols is fairly logical and often historically grounded.

As an author of music theory, I noticed the underlying pedagogical implications of traditional teaching approaches in the following Orleans group discussion:

PG: Now, when they rewrite [the open score] in ... short score, then they'd have to put the sharp before the note, right?

ABn: Yeah, how would you deal with that?

LLP: Right. So that's... Yes, the difficulty is then getting down to the [short score at the] bottom of the page.

AC: I think that would highlight ... the different ways of writing, which might be... Of why we now write it next to [the note], because when we're writing it in closed score, we need to put it... Have it easier to find.

ABn: Yeah, it needs to be faster to see.

AC: Short score, sorry.

LLP: Right. Not at all. Okay, then I will leave it as is. Certainly, for the first example. When it's in the open score, should I pull it down [onto the staff] to give them an example of what to do when they write it in short score?

AC: I think I might just, in the directions to the assignment, say, "Put accidentals next to the pitch, not over." Or words to that effect.

PG: I'd just let them... I'd let them experiment.

LLP: See, I'm ... in favour of doing that!

ABn: Yeah, I just like the idea of a challenge, an experiment, and seeing how it goes. But I can see how some teachers would want to know specifically, exactly... This must be done like this. Some people just really need to know and are very uncomfortable with open stuff.

PG: I mean, most kids are oblivious to sharps and flats anyway. (10)

Two things stand out for me in this exchange. The first is a reference to experimentation, which often leads to deepening discoveries, and the second, a spontaneous remark about students' inattention. Although casually articulated, this remark contains a modicum of truth. There are many reasons for the student to ignore accidentals, but a lack of engagement may stem from an introduction to these symbols by means of "this is..." statements. In order to be engaging, music theory must be relevant.

Deepening experiences of interpretation can provide the connectivity that engenders relevance. An examination of the *frottola*'s original manuscript offers the student an opportunity

to connect modern notational symbols with their historical precursors, which may satisfy some of her/his *why* questions. An elementary analysis of the modern transcription allows the student to connect *El grillo*'s modality with elements of common-practice tonality, such as chords and cadences. Since most cadences end with incomplete chords, a modest level of interpretation is required, but the surrounding measures give ample clues to the chords' qualities. Consequently, the most valuable opportunities for interpretation are found in Josquin's word painting and the manner in which he establishes an expressive relationship between text and music.

Excepting Bach's invention at level 6, the concept of word painting or programmatic writing has been a significant aspect of the deepening data, perhaps because it encourages open-ended questioning. But in my quest to furnish the student with vocabulary and the means to describe word painting, I asked her/him direct questions about textural and rhythmic irregularities, linking them with specific words in the text. Although these questions have specific answers, they are meant to draw the student's attention to musical anomalies. And once this awareness has been created, it is a relatively small step to the contemplation of *why* in open-ended questioning. For example, the Toronto group participants mentioned Josquin's treatment of the final word *amore*, which is highlighted with melismatic text setting rather than the prevailing syllabic setting. Although the "M word" (melisma) is not applicable at this level (CM-1T), it is surely possible to point out the rhythmic "busyness" of mm. 35-36. It is also possible for the student to extract meaning from this illustration of word painting – the cricket enthusiastically sings out of love.

Deepening for Understanding

Open-Ended Questioning: "You're working out ideas." An Orleans group participant relayed her experiences with student interpretations initiated by open-ended questions:

JK: When I ask that sort of question about [a] piece, I have not shared my open-ended answer with the student at all. This is an interpretation of the piece or “How am I approaching this piece?” I am thrown aback by some of the answers I get. Their imagery is so different, their approach is so different. I see a different mood, I see a different atmosphere for the piece, and it is quite legitimate. The student who can vocalize this usually is imaginative and creative enough that the perception is good. It’s appropriate. And I think that’s one of the necessary things – that we need to make these things on paper come to life. And if you listen to several renditions of [*El grillo*], they’re delightful! And they bring the word painting right out front. You can’t miss it, if you’re looking at the score and listening at the same time. So, I think it’s a wonderful thing to bring out. I think that’s what it’s all about. (10)

This sentiment was shared by everyone in the group. Another participant added her thoughts:

AC: That’s one of the huge paybacks of teaching, is hearing these different perceptions and, “Wow, I never thought of it that way!” And the insight into the varieties of musical experience, and the insight into how that student learns, perceives, performs, whatever. And giving them that permission too, is definitely helpful, I think. (10)

As a music theorist, I derive insights from the printed page as much as from the actualization of printed notation, or perhaps even more so. I am beginning to understand, however, that my perspective is somewhat unusual. I often disregard extra-musical associations because they seem to me to be superfluous, but my analysis of the deepening data is enabling me to see that music in performance is equally thought-provoking – and that programmatic interpretations of this music, if such interpretations are applicable, can facilitate meaning-making experiences for the student.

Prior to the first set of focus group discussions, I circulated several questions for the participants to ponder. One of the Kanata group participants addressed the following:

- What is your position on the issue of breadth vs. depth in student listening experiences? Why?
- How might these listening experiences contribute to the systematic development of both theoretical concepts and aural skills?

Framing her answer with the premise that the amount of depth a student can handle “really depends on the student,” she responded:

ABs: [L]istening experiences contribute to development, of course. I mean, all the questions asked in the Listening Guide[s] are the same kinds of questions the student[s] should ask themselves when analyzing their own repertoire, listening to ear training, listening to music. “What are the primary chords?” Questions like that. By drawing attention to these concepts, the Listening Guides create awareness. (1K)

This is the feedback I was hoping to receive, but she went on to quote Bono, the primary lyricist of the Irish rock band U2: “The more you know the less you feel” (Hewson, 2004). Her reference and subsequent comments reminded me of the Orleans group discussion I quoted earlier – about the element of enjoyment in music listening:

ABs: So, at this [intermediate] stage..., it’s like, “Okay, how in depth do you want to go?” I mean, that’s a whole other psychological and philosophical question... Do we just want to listen to this? “Hey, that was fun, and it was a concert overture.” And that’s fine for this stage. But I mean, you’re doing something different. You’re looking at it very academically, and you’re working out ideas, and this is ... a framework. (1K)

She concluded by saying that “[s]ome students are wildly interested and some aren’t” (ABs-1K). But I feel compelled to try to reach *all* students, even those who are not “wildly interested” in music theory. By contextualizing the teaching of music theory in a music listening environment, I hope to inspire at least some of “those who are not.”

However, I must first overcome the teachers’ reluctance or resistance. The deepening data revealed two areas of concern: (1) the participants’ perceptions about the “academic” nature of analysis; and (2) their presumptions about listening to music for pleasure. To some extent, these perceptions/presumptions are interrelated. They suggest that formal musical analysis, as the province of professional theorists, interferes with the listening pleasure of the non-professional masses. But knowledge begets enjoyment. If the student comes to know a piece of music through analysis, he/she will be more inclined to enjoy listening to it. This analysis should include both formal and informal interactions with the music (as process *and* product), since every observation constitutes an act of analysis. An integrated music theory pedagogy attempts to bring aural/visual awareness to these observations – as essential components of a guided discovery approach.

Preparing from an Examiner Perspective

The preparing theme is associated with my examiner perspective because in this role, I see most overtly the results of students' preparedness (or unpreparedness) for music theory examinations. As a member of RCM's College of Examiners, I am privileged both to serve my profession and to grow my competence within the profession I serve. Derived from these examining experiences, my understanding of music theory has matured and I have gained an increased awareness of the pedagogy it entails. Consequently, I am better equipped to prepare my students for exams. While this emphasis on preparation – as an instructional process – is advantageous as an immediate goal, it could have far-reaching advantages not only for my students, but for my colleagues and for the wider music community as well. Indeed, small samplings of my pedagogical “preparing” ideas have been distributed across Canada and parts of the United States in RCM's (2016) *Celebrate Theory* publications. The LGs give further substance to my ideas.

In their reviews of the LGs, the participants recognized analyzing, layering, and deepening experiences that provide students with opportunities to explore, reinforce, and interpret musical phenomena. For me, this is a vertical teaching progression that allows the student's knowledge of music theory to develop and grow, gaining in complexity as specific topics are excavated and significant discernments begin to accumulate. With the preparing data, the participants considered the LGs' potential for broadening experiences in addition to the deepening experiences previously discussed. This seems to me to be a horizontal teaching progression that encourages the student's musical/theoretical knowledge to widen, branching out and linking up with the more advanced subjects of harmony and history through music listening experiences.

Elliott (1991a; 1995) proposes *musicing* as the action through which students develop the critical abilities of perceptive listeners. This music-making action generates both verbal and non-verbal knowledge – the former validated through logical evidence (knowing-*that*) and the latter through practical success (knowing-*how*).⁸³ Distinguishing formal knowledge from procedural knowledge, Elliott adopts the term *musicianship* to cover the “horizontal range of capacities that constitute procedural musical knowledge and the vertical sense of competency, proficiency, or artistry we intend when we say that someone ‘really knows how’ to make music” (1991a, p. 29).

⁸³ Elliott bases his notion of *musicing*, which manifests intelligence in actions as well as words and symbols, on philosopher Gilbert Ryle's influential book, *The Concept of Mind* (originally published in 1949).

Although Elliot's horizontal/vertical analogy is aligned with music as a practical process, and mine tends toward a practical/theoretical integration of process *and* product, I am motivated to broaden my data analysis by his multidimensional view of musical experiences and their pedagogical interconnectedness.

These connections are nurtured by readiness, which for Bruner (1966) requires "mastery of those simpler skills that permit [the student] to reach higher skills" (p. 29). For Kodály, readiness involves a similar hierarchical arrangement of musical skills and concepts, but the sequence of their instruction is dictated by the music (Choksy, 1999b), with readiness or preparation activities determined by the new learnings to be derived from a specific work. In musical analysis, Rogers (2004) describes characteristic analytical hierarchies that denote levels of connection or relationship between musical events. Like its instructional counterpart, Rogers' notion of hierarchical awareness grows out of pattern perception. Gradually, information is accumulated through sequential musical experiences and these experiences extend into the realm of more advanced study through preparation.

The act of preparing, or making ready, constitutes the first stage in KM's four-step instructional process. This preparation stage is twofold. It requires: (1) the internalization of previously learned concepts necessary for the understanding of new conceptual elements; and (2) musical engagement with a repertoire of songs in which the new learnings are prominent. Within the framework of my inquiry, the preparing data is primarily focused on the LGs' potential for the construction of necessary understandings. However, these constructions are also embedded in the musical literature, although the chosen repertoire is sometimes less than ideal. KM's objectives at this first instructional stage are generally expressed as the integration of participatory actions: preparing through hearing and singing. While I am pedagogically focused on active listening, my intent is the same as Kodály's – preparation (both verbal and non-verbal) that functions as a catalyst for prospective or future understandings.

Since the LGs already incorporate an array of topics from RCM's (2016e) most recent rudiments curriculum, I expected the preparing data to reference advanced subject matter. While much of it does, referring to assorted aspects of harmony and history, two rudiments-related topics arose as well: ear training and melody writing. Although ear training is generally taught in the context of a practical lesson, and is examined in the same context, its technical composition is essentially theoretical. As a result, I have included discussions of ear training with the preparing

data, rather than the subsequent connecting data. The participants' observations of both intermediate and advanced applications of preparation are followed by a brief preparing for understanding section. The issue of reluctance or resistance, which became gradually more prominent as my data analysis deepened, is less prominent with the broadening implications of the preparing theme. I am led to conclude that the participants generally support the implementation of preparatory activities in the context of an integrated music theory pedagogy, but an art/science listening/thinking dualism lingers.

Intermediate Applications

Ear Training and Melody Writing: "It's useful to them." According to the Kanata group participants, students who have experienced intervals in a musical setting, and have attained an aural awareness of the experience, are better equipped to identify intervals in ear training exercises. Our conversation was initiated by one of my pre-circulated questions:

- Do you help your rudiments students connect intervals and chords to their ear training? How?

One of the group offered her experience:

DM: [W]hen we start out, with my kids, we do the circle of 5ths. So, I actually maybe do it incorrect[ly]. But instead of making their theory and ear training go together... Basically, if they know – like when they write it – if they see an F, they know a perfect fourth is B-flat, because they know their key signatures really well. So, I think my kids are better at knowing their key signatures. Like [I'll ask], "What's E major?" and they'll just say, "Four sharps." So, ... that's how I connect... (1K)

Even though she was somewhat unsure of herself, the participant quoted above brought up an important point: "They know [intervals] because of the key signatures and their scales" (DM-1K). This contextualization is vital because without it, the measurement of intervals becomes a "counting exercise, basically" (KS-1K). And to memorize the number of half steps in every interval is not only "[t]oo much work!" (ABs-1K), but it has no real musical meaning. It is also unreliable. I have witnessed the break-down of this half-step counting system – both in my studio, where transfer students struggle with identifying/writing intervals, and on RCM's rudiments examinations, where exam candidates enharmonically misspell intervals. These misspellings are not isolated errors. They adversely affect transpositions and other interval-related exercises as well.

However, assuming that intervals are properly situated in major keys with a secure knowledge of key signatures, there is also an issue of usefulness to consider:

ABs: I take that a little further. So, I don't teach [a] perfect 4th from C to F, in the key of F [major], it's always *so* to *do*. It's always G up to C [in C major]. And I wrote a long spiel, in answer to that question, about how working with chords, breaking them down, teaches intervals in a way that actually helps [the students'] melody playback. Rather than, "Here's an interval. Here's a melody playback." They're completely unrelated!

DM: Yeah, and that's the thing that I still need to connect with my kids, because they know... They can write [intervals] like pros now, right?

ABs: Their theory is fine.

DM: And they can hear them like pros, but they can't...

KS: Put the two together.

DM: Well, "What's the F?" Like yeah, I don't know.

LLP: And ... the *so-do* perfect 4th is much more useful because it's part of [the] tonic triad. But eventually, what they will come to know is that there are many perfect 4ths, and you can find them in different places.

But that one is particularly important.

ABs: Mostly, it's useful to them. (1K)

The "long spiel" that the first participant mentioned is excerpted from the notes that accompanied her annotated LGs:

ABs: When working on ear training, I teach melody playback and interval recognition as a connected exercise. For example, I would begin by having the student sing or [play] a tonic note followed by the lower fifth of the scale: *do-so₁-do*. After the student is easily able to sing and recognize this sound, I add the [leading tone]: *do-so₁-ti₁-do*. The pull of the [half step] below the tonic is powerful, and they are easily able to recognize the shape. Then, we begin a new shape, only using notes of the tonic triad: *do-mi-so-mi-do*. Using a full 4-note chord or even two tonics, thirds, and fifths, we practice outlining by ear different patterns. I then combine the two concepts together: *do-mi-so₁-ti₁-do*. The student has been exposed to a major 3rd, major 6th, another major 3rd, and a [half step] – all within the context of key and with an awareness of a chord progression: I-V-I. In time, I include notes of the IV chord for more varied intervals. (aLG)

This participant's systematic approach to ear training and the resulting contextualization of significant intervals and chords is quite impressive. I can offer only one addition – that the first melodic pattern (*do-so₁-do*) be derived from a piece of music. The repertoire need not be complicated. The final phrase of *Frères Jacques*, for instance, would do nicely: "Ding, dang, dong. Ding, dang, dong."

Melody playback, in which the student is asked to play a short melody after hearing it several times, is an aural practice that optimally incorporates the student's knowledge of music theory.⁸⁴ But it can be drilled without that knowledge – as a purely aural experience based on trial-and-error. Crudely summarized, melody playback is often the result of listening without thinking. Melody writing, conversely, is a written practice that serves as a synthesis of the student's theoretical knowledge. In my experience, however, it is frequently the result of thinking without listening. A combination of the two would be ideal.

Just as thinking, or an awareness of theoretical elements, can facilitate successful playback experiences, interpretive listening can aid the student's melody writing competencies. Having analyzed Mozart's aria, he/she may be led to notice, "'Oh, I could do that if I want to express...' You know, anger or whatever" (PG-1O). In Orleans, we returned to the concept of melody writing several times. One of our conversations is excerpted here:

LLP: And maybe that translates, even a little bit, into melody writing, as you were saying, [participant's name], too. That... Just the ability to first of all have an opinion, and then to be able to translate that into some kind of musical something of their own, and to... Maybe our job, as teachers, is just to create a safe space for that to happen. For them to be able to voice how they feel about a piece of music and then to be able to put something to paper. Which of course...

PG: And then to listen to what they put on the paper. Because melody writing, I have students... They write something and I say, "Did you play this?" "No." "Okay, let's play it!" They play the question [phrase], I play the answer, and it's this... And they look at me, and it's like, "Yeah! It doesn't work!" You know. And it's interesting, how it gets mechanical. Answer the question, write the... Use this rhythm, use these notes. But where does the music part come in?

⁸⁴ In the musicianship portion of RCM's (2015) piano examinations, the examiner will "identify the key, play the tonic triad *once*, and play the melody *twice* (p. 15, original emphasis). Beginning with level 5, the tonic triad is expanded to a four-note chord and the melody, which becomes progressively more complex, is played *three* times.

LLP: Right. And maybe ... the discernment of pleasantness or unpleasantness comes a little bit into that discussion, too. And it's a very fine line to work with their ... creations, and to criticize them. I mean, first of all you have to... But I think by creating or giving them very small parameters, so that what they create will essentially... If their first compositions are on the black keys entirely, for instance, they can't come up with anything that doesn't... That's too crunchy. But what I often do for my students is... Well, we play it through, of course, and in the end it's always, "Your ear will know what to do. Where does it want to [go]?"

ABn: I think that has to do with the safe place, too. To be able to do that, and to do it, and then think about it a little more, or try some other things, or in a few weeks come back to it. And give them the opportunity to say, "Oh my gosh, that really didn't work so well. Let's try something else." So, ... the idea to grow and to develop – to evolve. That way, they have a safe space. (10)

Needless to say, the creation of a supportive environment in which the student feels free to experiment is not something that originates with a set of instructional materials. This kind of support lies within the teacher's domain. But the LGs can provide assistance by increasing the student's base of knowledge and therefore, contributing to her/his understanding of how to handle melody writing tasks.

Creative successes at intermediate levels can bring confidence to more complex tasks at advanced levels. Although one of the Orleans group participants criticized what she considers to be the "mechanical" side of melody writing – "use this rhythm, use these notes" (10-PG) – the utilization of fairly stringent parameters helps to ensure the student's early success. As her/his experiences grow in number, so too do they grow in complexity. The initial parameters are gradually relaxed until they eventually disappear, in the manner of Bruner's (1963) scaffolding. But good melody writing involves more than stringing random notes over an arbitrary rhythmic pattern – even if the notes are selected from a specific list and the rhythm is pre-determined. There is an intuitive "rightness" about the process that comes with experience – and knowledge.

Advanced Applications

Harmony and History: "To start thinking about..." The Toronto group participants, presumably because of their experiences as examiners, were slightly more attuned to the preparation of intuitive knowledge in the LGs. While some of the preparatory activities include explicit melody writing tasks, most of the student's preparation for more advanced subjects is

drawn from harmonic analysis. The Kanata group participant, quoted earlier, outlined her intervallic approach to ear training “within the context of key and with an awareness of [the I-V-I] chord progression” (ABs-aLG). This awareness is fundamental to the study of harmony. From the preparing data, I extracted discussions about specific intervals and chords, such as the tritone and the dominant 7th chord, as well as some of the procedural mechanisms of harmony, including chord spellings/symbols, common tones, non-chord tones, and implied harmonies.

Many of these harmonic concepts are introduced in RCM’s (2016e) intermediate theory curriculum (levels 5-8). However, as separate *parts* of music theory, their place or function within a musical *whole* is not necessarily addressed. The LGs are meant to fill this gap. In the last activity for Mendelssohn’s Overture to *A Midsummer Night’s Dream*, I isolated a dominant 7th chord that precedes the final transformation of the royal theme – where the composer highlights the chord’s significance by marking it with a *fermata* (m. 657). Among several analytical tasks, I asked the student to “[n]ame the interval between clarinet parts.” One of the Toronto group participants singled out this request:

CP: Because that’s... The interval between the clarinet parts is the tritone. I’m just wondering if that’s the reason for putting that question there – is to get them to understand that.

LLP: I don’t think they have the word *tritone*. They might. But I’m happy for them to say diminished 5th. Actually, that’s interesting, because I could easily go there. I could easily say that this interval is a [tritone].

CP: It’s a very important interval. (1T)

In a harmonic context, the tritone is a significant interval because it is key-defining. It is also imbedded in the dominant 7th chord, which is an equally significant element of harmony.

I included the dominant 7th chord in the LG for Mozart’s aria, as well as for Mendelssohn’s overture, because it is a new curricular element at level 5. The chord’s appearance in Activity #5 initiated a preparing discussion with the same participant:

CP: Do we point out the special nature of the dominant 7th to them? Do we care if they know that at this level?

LLP: It would be a really good thing. Maybe that’s part of the “more”...

CP: Later on. Okay.

LLP: I think at this level, at least for me, I just want them to be able to spell it, and [to] be able to find it. But yes, there’s certainly more discussion that could happen.

CP: I did like the common tones between chords, and you did it more than once, that I saw, and that's really important to me.

LLP: I'm always looking ahead to harmony and so, trying to bring [in] as many concepts that I know they're going to need later [as I can]. (1T)

Perhaps the key to future learnings is exposure. If the student is exposed to specific chords early and often, it stands to reason that he/she will begin to recognize them in the performance repertoire. And from her/his own observations, the student will begin to develop an understanding of the chords' characteristic properties.

This understanding is extremely useful when the student is introduced to the concept of implied harmonies, which are the harmonies suggested by a melody's configuration. Indeed, the presence or absence of a strong harmonic foundation differentiates a good melody from a bad melody. In the fourth activity for the "Queen of the Night" Aria, I stated that "Mozart's melody is based on the notes of an F major triad," and directed the student to circle prominent notes from this triad in the excerpt. The same Toronto group participant responded as follows:

CP: Yeah, I think it's good because the average student probably doesn't make the connection. They're just playing the dots on the page and not thinking any farther. And in particular, the Classical spectrum of things. It's just what's on the page, and I encourage my students to get off the page as quickly as possible. And chord spelling is big for me. If you can't spell the chords, you're kind of hooped. This is good – making them think early there is this sense of the tonic triad projected over time, which helps with their harmony later. (1T)

I especially appreciate his last comment – concerning the "tonic triad projected over time" – because many students assume that triads are always solid structures. They play triads in broken form as technical exercises but in theoretical exercises, triads are ordinarily written in solid/blocked form. Consequently, music theory students forget that broken chords exist – that chords can manifest themselves as horizontal entities. They are not always vertical.

The Toronto group participants mentioned the LGs' preparation for implied harmonies several times. "Implied harmony, good introduction to... Like, 'What chord is implied by C and E?'" (CP-1T). This participant is referring to the first beat of m. 3 in Bach's invention which, because of its two-part organization, is an incomplete chord. But if the student has had previous experiences with implied harmonies, he/she should be able to supply the missing chord tone without difficulty.

Analysis often requires interpretation, which should be practiced from the outset. But a piece of music is composed of many intricate details, and the interpretive nature of analysis implies that it is fully dependent on the knowledge of the *doer* at the time of its *doing*. I got caught in this interpretive web with my analysis of the second excerpted melody from Mozart's aria (see **Appendix 4.1**). Once the student becomes aware that most melodies are based on broken chords, I was intent on ensuring that he/she understands there is more to the story – that most melodies fill the skips or leaps between chord members with other notes, diatonic or chromatic. My discussion with the Toronto group is included below:

LLP: So, I guess this is trying to address the ... other notes in the middle.

That the triads are not the whole melody.

CP: Yeah.

CM: But that'll make it easier later on when they're trying to decipher implied harmony, right?

CP: Exactly. Yeah, good point.

LLP: And eventually they will have to [identify] non-chord tones too and so, although I can't use words like *passing tones* etc. at this level, I can begin to open that topic for them, just in a small way.

CM: Are there chord changes?

LLP: There are, technically.

CM: I-V-I, I-IV-I.

LLP: Yeah, there are technically chord changes in there but I...

CM: But, I mean, because they're not really passing notes, would you say here?

LLP: Yeah.

CM: But, like I said, I think it's great that they start to see things, so that it'll be easier when they're trying to decipher [implied harmonies]. (1T)

The participant who challenged my analysis is entirely correct. Mozart's harmonization of the first melody, from which I extracted an F major triad, is $V^6-vi-iii^6-IV-I^6-V^6-I-IV^6/4-I-IV^6/4-I$.

Figure 5.1 shows the melody along with a reduction of its accompaniment:

Figure 5.1: Harmonic Reduction of Mozart's "Der Hölle Rache" (mm. 24-32)

Figure 5.1 displays the harmonic reduction of Mozart's "Der Hölle Rache" (mm. 24-32). The score is presented in two systems, each with a treble and bass staff. The first system (mm. 24-27) shows the following chords: V^6 , vi , iii^6 , and IV . The second system (mm. 28-32) shows the following chords: I^6 , V^6 , I , IV_4^6 , I , IV_4^6 , and I .

The second melody, from which I derived an interval exercise, is I^6 - $ii^6/5$ - vii^{o7}/V - $I^6/4$ - I^6 - I - $V^8/6/4$ - $7/5/3$ - I , shown in **Figure 5.2**:

Figure 5.2: Harmonic Reduction of Mozart's "Der Hölle Rache" (mm. 43-37)

Figure 5.2 displays the harmonic reduction of Mozart's "Der Hölle Rache" (mm. 43-37). The score is presented in two systems, each with a treble and bass staff. The first system (mm. 43-46) shows the following chords: I^6 , ii_5^6 , vii^{o7}/V , and I_4^6 . The second system (mm. 47-50) shows the following chords: I^6 , I , $V_6^8 \begin{smallmatrix} 8 \\ 4 \end{smallmatrix}$, and I .

Both are considerably more complex than I intimated. Was I wrong to simplify the harmonies? Did I misrepresent Mozart's melodies for the student? While it is always my intent to teach with "scrupulous intellectual honesty" (Bruner, 1963, p. 13), in this instance, it is necessary to begin the analytical unpacking of these melodies with elements that are known to the student, such as tonic triads and dominant 7th chords. But there is certainly more to this story too. When the student is ready, and if he/she is receptive, a comprehensive harmonic analysis could be

undertaken – with assistance from the teacher and/or a CLG. However, the issue of readiness is paramount.

Despite her analytical apprehension, the participant grasped my larger purpose “that they start to see things” (CM-1T). And not only to see, but to hear: “I think that this sets it up really well for the Mendelssohn later, for hearing harmonically. And I really like the way you’ve outlined those first four chords” (CM-1T). Perhaps an alternate or simplified harmonization is acceptable since it can grow in complexity along with the student’s intellectual maturity. And perhaps it is advantageous for her/him to recognize that a melody – even Mozart’s or Mendelssohn’s – can be harmonized in multiple ways. This recognition creates opportunities for experimentation. However, some topics, like invertible counterpoint, may be better left for later. “Yeah, it would take some leg-work on their part to understand invertible counterpoint – all the ins and outs of [it]. That’s a challenge!” (CP-1T). Regardless, it *is* possible to properly prepare the student for future experiences with contrapuntal textures.

For the preparation of topics in music history, the Toronto group participants were again the most vocal since they all mark RCM’s history examinations – two of them at advanced (ARCT) levels. An Orleans group participant requested additional information:

PG: Maybe even more on the composer himself? Is that...? My kids love learning about composers. Nitty-gritties about the composers. You know, it’s like... ****gasps**** Really?

ABn: Yeah, what would the composer have been thinking?

AC: He did what? (1O)

Although it was comically delivered, the thought behind her request is sincere. A similar desire for background information was conveyed by the Kanata group participants.

In Toronto, the conversation assumed larger preparing dimensions:

CP: [I]s this a place to address musical style, at all? Like with Mozart, you have to contrast this diatonic/triadic thing to something with chromaticism. A lot. Is that a place for this? To start thinking about... Because that’s a tough thing on the history [exams] – a stylistic feature. Yeah, it’s usually not really well done. (1T)

My initial response to this participant’s query was that the LGs are not the place for discussions of finely nuanced stylistic features. But his question gave me pause to think. Even though a typical level 5 student is not ready for a sophisticated discussion of Mozart’s diatonic/chromatic approach to the subtleties of tonality, he/she could begin a process of *noticing*. Consequently, my

revised response to his query is more accommodating. The LGs could include musical style features but there is a potential implementation problem. While my participant suggested additional information-sharing textboxes, I am hesitant to take this course of action since it amounts to a *telling* exercise that counters my pedagogical emphasis on the process of deriving or discovering.

The LGs' analytical approach may already open the door to stylistic interpretation by encouraging the student to notice specific theoretical elements in other repertoire that he/she is studying. Another of the Toronto group participants articulated this notion in relation to Mozart's aria:

CM: [With] this Activity #5, just outlining what the features are and what the remarkable features are, ... gets them thinking a different way. Like, because often we find [on] history [exams] that they don't really know what to talk about. It's more a running dialogue of what they're playing. (1T).

Nurturing the student's exploration of the musical literature and enabling her/him to think differently about music theory is my primary objective.

Preparing for future learnings in music history, the student may also be introduced to the concept of timbre or tone colour through exposure to the sounds of instruments other than the piano. Many students are acquainted with instrumental timbres from their participation in school music ensembles, including concert bands, jazz bands, or even string orchestras. While some of these students pursue private studies on a variety of instruments, the majority are pianists. Few, however, have seen or heard a harpsichord. Bach's Invention No. 1 in C Major, because it was originally written for this instrument, gives the student an occasion to explore the harpsichord's unique timbral qualities.

Although I did not specifically introduce it in the level 6 LG, I mentioned the harpsichord in conjunction with the student's first listening to Bach's invention. My concern about the instrument's lack of explanation was relieved by a Toronto group participant:

CP: I think that's enough, just to make them think, "Harpsichord, oh yeah." And hopefully they ask good questions about the harpsichord. And [the teacher] could go into the [explanation]: "Cristofori invented the harpsichord, or the piano, in 1705." Blah, blah, blah. Get them going that way. That would be nice. (1T)

I do not wish to shirk my pedagogical responsibility in the matter but I, too, feel that the type of description he has offered is better communicated by the teacher. As author, I believe it is my role to stay on track – to maintain an inquisitive analytical perspective, and not to lose sight of my integrated art/science, music/theory mission.

When the repertoire invites it, timbral discussions are entirely appropriate and rather timely. In Mendelssohn's Overture to *A Midsummer Night's Dream*, for instance, the orchestration is an intrinsic component of the work. "Ah yes, getting to think about instrumental colour. Great idea! Because I find that missing a lot from the history exams – the nature of instrumental colour and how important it is. It's not addressed enough" (CP-1T). An awareness of timbral distinctiveness can begin at level 6 with Bach's invention and continue at level 7 with Mendelssohn's overture. Consequently, it becomes part of the student's *noticing* of theoretical elements in the musical literature that he/she studies and performs.

Along with an expansion of the student's analytical/theoretical awareness, listening experiences can expand her/his historical awareness. By incorporating unfamiliar repertoire from outside the confines of the common-practice period, the student's base of knowledge enlarges. For example, an engagement with 4/2 meter in Josquin's *El grillo* can prepare for other such engagements in similar repertoire. One of the Toronto group participants remarked: "Me, I would stick with the 4/2 because of the student who is onto other Renaissance vocal music. They're going to run into it anyway. So [this way], they've had some experience with it" (CP-1T). In other words, the student's music reading skills will have been prepared. They will have been reinforced and enriched as well.

Preparing for Understanding

Choosing Repertoire: "A connection." An analysis of *El grillo* also prepares the student for interpretations of word painting, which is a common feature of secular vocal genres in the Renaissance era. From my experience as an examiner, I appreciate that many history students struggle with descriptions of these phenomena. With even less familiarity, rudiments students are apt to encounter the same struggles. As I explained to the Orleans group participants, even if I define word painting, I cannot simply ask the student for examples. This is a question that is often badly answered on music history exams because examination candidates do not know how to respond. For example, they write, "Fair Phyllis I saw sitting all alone," but they do not

describe its musical depiction.⁸⁵ This first line of text is set for soprano alone, representing Phyllis, and the second line – “Feeding her flock near to the mountainside” – for soprano along with the remaining voices, which represent her flock. Thus, word painting is found in the composer’s depiction of the text – not in the text itself.

My pedagogical approach to solving this problem of musical depiction involves asking the student both direct and indirect or open-ended questions. Direct questions about text displacements or rhythmic syncopations, for instance, illustrate common language/vocabulary as well as common strategies for the description of word painting. Given these examples, he/she is better prepared to answer questions like: “How does the music imitate the cricket’s chirping?” And such a question, which focuses on a specific occurrence of word painting, will prepare the student for later requests at advanced levels that are completely open.

I asked open-ended questions with the knowledge that answers will be manageable for many students, but they will not be manageable for others. Teachers may also have difficulty. They are liable to want a single “correct” answer rather than an assortment of possible answers that invite dialogue. However, by starting slowly and moving incrementally one step at a time, the student can be led to an understanding of what to do or how to answer questions that require her/his interpretation of musical events. Thus, he/she will have gathered enough experience to be able to answer confidently. “Agreed” (PG-1O). The student’s interpretive encounter with Josquin’s cricket may foreshadow an additional encounter. “There’s another cricket in the *Ancient Voices of Children* [1970]. A connection” (CP-1T). American composer George Crumb’s (b. 1929) highly virtuosic work, subtitled “A Cycle of Songs on Texts by Federico Garcia Lorca” (1898-1936), was a required work for the ARCT history examination until independent study topics displaced it, and other twentieth-century works, in RCM’s (2016e) *Theory Syllabus*.

The choice of repertoire is a crucial consideration for an integrated music theory pedagogy – for a core of well-chosen musical works is the source of its subject matter. An integrated pedagogical approach creates both relevance and usefulness since a growing understanding of music theory enables the student’s broadening preparation for future music studies. In essence, music theory enables her/him to analyze increasingly complex works of musical literature. But

⁸⁵ Published in 1599, *Fair Phyllis* is an English madrigal by John Farmer (fl.1591-1601). Written for four unaccompanied voices (SATB), its clever word painting expresses a lighthearted, pastoral text (Forney & Machlis, 2007).

the literature is dual-purposed: music theory both explains it and is derived from it. The Kanata group participants discussed some of RCM's repertoire choices:

ABs: It's a bit cherry-picked, the repertoire.

LLP: Very. And even *El grillo*, while it's, you know, a cute little piece...

ABs: It's fun.

LLP: It is historically, academically... [Scholars] don't even know that it was written by Josquin. This is the only version of it, and there are mistakes in it. They believe that it was ... added as an after-thought to fill ... pages at the end of a collection. So, it doesn't represent a *frottola* very well. It certainly doesn't represent Josquin very well. So, it's...

KS: Interesting that they chose it then...

ABs: It's catchy!

KS: You know what? Catching the students' interest is a way to keep them going.

LLP: That's really what [RCM's] all about. And trying to get them to listen to a variety of repertoire. But for me, just scratching the surface of it, just listening to it, does not really give them any real insights into it. Or what's there, or...

KS: What they need.

ABs: But maybe that's not the goal too, right? Maybe the goal is just to have a listen and... (1K)

While the participants expressed approval for the preparing or readiness activities in the LGs, a faint undertone of reluctance or resistance entered this excerpted discussion. It hints at a separation between music listening and music theory, assuming the student's interest would not be served if her/his listening involved too much thinking. This assumption perpetuates traditional views of music theory as a non-musical science.

Connecting from a Student Perspective

Maintaining an attitude that there is something to be learned in every circumstance, my student-self is a constant presence. As a student of music theory, I was concerned about the lack of connectivity between my early study of rudiments and my later study of tonal harmony – the central topic of my preparing theme. Even more concerning was the lack of connectivity between my practical training and my theoretical training. In essence, I was missing a direct link between the art of music and the science of music theory. My connecting theme revolves around this missing link. It interrogates my attempt, with the LGs, to reconcile music and music theory as an integrated entity.

In the horizontal broadening experiences that comprise the preparing data, my participants considered the implementation of the LGs from a readiness perspective. This element of preparation allows the student's musical/theoretical knowledge to connect with the more complicated components of rudiments, such as ear training and melody writing, as well as the more advanced subjects of harmony and history. With the connecting data, the student's knowledge of music theory is encouraged to widen into the domain of her/his performance studies. By joining or linking the student's practical and theoretical understandings of music, the LGs encourage a holistic comprehension of music as an integrated artistic/theoretic process/product. Consequently, he/she will experience music as a whole that combines intimately interconnected parts.

According to Regelski (1982), historical understandings of the musical whole were reduced to its analyzed, classified, and labelled parts, thus equating or confusing factual information with knowledge. Since the reconstitution of this atomistic analysis relied on intuitive processes of association and interpretation, music as a whole was often neglected. Even with observational or empirical approaches that formulate harmonic theory from the analysis of common practice, repeated musical patterns frequently "solidif[ied] into a system of rules, which then [became] codified as music theory" (Thompson, 1980, p. 129). These "rules" configure music theory as a science separate from music as an art. My inquiry counters their segregation in conventional teaching with a practical/theoretical reconnection that emphasizes the inclusivity of integration and the unity of an integrated pedagogical *praxis*.

LaBoskey (2004) advocates the educational viability of an interrelationship between theory and practice. In a musical context, Jorgensen (2005) suggests that the intersection of theory and practice provides not only an understanding of the musical work, but an understanding of the "wholes and parts that comprise the work of music education" (p. 32). Inspired by the curricular potential of Jorgensen's suggestion, I am convinced that her dynamic view of teaching, which encourages the functionality of student/teacher interactions, will allow the hypothetical nature of theory to inhabit the experiential realm of practice – by way of a mutually beneficial connection.

The act of connecting implies a fastening together that usually requires intervention by some means or matter. The intervening methods/materials provide both parties with access and communication. In the context of my inquiry, the LGs may be construed as intervening materials that provide the student with the means to access works of musical literature and to communicate

discoveries that stem from her/his analysis or interpretation of these works. The student's discoveries may then be transferred to other repertoire which will either confirm or refute her/his conclusions. But more importantly, the student will have established a two-way bridge between her/his practical and theoretical experiences of music – a bridge that enables the student to bring theoretical knowledge to the performance of repertoire and practical relevance to the study of music theory.

A connecting bridge facilitates the comparisons that Rogers (2004) links with the characteristics of musical analysis. These comparisons disclose similarities and differences – both internally, between sections of a work, and/or externally, between one work and another. Analytical comparisons can be revealing, especially “when looking for differences among pieces that have obvious similarities ... and similarities among pieces with obvious differences” (p. 76). The LGs primarily emphasize internal comparisons. These can be illustrated by some of the assignment tasks for Mendelssohn's Overture to *A Midsummer Night's Dream*:

- Compare articulation marks for the young lovers' theme and the fairies' theme. How are they different?
- Compare dynamic marks for the clowns' theme and the fairies' theme. How are they different?

The LGs also emphasize external comparisons by interacting with similar theoretical elements, such as triads, in disparate musical works.

For me, the connecting data represents a merging of experience and intelligence in the doing and thinking of music. At the intersection of these music/theory endeavours is the concept of relevance. Although music theory is customarily charged with the burden of relevance – “What can reading/writing activities offer my students' playing or listening?” – I would argue that playing/listening activities should also inform students' musical reading and writing. The participants' ideas regarding my latter statement were not addressed since most of our connecting discussions centered on the former. These discussions are categorized by voice or instrument, with instrumental considerations further sorted by family classifications: keyboards, strings (including guitar), and winds. A connecting for understanding section concludes this theme with the participants' recommendations for further instructional materials that combine music theory with music performance. But the implementation of these integrated materials raises a hint of reluctance or resistance in the discernment that a substantial investment of time may be required.

Practical Relevance

Vocal Considerations: *“We want to bring this music alive.”* It was generally observed by the participants that music listening experiences can stimulate students’ aural awareness of the basic elements of music: rhythm, melody, harmony, texture, structure, and expression. This awareness can then enhance their playing/singing experiences with heightened attention to these same elements. In effect, it brings the activity of listening into the realm of performing. But it may also bring performing into the realm of analyzing, which emphasizes the need for accessible repertoire. I have, in the previous chapter, expressed my views about the inappropriateness of Mozart’s “Queen of the Night” Aria for level 5.

Student/teacher collaborations are confronted with problems of accessibility. The first stumbling block is the positioning of Mozart’s famous melody in the aria. “Are they supposed to connect this [rhythm/melody] to that actual part in the aria?” (JR-1T). The pre-listening activities, which introduce Mozart’s melody through its constituent elements, are intended to prepare the student to hear the composer’s rendering of it. “[T]hinking from the teacher’s point of view,” this Toronto group participant wondered if it would be “helpful for [teachers] to know, for instance, what bar this would be if they were trying to cross-reference the score” (JR-1T). Measure numbers could easily be included in the LG. But it is the participant’s thinking from the student’s point of view that implies a practical connection, albeit a less-than-satisfactory one. He expressed concern for the student’s ability to sing Mozart’s melody, citing potential challenges in both its range and its register – a second stumbling block.

Even transposed an octave below its original *coloratura* register, Mozart’s melody may not be singable, particularly for younger students. Nevertheless, in the participant’s words: “[W]e want to bring this music alive. We want the student to experience it” (JR-1T). He suggested that I maybe give the student a “heads-up that this [melody] require[s] a large range,” to prevent her/him from protesting, ““Am I expected to be able to sing this high?”” (JR-1T). He also suggested that I maybe use “some kind of dotted-line bracket that might [signal], ‘Oh, you may want to stop here.’” (JR-1T). I would rather not clutter the student’s excerpts with non-musical information or instructions, but I could certainly include the participant’s suggestions in the teacher’s CLG. I had anticipated the range issue and addressed it by giving the student an option to play Mozart’s melody on her/his instrument. But another of the Toronto group participants defended my request for the melody to be sung: “[I]t’s still kind of in a singable range. Like C to

F is basically [similar to] *O Canada*, right? So, it's not like F is that bad, or a totally unsingable note" (CM-1T). But if singing is out of the question, playing is a viable alternative – for a physical experience of Mozart's melody, however it is accomplished, is the point of the activity.

This physical experience internalizes the melody which, along with its subsequent analysis, establishes the groundwork for a practical/theoretical connection. Avenues of access and communication are opened. Naturally, Mozart's aria and Josquin's *frottola*, as vocal/choral works, hold the greatest relevance for voice students who regularly cope with the added element of text. As a pianist, I consider programmatic nuances only if the piece I am playing features a descriptive title, such as Claude Debussy's (1862-1918) impressionist *prélude La Cathédrale engloutie*. But in vocal/choral works, the music is fully integrated with the text and vocalists must incorporate aspects of word painting in their performances – regardless of language. Therefore, a translation of the text is required.

In the level 8 LG, I asked the student to translate the Italian text of *El grillo* into English. I intended to connect some of the translated words with Josquin's setting of them, then to connect his setting with the student's listening experience. I did not expect there to be a further connection – to the student's performance repertoire – but in relation to the LG's translating assignment, one of the Toronto group participants commented:

CM: [I]t's nice when it crosses fields. So, for instance, a singer would always do this. That would be... Even at level 6, you'd be required to do this for your lesson. So, the fact that you're doing an assignment that would be similar to what the expectations of a singer would be, I think that's great. (1T)

I did not recognize this connection at the writing stage, but I am grateful to know it now. I am also grateful for my participant's caution regarding translations: "Even things like level 1 – *Ma bella bimba* (Lovely Little Lady)" – a traditional song believed to have originated in Italy. "Well, that's not what it means. It means 'pretty little girl,' but you can't sing, 'Oh come, my pretty little girl.' Right?" (CM-1T). "It could be a felony!" (JR-1T). Accordingly, guidance in matters of interpretation is sometimes necessary but vocal connections are established, nonetheless. The student's understanding of word painting is enhanced with the interpretive nuances of music theory. This enhanced understanding then fosters more meaningful performative experiences with the repertoire.

Instrumental Considerations: “Can you play it?” Keyboard connections are generally more subtle than their vocal counterparts but they can, on occasion, be obvious – as with Bach’s Invention No. 1 in C Major. Theoretically, the genre is introduced in RCM’s (2016e) *Theory Syllabus* at level 1. Practically, Bach’s fifteen two-part inventions are listed as possible repertoire selections in RCM’s (2015c) *Piano Syllabus*, divided between level 7 (including No. 1) and level 8. The Orleans group participants highlighted the possibility that a student utilizing the level 6 LG could play this invention in the Baroque segment of her/his past, present, or future piano studies.

Since Bach’s Invention No. 1 is situated in the theory curriculum at level 6, but in the piano curriculum at level 7, RCM’s sequencing implies that it should be studied before it is played. However, a written analysis of the work, without a musical rendering, may not be recognized or remembered by the student. Conversely, if the invention is played before it is studied, there is a much greater potential for interest in its analysis – an interest I have witnessed with music theory students who recognize repertoire they have previously played. But despite the order of engagement, one encounter will surely influence the other and a musical/theoretical relationship will develop. “I always like the connection that I can play it on the piano” (CP-1T). Playing Bach’s invention on a harpsichord would bring the student’s performance experience to an even higher, historically-informed level. “You rarely hear it on a harpsichord... I like hearing it on a harpsichord” (CP-1T). This is seldom possible since few piano teachers have access to a harpsichord, although the harpsichord setting on a digital piano may serve an interim purpose.

An example of a less obvious keyboard connection came from one of the Toronto group participants in relation to Josquin’s *El grillo*. The LG directs the student to name the implied key and cadence at mm. 36-37, which requires some contextual “sleuthing” since the cadential chord-of-arrival is incomplete. The participant asked: “Would they necessarily look to a *tierce de Picardie*? Because they played it in their Bach?” (CP-1T).⁸⁶ He raises a very good question. The decision to complete the chord with a major third or a minor third is ultimately the student’s, but her/his choice could present a useful teachable moment. The key is implied by the surrounding measures. If the student has written a *tierce de Picardie*, I would be inclined to refer her/him to Josquin’s musical clues. Not only is D minor implied, but the position of the cadence,

⁸⁶ A *tierce de Picardie* (Picardy third) refers to the raised/sharpened major third of the final tonic chord in an otherwise minor-key composition of the late Renaissance or Baroque eras. The term was first used in 1767 by Jean-Jacques Rousseau (1712-1778) in his *Dictionnaire de musique* (Randel, 1986).

at the end of a section rather than the end of the piece, makes a *tierce de Picardie* unusual – as does its characteristic historical context. In any case, the ensuing discussion would likely enhance the student’s understanding of this predominantly Baroque mannerism.

One of my goals with the LGs is to demonstrate that the contents of music theory, like intervals and chords for instance, are not *only* the province of reading/writing exercises or ear training identifications. They are the ingredients from which music is formed and as such, they are the foundational workings of the student’s repertoire:

LLP: That’s my primary focus, is wanting to show them that [intervals and chords] don’t just happen in a theory book, that they are part of the music as well.

DM: Or ... scales. Like, “Why do we do scales?” Well, open any piece of music – you’ll find a dominant 7th [chord]. You’ll find scales.

KS: “Have you played a sonatina lately?” (1K)

As well as providing the student with examples of these basic compositional elements, sonatinas provide a valuable connection to the structural components of sonata form. Exposition, development, and recapitulation are introduced in RCM’s (2016e) *Theory Syllabus* at level 6, but “[t]hese should be terms that come up at the [practical] lesson anyway, because they’re playing sonatinas from a young age, right?” (CM-1T). Piano students encounter sonatinas, or smaller-scale sonatas, at level 3. “[S]tring players ... don’t play sonatas that young, but they play concertos, starting at level 3” (CM-1T). Concertos too incorporate sonata form.

The prevalence of sonata form in the musical literature of the Classical era should ensure its familiarity, whether explicit or implicit. It is the focal point of the LG for Mendelssohn’s Overture to *A Midsummer Night’s Dream*, although most of the activities are positioned within the exposition section. The assignment for Activity #5, which involves listening beyond the exposition, is essentially a “fast-forward” analysis through the entire work, but I did not want the student to passively listen. I wanted to create a directed listening experience with specific structural components that he/she could aurally detect in the remaining sections. While I do not necessarily expect the student to locate these components without assistance, he/she may have previous playing experiences from which to speculate and to forge independent musical/structural connections.

Even if it is only the terms – *exposition*, *development*, and *recapitulation* – that are familiar, the student is poised to associate practical and theoretical conceptions of formal structure by listening to Mendelssohn’s overture from beginning to end:

LLP: [The assignment’s] an effort to try and move them in that direction. And whether they actually, as I say, get it on their own, or whether they ... need help [and take it back to the teacher], it’s a way of opening the conversation.

CP: That’s a good way to put it. (1T)

The conversation that this assignment may generate enables a learning experience for both student and teacher. The teacher’s experience will then carry forward to other students.

There is great responsibility in the teacher’s guiding counsel, particularly for younger students. Connections can be unwittingly thwarted by the misuse or misunderstanding of a single word, as a Kanata group participant recounted:

ABs: We make it out that our students are completely incompetent, but someday you wonder, right? Like you think things are obvious and they miss it on just the smallest word, so...

LLP: Yes, that’s exactly it.

DM: Well, even when you were doing your beat vs. count, wasn’t that...?

ABs: I have a grade 9 student who is 11 years old, who... I asked her to... I said, “How many beats are in this bar?” And she said she didn’t know. It’s 4/4 time and she’s doing grade 9 music. “How can you not know this?” I said, “[student’s name], write in the counts.” 1, 2, 3, 4, perfectly placed. I said, “Well, there you go.” She [said], “Oh! Is that all we were counting?”

LLP: Ah-ha!

ABs: I always said counts. And I’m like, “Wow, you’re a bad teacher, [participant’s own name]. Like, how did you not know that?”

LLP: No, stuff like that...

DM: But it’s just little...

KS: It’s the little things that just slip in. (1T)

Terminology, or the inconsistent use of terminology, can make or break practical/theoretical connections, either supporting or severing them.

My use of the term *member* to describe the individual notes of triads or chords may prompt a similar inconsistency. One of the Kanata group participants asked, “What do they use in the theory books? Notes?” (ABs-1K). Another asked about the musicianship requirements in RCM’s (2015c) *Piano Syllabus*. Reading from page 37, she quoted: “Students will be asked to identify a single *note* as the root, third, or fifth of a major or minor triad” (DM-1K, emphasis

added) – an ear training/testing requirement at levels 3 and 4. Her reasoning is sound. “Yeah, because I was thinking over to this syllabus and I was like... If you’re teaching ... theory and we teach piano, right? So, we probably use the same terminology” (DM-1K). I may yet have to replace *member* with the more widely accepted *note*.

In Orleans, our connecting discussion was less pragmatic. It centered on the concepts of consonance and dissonance, which I thought may be too subtle or buried too deeply beneath the surface of the LGs, but the concepts themselves are subtly nuanced. The following is excerpted from the group’s conversation:

ABn: [I]f you’re talking of consonance and dissonance, I find that the kids do hear that, even in the younger pieces. So, it’s just a matter of bringing it out in the pieces that they play, because my personal feelings about theory is that it’s understanding the music that you’re playing. So, I do try to take advantage of, if there’s a dissonance, to try to... “Yes, great, you noticed that! That’s wonderful!”

JK: Do you find they often correct? They re-correct to a dissonance, or to a consonance?

ABn: No. In my experience, they just tend to point out that this can’t be right, or they hesitate. “No, this can’t be right. I couldn’t have got it right.” And that’s a good moment to say, “Yeah, you did, actually.” And there’s a reason for that because it’s going to sound so much better when it does come out [or resolve]. Maybe that’s not the right way to put it, but it is the dissonance. I just think, so many of those things they do notice, and it’s a moment to just say, “Yeah! Good for you. You noticed that.” That’s what so much of this is, isn’t it? Developing vocabulary. For me, the biggest thing is to help them to find the words to explain what it is that they’re hearing. Because they don’t know. They’re hearing something, but they just don’t know how to explain it. Like probably other things in life too, they haven’t developed the vocabulary. (1O)

Perhaps it is important for the teacher to actively notice the student’s reaction to the music he/she is playing. The teacher can then help the student verbalize her/his response and identify its musical source.

Eventually, the student will be able to draw from her/his own playing experience. “And, as [one of the participants] is often fond of saying, ‘It’s not always about the piano.’ There are other instruments, and there are other music students that are ... hopefully” using the LGs (ABn-1O). Consequently, Mozart’s potentially unsingable melody can be brought into the student’s sphere of musical reference. “That’s nice. Even an arrangement, like a simple... In my guitar class, I would have somebody play the melody, and we’d figure out what the harmony is, and we’d play

that, so it makes more sense” (CP-1T). This kind of harmonic sense-making is fundamental to practical/theoretical connectivity, especially for string players.

In the context of identifying the key of the fairies’ theme in Mendelssohn’s overture, a Toronto group participant commented:

CM: I really like that because as a string player, when we do, for instance, even a study, an *étude*, we always have to know what key we’re going into because we don’t have that luxury of harmonic [accompaniment]. Everything’s implied harmony, right? So, we have to say, “Oh, this is actually in E minor here.” So, we talk like this all the time. (1T)

An awareness of implied harmony is useful both in preparing the student for future studies in harmony as well as in connecting the student’s theoretical knowledge with its practical application. Whether the implied harmony is vertical or horizontal is unimportant. If the student knows a work’s harmonic blueprint, he/she will be better positioned to memorize it for performance.

This *knowing* may also inform improvisatory experiences. One of the Toronto group participants saw the *doing* potential of improvisation as a bridge between music theory and music performance.

CP: Yeah, and a good example: “What’s a scale for? What’s a triad for?” I do that a lot in my teaching, and I encourage [my students] to improvise a lot, so they get this linear horizontal aspect. See, I don’t think... How many people are looking at this sea of notes, and are they connecting it to a triad? Yet hopefully, they think in that direction, so I really liked this part. Just those simple questions at the bottom, thinking, “Well, what part of the chord is that?” (1T)

The questions he is referencing are:

- What member of the tonic triad begins Mozart’s melody?
- What member ends it?
- What triad member is the highest note?
- What member is the lowest note?

They enable the student to see that significant points of the melody – first note, last note, highest note, lowest note – are often occupied by members of the tonic triad. This type of analytical thinking is universal. It is not limited to either vocalists or instrumentalists.

Traditional music theory textbooks (Berlin, 1969; Lawless, 1975; Wharram, 1969) tend to connect presentations of accidentals or half/whole steps, for example, to the piano keyboard. In

some textbooks, such as Grace Vandendool's (1984) *Keyboard Theory* series, the piano is inextricably woven throughout. While keyboard visualizations of whole steps or half steps can benefit many students, the physical realization of these intervals is not consistent with non-keyboard instruments. The LGs, therefore, are designed to avoid long-established piano centricities – a detail that was noticed by the Orleans group cellist, especially in relation to Josquin's *El grillo*. She saw, in the first activity, sharps written above the staff: "String players use that sometimes as a way to remind themselves that something is sharp in the key signature. I'm sure other people do too, but I never did it with other instruments I played" (AC-1O). She also saw C clefs: "My viola students are going to be so happy. A C clef at last!" (AC-1O).

An exploration of the *frottola*'s original manuscript creates practical relevance for C clefs as well as other peculiarities of Renaissance notation. The same participant described her instructional approach to these early clefs:

AC: When I'm teaching tenor and alto clef, I always tell [students] that once upon a time, a clef could be anywhere [on the staff]. And this [manuscript] would be great, because it would be an example of that in real life.

LLP: Okay.

AC: Cellists might stop complaining about tenor clef, you never know. It could happen! (1O)

Other participants, perhaps with less C-clef experience, were bothered by the assignment for Activity #2 in which I asked the student to "[w]rite the tenor's refrain on the treble staff at the same pitch." The difficulty involves the *tenor* part being written on an *alto* staff. I was surprised by this since C clefs are moveable, particularly in Josquin's Renaissance context, but their identification with specific voice parts has undoubtedly solidified their modern associations. However, I wonder whether the student's staff/voice connections would be as firmly established as her/his teacher's – or my participants'. To encourage analytical flexibility in preparation for the assignment, I asked:

- On what staff line is Middle C positioned for each voice part?
- Which part could use a modern alto clef without rewriting the notes?

For some of my participants, these questions are not sufficiently obvious to inspire the requisite flexibility. Perhaps the questions are faulty. Perhaps the participants are hesitant to adjust their long-held beliefs about C clefs. Or perhaps there is another reason:

AC: I suspect, if it's any help, it may be because in French the viola is called an alto, and it uses this clef. I don't know if there's a direct etymology there but... Yeah, the instrument that is sometimes called an alto uses the alto clef. It would at least be [given as] a way to remember [the name], even if it's not the real reason. (1O)

This explains a string player's potential discomfort with the assignment, but it does not account for the uneasiness of other participants.

Although there are no brass or woodwind players among my participants, both the Orleans group and the Toronto group mentioned wind instruments, assuming that "some [students] may play in school bands and things" (JK-1O). This Orleans group participant, motivated by the level 7 LG for Mendelssohn's overture (see **Appendix 4.3**), proposed an instrumental or timbral recognition activity that would connect the student's listening experience with her/his playing experience. Other Orleans group participants, anxious to address the compound interval in the clowns' theme (theme 2b), suggested the following playing task:

PG: That could be a challenge question, though... You know, "On your instrument, can you figure out how many steps it is between these two notes? This is called a compound interval."

ABn: "Can you play it? What would be the number of this interval?"
Yeah! (1O)

Compound intervals are unknown elements at level 7. But this type of discovery experience – without the statement of "this is..." – could prepare the student for a formal labelling experience at the next level. And if the initial discovery is accompanied by a playing experience, it will convey both practical and theoretical meaning.

Similarly, a Toronto group participant, attempting to clarify the transposition assignment for Activity #2, appealed to the student's playing experience – real or imagined. She offered this explanation:

CM: [W]hen you play the fingering for the note C, this is the note you actually hear. So, you hear A and that's why it's called clarinet in A. Or when you play the fingering for C on a French horn, on this particular horn, you hear the note E. (1O)

I appreciate the simplicity of my participant's explanation. I also appreciate her eagerness to improve the usefulness of the LGs. However, I suspect that the participants are maybe overthinking the exercises. A typical level 7 student does not have enough experience with

transposing instruments – nor with C clefs at level 8 – to confuse written pitches with sounding pitches. The participants may be anticipating confusion because they are reading the activities/assignments with the comprehensive expertise of their teachers’ knowledge. This is, of course, to be expected. But if a given topic is introduced in small portions, one at a time, it should be user-friendly. Confusion arises if he/she is overwhelmed by too many portions presented at the same time, or if individual portions are not connected to pre-existing theoretical/practical knowledge (Rogers, 2004).

Connecting for Understanding

Integration of Theory and Practice: “Combining the whole thing in a musical way.” The LGs were written as supplemental materials to augment RCM’s (2016e) intermediate theory curriculum. As such, they incorporate a series of reinforcing lessons. I invited the Orleans group participants to consider whether a series of teaching lessons, in which level-specific concepts are introduced instead of practiced, would be more useful. They were quite receptive:

PG: What would that involve?

LLP: If they were not supplemental? If they were the meat and potatoes, and not the dessert?

PG: Yeah, I think so.

ABn: Some people might choose to go without the dessert, if they’re supplemental. It’s just, “I don’t have time for this,” or for whatever reason, “[I’m] not going to do this.” So yes, I think probably having [them] on a mandatory list...

PG: I find this much more important than what’s already in...

ABn: Yeah, it’s very, very interesting. To me, it’s just such an adjunct to the music. To understanding the music.

JK: I think it’s very deep and broad. And I think it would take the student a long time to absorb it, bit by bit. Which is healthy. It’s just the way I think it would work out. They wouldn’t do this in a week or two, one of these lessons.

PG: No. (10)

While my post-graduate work will likely pursue, with appropriate modifications, the pedagogical path I have established with the LGs, I imagined this work in the realm of music theory. But one of the Orleans group participants upended my long-held assumption:

ABn: Are you thinking of going with the theory? I'm seeing it more as going with the practical.

JK: Oh.

ABn: Sort of a theoretical background to... Like the Teacher's Guide. (1O)

This practical/theoretical connection would be ideal. It would fully integrate the student's study of music theory and her/his performance repertoire. However, it would not present the required theoretical elements in the neatly packaged units that most music theory teachers expect, and its implementation would be time-consuming. But integrated teaching materials could allow for some instructional flexibility:

JK: I really like the idea that, if you did this, you could teach theory separately, or practical separately, or you have a much better possibility of combining the whole thing in a musical way that would give the teacher a lot of satisfaction. Because sitting down and marking lots of pieces of paper is not really very [enjoyable]. (1O)

Completing "lots of pieces of paper" is not very enjoyable for the student either. It is certainly not very musical. And it is entirely devoid of any practical/theoretical relevance.

Singing from an Artist/Musician Perspective

Of all the themes identified in my data, singing is the most obvious. A topic of discussion for all three focus groups, it spoke to me earliest and loudest – before the data was even transcribed. It is also distinctive as the only theme that involves a concrete musical skill. As such, singing incorporates the physical activity of producing musical sounds with the voice. It augments regular speech by sustaining a succession of melodic/rhythmic vocalizations with musical inflections or modulations and a variety of vocal techniques. Consequently, singing is a musical *doing* while the other themes – analyzing, layering, deepening, preparing, and connecting – are better described as *thinking* activities. And these are further delineated by pedagogical thinking as opposed to musical thinking.

The singing data is aligned with my artist/musician perspective because of its clear association with musical performance and my desire to infuse music theory pedagogy with the actualization or realization of musical symbology. Through the act of singing, it is possible to promote integration as well as Regelski's (1982) preservation of the *music* in music theory with artistic integrity. Beyond this practical consideration, the singing data is also aligned with my

musician-self because of its outlier status. In the same way that singing or playing activities, as manifestations of art, are often ignored in the scientific sphere of music theory, I have undervalued the creative potential of the artist/musician within myself. Although my cumulative experiences form a tentative line-of-succession that extends from student to musician and musician to author, I rarely seek counsel from my musician-self. In similar fashion, the symbols of music theory are often divorced from the sounds of music as an aural phenomenon. Yet, sound and symbol are symbiotically intertwined and their relationship should be emphasized in the integrated teaching of music theory.

Singing is fundamental to the integration of music in music theory pedagogy since it involves a participatory experience of music. It is a physical, embodied expression of musical elements that cannot be duplicated, even by playing an instrument. The human voice, as a natural instrument, is immediately available to everyone. It provides the means for *active* music-making which facilitates understanding and appreciation. For instance, a complex instrumental work can be enjoyed through the singing of its themes, and instrumentalists can approach the performance of a work by first singing its melodic material (Szönyi, 1973). This interrelationship is also instantiated with the Italian term *cantabile* which refers to a songlike style of instrumental playing that is intended to imitate the lyrical qualities of the human voice. Consequently, singing is closely associated with the musical ear and because of this association, it offers numerous educational benefits – in addition to its physical, psychological/emotional, and social benefits.

If Kodály's educational philosophy could be encapsulated in a single word, that word would be *singing* (Penny, 2012). In her summary of this philosophy, Choksy (1981) highlights the importance of musical literacy through singing as well as early experiences with folk music and composed music of unquestioned value. On the subject of singing, she argues that "*to be internalized, musical learning must begin with the child's own natural instrument – the voice* (p. 7, original emphasis). Indeed, Kodály's (1974) position on singing as the optimal beginning for music education is crystal clear. He reprimands the prevailing "art of musical pyrotechnics" in private music teaching and describes its result as "[i]nstrumental practice half by ear, and without any theoretical knowledge: music-making by the fingers, but not by the soul" (p. 202). In his preface to the Hungarian edition of Erzsébet Szönyi's (1956) *Musical Reading and Writing*, he proposes the following alternative:

Individual singing plus listening to music (by means of active and passive well-arranged experiences) develops the ear to such an extent that one understands music one has heard with as much clarity as though one were looking at a score; if necessary – and if time permits – one should be able to reproduce such a score. (translated and reprinted in Kodály, 1974, p. 204)

Singing is essential for creating an environment in which the teaching of music theory is derived from an active experience of music. Through this vocal/experiential association, a series of conceptual understandings are not only intellectualized, but are developed and internalized (Choksy, 1999a). Kodály believed that the “real aim in teaching theory was to encourage students to make active music with skill” (Szönyi, 1973, p. 11), meaning the ability to sing at sight and to write from aural memory. But over and above the pedagogical purpose of singing – to increase the student’s awareness of melodic and rhythmic concepts – KM practitioners hold that singing is the most important means of musical expression. Choksy (1991) voices a like-minded opinion: “The teacher who sings regularly with his or her [students] is presenting them with a gift that will provide them with lifelong enjoyment. Even if nothing else is accomplished in the music class, the time will not have been wasted” (p. 33).

Two of my participants teach singing as an independent performance skill. The rest of us utilize singing as an illustrative device. All the participants recognized the central role of singing in the LGs. From my analysis of the introductory singing data, extra-curricular concepts surfaced as the principal subtheme and the most prominent of these is *solfège*. Since it is not included in RCM’s (2016e) *Theory Syllabus*, the participants were apprehensive about its prevalence in the LGs. *Solfège* itself divides into several related subtopics: *la*-based syllables, fixed-*do*/moveable-*do* considerations, and scale degree number alternatives. Of these subtopics, the debate over fixed-*do* or moveable-*do* applications, while significant, is secondary to the focus of my study. Therefore, it is not specifically addressed in the following discussion.

Despite the participants’ uneasiness, there was consensus among all three groups in favour of my pedagogical choices – with the recommendation that I include introductory explanations to demonstrate my implementation of *solfa* syllables. Following my examination of the *solfège*-related conversations is a brief exploration of singing for understanding, which concludes my narrative recounting of the interrogative data. As the final variation of my *doing for understanding* motif, it considers a sound-before-symbol teaching process that highlights

intervallic, melodic, and harmonic applications for singing. It also raises a significant aspect of the participants' reluctance or resistance.

Extra-Curricular Concepts

Solfège: “What are all these little letters?” One of the Kanata group participants identified solmization, or more commonly the vocalization of melodic pitches, as a musical skill that is not specifically required for RCM's theory examinations. Nor, to my knowledge, has it ever been a requirement of RCM's curriculum. I anticipated potential problems with my inclusion of moveable-*do* solmization in the LGs. I was not disappointed as it was brought up in every discussion – with varying degrees of concern. For the younger teachers, who tend to concentrate their music instruction on exam preparation, the addition of solmization threatens to overwhelm an already lengthy list of curricular requirements. For the older teachers, solmization is not generally viewed as a product or a skill to be tested. It is valued as a process or a tool that enables musical understanding.

However, the issue of whether solmization is curricular or extra-curricular is not really the problem. RCM, albeit one of the largest and most respected music education institutions in the world, is not the only such institution and its *Theory Syllabus* (2016e), not the only determination of curricular validity. Of prime importance then, is whether solmization is known or unknown. One of the Toronto group participants, in discussing the non-prevalence of rhythm syllables, suggested that students are more familiar with “*do-re-mi-fa-so-la-ti-do*” and “other manipulations of it” (CP-1T). But his assessment, although accurate for his area of the city, was not confirmed by his colleagues. They responded with some surprise:

CM: Really? Because I have a lot of students who haven't been exposed to *do-re-mi* before.

JR: Me too. They're very helpless and hopeless with tonic *solfa*. (1T)

Their response was reiterated by both the other groups. A participant in Kanata felt that *solfège* is essentially “gone” from the “English-speaking world,” owing to its disappearance from the “method books” (ABs-1K). Because of this absence, many students – and “a lot of teachers” as well – “might not know *solfège*” (KS-1K), particularly for minor scales.⁸⁷

⁸⁷ Undeniably, the teachers' “not knowing” is worrisome but it may be, at least partially, circumstantial. Teachers may know *solfège* but in varying dialects. The diatonic syllables (*do, re, mi, fa, so, la, and ti*) are used fairly consistently (by Anglophones), but the chromatic syllables, which identify raised or lowered notes, are used less consistently.

As I mentioned in chapter 4, I made a conscious decision to adopt *la*-based *solfa* syllables for minor scales, partly because of their familiarity from my KM training, but also because a *la* tonic allowed me to establish a clear relationship between relative major and minor keys. However, the instructional logic behind my decision seemed arbitrary for an Orleans group participant with less *sofège* fluency. She asked: “If it’s a movable-*do*, why does the relative minor start on *la*?” (JK-1O). In many educational environments it does not. The utilization of a *do* tonic for minor scales establishes a *parallel* relationship between major and minor keys. Rather than sharing the same key signature, they share the same tonic or starting pitch. Of course, parallel keys are musically recognizable, and juxtaposed in many compositions of the common-practice period, but parallel keys are not considered to be closely-related because their key signatures differ by more than one sharp or flat. As a result, *do*-based minor scales require chromatic syllables – even in their natural form – which causes unnecessary complications.

Although she encountered *do*-based syllables for minor scales at university, one of the Kanata group participants acknowledges that “using *la* makes so much more sense” (ABs-1K). To clarify the *la*-based syllables, she offered this advice: “Could you have a line where you matched the *sofège*? So, there’s *do-re-mi* in F major and then underneath it, [you could] have the minor scale start [on] *la* in the same spot” (ABs-1K). By overlapping relative major and minor scales, the derivation of *la*-based syllables for minor keys becomes immediately evident (see **Table 4.5**). This is the process by which relative minor keys are introduced in level 2 of RCM’s (2016) *Celebrate Theory* series – without *sofège*. But if *solfa* syllables could be added to the process, the student’s previous learning, which is primarily visual, could be audiated.

This aural experience has great potential for circumventing theoretical confusion. I shared with the Kanata group my own teaching experiences, having observed repeated occurrences of students’ difficulty with the concept of relative major and minor scales. The difficulty, however, is not with the concept; it is with the application of the concept. Over the course of my career, I have experimented with many approaches to solving relative major and minor scales or finding one from the other. Ideally, the approach involves understanding and not just memorization, but there are two issues to be considered: distance and direction. By informing my students that there are three half steps separating relative keys, I made the determination of distance easier to remember but I also reduced it to a counting exercise that does not account for enharmonic equivalencies. Unintentionally, I created an additional stumbling block. In terms of direction,

my baseball analogy – *up* to the major leagues and *down* to the minor leagues – is a pedagogically empty mnemonic device. Neither of my teaching strategies fosters student understanding.

If I had realized sooner the instructional potential of *la-ti-do* and *do-ti-la*, indicating the overlapped portion of relative major and minor scales, I could have simplified their relationship for many more of my students. Without wordy explanations, these *solfa* syllables address both distance and direction – *la-ti* being a whole step and *ti-do*, a half step. They also incorporate the sounds of whole steps and half steps, ascending and descending. Solmization then, facilitates musical reading *and* theoretical understanding, but I cannot assume that my version of solmization is the only version. I can, however, clarify my approach in the CLGs and invite the teacher to adapt my *solfa* syllables to incorporate her/his personal preferences.

Given the inconsistencies of *solfège* in music education, why should I persevere with its inclusion in the LGs? Why is *solfège* so important? Beyond its association with KM, *solfège* is pedagogically significant because it connects reading and writing activities to singing which in turn, connects intellectual and aural experiences of music. This approach to ear training, according to Erin Paul (2017), is “all about developing a well-tuned musical ear. It involves learning to [aurally] recognize intervals, chords, and chord progressions” (Moveable “Do” and Ear Training section, para. 1). *Solfège* enables the vocalizing of music notation, or the animating of an inanimate object.

It is this action of bringing to musical life the theoretical components of a score – reminiscent of Elliott’s (1995) *musicing* – that embodies my vision of integration. The participants, however, may not subscribe to my view. A Kanata group participant thought that her students would “block-out looking at [the *solfège*] at ... level 5 and say, ‘What are all these little letters here?’” (ABs-1K). She was referring to Activity #2 for Mozart’s aria, which adds pitches to the previous activity’s rhythm. She suggested, more than once, including an F major scale with the “*solfège* labelled” as a model for comparison – so “they can cross reference it” (ABs-1K). Indeed, “after they’ve worked on a couple of *solfège* examples, ... [t]hey should have it” (ABs-1K). Her colleagues agreed.

My participant’s intentions are well-founded: “Maybe just ... giving them one answer – *do* is [the] root – would help them figure out how to write the *solfège* for the other [tonic triad members]” (ABs-1K). My participant’s approach to music theory teaching is consistent with

long-established traditions. I recognize her ability to connect musical/theoretical components and to relay the knowledge she has acquired to her students. I recognize it because I see in her a mirror of my younger self. However, this mode of teaching does not acknowledge the student's ability to participate in her/his learning. It does not leave room for experimenting or interpreting or *musicing*.

An integrated music theory pedagogy is not just a matter of seeing, it is a matter of hearing. If, for example, *solfa* syllables are introduced in the context of a scale – on paper – are we not presenting the theory (the explanation) *before* the music (the phenomenon to be explained)? The symbol before its sound? I wish to reverse the order of this presentation, but the argument could be made that by introducing *solfa* syllables in the context of Mozart's aria, I am putting the cart before the proverbial horse. How can unknown syllables be used to sing an unknown melody? I admit that the equation is far from ideal since it contains too many unknowns, but I am hopeful that most student/teacher partnerships have at least some familiarity with *solfa* syllables. Even a passive familiarity provides a footing for future learnings, and accumulated footings support a foundation on which to construct gradually more complex musical learnings. I am also introducing *solfa* syllables in a melody, not a scale, and I am extracting triads as well as the applicable solmization from the melody. In so doing, I am reversing the customary instructional order by presenting music before theory. And for the student/teacher partnerships unfamiliar with *solfa* syllables, I am presenting music and theory simultaneously – as an intermediate step toward my goal.

An example drawn from the singing data refers to a specific application of *solfège* in the level 7 LG. The following exchange raises a potential problem with *solfa* and the concept of modulation:

ABs: So, this is the line... "It ends in B major. What accidental is necessary in the new key?" So, the assignment: "Write a four-measure melody with the following rhythm. Use portions of the B major scale." Okay, so that implies that at some point in time we could use an A-sharp. Because that would be a portion of the B major scale.

LLP: Yes.

ABs: "Write the *solfa* abbreviations below each note. Sing your melody." What would the *solfège* for A-sharp be?

LLP: You'd have to use the *solfège* for B Major. So, the idea is that this is a B major [melody], even though the key signature is E major. But...

ABs: So then... But you said, "Use portions of the B scale." You didn't say, "Write all of this in B major."

LLP: Okay, I'll make that more clear.

ABs: Just because the key signature is E Major, that's going to be the go-to, at least in my mind. (1K)

Although the participant challenges my use of solmization in the assignment for Activity #4, the *solfège* is pedagogically advantageous for several reasons. First, it facilitates musical reading. *Solfa* syllables provide the student with a mechanism through which to sing the melody he/she has created. Because the syllable abbreviations are supplied by the student, he/she is led to an awareness of the notes being used and their relative position in the B major scale. By singing – and hearing – her/his melody, the student is encouraged to gauge its merit. Of course, there are good melodies, bad melodies, and a broad continuum of in-between melodies. But such judgements rely on the student's vocalization of the melody which in my experience, is surprisingly self-regulating. The process of “fixing” a melody the student deems unsatisfactory is invaluable. Even if the task is accomplished by trial-and-error, rather than through intellectual cognizance, a wealth of knowledge awaits discovery.

Second, solmization facilitates a theoretical understanding of modulation, which is the sticking point for my participant. Her concern, that I am asking for a B major melody in an E major context, is understandable. But modulation, as a change from one key to another, may or *may not* involve a change of key signature. While the concept formally enters RCM's (2016e) theory curriculum at level 9, it appears in the student's practical repertoire as early as level 1. Modulation is also an important structural component of sonata form because the second theme or theme group is expected, in the exposition, to be stated in a contrasting key. So it is in Mendelssohn's overture – both theme 2a and 2b are in the key of the dominant (B major) – but the key signature preserves the larger context (E major). In order to accommodate this modulation in the LG, the *solfa* syllables shift to a new *do* (B), but the key signature remains unchanged.

The flexibility inherent in this and similar applications of *solfège* is eminently useful, both musically and theoretically. In many ways, *solfège* forms the bridge between music and theory – a two-way bridge that services the relevance of music theory. *Solfège* enables a symbiotic relationship in which theory can be derived from music and music can be derived from theory. Pedagogically, solmization can enhance the student's knowledge of music theory. For example, *solfa* syllables, and the aural associations they engender, can facilitate the student's creation of better melodies. And successful creative experiences inspire a yearning for more.

Perhaps *solfège* is disappearing from common English-language usage, just as the Kanata group participants feared. In its place, a Toronto group participant suggested using scale degree numbers, shown as ^1, ^2, ^3, ^4, ^5, ^6, and ^7. This system of pitch identification is “fairly universal in the music community” (CP-1T), and “it’s also easily translatable” (CM-1T). For the opening of the F major melody in Mozart’s “Queen of the Night” Aria, “if somebody’s using a [scale degree] system they can use, ^3-^2-^3-^4, ^5-^5-^5-^5, ^5-^5-^5-^5, ^1” (CM-1T). Her colleague agreed: “[I]t doesn’t matter. I don’t care whether the students use numbers. [But] I use tonic *solfa* most of the time in my teaching” (JR-1T). Their discussion implies that *something* is better than nothing.

An advantage of the scale degree number system, like moveable-*do* solmization, is its adherence to relative pitches. A disadvantage involves the number seven. Unlike the numbers one to six, which are monosyllabic, the pronunciation of seven requires two syllables: se-ven. Consequently, the numeric vocalization of a melody will unintentionally alter its rhythm – unless the seventh scale degree is vocalized in French perhaps, as *sept*. But troublesome syllabifications are only part of the problem. Another disadvantage is the inability of scale degree numbers to represent chromatic alterations. Although music theorists speak of “sharp-four” and other such chromaticisms in functional harmony, there is a referential danger that scale degree numbers could be confused with Roman numerals which in a harmonic context, identify specific chord structures. Consistent terminology then, is a vital consideration.

Singing for Understanding

Sound before Symbol: “Encouragement to sing is a good idea.” The educational value of singing is its prominence in a sound-before-symbol teaching process that encourages musical growth through musical experience. Derived from vocal interactions with sound, these experiences allow the student to develop personal meanings of music. Contemplating the future of elementary music education, Amanda Montgomery (2000) writes:

Whether encountering a nursery song, a symphony movement, or a dirge played on a didgeridoo, children need to learn to think about, and understand, the musical sounds they encounter. Understanding, or musical knowing, comes from active engagement with music. Musical exploring, performing, improvising, reflecting, analyzing, and creating are all activities associated with such engagement. (p. 130)

Although Montgomery did not mention singing as a specific activity with which to engage music, her counsel is compelling – in the context of an elementary school music classroom. But few would consider her advice realistic for the teaching of music theory. Most music theory teachers, including a number of the participants, do not include singing activities in their instructional practice. Nor do I, with any regularity. “[S]o with the tonic *solfa* syllables, we are inviting them to sing this music in their lesson, right?” (JR-1T). I answered my participant with a resounding “Yes.” I would even suggest that singing underlies all the activities Montgomery listed. As a pedagogical tool of integration, singing *is* a viable experiential conduit for student/teacher interactions with music theory.

In the LGs, I am encouraging universal singing, or singing for everyone, not just for singers. This element of universality allows the student to link sound and symbol by associating a physical sensation with its symbolic representation. Singing provides a direct experience of music that can expand the student’s understanding of musical elements and their organization into complex musical structures. With emphasis on these structures, a sound-before-symbol teaching process can help the student make sense of the musical sounds he/she encounters in any environment. Singing, therefore, can enable the development of personal musical knowing (Montgomery, 2000). In pursuit of this knowledge, the LGs utilize singing activities for the discovery/exploration of multiple musical elements. The participants observed three such applications – intervallic, melodic, and harmonic.

Since intervals are constituent elements of scales and chords, an understanding of intervals is essential for an understanding of the wider pitch content that comprises music theory. In the LG for Bach’s Invention No. 1 in C Major, intervals figure prominently in analytical discussions of transposed motives, altered motives, and inverted motives. Intervals are the building materials from which the student is directed to construct Bach’s inversion. But it is effectively an analytical/theoretical exercise until the newly discovered inversion is vocalized. “Encouragement to sing ... is a good idea” (CP-1T). The student’s first engagement with Bach’s motive is to sing it – from self-supplied *solfa* syllables – and to memorize it. Repetitions of this initial experience, which involve ever greater analytical complexities, inform all subsequent experiences, including the derivation of an inverted model. Singing provides a bridge that connects sound and symbol with the intention of fostering personal meaning-making.

While I intended this application of singing in Bach's invention, I did not anticipate an intervallic application in Mendelssohn's overture. I had resigned myself to an instrumental focus and included singing activities only for the young lovers' theme (theme 2a) because of its more lyrical character. I would have liked to vocalize the clowns' theme (theme 2b), but the wide leaps that suggest a "hee-haw" or a donkey's braying – associated with Nick Bottom's transformation – are difficult to sing. Furthermore, compound intervals are not included in RCM's (2016e) *Theory Syllabus* until the next level. But to my surprise, an Orleans group participant countered: "I can't help but thinking they're all going to *want* to sing it just because it's difficult. It sounds weird" (JK-1O, emphasis added). As it was mentioned with the connecting data, one of her colleagues suggested that compound intervals could be the subject of a challenge question and the student could be encouraged to play them. Whether singing or playing, the student's physical production of these intervals will experientially accentuate their numerical distance as larger than an octave.

Intervallic applications of singing are easily expanded to become melodic applications. By choosing a melody-writing exercise to prepare the student's interaction with Mendelssohn's second theme group, I provided an opportunity for her/him to experiment with pertinent rhythmic and melodic elements. Therefore, when theme 2a is presented in Activity #5, the student is already familiar with a portion of its rhythm as well as the tonal content of its melody. Since the assignment is constructed for the purpose of preparation, its creative parameters are not arbitrarily chosen. They are musically relevant for Mendelssohn's overture and they become personally relevant through singing.

CP: Yeah, that could be a good way to point out how to use the basic elements of a melody – to make it singable. And if they try to sing something that's really all over the place, they'll make that [unsingable] connection right away, I would think. (1T)

For this Toronto group participant, the singability of the student's melody is its most important feature. A melody may look good on paper – with correctly notated symbols – but it may not *sound* good. And the teacher's opinion should not be the only determination of its goodness. The student must be led to form her/his own opinion, based on a singing experience.

A harmonic application for singing, proposed by one of the Toronto group participants, is also related to the LG for Mendelssohn's Overture to *A Midsummer Night's Dream*. In the

context of our discussion about the overture's introduction and its playability on the piano, she offered these comments:

CM: Well, I just wonder, since it's such a great opening... And I realize, before you get to [the orchestration], I wonder if it's possible that the teacher could play it, and ... the student sings the notes of the chords starting at the top. So you start to hear that way. So [in this excerpt], even if they sang, which I would expect they would sing E-C-A, not E-A, ... it's kind of like the singer would have accompanied sight-reading. Right? But you're hearing or singing the notes of the chord. So, you're starting to develop a harmonic ear.

LLP: I like that a lot. Okay, thank you!

CM: Because, I think if you're looking at that, like saying, "Oh, that looks like all an E major chord." But then if you're hearing that there's other things that fit underneath it... (1T)

The harmonic flexibility my participant observed is precisely the phenomenon I was hoping to highlight – from a theoretical perspective. As a student, I had long ago analyzed the chords in Mendelssohn's introduction and as a young teacher, I had analyzed the resulting harmonic progression (I-V-iv-I). But it was not until I wrote the level 7 LG that I saw the introduction's melody as an extended E major triad. It was as an author then, that I finally came to understand the harmonic potential of Mendelssohn's melody for a presentation of common tones or shared scale degrees. However, I had not considered the aural implications of the activity nor its prospective integration with ear training.

For me, singing is the gateway to integration. It provides both the student and the teacher with a "hands-on" experience of music as the epitome of *musicizing* (Elliott, 1995). In an integrated music theory pedagogy, singing blends all the discreet parts of music theory into a unified whole. It facilitates musical experiences for everyone, bringing music from the instructional periphery and placing it at the center of music theory teaching. In the words of Kodály (1974), "Even the most talented artist can never overcome the disadvantages of an education without singing" (p. 204). But the *how* of providing these singing experiences in the context of a music theory lesson is still a problem.

Reflective Interactions with the Themes

In the concluding focus group discussions, the participants were generally more comfortable with the topic of music theory pedagogy. Having had an opportunity to experiment with the LGs, they seemed more confident and tended to share their experiences more freely. At

the time, I found our conversations to be deeply meaningful. Much later, I came to the realization that I had less “trial” data than I had hoped. Of my eleven participants, only five actively used one or more of the LGs with their students – one in Toronto, two in both Orleans and Kanata. Although two additional participants anticipated future opportunities to experiment with the LGs (one in Toronto and one in Kanata), none of these possible trials came to fruition.

Regardless, the intervening months gave the participants time to reflect on the introductory focus group discussions as well as the pedagogical implications of my ideas for teaching music theory. Although Leavy’s (2015) reflexive counsel is meant to guide arts-based researchers, it is also plausible for my participants: “Reflexivity involves constantly examining your own position in the research endeavor, including your assumptions, feelings, and decisions” (p. 282). This reflexivity, which is directed at or turns back on itself, systematically scrutinizes self-referential contexts of knowledge construction. But what if the reflexive act was turned outward? What if we, as music theory teachers, constantly and intentionally examined our pedagogical assumptions in order to gauge the impact of our decisions on the knowledge construction of our students?

While my variant of Leavy’s reflexivity is externally purposed, its realization requires an act of reflection that is characterized by deep or serious thought. This internally generated thoughtfulness comprises a significant portion of the data I collected from the second set of focus group discussions. At this reflective stage of my inquiry, the participants’ appraisal of the LGs deepened. For some, my materials were transformed from instructional *products* to pedagogical *processes*. Group conversations about their effectiveness as tools of instruction became reflective insights about their potential as models of an integrated pedagogical approach. The resulting data, drawn from the sharing of our experiences, addresses my reflective question:

- How can the implementation of an integrated pedagogy for the teaching of intervals and chords according to the Royal Conservatory’s (2016e) intermediate theory curriculum be improved by the participants in my research study?

My analysis of the reflective data began just as it did with the interrogative data. I created six files, one for each theme, and proceeded to extract pertinent excerpts from the written transcripts. However, I discovered almost immediately that the boundaries between my themes were blurred – much more significantly than the first data set. Many excerpts referred to multiple themes. And similar to my experience writing the LGs, I could not blindly follow a pre-existing template, even if the template was one of my own making. Just as Bach’s invention did not lend

itself to the same pedagogical treatment as Mozart's aria, neither did my analysis of the reflective data. Since the themes were less distinct, I decided to organize the data under one all-encompassing theme: integrating. This integrating theme represents the intersection of my six previous themes: analyzing, layering, deepening, preparing, connecting, and singing. It also represents the essence of my comprehensive approach to music theory pedagogy with, about, in, and through music (Cornett & Smithrim, 2001).

The following analysis is structured around four extended excerpts that epitomize the participants' contributions to my research project. Their perspectives, given in the context of topically complete exchanges, offer valuable insights for the implementation of music listening activities/assignments as the central components of an integrated music theory pedagogy. While the concluding focus group discussions often revisited topics from the introductory discussions, they tended to expand these topics beyond practical considerations into theoretical terrain. In other words, we began to consider the *metapractices* of integration and their pedagogical implications for music theory teaching. In effect, the reflective interactions picked up where the interrogative interactions left off. Although my voice is quite prevalent in the introductory conversations – frequently responding to the participants' queries – it is much less so in the concluding conversations. Therefore, my researcher-self takes an ancillary role, allowing the participants to speak for themselves, without interpretive interruptions.

Integrating Music and Theory

Implementation: “I guess we did improvise.” To convey a sense of how she used the LGs with her students, one of the Kanata group participants read her answers to the questions I circulated before our second meeting (see **Appendix 3.7**):

ABs: I used [level] 7 *A Midsummer Night's Dream* (only activities one to four) with a student, ... and all six activities of [level] 5 "Queen of the Night" with two other students. I used [them] in individual lessons – about 15 to 20 minutes is how much time we had to work on [them]. Usually I did it for lessons when they, for whatever reasons, hadn't practiced and I said, "Great, it's theory day today!" How did I implement the Listening Guides? I had the student[s] open their *Celebrate Theory* book[s] to the correlating page and piece – I wanted them to understand that these activities were intended as supporting activities for what they have to learn anyway. I don't like that, because I would like just to teach them stuff that I think is important, but they want to know that they have to do it anyways and that this is supporting for it. How did I engage my students? I explained that these activities contain/connect the theoretical ideas, like chords and intervals that they've already learned, with music that they may or may not be familiar with. And did I feel that these activities were successful? In many ways, yes. I noticed the student[s] exhibit satisfaction at the connections they were able to make. For example, [a level] 7 student completed Activities #1 and #2 from *A Midsummer Night's Dream*, playing and analyzing – of course, you know what they are – the opening chord[s]. After she explored the quality and the inversion of the [melodic] chord, had harmonized [it] with the tonic, subdominant, dominant chords, and then had played the chords with the voicing given (assisted by me for the larger intervals), she was immediately aware of the passage when we listened to the recording. "Well, there we are," were her exact words. So, it was crystal clear that she had absorbed that, and... Did we improvise? That question surprised me. I was like, "No, we didn't." And then I got thinking, "Yes." You talk about, okay here, the different notes of the E major chord. Now, you put it all together and it makes a [melodic] tonic chord, but you can harmonize it in different ways. And for the fun of it ... – she really hadn't practiced – we explored some different chords we could have used, and then we decided that Mendelssohn's harmonization had a strong pull to the end of the line. It worked better than ours. So, I guess we did improvise. "Did you experiment with subjective discernments of consonance and/or dissonance?" I really didn't. "Would you consider using the [Listening] Guides again? Why or why not?" Absolutely, I would. The [LGs] are useful tools for expanding the student's understanding and awareness of theoretical elements within real music, not just theory assignments – which was your goal. How would I improve them? Things we'd already talked about... (2K)

This participant's reply encompasses all my previous themes. Some, like analyzing and connecting, are referenced specifically, while others are gleaned from the content of her response.

Three items of interest caught my attention. First, the participant reported that her student was "immediately aware of the [introductory] passage when we listened to the recording" of

Mendelssohn's Overture to *A Midsummer Night's Dream* – after preparing the experience by “playing and analyzing” the opening chords – which confirms my expectation for the student's initial listening experience. This sequence of activities is associated with the layering theme since it reinforces theoretical knowledge with listening. Second, I noticed the preparing theme in their student/teacher exploration of “different ways” to harmonize the individual notes of an E major triad. Through this collaborative activity, my participant was actively cultivating the student's readiness for more advanced theoretical studies. Third, I detected a buried indication of the deepening theme as an interpretive handling of subjective components. Although my participant dismissed the notion of consonance and dissonance, considering it irrelevant in the recounting of her student's experience, I would argue otherwise. While she did not specifically use the *consonance/dissonance* terms, she encouraged her student to compare their jointly composed harmonization with Mendelssohn's and in so doing, to assess its comparative effectiveness. This process of assessment requires the discernment of consonance and dissonance, for it is their interaction that creates the “strong pull to the end of the line.”

The subjective qualities of consonance and dissonance make them difficult concepts to teach. One of the Toronto group participants offered his approach:

CP: What I work with a lot is scale tone vs. chord tone. [Students] have to make the decision. Here's the chord, and as you... You're going to play the scale and you're going to tell me whether that's consonant or dissonant.

JR: I'm sorry [participant's name], explain that further.

CP: So, if I'm playing Cmaj7, they're going to play the C Ionian mode. They have to listen carefully and make a decision whether the note they play through it, as the chord is playing – through playing the scale – is that a consonant sound or is that a dissonant sound?

JR: With their... In conjunction with the chord.

CP: Correct.

JR: It's like *tintinnabulation*.⁸⁸

CP: *Tintinnabulation*, you're right!

JR: Like the Arvo Pärt, where they have the triad, and it's the buzzing sound, and then it's a consonance and dissonance that's... You're preparing them for *tintinnabulation*.

⁸⁸ *Tintinnabulation* (from the Latin for “tinkling bell”) is a minimalist compositional style developed by Estonian composer Arvo Pärt. It is achieved by the interweaving of two vocal lines that hover around a central pitch (Machlis & Forney, 2003): one arpeggiates the tonic triad, creating a bell-like effect, while the other moves diatonically in conjunct scalar patterns.

CP: I do that a lot, so they get the concept of what we conceive as consonant and dissonant, but they're making the decision. I'm not telling them a thing.

LLP: Yes.

CP: And then they go, "Oh yeah, okay. This one is a little more dissonant than that one."

JR: Mm-hmm.

CP: "Now play it an octave higher." "Oh, that 9th is kind of nice. It's kind of cool. The 2nd was a little rough." So, that's just one thought I had on putting across consonance and dissonance – making [students] make the decision, so it hopefully gets in there. (2T)

Although my consonance/dissonance ideas are not conspicuous in the LGs' implementation, their pedagogical potential lingers in the background. My participant's instructional approach offers an interesting mechanism for bringing the aural subtleties of these concepts to the foreground. The *tintinnabular* compositions of Arvo Pärt (b. 1935) take this approach a step further by offering musical contextualizations of consonance and dissonance. In the opening section of Pärt's *Cantate Domino canticum novum* (1977, revised 1996) – to draw an example from RCM's (2009) ARCT history curriculum – the organ plays triadic figures based on a B-flat major chord while the SATB chorus sings conjunct melodic lines that resemble Medieval plainchant (Lopinski et al., 2010). But rather than *concluding* a consonance/dissonance discussion with this work, why not begin with it? Bruner's (1966) optimal instructional sequence follows an enactive, iconic, then symbolic path from concrete musical experiences to increasingly abstract representations of music. Consequently, an optimal sequence of interactions with consonance and dissonance could proceed from a listening experience of Pärt's choral work (or something similar), through my participant's aural exploration of simultaneous scales and chords, to the labelling and verbalization of theoretical concepts. The next step, of course, is the application of these concepts in new or unfamiliar contexts, but the instructional sequence as a whole is facilitated by knowledge gleaned from examination and interpretation. The process of analysis, therefore, is essential.

Analysis: "We try to make order out of chaos." According to Rogers (2004), the value of analysis in music listening is often unacknowledged and unaddressed in the published literature. But for him, the centrality of analysis in the merging of mind training and ear training is vitally important. Music listening is reinforced with conceptual supports, or the "underpinnings of analytical modes of thought" (p. 103), that encourage structural hearing. This

aural awareness of structure enables the student to make sense of her/his music listening. It also enables her/his understanding of musical meaning, but this understanding is not spontaneous. An Orleans group participant expressed some frustration with a student's lack of analytical facility in relation to the subjective qualities of music, such as mood:

PG: The one question: "How does Mendelssohn create the mysterious mood?" And that was a corker! [He] was like, "I don't know." "Well, okay. What does the [piece] sound [like]? Does [it] sound like a happy song, or a sad song, or a mysterious song?" ... And okay, "Is happy major? Or is happy minor?" And so, then we went back to just recognizing chord qualit[ies] and interval qualities and that kind of thing. It's all tied in but for [students], it's like the universe – all these stars that aren't connected somehow. (20)

Even advanced students of music history, whose course requirements include regular exposure to music listening, do not always know what to listen for or how to describe what it is they hear. Analysis, like any other musical skill, must be taught. It must be nurtured and developed.

One of the Toronto group participants recounted his experiences with musical analysis, both as a student and as a teacher – the latter influenced by his negative experiences of the former:

JR: I didn't dislike analysis as a student, I *hated* analysis (participant's emphasis). It was this concept [of], "I can't do this." I couldn't do it.

CM: Me too.

JR: I could not do it. And I've learned, one of my mottos: "Can't lives on Won't Street." So, I didn't have that motto when I was a student.

Someone should have told me that. "Can't lives on Won't Street." ... I [couldn't] really get into it. But [analysis] is ... valuable because, I explain [to my students], we analyze thousands of times ... in a day, unconsciously. When we go down the stairs, we immediately analyze, without thinking about it. We assess the depth of the tread, how many steps. We have to make sense [of it]. We try to make order out of chaos, and that's what we do when we listen to music and look at music. So, ... I think that, in the end, is what my goal is. It's lovely that [students] can do four-part writing and all that, but ... it's aural analysis ..., in the end, that's going to be the most valuable. It's knowing what questions to ask, not the answers. The answers aren't as important as the question[s]. Knowing what question[s] to ask with the music. When we go to a concert, whether it's Lady Gaga, or the Guelph Symphony, we bring our whole life experience, so we know what questions to ask and then, how to respond. "Oh, I would have predicted this, but the symphony did that.

Oh, I wonder why? Why did the composer write that way?" In the end, that's what I wish for my students, that they have this basis of what the idioms are so that they can know and say, "Oh, what am I expecting here? What am I asking about? What am I getting back?" So, I think ... analysis is ultimately key. And we focus a lot of it in the writing – in written harmonic, structural [analysis] – but it does come back, right? I teach a pedagogy course to piano teachers, or to anybody, but for want of a better title, we came up with "A Theoretical Pianist." And it's looking at the [level] 1 to 8 pieces from a theory perspective. And what I do is I clip things from the syllabus and I say, "Okay, here's level 1, and here is ... balanced binary, here is sequence." And we have to find ways of bringing [theory] to life for that seven-year-old, or ten-year-old, or [whoever], or the adult, that doesn't overwhelm them. But we're constantly talking about the language of music so that when [students] come to level 9 or 10, this is not a surprise. As theory teachers, we [are] continually shocked at how students come into level 9 harmony all the time, and it's like sonata form has never occurred to them... This summer, I [took] them to level 3 piano and I said...

CM: Right, level 3 is when it comes.

JR: "Look at level 3. You've been playing this and I have faith in the teachers you've had – they've talked about this." Now, I don't know, but this is something that we have to... And that's why this is all so important from the earliest level, that... The ability to decode the music. I try to use different analogies. [I] say, "If you were an agent, you were sending a twelve-year-old to audition at the Stratford Festival, and there's a small part in a Shakespeare play. Would you simply send [him] because [he can] read the words, [he] can speak, [he] can pronounce English words? Or would you coach [him] on the subtext, the meaning of it...? Because we can tell immediately if [he] knows how to say nice [Shakespearean] words or [if he] actually knows what the speech is about. We would never send a young actor, or a seasoned actor... [He] would go in coached, to give context to what [he's] doing.

CM: Right.

JR: And I tell my students, I say, "You can get very far in music. To play, you put your fingers on the right keys. And you play loud here and soft here, but that's not what music is." It's not that, that's assumed (that you can put your fingers on the right keys), but that's not what it is. And if you don't know what you're playing... I think [that] harmony is the key issue.

CM: Right, because I was going to say...

JR: Harmony is really central. Rhythm is, melody is, but I came to ... understand that harmony is the glue, at least for Western music. It holds it all together. I didn't appreciate that when I was a harmony student.

CM: Because if you hear ... orchestral audition[s], you can tell when ... [candidates know] everything that's going on around them, because they're playing one line, but you can say, "Oh, they're hearing the whole orchestra." Mm-hmm.

JR: Aw, that's fascinating. See, that is exactly what I'm talking about.

That's amazing. They understand the context.

CM: Right.

JR: And they know how they fit into the puzzle. (2T)

I asked the Toronto group participants how it is that we can cultivate this kind of contextualized analysis in our teaching of music theory. As the final evaluation for RCM's rudiments exams, candidates are presented with a brief musical excerpt followed by a list of analytical tasks. Like a reading comprehension assignment, it is a summative exercise. As such, the musical excerpt provides little more than staging for a contrived treasure hunt. While it may serve a useful assessment purpose, this analysis does not allow for a genuine musical interaction:

CM: I worry that ... student[s] doing [the] last question [aren't] really hearing it.

JR: No.

LLP: No.

CM: So, they're just seeing it, right? So, they don't...

CP: For sure.

CM: They don't know that it's imitation [for example]; they don't really know what that means. (2T)

In an examination setting, analytical tasks are purposed for the teacher – as measurements of comprehension – not for the student. Furthermore, if analysis is regularly associated with testing, it will almost certainly elicit feelings of aversion. Without an incentive grounded in the student's "need to know," the allure of analytical discovery is absent.

Although another of the Toronto group participants corroborated her colleague's early dislike of analysis, this was not my experience. Nor was it the experience of an Orleans group participant:

AC: [A]s a teenager, ... this [invention] was one of [my] first [experiences] of this kind of analysis. It was such an illumination and such an inspiration of, "Ooh, that's why it's so beautiful, and now I... Why does it sound like that? And why does this interval...? What is that interval that I love so much?" Or whatever. But finding out that it was not random, because I think we – a lot, at least in my era – grew up with the stereotype of the sort of divinely inspired composer just... [The] same as authors, they didn't have to think structure, they didn't have to go back and look at it, they just... Inspiration struck and they wrote things down and it was perfect. Instead of, "Oh no, actually, there's some parallel[s]. I have to fix that." And there's construction involved, there are wood-working plans involved.

ABn: Yeah, I think that's a good way to put it. It's a very tightly constructed piece of work, and there are some little variations. And that's the thing, ... you're looking for the little "Where's Waldo? Where's...? Oh, that changes there." So, a lot of it is very subtle – how [Bach] changes it – and it all works together to make something very beautiful. So yeah, it's just the idea of the degree of construction that, as you say, [it's] not like a... Not words [or notes] just flying about wildly on a page. (20)

The work these participants are referencing is Bach's Invention No. 1 in C Major. Since the accompanying LG is highly analytical, students' interactions with the work may tend toward antipathy, rather than my participant's fascination.

Bach's Invention: "You're seeing it, you're hearing it, and you're playing it." Of the four LGs, the one linked with Bach's Invention in C Major is the most theoretical. The work itself is the farthest removed from any musical meaning beyond its specific compositional features. While my interrogative data suggested a hint of deepening interpretation in Bach's manipulation of the opening motive, the invention's skillful construction is better suited to an analyzing encounter. The level 6 LG is intended to introduce Bach's invention and to make plain its esoteric nature. An Orleans group participant thought it would be engaging for one of her adolescent students. It was not. With little involvement from me, the group undertook an unravelling of the invention's analysis as well as the student's analytical experience. The pertinent conversation, including a number of pedagogical insights, is reproduced in its entirety:

LLP: Well then, we'll let you lead the...

AC: Lead the charge.

LLP: Yes, the invention.

ABn: Yeah. Well, it's quite a thing. I really enjoyed looking at [the] Spanish [analysis] – the colour[ed] thing – that was kind of interesting. And just the idea of going through... There were eighteen complete motives. And when I first went through them, I thought they all had to be ending with a 5th, and I thought, "Well, this is not working. Why is this not working?" And then I went back and read the question again, and it said some of them will have different endings, altered endings, so that was fine. It worked out then.

LLP: Okay.

ABn: So, but yeah, it's very interesting, going through it and just realizing, just looking for [motives] and see[ing] how they compare. Looking at the idea of ... modulation, the augmentation, and it was, again, looking at it from a very theoretical point of view. But then, I think it's easier to look at Bach theoretically ... He's a theoretical guy. I mean, he's also very musical and everything is wonderful, but... And it's easier to find the motive, to sing it, to find out where it is, and to go through it.

AC: And you give us the whole score.

ABn: Yeah, and we have the score. That's very helpful too. And so, I... Now I thought this would be easier for a student, and I... He was doing – this is a level 7, this No. 1 – he was doing one with the [level] 8 repertoire and I thought, “Well, this would be great because it's a little easier.” But he was just used to looking at the notes and playing the notes, and just trying to find this stuff through it, this was a... It was like a very difficult exercise for him.

LLP: Hmm. Okay.

ABn: Because obviously, he'd never even thought of it like that... Now I think there were some other things going on that were not related to me, ... so this was just a little something extra that he really didn't need to have on his plate. And since it was something ... quite foreign to him, I think he probably thought he'd just let it go and let me do all the talking. So, that was my experience with him, but it was just so very, very different for him to experience (if I can use that word), to experience an invention that way. And I mean, he's a smart guy, a very, very smart guy, but I don't know if the will wasn't there, if he was just overloaded and just couldn't take one more ... thing in, or if it was just too different and he just was not able to absorb it at that time...

LLP: Okay. That's okay. When I went to write this [LG], I mean after coming through [the level 5] experience and setting up ... two pre-activities, and I came to this [one] and thought, “What am I going to do for a pre-activity when I'm working with eight notes, essentially?” And so, in the end, I totally dispensed with the pre-activities and decided to just jump right into it. Because there...

ABn: I like the idea of explain[ing] the motive and then, the identifying [of] complete motives. I thought that was very helpful – to go through the piece and to find those, and to realize when you break it down, there's really not a lot to it.

LLP: No.

ABn: It's the same thing that keeps being repeated, but [Bach] does it in such a way that he changes it up and moves it around. So, it was very interesting. And also, just the idea of the melodic interval between the last two notes of the original, and "Name the four intervals that replace it." I mean, that is a whole week's worth [of work] in itself. Just doing that, there's a lot of work there. I mean, I was going through that, and you're looking for it and, "Oh yeah, it's different here. Yeah, this is here. This is in the treble, this is in the bass." It's just looking for them and where they are. So, I thought that was a lot.

AC: [Teacher's name], my high school piano teacher did that when I played this one.

ABn: Yeah. It was great, it was really... And then the other [thing] was the inverted ones – the nineteen complete inversions. You know, with a coloured pen. So, it was really quite something, but it's one thing to see it like that, or hear it like that, and play... I think you're seeing it, you're hearing it, and you're playing it. They're really different experiences that you're having of this.

AC: Which is the point.

LLP: Right.

ABn: Yeah, which is the point, but it's a huge mouthful. It really is a big one.

AC: And so, you said for your student, it was a... It was just such a new way of learning stuff?

ABn: It was just more... It was around the end of the year too, and looking at other things, and he was just busy. And he was having some issues at school and ... you know, young teen and all that angst. But I thought it would be a really good one, that he could dig into that [analysis], but it just didn't work.

JK: I watched a colleague of mine, a friend of mine, who was a commerce student and became a financial advisor. I watched her looking at financial pages, just like that. It would take me half an hour to read each one. And then I think of us looking at a score...

ABn: Yes.

JK: We've been doing it for decades. We've played it, we've listened to it, we've analyzed it. It's a totally different ball game for the kid who's just trying to figure out if this is an E or an E-flat.

AC: He's looking at, "Which finger do I play that C with?"

ABn: That's what I was thinking, it's really... It's such a revolutionary thing for these guys to have to [do]. Because they haven't done this. They're just learning to play and for some of them, just getting the notes is a huge deal. And then they have to figure out what the notes are. [This type of analysis is] pushing them just a little farther than some of them want to go.

JK: But it gives them an idea of the inventiveness of ... Bach, and of the structure of the piece – how he gets this all to fit together without making a clang of discords.

AC: And then it sounds beautiful besides, yeah.

JK: Yes.

ABn: But it does really get you inside the music. I really agree with that. With me, anytime I started [learning] anything of Bach's, it was just a jumble of notes. But after, it really is an acquired taste. And the more you learn it, the more you get into it, the more you appreciate what he's doing, and the more it becomes an earworm. I never thought I would hum along to ... Bach, but sometimes it just gets in your head and it just stays there. So, the guy really does grow on you. And for ... students, I think [they] need this kind of thing to help them understand. So again, it was difficult for [my] student, and I think it *is* very difficult going through it. And as you said [participant's name], we've had a lot of time with these things. Even with the experience that I've had with these, I was really working. You know, I spent... It was more than fifteen minutes, let's just say, that I spent on this. It took some time. (20)

As my participant pointed out, there could be many explanations, both musical and non-musical, for her student's disinterest. Musically, he may have been intimidated by the unfamiliarity of the LG's analyzing activities. Although my comment about the lack of pre-activities seems irrelevant in the context of the surrounding conversation, it speaks to the student's unpreparedness for the analytical experience I had hoped to foster. This is in no way a reflection on my participant or her student. It is a recognition that my pedagogical approach is out-of-the-ordinary. The level 6 LG may or may not require preparation, but the work of analysis surely does – particularly if it appears to be encroaching on playing or performing activities. But as my Toronto group participant highlighted with his theatrical analogy, an unprepared actor is an unconvincing actor. So too, for musicians.

Relevance is an additional concern. For the student mentioned above, who was playing another of Bach's inventions, there was no reason to analyze No. 1. Why would he need to work out compositional details in an invention he had not played? Establishing the crucial connection to "his" invention would require genre-specific generalizations that are better derived from the known work and applied to the unknown – rather than the other way around. But for a student of the Orleans group participant I interviewed separately, the experience was much more rewarding. Her interaction with the LG for Bach's invention coincided with her learning to play it:

LLP: Yay!

PG: Yay is for sure, right? Because it's just propelled her into... "Oh, yeah, yeah." She's seeing [the motive] and recognizing it, and then [she's] able to [play] it – much more quickly than had she not had all those colours in there, I think. (20)

This student's experience epitomizes the holistic ideal of an integrated music theory pedagogy. Instead of enduring analysis as a theoretical necessity, and being overwhelmed by it, she was able to embrace analysis as a practical exploration of her repertoire:

PG: [O]nce she saw that beginning there – the shape of it – well, then she would go to the next one, and I just let her go. And she even found one that I didn't find ..., as I was doing it. So, I thought that was great. She's, "Oh, here's one last one." So, that was good. (2O)

Could her affinity for analysis be a matter of temperament? Stereotypical assumptions presuppose that theoretical analysis appeals to students with math/science interests, but this assumption was not evidenced by the first student. Obviously, the matter is far more complex. My Toronto group participant, whose passion for art (*not* science) may have fueled his intense dislike for analysis, cited his perceived inability – and its attendant fear – as the primary inhibiting factor. While he favours repertoire with extra-musical associations, he resolutely creates meaningful experiences of varied analyses for his students, despite his personal preferences:

JR: For me, it's always easier to "sell" something that's programmatic, whether [it's] something visual [or] something with a text. If I'm selling modern music, selling dissonance in [Berg's] *Wozzeck* is much easier for me than selling dissonance in [Webern's] Symphony, op. 21.⁸⁹ Not for everyone, some people are not programmatic/pictorial, but... So, the "Queen of the Night" aria, you can engage, right? There's a character, there's a story, there's fantasy. That sells very nicely. And so, we have... Yeah, the challenge is bringing an invention to life. And some will respond to the mathematical genius of [its] construction and others will quickly get overwhelmed with it. And even the teacher might get overwhelmed with it. That's the funny thing. (2T)

For me, from every one of my personal/professional perspectives, I feel overwhelmed when I cannot link a new experience with an old one. This feeling is not dependent on whether my temperament is artistic or scientific. It depends on whether the new experience is accessible – and accessibility depends on the route I travel as well as the vehicle I utilize. As teachers, we make countless instructional decisions on behalf of our students. If they recognize the contextual

⁸⁹ RCM's (2016e) ARCT history curriculum includes *Wozzeck*, an Expressionist opera by Alban Berg (1885-1935), and the second movement of Symphony, op. 21, a serialist work for chamber orchestra by Anton Webern (1883-1945). As composers of the Second Viennese School, both Berg and Webern, along with their teacher/mentor Arnold Schoenberg (1874-1951), adopted the post-tonal conventions of atonality.

bridge we construct, the path to new learning is generally well-received. But if the road is obstructed or the passage discontinuous, the new learning is jeopardized. For many students, like the first Orleans student, theoretical activities such as analysis are seemingly incongruous with a performative instrumental or vocal experience. Given practical relevance, however, analysis can bridge the music/theory divide by enhancing performance with useful compositional information, as it happened for the second Orleans student.

Context: “That’s where the repertoire comes in.” Meaning-making in music theory is clarified by circumstance – the context or setting in which meaning can be fully understood. Provided with a relevant musical context, students can be guided to derive or discern theoretical meaning for themselves. The Toronto group participants, having established the provision of context as an instructional necessity, particularly for an integrated music theory pedagogy, launched a discussion of contextual parameters. Since repertoire chosen for teaching purposes is traditionally limited by common-practice period boundaries, they were eager to expand the scope of choice to include popular music:

JR: ... coming back [to] context. The more we can contextualize, either through what [students] play, which is the best, [or] anything that’s [relevant]. And that’s where we have to be creative. And I’d like to think that all of this ... is merely a stepping-stone. If someone doesn’t like [the] aural analysis [in our harmony books, for example], that’s okay. “Oh, this is an idea of what you can do, how to make it personal for you. You can ignore our aural analysis – it was just an idea.”

CM: Yeah, yeah.

JR: “Try it out. If it doesn’t work for you, come up with another thing.” But that was important, and I’m happy to say, so far, there might be dissenting words, but there’s been really good feedback. They say, “Oh my gosh, we love the fact that you’re not towing the line [with traditional repertoire]!” I thought, “Yeah, that’s good.” I think maybe we got... That’s a good thing. Because I like that, when [there’s] a pop song... I did not understand dominant 7ths when I was [a student]. Bill Andrews – we did a whole year [of] what we would [now] call basic and intermediate harmony. It was a one-year course. [We] didn’t do the basic exam. There [were] sixty of us in the room down the way [at RCM], and some of us were going to [university] so they said, “You better do two years in one.” Great! I didn’t understand dominant 7ths, and this was... I didn’t know what the V stands for! Like $\frac{6}{5}$? And he said, “Okay, next week we’re doing the 9th, 11th, 13th.” So I said, “Are you kidding me? Are you kidding?” I don’t even get this stuff: $V^{\frac{6}{5}}$, $V[\frac{4}{3}]$? And then he played $[V^{13}-I]$. Oh, my god! Right away.

I tell my students this in every class: [participant sings] “Nestlé’s makes the very best – cho-colate.” That is the dominant 13th! That [jingle] spoke to me. He didn’t say that. He didn’t relate to that. But I could hear [the] *mi-do*. Oh, my god! That cadence, that’s the dominant 13th! And that’s what I say to students. That’s the “ah-ha,” that’s the eureka moment. Whether it’s – whatever it is. You say, “Ah-ha!” That little jingle, that cartoon. “Ah-ha!” Whatever it is that will say... I can connect. I can write a dominant 13th anywhere, and that [jingle is] probably what I’m hearing. Now, I can hear other repertoire ... too. I can hear a Chopin prelude, but that’s what spoke to me in a way that Bach chorales did not speak to me in harmony. What [did] I know? [They] meant nothing to me. So, it’s good that we teach [chorales], and it’s good [that] we have a discipline, but the more we can open up, and show ... students that this... [It] goes beyond the confines of classical music.

CM: Yeah. Well, I’ll tell you a funny story. I had a student, with the popular piano [option], and for his grade 3, 5, and grade 8 exam[s], he did the same piece from *Lord of the Rings*.

JR: Aw!

CM: Not the totally...

JR: Different arrangements. Cool.

CM: Yeah, different arrangements for his level, and we could incorporate new skill[s] that he had, right? And it was funny that he still liked the piece, that much later, but...

LLP: But that’s such a valuable thing to do, because then you’ve got [a base], and you’re ... building and building on top of it. Because ... we [can] keep building, but if [we’re] building on different bases, then we’re ... only getting so high. But if we can build on the same base, we can get a lot higher.

CM: Because, I don’t know if you remember, but it’s when they... It’s ten years ago, twelve years ago, when a pop song would come out, and there’d ... be this rush to get it to print. And it would be a pop vocal, like a vocal/piano version. And [it’d] be really terrible. [It’d] be ... basically unplayable and really static sounding. Anyway, so [RCM’s popular selection], in a way, has addressed this, right? Because if you were coming up with your own arrangement, then you’re saying... Well, because if students go to buy a piece and they say, “Oh, it doesn’t sound like this.” And, “Can you play it for me?” And it sounds the same because I always say, especially in piano, “You’re only as good as the arrangement you’re playing.” If you’re playing a big note piano piece, you can’t make it sound that much better, right? (2T)

At the time, I sensed the value of this conversation, but my understanding of its full significance was slow to reveal itself. Now, I can finally confront the prejudice it unearthed: I give little educational credence to popular music. I certainly enjoy listening to it, and I love singing along with it, but I do not consider popular music to be “serious” music. Essentially, I

associate popular music with personal pleasure and serious “classical” music with professional practice. Unlike the Toronto group participant quoted above, I did not recognize the unmistakable resolution of V¹³ in a vintage commercial for Nestlé’s Quik (now Nesquik) because I never thought to analyze it – and my indifference dismisses its instructional potential.

I am not alone in my thinking, but this knowledge is small consolation. An integrated pedagogy should be an inclusive pedagogy. By setting aside (or segregating) popular music and confining it to the fringes of serious music study, I am imposing my limited views and value judgements on my students. But awareness opens avenues of transformation. If I explore the repertoire that holds meaning for my students, discovery awaits us all. The Toronto group participants have brought this issue to my attention and a collection of essays about teaching/learning popular music in academia (Rodriguez, 2017) will inspire further investigation. For now, however, my pedagogical aspirations remain focused on integration.

This music/theory integration is often complicated by my role as a music theory specialist since I am not directly involved in my students’ practical studies. While one of the Toronto group participants is similarly situated, the others are not:

JR: The challenge [for] me, of course, is that I’ve always... Most of my career, I’ve moved in this “specialist” thing. So, it’s not holistic in the sense that I don’t see [students] coming up through the practical. I... They land on my [doorstep] and either they’ve done rudiments, or it’s a patchwork. I don’t know if I [even get] a clear idea of what they know. I’m still trying to sort out where the blanks are. Yeah, [it requires] lots of remedial [work].

CM: I think that’s true in any language. There’s no perfect way to teach a language. There’s no way to get through and not have holes somewhere.

JR: Yeah, yeah.

CM: Right? Because sometimes I’ll be working with [students] and I’ll think, “Oh, fantastic! We’re moving along and now there’s just one more step, and that...” For me, that would be easy... And [I] think it’s nothing, [but] for them, it’s a huge hurdle. They’ve gone through the things that I would have struggled with, but when they get to this one, ... that’s their nemesis.

CP: Yeah, interesting. Yeah, that sounds very familiar. (2T)

Bridging the gap between music and theory requires both instructional connectivity and contextual relevance. It requires bringing a “musical aspect into what used to be very cut and dry, or very dry – not cut and dry, *very dry* – to ... teach, and to bring to life” (JR-2T, participant’s emphasis). But a music/theory integration is more than score reading and searching

for tritones and dominant 7th chords. It places intervals and chords in the context of a music listening experience. “That’s where the repertoire comes in, I think. It’s finding the right... You see, you add one little layer, and then you go to the next thing and add another layer” (CP-2T). Integrating requires a mixture of activities – analyzing, layering, deepening, preparing, connecting, singing – bringing them together to become an instructional whole.

Just as the myth of the divinely-inspired artist is largely fallacy, so too is the myth that music theory can be taught as an abstract science. Sound and symbol are interdependent. Artistry is synonymous with creative ability, but it also encompasses the technical proficiencies of craftsmanship. Scientists systematically gather evidence to test hypotheses, but the knowledge gained leads to innovation. Art and science are interdependent. A fully integrated music theory pedagogy demands equal participation from both disciplines.

The concluding focus group discussions provide ample data to support my pedagogical ideas – from a theoretical point of view. They do not, however, provide *direct* evidence to support the usability of the LGs from a practical point of view, nor were they intended for this purpose. While I had hoped that the LGs would be utilized more extensively, and that the participants would have more to report about their trial experiences as well as those of their students, I did not set out to collect student-centered data. Since I was interested in the *participants’* interpretations of their students’ reactions, my findings reflect teacher-centered responses to the LGs’ instructional process. With less process-driven data than I had anticipated, these responses are fewer in number but their reduced quantity does not diminish their quality, nor the value of their contribution to my study.

The MYC participant who departed early from the second Kanata meeting wrote several observations in the margins of her annotated LGs. Along with repeated references to the amount of lesson-time required, she labelled some activities with question marks and described others with comments such as “difficult,” “didn’t happen,” “never heard of this,” or “not sure what we were looking for” (MI-aLG). This participant’s uncertainty, although not openly shared by her colleagues, is significant. It indicates that my pedagogical ideas need further explanation, and further experimentation, before they can be readily implemented. Like the make conscious step in KM’s instructional process, there must be adequate preparation for both the teacher and the student. This preparation must also be allowed to settle before an integrated music theory pedagogy is fully adopted.

Concluding Remarks

Chapter 5 began the second part of my inquiry, in which the empirical data was introduced and analyzed. This data, representing Schön's (1983) design-oriented "back-talk," includes the participants' critical reviews of the LGs as well as their trial implementations. The introductory focus group discussions comprised the reviewing tasks, while the concluding focus group discussions comprised the implementing tasks. The data collected from the first set of discussions facilitated the interrogative interactions I intended for the second stage of my research process.

This interrogative data revealed six themes, each associated with one of my personal/professional perspectives: analyzing as a researcher, layering as a teacher/practitioner, deepening as an author/pedagogue, preparing as an examiner, connecting as a student, and singing as an artist/musician. While the data generated from the participant's reviews were broadly aimed at establishing the LGs' potential usefulness, singular themes reported specific aspects of the participants' engagement with the LGs as instructional *products*:

- analyzing – surface content; details of constitution and structure
- layering – reinforcement of theoretical knowledge through music listening
- deepening – interpretation; subjective discernments of music theory
- preparing – readiness for future learnings in advanced theoretical subjects
- connecting – practical relevance; theory/performance relationships
- singing – experiential interactions with music theory

Some themes, such as analyzing, were divided according to subthemes that further organized the data. The narrative discourse surrounding each theme, which begins as a collective dialogue, ends with a section dedicated to my individual meaning-making within the framework of my inquiry. These "... for understanding" sections explore my preliminary findings and taken together, form the mostly linear trajectory of my quest for an integrated music theory pedagogy.

Since the data I had hoped to gather for the third stage of my research process (from the Google Docs files) did not materialize, the data collected from the second set of focus group discussions was dually purposed. A portion of this data, involving five participants' engagement with the LGs as instructional *processes*, spoke to the implementation emphasis of the reflective interactions at stage three. The remaining portion informs the summative interactions that constitute stage four. These will occupy the final chapter. Consistent with ABR practices, my research findings will "not [be] replicated in their 'raw' form" – they are "made sense of (through

analysis and interpretation),” then presented in a “distilled, coherent, carefully crafted format” (Leavy, 2015, pp. 28-29). I offer these findings to the music theory pedagogy community.

Chapter 6

Synthesis: Finding a Multiplicity of Meanings

The heart of the educational process consists of providing aids and dialogues for translating experience into more powerful systems of notation and ordering.

– Jerome S. Bruner (1915-2016)

Introductory Remarks

In music theory research, the musical work comprises the data. A music theorist labours to make the work understandable for others in a comparatively small academic community. He/she dissects it and examines its component parts, but within this specialized community, the work continues to exist as a creative whole. In music education research, information *about* the musical work comprises the data. Through this information, which is sometimes circumstantial, a music educator labours to make the musical work understandable for others in a wider, less specialized community. Commonly focused on the acquisition of appreciation, he/she surrounds the work with relevant facts and figures that provide historical, structural, or performative context. In music theory pedagogy research, the component parts of a musical work comprise the data. Frequently, the work is unspecified. In the dissecting process, it loses its identity as a creative whole. But this whole is far more than the sum of its parts. A music theory pedagogue must labour to make the musical work understandable *through* its component parts. The two – a whole and its parts – must be integrated.

My inquiry in music theory pedagogy explores the didactic potential of integration for the teaching of music theory. Following Bruner's (1966) experiential educational process and Choksy's (1981, 1999b) directed listening model, I designed integrated instructional aids intended to elicit student/teacher dialogues with knowledge-sharing interactions. However, integration is a unifying factor in other aspects of my dissertation as well. My inquiry brings together the knowledge traditions of music theory and music education, allowing their distinct viewpoints to merge in the discipline of music theory pedagogy. It facilitates a music/theory merger by bringing ABR practices, often associated with inquiries in the social sciences, to a study that integrates music-as-art and music-theory-as-science. It also integrates my six perspectives, enabling my researcher-self to incorporate the unique experiences and observations

of my other selves: student, artist/musician, teacher/practitioner, examiner, and author/pedagogue.

Chapter 1 introduces my multi-faceted relationship with music theory through these individual perspectives – in much the same way that a music theory pedagogue endeavours to introduce a musical work through its component parts. And just as its parts distinguish the whole, so too, my experiences distinguish me. Their integration, rendered as a personal narrative, shapes my composite understanding of music theory pedagogy. From this understanding, I derived the rationale for my research. Chapter 2 widens the sphere of my inquiry to encompass the literature of pertinent scholarly communities. Seeking to broaden/deepen my understanding of music theory teaching practices, I reviewed three intersecting bodies of literature: music theory, music theory pedagogy, and music education. These research communities assisted my meaning-making and influenced my argument in favour of an integrated music theory pedagogy.

Chapter 3 examines the ABR literature. Attracted to its blurring of specific cognitive findings and less definable aesthetic *knowings* (Greenwood, 2012), I recognized ABR as an integration of epistemological tenets. This integration, combined with the amorphous ambiguity of ABR practices, resonated deeply with my artistic personality. By adopting an ABR lens for my inquiry, I was able to construct a methodological framework that incorporates KM's four-step instructional process: prepare, make conscious, reinforce, and assess. Chapter 4 gives pedagogical substance to KM's process in the guise of four LGs. As purposeful integrations of music (art) and music theory (science), the LGs are aligned with the music history portion of RCM's (2016e) intermediate theory curriculum. An analysis of the LGs' repertoire-based content forefronts the pedagogical problems I negotiated in their creation.

The LGs, which emphasize the teaching of applicable pitch elements, provided preparatory data in answer to my formative question:

- How can the teaching of intervals and chords be integrated with repertoire from the Royal Conservatory's (2016e) intermediate theory curriculum?

Chapter 5 addressed both my interrogative and my reflective questions, respectively:

- How can an integrated pedagogy for the teaching of intervals and chords according to the Royal Conservatory's (2016e) intermediate theory curriculum be implemented?
- How can the implementation of an integrated pedagogy for the teaching of intervals and chords according to the Royal Conservatory's (2016e) intermediate theory curriculum be improved by the participants in my research study?

At the empirical stage of my inquiry, I invited my teacher-colleagues to review the LGs, to use them, and to provide feedback. In the same way that my individual thinking about music theory pedagogy was enhanced/enriched by the communal literature, my *doing* of music theory pedagogy was enhanced/enriched by the participants. The introductory focus group discussions considered the potential usefulness of the LGs as instructional products, while the concluding focus group discussions considered the effectiveness of their pedagogical processes, despite the lesser amount of trial data. The participants' responses to the LGs were mostly positive and supportive. Explicitly, they articulated overall acceptance but implicitly, they exhibited signs of hesitance. Chapter 6 is directed toward their reluctance/resistance.

In light of these blurred findings/knowings, chapter 6 is also tasked with unravelling my summative question:

- How can the harmony component of the Royal Conservatory's (2016e) advanced theory curriculum be enhanced by an integrated artistic/scientific pedagogy at the intermediate level?

Although I imagined the summative stage of my inquiry as a direct interaction with the participants, it was in actuality, an indirect interaction. Rather than the participants themselves, I interacted with the data they provided. But unlike the previous chapter, which presented an *analysis* of the data collected from our focus group discussions, chapter 6 involves a *synthesis*. Instead of analyzing the data's component parts, I synthesized them into a coherent whole. From this synthesis, I extracted meaningful insights that will improve the usability of my LGs and strengthen the integrated pedagogical product/process I have proposed for the teaching of music theory. The chapter concludes with further recommendations for an art/science integration in the wider field of music theory pedagogy.

Summative Interactions with the Data

The organization of chapter 6 is inspired by Eisner's (1991) concept of "educational criticism" which includes four dimensions: description, making vivid the experience; interpretation, accounting of/for the experience with theory; evaluation, appraising the merit of the experience; and generalization, deriving a thematic from the experience. Eisner's four dimensions bear a striking resemblance to the four stages of KM's instructional process: preparation through hearing and singing, making vivid the experience of music; conscious awareness through deriving, accounting of/for the experience with music theory; reinforcement

through writing, appraising the merit of the musical experience with theoretical representation; and assessment through reading and creating, deriving a representative thematic from the musical/theoretical experience. Although Eisner's educational criticism is rooted in the arts, my reading of his evaluative process, superimposed with KM's instructional process, stretches beyond its original intent.

For Eisner (1991), educational criticism is dependent upon the awareness or consciousness of a phenomena he terms "educational connoisseurship." He explains their functional interdependency:

The word *connoisseurship* comes from the Latin *cognoscere*, to know. In the visual arts, to know depends upon the ability to see, not merely to look. Criticism refers to the process of enabling others to see the qualities that a work of art possesses. Effective criticism functions as a midwife to perception. It helps it come into being, then later refines it and helps it become more acute. (p. 6, original emphasis)

Serving as an artistic frame of reference, Eisner's concept of criticism is aimed at the re-education of perception (Dewey, 1934), but it relies on connoisseurship for its subject matter. "[C]onnoisseurship is the art of appreciation, [while] criticism is the art of disclosure" (Eisner, 1976, p. 141). One is private, the other, public. Critics strive to articulate the ineffable qualities of an artwork in a language that renders them vivid. Illuminating these qualities with the tools of metaphor and analogy, suggestion and implication, critics enable us to see through the knowing eyes of connoisseurs – or to hear through their ears. In the context of my inquiry, I have assumed the role of critic. As such, I rely on the connoisseurship of my participants for direction and guidance.

Description: Making Vivid the Experience

Singing: "I can't get kids to sing." The first critical task, making vivid the experience of music, compels me to re-address my singing theme. Siegesmund and Cahnmann-Taylor (2008), in their determination to expand curricular understanding through the scholARTristry of ABER, insist that "education should capture the fullness of experience" (p. 244). It follows that music education should capture the fullness of a musical experience with singing – one of the most universally accessible and personally meaningful expressions of music. But for many of my participants, the "singing was a little bit of an issue" (KS-2K). And it was an issue that surfaced

in all the concluding focus group discussions. As an illustrative example, the host participant in Kanata expressed frustration with one of her students:

ABs: I snapped at a [level] 10 student the other day. She called like a major 7th a minor 2nd or something, like she flipped it in her head. And I said, “Okay, sing the bottom note.” “I don’t sing.” I said, “Yes you do, sing.” And it was totally within her range, and she made this most beautiful sound. I’m like, “Yeah, you sing. I’m going to sing with you, and now we’re going to sing all the way up. You’re 14 years old. This is your [level] 10 exam. Honey, sing an interval. It’s just me in the room.” And she did, and she had a lovely voice! Like, “Why are you so afraid of your own voice?”

KS: Mm-hmm.

LLP: Yeah, and what’s created that culture?

ABs: They don’t sing in school. (2K)

The lack of singing in school music programs is certainly a contributing factor, but it is not the only factor. Somewhat defensive about her teaching practice, a Kanata group participant who described herself as “one of *those*” teachers (MI-2K, participant’s emphasis), meaning that she teaches exclusively for exam readiness, launched a lengthy conversation about singing with a sobering question:

MI: So, why would I teach *solfège* to somebody who doesn’t even need to know it for their [level] 7 and 8 theory? They’re in it for their high school credits, that’s it. So...

LLP: Right.

MI: It’s great, and like, “Oh, the being able to sing, and integrate it in, and oh, the internalize this and that.” But like, they just want their high school credits, and...

ABs: And I can’t get kids to sing.

KS: No.

ABs: Really. I snapped [at] somebody ... the other day because she wouldn’t sing. And I’m like, “You must!”

KS: It’s so hard to get them to sing. So hard.

ABs: Do you have any luck getting your kids to sing?

DM: Mm-hmm.

ABs: So, what do you do?

DM: I’m just a really bad singer. I’m like... Because I go like this...

I’m like, “Sing like: *da ta-da!*” And they’re, “Okay! Like, stop!”

KS: “I’ll sing if you will just... Stop!”

DM: Yeah. And if you’re goofy with them, then they’ll sing. Because they’re like, “Oh, it’s not serious.” (2K)

The conversation continued well beyond this excerpt, producing several pages of typewritten text from which I gathered a list of probable causes – and their negative outcomes – concerning students’ reluctance to sing:

- lack of prior experience; lack of confidence
- lack of a reliable model; fear of failure
- lack of a realistic model; fear of ridicule
- lack of necessity; ambivalence

As I summarized the group’s stance on singing, I noticed the absence of its opening voice in the continuing dialogue. We did not engage this participant’s dissenting viewpoint. *I* did not make space for a viewpoint that opposed mine. But she is my “grassroots” participant. What if her opinion is representative of the music teacher population as a whole?

I much prefer the comments of the Orleans group participants, particularly the one who announced, “I like the amount of singing [the] students have to do. If I can figure out how to get my students to do that some more...” (AC-2O). Even her colleague’s response: “Yes, that’s quite new. Yeah, get them to sing it. Good luck with that! That’s hard” (ABn-2O). I am not discouraged because I *know* these participants understand the pedagogical value of singing, despite repeated allegations of “hardness.” This is true of all my participants – except the dissenting voice. They recognize their students’ “nutritional” need for singing, like they would a musical multivitamin, and they accept their educational responsibility to provide it. I am not saying that they will instantly abandon their current teaching practices to take up the singing banner and thereafter march to a different drummer, so to speak. But they will think about singing. It will have entered their conscious awareness and it will likely, gradually, seep into their teaching.

Or it will become more prominent in the teaching of participants who already include singing as a regular activity. An Orleans group participant with whom I had a private interview, after she was unable to attend the second focus group discussion, resolved to do just that:

PG: Oh, what do you do...? This is a singing teacher asking you this question! But I think it was back on... Yeah, and you said, “Write the *solfa* abbreviations and then sing your melody.” Pfft, fat chance of that happening! I thought, “Oh my goodness, you know. They can recognize a perfect 4th. They can see that it’s a perfect 4th. Can they sing a perfect 4th? Absolutely not.” So I thought, “Am I slipping up here somewhere?” And should... I’m wondering, because I know on the exam, ... you get the choice.⁹⁰ And I thought, “I think I’m going to start having them do both,” rather than just identifying. “Okay, that’s a perfect 4th. Okay, here’s a note, sing me a perfect 4th.” So, that was...

LLP: Yup. Totally different skill set.

PG: Yes, yes. And I’ve got one little girl that’s... She’s in [level] 2 ... piano, and oh my gosh, she can... For her to find, to match a pitch, is almost impossible. But yet, she’s got a very good ear and can identify. But if I have her try to match my pitch it’s like ***growls*** She’s down in the basement, you know. She has a lower voice but that’s a challenge. That’s a challenge! So, maybe there should be some more of that kind. If you would ever do something for the lower [levels] too, is to start getting them to sing those intervals. Because I know if they can sing it, they can play it.

LLP: Yup. Yeah, absolutely.

PG: And they can recognize it. (2O)

The premise behind KM as a singing method is that vocalization connects the representation and the actualization of music. Everyone has a voice. The act of singing should be universal. But the obstacles that deter singing do not make it universally appealing. Sometimes even its advantages cannot persuade dissenting voices.

My Kanata group participant was not persuaded. Although she withdrew from the conversation, it is unlikely that she withdrew her question or the judgement it implies. She is an outlier. At the time, I assumed that she did not understand the merits of singing. But she is a certified MYC teacher – of course she understands. Maybe she associates singing with younger children and not the older school-age children who populate her piano studio. No. I cannot blame her for her reluctance. Singing is the most significant aspect of the LGs with which she struggled. A few days before our first focus group discussion, which my participant was unable to attend, she enthusiastically wrote in an e-mail:

⁹⁰ To satisfy a portion of the musicianship requirements for RCM’s (2015c) piano examinations, students, beginning at level 1, are asked to identify level-specific intervals played once by the examiner, or they may choose to sing/hum intervals from a single note, also played by the examiner.

I have worked through all 4 of your Listening Guides:) They are absolutely wonderful and map out the in-depth information of the 4 pieces in a very logical, fun, and easy-to-understand way. I love the specific recordings you listed ... too:) After working through all 4 [LGs], I really do feel like I know the 4 musical works a million times better than before!!! (M. Iwaskow, e-mail response, March 20, 2017)

With this statement of general acceptance, I can put the singing issue into perspective.

According to Siegesmund and Cahnmann-Taylor (2008), arts-based researchers “often look explicitly *for* outliers” in order to disrupt the master narrative (p. 238, original emphasis). They also seek change “from the bottom-up through grassroots circles of conversation” (p. 236). My inquiry, as a whole, is intended to disrupt the master narrative in music theory pedagogy, but I did not expect one of my participants to disrupt my disruption. After failing to lay blame elsewhere – on the participant – my first impulse was to somehow rectify the situation. Many participants had suggested CLGs that would clarify, describe, explain, and ultimately justify my pedagogical choices. However, disruptions give us pause to consider alternatives. ABR is not in the business of solving problems. It is meant to expand human understanding in imaginative ways.

My utilization of singing in the LGs, particularly singing by means of solmization, is meant to expand the student’s understanding of both music and music theory. It is not foolproof – “Yeah, cause that’s two things: you’re trying to get ... yourself organized with the pitch, and you’re trying to figure out what the notes are” (ABn-2O) – but it has proven useful: “Oh, I love *solfa*. I love the movable-*do* because it inflects for chromatic notes and it just... It’s also ... the first thing I learned, and that probably has something to do with it, but it covers so many issues or contingencies” (AC-2O). However, for teachers who have not been previously exposed to pitch syllabification, or for those with limited exposure, the nuances of it may seem overwhelmingly complicated. And for my outlier participant, it must have seemed like just one more element to cram into an already overcrowded lesson – and an extra-curricular element at that. Realistically, why would she risk disrupting the *status quo*?

One of the Toronto group participants may have an answer for her:

JR: I think [it's an] awakening. And then you can introduce these concepts. It doesn't matter if it's in the syllabus, ... teacher[s] can ignore it if they want. I mean, I think the idea, when you're marketing this to teachers, is [that] this is the template. It's a way of doing it, but it's also encouraging people (teachers) to embrace what works. So, if tonic *solfa* works, great, if numbers work, great. Maybe even... Well, in a workshop you can talk about that – maybe not have different confusing systems – but I think introducing it at the beginning. And if that is the way you're going, then I don't think it has to conform to exactly what's in the [syllabus]. I think the payout is really good when you introduce this. So, I have no problem with tonic *solfa*. I think it's great. Ideally, if it's introduced earlier, right from the beginning so that they're getting that, I think that'd be ideal. (2T)

By awakening knowledge of this instructional tool in my participant, an opportunity arises for her to awaken the same knowledge in her students. But it is not my place to force the issue. I am reminded of an old proverb: *you can lead a horse to water, but you can't make it drink*.⁹¹ Consequently, I will tuck away for safe-keeping her concern about singing. Just as I imagine the other participants' awareness of singing will have an effect on their teaching, my awareness of the outlier participant's reluctance/resistance will have an effect on my future pedagogical writing. If indeed her opinion represents that of the wider teaching community, I will need to revisit the issue of singing more substantively. For now, I hope the LGs will encourage music theory teachers to consider singing with their students.

Interpretation: Accounting of/for the Experience with Theory

Critical Thinking: “To get inside the music.” In chapter 5, I suggested that Eisner's interpretative approach to criticism may be pedagogically repurposed for the integrated teaching of music theory. This application provides students with the analytical tools necessary for seeing and describing the music they encounter. It also provides them with a chance to hone the skills of connoisseurship and critical thinking. The act of interpretation ranges from technical explanation on one end of the spectrum to stylistic representation on the other. One extreme implies the objectivity of science, while the other implies the subjectivity of art. Either way, interpretation is concentrated on the derivation of meaning. But not one, single, definitive meaning – a multiplicity of meanings.

⁹¹ This proverb appeared in a 1546 collection titled *The Proverbs of John Heywood* (c.1497-c.1580): *A man may well bring a horse to the water, But he cannot make him drinke he will* (Sharman, 1874).

In Leavy's (2015) words:

One of the unique strengths of ABR practices is that they allow for *multiple meanings* to emerge (as opposed to authoritative claims that one might find in quantitative research). In this regard, arts-based researchers are after truths not truth (Bochner & Riggs, 2014). By producing a multiplicity of meanings, ABR has the potential to promote deep engagement, critical thinking, and reflection, all of which contributes to the ultimate impact and thus usefulness of the work. Therefore, *ambiguity* can be seen as a strength of ABR. (pp. 276-277, original emphasis)

Leavy goes on to warn that there is “always a balance to strike between opening up a multiplicity of meanings and maintaining responsibility for the range of meanings that could emerge” (p. 277). This balance, or lack thereof, could affect the work's reception. Consequently, it is my responsibility to present a balanced interpretation of the data.

In my music theory pedagogy context, I am balancing the research conventions of two communities of scholarship: music theory and music education. In the specific context of Eisner's interpretive dimension, I am caught between these communities because his reference to theory is not consistent with mine. He is accounting of/for the experience with *educational* theory, while I am primarily concerned with *musical* theory. However, the required theoretical compromise places my discussion squarely in the domain of music theory pedagogy. As a master's student in music theory, I explored the pedagogical congruencies between Kodály's methodology and post-secondary tonal harmony. How *should* conceptual knowledge about harmony be taught? I relied on the publications of Rogers (2004), connecting thinking and listening with musical analysis, and White (2002), asserting that “genuine understanding of musical concepts cannot be acquired without the aural and even tactile experience of actual music” (p. 147) – quoted earlier in chapter 2. Both authors are strong proponents of experiential learning.

As a doctoral student in music education, I explored the intricacies of my question from an educational vantage point. In so doing, I developed an awareness that I tend to privilege scientific logic over artistic expression in my teaching. Therefore, my approach to music theory instruction is essentially backward. This self-scrutiny of my professional protocols, using knowledge derived from practice and practice informed by knowledge, roused new questions. How can I incorporate musical literature in my teaching process? How can I encourage my

students to derive musical concepts for themselves? How can I provide my students with rich concrete experiences that facilitate a natural and sequential progression toward more complex thinking? The literature in music education offered some direction: Yarbrough (2003), contrasting conceptual knowledge and perceptual knowledge; Andrews (1990), reconceptualizing the inductive process with discovery learning; and Jorgensen (2005), encouraging the dynamic functionality of student/teacher interactions; to name just a few. But it is still Rogers and White who seem best equipped to navigate the indeterminacy between Eisner's educational vision of theory and my musical vision. Their tool of navigation is analysis.

Interpretation, whether educational or musical, requires the critical thinking skills of analysis. So too are analytical skills imperative for the experiential learning of musical/theoretical concepts. Their collaborative association, in White's (2002) opinion, is multi-directional: "One certainly applies theoretical concepts to the analysis of music, but one also learns theoretical concepts through the analytical process" (p. 137). This collaboration is a fundamental component of the LGs. They are designed to foster active listening engagements by enabling students "to get inside the music" (ABn-2O). But getting inside requires listening and thinking (Rogers, 2004), perception and conception (Yarbrough, 2003) – "actually thinking about what [the] piece means" (KS-2K). It requires the integrated interpretation of music's subjective elements as well as the objective elements of key, tempo, meter, and so on.

An art/science music/theory integration for the teaching of music theory has been clearly endorsed by my participants: "I think you're really onto something" (CM-2T). But the pedagogical *how* of this integration is less clear. Recognizing the backwardness or deductiveness of my own teaching, especially in relation to KM, I attempted to re-orient myself with the LGs. I adopted an inductive form of guided discovery (Andrews, 1990), and with Choksy's (1999b) staunch assurance as my rationalization – "There is no aspect of musical learning that cannot be uncovered through a systematic study of masterworks," (p. 77) – I placed repertoire selected from RCM's (2016e) intermediate theory curriculum at the center of my pedagogical approach. But this is not the usual procedure.

As a postlude to the reflective questions I circulated after the introductory focus group discussions, I posted the following paragraph in the shared Google Docs files (see **Appendix 3.7**):

Defending Kodály's pedagogical approach, Choksy quotes Dobszay (1992): "I have become increasingly convinced that the direction of music teaching can best be determined by the inner logic of music itself" (p. 10). Simply stated, the music must come first. It must be elevated from its secondary function (as illustrative example) to become the primary focus for teaching. Do you agree with Choksy's belief that much music teaching is backward? Why or why not? How do you suggest we preserve the *music* in our teaching of music theory?

A Kanata group participant spoke very eloquently on this topic, reading from her thoughtfully prepared response during our concluding focus group discussion:

ABs: And then, yeah, the postlude question. The belief that music teaching is essentially backwards because we're making a definition and then trying to find the examples. So, the question is, "How do you suggest we preserve the music in our teaching of music theory?" So, we've discussed a lot of this, but I think there are reasons that music theory teaching has gone the direction that it has. I was teaching somebody history last night, and I made a correlation. Mark Evan Bonds, *The History of Western Music*. Do you know that big book? We [used] it in university. Bonds [2006] states that, "Renaissance theorists and composers conceived of harmony as a by-product of counterpoint – that is, as a by-product of the relationship among the given voices of a work." So, "For music written in the [eighteenth century], however, [such an] analysis [would be] entirely appropriate." You know, the Palestrina counterpoint. "It was in the seventeenth century that musicians began to think of harmony more and more in terms of chordal progressions" [p. 217]. So I wrote, in other words, although the Renaissance working of counterpoint, based on the relationship (consonant or dissonant) between two notes, is perhaps an organic, natural way of creating harmonic structures, that method of analyzing, and perhaps even [of] composing, gave way to a more theoretical approach, worked from a harmonic progression and then [to] specify the notes – which is how I would teach counterpoint. Perhaps this shift occurred, not just because the music was moving from modes to the rigid hierarchy of major-minor tonality, but because it was more foolproof – foulproof? I wrote foul, but I think it's foolproof – to set out a framework of chordal progressions and patterns, and then [to] fill in the details. Likewise, returning to the question. Is the current pedagogy of teaching music essentially backwards? Theoretical concepts first, exemplification second. I feel like backwards is an inaccurate description. Perhaps simplistic is the better description. For music teachers with limited class time, it is far simpler, for example, to teach the basic concept of dissonance and consonance, maybe even using a major scale to do it – but that's not music, it's just a scale – and then have the students listen to real music and identify... So, it's easier to just tell them what it is.

LLP: Right.

ABs: ... than to have the students listen to real music and then identify the moments of tension versus rest – not even using those terms. So, is the teaching of theoretical concepts *followed* by musical exemplification a backwards approach? Perhaps. And only by acknowledging the lure of its practicality can music teachers embrace, even partially, a more organic approach of experiencing the concept before naming it. (2K, participant's emphasis)

One of the Orleans group participants, in our first focus group discussion, used the word *organic* to label this experiential approach. Like the participant quoted above, she was also implying qualities of inevitability or instinctiveness. These qualities would easily apply to the application of such a process, but the process itself is surely not an inevitable or instinctive choice for the majority of music theory teachers. Even if they were swayed by the organic nature of its pedagogical approach, they would undoubtedly be apprehensive about the fluidity of its open-endedness – along with the realization that “going with the flow” takes time. Perhaps too much time. How do teachers invest this precious commodity wisely? How do they balance the pressures of exam preparation with the musical well-being of their students?

According to KM practitioner László Dobszay (1992):

[The teacher] demonstrates, sings for the class, leads the common performance of music and, parallel with this, always displays what is being done in written form. If they deal with notation using the “deciphering” method as well, the [students] will be able to identify more and more acoustic and visual components with gradually increasing precision. This may happen without threatening to destroy the inherent logic of music through stumbling across the difficulties of music reading. (pp. 75-76)

Of course, the classroom setting of Dobszay's elementary-level music instruction does not conform with the often individualized teaching of music theory, but the centrality of music in his approach is certainly applicable. He references the deciphering (decoding/decrypting) of music notation, which indicates his affinity for a guided discovery approach to learning, as well as the gradual accumulations of musical/theoretical knowledge that suggest Bruner's (1963) spiral curriculum – all facilitated by the critical thinking of analysis.

For White (2002), teaching music theory in a college setting, analysis is the central activity. Not only does it provide an opportunity for his students to learn varied musical works, but it also illustrates for them that “those things ferreted out ... are in fact living musical phenomena” (p.

128). Hearing/listening is crucial. He begins with an aural analysis of the work, recommending that only *after* it has been experienced, the score should be opened. Music first, theory second. Exemplifying this process – the “manner in which concepts or theories of music are evolved and elucidated” (p. 135) – White provides a sample classroom discussion, reproduced in **Appendix 6.1**. The topic of discussion is the exposition of J. S. Bach’s Fugue in D-sharp Minor from *The Well-Tempered Clavier* (volume 1), illustrated in **Appendix 6.2**.

There are several pedagogical details to note:

- the teacher’s lines are almost exclusively questions
- the concept of *codetta* evolves, it is not formally announced
- the term is introduced after the concept is understood

Another detail to note is White’s (2002) inclusion of repertoire beyond the confines of the common-practice period, specifically a *Canzonet* by Elizabethan composer Thomas Morley (c.1557-1602).⁹² In the description following his sample discussion, White stretches the timeline in a more contemporary direction as well, suggesting the first movement of *Music for Strings, Percussion, and Celesta* by Béla Bartók (1881-1945).

The pedagogical principles that inform White’s (2002) classroom discussion are remarkably similar to those demonstrated by Choksy (1999b) in her *Listening Strategies* – the ones that inspired my LGs. In the course of White’s discussion, he incorporates the opening measures of Bach’s “Little” Fugue in G Minor for the purpose of comparison. This organ work is featured in a series of listening experiences that Choksy (1981) often presented in her undergraduate music education courses. More than 45 years later, I can still sing the subject of this fugue in *solfa*, from memory. Granted, Choksy’s *Listening Strategies* are designed for upper-elementary students, not the college-level students in White’s example. While Choksy’s analysis may be somewhat simplified, critical thinking skills are emphasized with equal tenacity, and the musical work remains the center of attention.

However, the problem of implementation in my RCM context has not been properly addressed. How do I convince my participants, along with music theory teachers in the wider

⁹² Derived from the Italian *canzonetta* (little song), the English canzonet is a sixteenth-century vocal genre in a simple, mostly homophonic texture (Burkholder, Grout, & Palisca, 2014). Morley published 20 canzonets for three voices in 1593, with 24 in a 2nd edition (1606); 12 canzonets for two voices in 1595; and 21 for five or six voices in 1597. Unfortunately, White (2002) does not specify which of Morley’s canzonets he included in his sample classroom discussion, although it must, of necessity, be polyphonic.

educational community, to embrace an experiential teaching practice? The pedagogical merits of this practice have been well-established (Hoag, 2020; Rogers, 2020), but the issue of time consumption has been side-stepped (Heap, 2020). The Kanata group participant whose testimony I excerpted above assumes that traditional methods of teaching music theory – “just tell them what it is” (ABs-2K) – are “simpler” and therefore, less time consuming. But simpler for whom? Perhaps it is necessary to look beyond the immediacy of the moment, with an eye toward the future. An investment in students’ deeper understanding *now* will invariably save valuable time later. Earlier in the discussion, this same participant, asking for a glossary of terms and concepts that were covered in previous levels, inadvertently undermined her own argument for simplification:

ABs: For example, [student’s name], in level 7, really couldn’t remember the basic components of sonata form, even though she had only finished her level 6 theory two months previous. So, I mean, I wouldn’t include it right on the page, right? Because you’re trying to... You know. But I was like, “We talk about this all the time.” She drew a blank. I mean, if there was a glossary, it’s one step away, it would force her to look it up, at least. Because she’s like, “I don’t even think I have my [level] 6 theory book.” And I’m like, “We finished this two months ago. Did you burn it?” (2K)

If my participant’s student, at an earlier level, had experienced sonata form in a meaningful way – had musically interacted with an example from the repertoire and analyzed its structural components – she may have remembered them. But without the active, critical thinking skills of analysis, terms like *exposition*, *development*, and *recapitulation* are merely words that appeared somewhere in a previous theory book. And if a glossary is present, there is absolutely no incentive to recall musical terms since there is always the option of looking up whatever is required. This process may be simpler, but what has the student learned, other than where to look if she needs assistance? I want my students to take an active role in their musical/theoretical learning. I want the structural components of sonata form (exposition, development, and recapitulation) to be words with real musical meaning – words that have entered the mainstream of their vocabulary because they are used regularly. This kind of experiential immersion enables my students’ involvement in the educational process, fostering both their intellectual development and their emotional fulfillment – for knowledge breeds success.

Evaluation: Appraising the Merit of the Experience

Listening: “Awakening musical literacy.” Although my participants have approved the LGs in *theory*, whether they approve of them enough to put them into *practice* is another matter altogether. While the LGs’ pedagogical approach is the focus of the preceding interpretation section, which considers the educational theory that supports their inherent musical theory, the LGs’ implementation is the focus of the current evaluation section. Since the third stage of KM’s instructional process involves reinforcement through writing, I have fitted Eisner’s evaluative dimension with the garb of music theory: appraising the merit of the musical experience with theoretical representation. This statement may seem to imply a *uni*-directional process – music through theory – but I am adopting White’s (2002) *multi*-directional process so as to reverse the implication, using analysis to appraise theory through music.

Evaluation involves making a judgement of value or an assessment of quality. Aligned with the notion of reinforcement, which involves strengthening a belief or a pattern of behaviour, the process of evaluation that I am utilizing appraises the quality/value of the pedagogical beliefs/behaviours demonstrated in the LGs. To this end, I am interested in the evaluations of my participants as educational connoisseurs.

Intending to reinforce theoretical knowledge through listening activities, I wrote the LGs as integrated instructional tools. Modelled on Choksy’s (1999b) Listening Strategies, they were also inspired by a beautifully illustrated series of books titled *Get to Know Classical Masterpieces* (Schott Music). *The Magic Flute* (2007) contains simple piano arrangements by Hans-Günter Heumann (b. 1955) of select arias and choruses, including “The rage of hell it boils within my bosom,” as well as informative explanations about the composer, the opera, and the story. It is a perfect resource for a music educator, looking for material *about* Mozart’s opera. But it has very little to offer a music theorist, and even less for a music theory pedagogue – although it could. If Heumann’s arrangements can encourage students to play Mozart’s well-known melodies, why not take their curiosity a step farther and encourage them to explore Mozart’s melodies in more detail (Duker, 2020)? Why not help them get inside the music and find out what it is made of?

I explained this point of departure to my Orleans group participants. One of the group responded with the following:

ABn: Yeah, I can see that and you do draw that out. I was thinking too, it's a nice jumping off point for a teacher to see that, because you could pull that [out of] just about any piece ... the kids are playing.

LLP: Exactly.

ABn: And I think that is a really nice idea. So, "Do you see that cadence there? Is this a finished...? Is this a complete cadence?" Or "Where do you see this?" or "Where [are we] modulating to this?" So, it certainly has value that way. I find it was very interesting, although I... It's a lot of work! And again, my experience with my students, and what... I've been trying to get them to do these things. They don't seem to have... One, they don't seem to have the background. So, you need to start somewhere and I don't know where you start. And the other thing is they... It takes a while. And I think the concept for a lot of students is, "I'm learning to play. I have to know about notes. I have to know about scales." Well, not even that – I think they just want to play. But this is adding such another dimension. This is almost like four-dimensional. This is really adding so much more. So, such a depth of information, which I think is great because I love history and theory myself. But just to teach it to the kids, like I'm thinking, it's going to take a lot more time. It would take separate theory time, I think. I don't think you could do it in a lesson. It would take some separate theory time. And I don't know if they would go for that as much. (20)

The time monster rears its ugly head yet again. But the perception of time-well-spent varies from teacher to teacher, just as it does from student to student. Although she was addressing the subject of *solfege*, a Toronto group participant remarked:

CM: Well, yeah, I think that any good teacher wants to find a way to incorporate those peripheral skills because we see that ultimately, that's what's going to propel people forward. ... I always tell my students, or the parents, that if you invest in this, if you invest in all the things, you're going to have an acceleration because you really understand. (2T)

For me, the secret to this acceleration is guided listening. Most instrumental students are focused on playing, as my Orleans group participant pointed out, but if they could be encouraged to focus on the *music* they are playing – as receptors as well as producers – they may begin to acquire the skills of perceptive listeners, with applications far beyond the realm of music. Perceptive listening begets critical thinking. However, "the whole listening activity is something new, where they have to really listen and explain what they're hearing and thinking, that's the big challenge" (PG-20). It is a challenge because it is not generally practiced. Students may consider the intrinsic qualities of their repertoire in the creation of a stylistically appropriate

performance, and indeed these qualities should be considered, but the theoretical elements that structure their repertoire, which are equally worthy of attention, are frequently overlooked.

Citing my pre-prepared concluding focus group questions (see **Appendix 3.8**), I asked the Toronto group participants: “Do you feel that the inclusion of repertoire (art) in the teaching of music theory (science) encourages the development of student subjectivity? Is this important? Why or why not?” One of them responded quite emphatically:

CP: It’s definitely important. Repertoire, yeah. If I want to teach structural phrasing, I’ll take, something [from] medieval polyphony (early), where we hear the perfect consonance. It goes crazy and they do whatever they want, because they weren’t thinking in a certain way, and then they finish the phrase on a perfect consonance. [Students] get a sense of architecture ... from the medieval piece. I love using medieval stuff like that. So, repertoire, hugely important. Or if I want to discuss parallel minor: *Norwegian Wood*. You know, it’s a little more hip than perhaps something else they might do from the RCM repertoire, but you can hear it right away. Or *Tierce de Picardie*, I love [how]... The idea that the harmony has changed. They’re hearing the colours change, the [minor] to the [major], just these simple ways. So, huge. (2T)

While his choice of repertoire is even farther removed from the common-practice period literature than White’s (2002) sample classroom discussion, this participant’s resourcefulness is motivating. Sometimes the best examples can be found in musical literature where you least expect them. And stepping outside the relative safety of common-practice period boundaries inspires in his students the same spirit of adventure.

In Orleans, the discussion was tidily centered around the LGs’ repertoire, particularly Mozart’s “Queen of the Night” Aria (see **Appendix 4.1**). One participant, intrigued by the way I had introduced it, offered a compliment: “I really liked the idea that the first [activity] has all to do with rhythm, [and] the second activity has all to do with melody” (JK-2O). My idea, of course, was to engage one musical element at a time – rhythm, melody, then articulation/expression. She continued: “That was new to me, and I can certainly see the logic in it” (JK-2O). I explained that I was helping the student build Mozart’s melody, but my participant was anxious to interject: “I see your point. However, as a late bloomer, still trying to bloom – I hear the music, I begin to understand the music. I hear the music again and I understand it in a much fuller, more constructive way. But I would think it’s a very dry exercise, to analyze it before I hear it” (JK-2O).

My participant's approach to new repertoire is very similar to White's (2002). They are both perceptive listeners who possess the critical thinking skills necessary for the gradual understanding of a given musical work. More importantly, they are experienced listeners. I expect, however, that a typical level 5 student, in her/his first exposure to Mozart's aria, is not. Furthermore, the activities I created, while analytically motivated, are not meant to be analysis exercises *per se*. They are meant to be musical play – activities for the student's enjoyment or recreation that just happen to have a practical purpose. If the student has been *playing* with rhythmic patterns and melodic shapes that he/she will later identify with Mozart's aria, even the composition process will be somewhat de-mystified. Creative exercises, including melody writing, will naturally grow out of the student's uninhibited play.

Herein lies the usefulness – the inevitability or instinctiveness – of an integrated music theory pedagogy. These organic qualities cultivate both the perceptive listening of musical ears and the analytical thinking of critical minds. The benefits of integration are substantial. A Toronto group participant spoke to this point:

JR: I think this is, you know, in the synergy of it all, [what] you presented, is... Well, I haven't had a chance to explore the rudiments books in detail, but this is in keeping with, I think, the direction that, you know, the Conservatory has gone. And awakening musical literacy through experiencing the music, and... Yeah.

CP: That's a good way to put it. That's a good phrase.

JR: There you go, because in the end, ... my job, I figure, is decoding. And I have to tell them it's a language and we're decoding the language. I always tell my students in every course, I [say], you know, "Composers always talk to the smartest person in the room, not to the dullest. They know there are going to be lots of dullards. Whether it's contemporary or back in Mozart's time. It's going to wash over them like aural wallpaper." We get that. There's nothing wrong with having ... sensory enjoyment. But I say, "They always spoke in code, and it's a coded language." So, what we're trying to do is decode that language.

LLP: Right.

JR: Through building a music vocabulary and awakening, making the connection. I love David Paul, if you ever knew his harmony, or rudiments books? (2T)

FHM, supported by RCM, has experimented with the publication of integrated instructional materials several times over the years. *Sound & Symbol: The Rudiments of Music* (1982-1984) is a two-volume set of books by David Paul that offer students a "truly *musical* experience" by introducing theoretical concepts along with sight-reading and ear-training activities (1982, p. v,

original emphasis). The author's intention is for students to "learn music theory not only intellectually but also aurally (through listening) and physically (through singing and playing)" (p. v). Both volumes contain a wealth of authentic musical materials drawn from the folksong traditions of many countries as well as the masterworks of composers from pre-tonal to post-tonal eras. In his preface to volume 2, Paul explains the basic premise of his pedagogical approach:

I have found that by using the approach presented in *Sound & Symbol*, students gain a knowledge of theory they can apply directly to their practical work. This accelerates their ability to read, understand, and memorize musical scores. Students who begin the study of harmony after completing Volume [2] ... are able to harmonize a melody or bass and analyze music much more readily than if their study of rudiments had included only a survey of "the rules." (1984, p. iii)

Despite Paul's attempt to "bring the study of music theory into the realm of 'aliveness'" (1982, p. vi), his books were not utilized in sufficient numbers to keep them in print. Evidently, music theory teachers were not yet ready to accept his integrated pedagogical approach. I used them quite successfully, as did my participant.

In 2006-2007, FHM published a series of eight books (levels 1-8) titled *Sound Advice: Theory and Ear Training* by Brenda Braaten and Crystal Wiksyk – both affiliated with VCM. The teaching philosophy of these authors is simple: "never take the *sound* out of music theory instruction!" (p. 6, original emphasis). They combined written theory with aural theory, introducing new concepts in Learning Guides, then reinforcing both new and review concepts in Theory Worksheets and Ear-Training Worksheets. The purchase of each book included access (via password) to level-specific audio tracks on the *Sound Advice* website. I used this series of books too, but less successfully than Paul's. While the ear training component is quite strong, the music theory component is not. Finding that the guides/worksheets did not meet the thoroughness of my students' requirements, I went back to the non-integrated materials I had been previously using. Other teachers must have thought similarly because the series was not as popular as anticipated. FHM relinquished their copyright and in 2018, the series was released in a second edition by Sound Advice Publishing.

Given the disappointing reception of these integrated teaching materials, it is surprising that FHM agreed to another such project with the *Celebrate Theory* (2016) series – RCM's first in-house series of elementary/intermediate rudiments books. Although RCM's Academic Programs personnel, as well as the editorial staff at FHM, were remarkably open to the integrated

pedagogical approach that I proposed, the *Celebrate Theory* series was a collaborative effort. The authorial team included Braaten and Wiksyk, along with senior examiners Maria Case, Janet Lopinski, Joe Ringhofer, and James Stager.

While this show of support from RCM's leadership is encouraging, it will likely be some time before the wider music teaching community accepts the pedagogical change that has been initiated. Approximately a month after the release of *Celebrate Theory*, I was approached, at a general meeting of ORMTA's Ottawa Region Branch, by a teacher-colleague who voiced several complaints about the new series. Chief among her concerns was what she perceived as a lack of reinforcement (or practice), particularly in melody writing. I accepted her criticisms the morning of our encounter but sent her a lengthy explanatory e-mail several days later. The full text is included in **Appendix 6.3**. In her brief reply, my colleague said she would try to keep an open mind, but we have not spoken of it since. Change is difficult, as the Kanata group participants acknowledged:

ABs: Unfortunately, ... you know the teacher population is fairly unwieldy.

KS: Change? Change?

ABs: So, I mean... You know, gradual, right? It's baby steps! [We] can handle baby steps. We can't handle big changes. We don't like big changes, I'm afraid. I went into, you know, the music store across from RCM last summer.

LLP: Mm-hmm.

ABs: When I was there for Summer Summit. And I was like buying a foot-tall stack of things, and I was buying the new theory books. And the guy says, "Oh, what do you think of them?" And I'm like, "Oh, there's some changes, but oh, it's fine. It's theory, it's whatever." And he's like, "Oh, because everyone that walks through the door is like, 'What have they done?'" I'm like, okay, the music teacher population needs to chill out. They're fine. They're an improvement. There's one per grade, which is a huge step in the right direction. I find them clear. Yeah, they could have more exercises, probably, but they're limited by space. It's fine, okay! (2K)

My participant's accommodating attitude is refreshing. I realized that in my earlier e-mail rebuttal, I was seeking my ORMTA colleague's approval by *telling* her about the pedagogical advantages of the *Celebrate Theory* books. My words, however, mean very little. Like experiential learning processes, it is only in her *experiencing* the nuances of these pedagogical advantages for herself, or together with her students, that my colleague's mindset may begin to

change. This is true of any new concept. For one of the Toronto group participants, the concept was *solfège*: “the only way I came to understand it was [by] actively doing it” (JR-2T). RCM’s commitment to the *Celebrate Theory* series may eventually nudge my disgruntled colleague in the direction of an integrated music theory pedagogy out of necessity – at least until 2023 when the *Theory Syllabus* is due for its next revision. But I have every reason to believe that RCM will stay its current course toward integration.

Generalization: Deriving a Thematic from the Experience

Understanding: “They’ll think differently.” The fourth dimension of Eisner’s (1991) educational criticism facilitates the summative process of synthesis. Through this process, a general statement is inferred from the specific details of a particular subject. However, according to Siegesmund and Cahnmann-Taylor (2008), generalizability may not be a term that applies to every form of research. Eisner himself, in the work referenced above, proposes the term “consensual validation” to replace the mechanistic features of generalizability for ABR. Assuming the acceptance of subjectivity, a work of ABR attains consensual validation if “informed audiences carefully discuss and validate the work” (p. 236). My participants constitute this informed audience.

The fourth stage of KM’s instructional process – assessment – also facilitates the evaluative properties of synthesis. Through reading or creating activities, especially improvisation and composition, the student demonstrates the acquisition of knowledge by identifying or utilizing new concepts in unfamiliar contexts. This demonstration of understanding requires the portability of generalized inferences. Therefore, Eisner’s generalization may be enhanced with Kodály’s assessment: deriving a representative thematic from the musical/theoretical experience. This representative thematic is a significant component of the creative process. While generalizability may be ineffectual from an ABR perspective, it is essential from a pedagogical perspective. Consequently, in whatever terminology it is presented – generalization or consensual validation – a summary of findings, or understandings derived from the findings, is fundamental to my inquiry in music theory pedagogy. I rely on my participants, as educational connoisseurs, to assist my meaning-making process. Because they perceive intended meanings, and interpret or view those meanings in particular ways, they expand my ability to comprehend or understand the essence of my pedagogical purpose – for “in the particular resides the general” (Barone & Eisner, 2012, p. 3).

Despite their reservations about singing, experiential learning, and integration – the topics explored under the description, interpretation, and evaluation subheadings – my participants all expressed enthusiasm for the LGs:

ABs: I really hope that this [material] gets to press so that we can use [it] with students.

KS: Use it, exactly.

ABs: Somewhere over the rainbow, Lori Lynn.

LLP: Well, as I've been going through all of this, I think actually, this is my life's work. This is...

ABs: The big project.

KS: This is what everything's been leading to.

LLP: Yeah, even the experience of writing for RCM was really great. And the fact that they were able to use some of my ideas, which are a little different than mainstream, is amazing to me. But at the same time, they're not yet what I really want them to be, so I imagine that I have to write my own [material] at some point in time. But this will definitely be part of it.

ABs: And would you connect [it] with music history, or not? Just stick with...

LLP: Definitely. But not necessarily with [RCM's music] history. I ... believe that a core of well-chosen repertoire is where theory comes from, if you can make it relevant and useful and find a way to make it necessary. We need theory in order to be able to talk about our music and so, for students to understand that and to create the necessity for it, I think, is where I'm going.

ABs: Because in some ways... I mean, this makes sense. It's very marketable to tie it with RCM, but (a) RCM changes, and (b) do the pieces always fit a level 5 student? (1K)

My participant's points are well-taken, but RCM is moving. A mutually beneficial relationship would allow us to move together toward the same goal of integration.

The participants' perceptions of the LGs sometimes appeared to presuppose an underlying differentiation between academically-inspired research products and user-friendly marketable products. My hope, of course, is that they can be both. A Toronto group participant, recognizing the growing pains that are likely to accompany their transfer from one to the other, observed:

CM: Well, ... if you think back to like when we were doing piano, like list C pieces in the early grades, they were little... They were all little two-part inventions. And when [RCM] introduced in the late 90s, when they introduced Canadian content, and they said they're going to be more popular, like more recent genres... And people were, teachers were really upset ... because they weren't these traditional little Beethoven Ecossaises or... But then you look where we are now, where that's actually what drives most students.

JR: Mm-hmm. The contemporary, yeah.

CM: It's not the list A and the list B, but it's all the different styles. So, I think once you set it up, once people..., you have a whole generation go through like that, they'll think differently. (2T)

A different kind of thinking is exactly what I am attempting to elicit. But creating a usable/useful product is also a priority. The Kanata group participants suggested a correlation with the musicianship requirements for their students' practical studies – technique, ear training, and sight reading:

ABs: Not to re-invent the wheel, because you've done this and you've got to push this through, but is there something – a product for the early years, like [level] 1, a musicianship book, which would work with both the intervals they are identifying ([level] 1 maybe isn't identifying intervals), but also would attach itself to any intervallic work you're doing in level 1? Level 2: singing whatever chords they're learning in their theory and tying it to their ear training. So, it's a comprehensive musicianship thing, which works both with their practical exam, and the theory book that they're doing.

KS: I think the option is already there. I think it's just [that] teachers don't do it.

DM: Yeah.

ABs: But maybe they need a book. Maybe they need something to light the way for them.

DM: But even in the syllabus it's like, "Sing the first, sing the third, sing the fifth."

ABs: So, but I'm saying, is that a moment to attach *solfège* to it, right at the early year[s]?

DM: Oh.

LLP: Yes.

ABs: Because you have to do it there, or else it's really just imposing a naming system.

KS: Yeah, you need the *solfège* right from like the prep A books.

LLP: For sure.

ABs: And that's... The way has not been lit for most teachers at that level.

KS: Yeah, I mean, it can be... You could start by introducing the singing, the pentascales.

LLP: Right.

KS: *Do re mi fa so*. Yeah. That's the easiest way to go. (2K)

I appreciate the intensity of their interest, both in terms of integration and the inclusion of *solfège*. If ABR is intended to expand discourse through imagination (Siegesmund & Cahnmann-Taylor, 2008), then the mission is accomplished. But I think there is more to consider. Leavy (2015), in recounting the artistic demands of this work, mentioned the term “artful-science,” coined by poetic-anthropologist Ivan Brady (1991), as a combination of humanistic and scientific designs in modern ethnography (2004). In the context of music theory pedagogy, artful-science seems especially fitting. However, an integration of music theory and musicianship, while practical, does not expand the artful discourse far enough. As noted above, the “option is already there” (KS-2K). But more significantly, musicianship involves the development of peripheral musical skills, it does not involve music-as-art.

ABR practices require researchers to think like artists. I want, in the practice of an integrated music theory pedagogy, for students to think like musicians. Houlahan and Tacka promise the music-centered approach I am advocating in *From Sound to Symbol: Fundamentals of Music* (2012). They guide students to explore “rhythmic and melodic patterns through kinesthetic, aural, and visual activities” *before* learning traditional names and terms for musical phenomena (p. xvii). As the authors of *Kodály Today: A Cognitive Approach to Elementary Music Education* (2008), I expected to see aspects of KM in their theory book.⁹³ I found a truncated but easily identifiable three-step teaching process – prepare, present, practice – which they associate with three learning phases: cognitive, associative, and assimilative. In their music theory book, these phases are exhibited by the following activities:

- students listen to, memorize, sing, and analyze (by ear) short musical examples
- students demonstrate musical concepts/elements with rhythm or *solfa* syllables
- students notate musical concepts/elements on the staff

Hypothetically, Houlahan and Tacka's music theory book should deliver artful-science. In reality, it does not. Although the pedagogical approach reverses traditional symbol-to-sound

⁹³ In 2015, a second edition of Houlahan and Tacka's music education book was released as part of the *Kodály Today Handbook Series*. There are currently six additional titles in the series, beginning with *Kodály in the Kindergarten Classroom: Developing the Creative Brain in the 21st Century*. Other titles in the series target the first through fifth grade classrooms.

approaches, it introduces music fundamentals in the same unwieldy, compartmentalized presentation as other theory books, particularly those intended for post-secondary audiences. A few musical excerpts placed at the beginning of each chapter do not adequately balance the subsequent pages and pages of theoretical text. Adding is not the equivalent of integrating. Adding involves a joining of parts that increases the sum total while integrating involves a combining of parts that creates a new whole. Integrating implies a process of becoming.

How, then, is integration to be accomplished in music theory pedagogy? Not a tentative “dipping one’s toes at the water’s edge” (p. 105), to borrow from Rolling’s (2010) plea for creative commitment in ABR practices, but a balanced combination of “theoretically sophisticated understandings and artistically inspired [artworks]” (Eisner, 2008a, p. 9) – which I quoted in chapter 3. The word *organic* comes to mind, as does a spontaneous experience with one of my adult students in the fall of 2019.

He was a level 9 harmony student who asked me to coach his level 10 piano studies as well. I recall playing melodic intervals for him to aurally identify and his stumbling over a tritone (augmented 4th/diminished 5th).⁹⁴ In order to isolate the dissonant sound of this interval and to differentiate it from other intervals, I played a harmonic tritone, which involves two tendency tones, followed by its consonant resolution. This led to a brief discussion of dominant 7th chords, since the tritone is embedded in this chord and its resolving is a significant factor in the chord’s progression from dissonance to consonance. We had been recently working on dominant 7th chords in his harmony lessons. Next, he played Chopin’s Prelude in A Major, op. 28, no. 7, included in **Appendix 6.4**. He was beginning to memorize it and was wrestling with some of the chromatic inflections. In the entire 16-measure piece, Chopin uses only four chords: E⁷/E⁹, A, F#⁷, and Bm/Bm⁷. When we set out to analyze it, with the intention of adding intellect to my student’s kinesthetic memory, a clear tritone resolution became evident in mm. 6-7. Although Chopin’s pianistic voicings are not always straight-forward, we were able to locate – and contextualize – other similar resolutions.

My student experienced several “ah-ha” moments in this lesson. I did too. Since I have become a music theory specialist, I am generally not aware of the repertoire my students are playing. But the connections we made in this lesson were transformational. We created a bridge

⁹⁴ Melodic intervals involve two notes played successively – one after the other – whereas harmonic intervals involve two notes played simultaneously.

between music and theory, with a teachable moment as the catalyst. How can I recreate this experience for others?

In August 2017, I gave a “Five-Minute Lightning Talk” at RCM’s Summer Summit titled *Teaching Music Theory with, about, in, and through Music*. Meeting in Toronto for our concluding focus group discussion just a few days prior, one of the participants asked about a “selling line” or a “hook” for my pedagogical ideas and I suggested the title of my talk. He replied: “Huh! Actually, that’s good. And it seems like such an obvious concept to us, but to someone else... It’s in the actual stuff you’re playing, right? That’s the bottom line. So, whether it’s a banjo piece or a concerto...” (CP-2T). For this talk, I chose a level 5 piano piece by Bartók with which to experiment. The opening of this work, *Jest*, is included in **Appendix 6.5**. My primary objective was to show that analysis connects practical experience with theoretical understanding.

In the context of a fictional student’s piano lesson, I imagined two theory encounters that would introduce *Jest* as an unknown piece of repertoire. Each encounter comprises two components – one for the lesson and the other to take home. The first involves scales. I noticed that Bartók’s melody, in D major, is entirely diatonic and fits within the range of one octave, circling the tonic from dominant to dominant. I asked the student to:

- activity – Play the scale of D major, hands together, for two octaves.
- assignment – Write the scale of D major ascending for two octaves. Use a treble clef and a key signature. Circle the dominant note in each octave.

The second encounter involves melody writing. I extracted a motive from mm. 5-6 and the same motive from mm. 7-8. Using an identical 2-measure rhythm, I contracted mm. 9-11 to form a different motive and repeated the process for mm. 14-16. I placed these motives, reproduced in **Appendix 6.6**, on four index cards and asked the student to:

- activity – Adjust the order of the motives to create a parallel period with two four-measure phrases. Play your melody.
- assignment – Use the given motives. Write a four-measure antecedent (question) phrase that ends on an unstable scale degree. Write a parallel consequent (answer) phrase that ends on a stable scale degree.

At the end of five minutes, my fictional student was ready to play the piece. In reality, I would have spread these encounters over two lessons. But I am counting on my student to recognize that Bartók did *not* write a parallel period, nor did he use his motives to build two four-

measure phrases. This becomes a talking point. Why did he do that? How do Bartók's compositional choices reflect the meaning of the work's title? In subsequent lessons, I would direct my student to the topic of triads, and so on. My talk was quite well-received but I was unprepared for one of the questions that followed. I was asked if I approached all my students' repertoire this way. I said "Yes!" – because I would, given the opportunity – but I had no supporting evidence. And I was too startled to explain.

In March 2018, I was invited to give another Five-Minute Lightning Talk at a professional development workshop for theory examiners. This time I wanted to address the topic of intellectual honesty. I was bothered by a bulletin-board poster in the studio I was renting that stated: "minor intervals are major intervals that are lower by a [half-step]."⁹⁵ I titled my talk *Teaching Music Theory for Future Relevance* and quoted Bruner (1966) who maintains that "any subject can be taught in some intellectually honest form to any child at any stage of development" (p. 33). I resurrected my earlier presentation of Neeffe's *Allegretto in C Major* (see **Appendix 2.4; Appendix 2.5**) and spoke about preparing students for the concept of tonicization. This concept does not formally enter RCM's (2016e) theory curriculum until level 9, but it is clearly displayed in Neeffe's level 2 piano piece. Consequently, the student who has been made aware of the temporary leading-tone resolutions in Neeffe's *Allegretto* will bring a wealth of elementary/intermediate experience to her/his advanced study of harmony – if the teacher has shown an interest in their future relevance and has drawn theoretical understandings from the student's repertoire with intellectual honesty.

But the *how* of it is still an issue. I hear again the words of my Kanata group participant: "Maybe they need a book. Maybe they need something to light the way for them" (ABs-2K). They may not realize, however, that such a book could not follow the unit by unit subject-logic of every other music theory book. Even Paul (1982-1984), whose music-infused materials I admire greatly, organized his presentation in twelve chapters spread over two volumes. Therefore, to the list of my participants' reservations – singing, experiential learning, and integration – I must now add a non-compartmentalized organization. Preparing for this eventuality, I asked the Orleans group participants about reworking the LGs as teaching or making conscious materials rather

⁹⁵ This statement is true at levels 5 and 6 when intervals are measured above a given note and the upper note is lowered. But it is *not* true, starting at level 7 when intervals may also be measured below a given note and the lower note must be raised. Therefore, a more accurate statement would read: "minor intervals are major intervals made *smaller* by a half-step."

than reinforcing materials. Their response, which was especially encouraging, is quoted with the connecting data in chapter 5. I explained that writing a set of fully integrated music theory books would involve choosing a core-repertoire at each level and then working through all the requirements in RCM's (2016e) *Theory Syllabus*. I re-iterated that teaching music theory in this way is somewhat piecemeal – a little bit of this, a little bit of that – and it does not tell the whole story of intervals, for instance, in one chapter. It is not packaged in neatly organized units. I queried this non-compartmentalized organization:

LLP: So, if I do this thing, it will not be neatly packaged. It will come in a much...

AC: Much more organic [package].

ABn: Yeah.

JK: Can you do it though, to substantiate all the present theory requirements at each grade level?

LLP: I could, if I had... I'd have to choose my [repertoire] extremely carefully. (10)

I anticipate that this non-standard packaging will be the most challenging obstacle for teachers. If truth be told, it has been the biggest hurdle for me, in all the years I have contemplated this project. I have searched for *fully* integrated instructional materials with which to teach music theory but have found none. As a result, I will need to create them myself – for I am convinced that a music-logic organization, rather than the traditional subject-logic, is the next step for an integrated music theory pedagogy.

The Take-Away

The moment of truth is upon me – the grand “ah-ha” moment that brings together all the disparate elements of my inquiry. It arrived in a metaphorical bolt of lightning on January 21, 2020, toward the end of my winter writing retreat. As the ultimate synthesis of music and theory, it reconciles the lingering dissonances that cloud my art/science integration. Principal among these “musical tensions” is my attempt to fuse the intuitively unfolding practices of ABR with the highly sequential instructional procedures of KM. But as I mentioned in chapter 2, music embodies two knowledge traditions. It is understood both objectively as a positivist product and subjectively as an interpretive process (Aróstegui, 2003) – both a score and a performative depiction of the score.

Citing German philosopher Immanuel Kant (1724-1804), Lewis Rowell (1983) distinguishes between musical objects/events as they are (*noumena*) and as they appear (*phenomena*), or “things-in-themselves” and “things-as-perceived” (p. 141). The former may be defined with an objective accounting of “essential features and necessary conditions” that remain “independent of all perception” (p. 141). The latter involves the subjective activities of interpreting and assigning meaning, or “fusing certain precepts while detaching others” (p. 141). Although it is a substantial simplification of a complex matter, music-as-object (a score) may be loosely equated with its *science* and music-as-event (a performance), with its *art*.

In the end, one cannot exist without the other since music itself is an integration of art and science. Its composition stems from an act of creativity, but this creative act is tempered with the conventions of structure, of foreground and background. Just as coloured pigments on stretched canvas form a landscape by means of the artist’s brush strokes, so too a musical whole is fashioned from the elements of music (pitch and rhythm) by the composer’s technical facility. Without a recognizable structure, music lacks meaning or a “connection between the intrinsic and the extrinsic” (Rowell, 1983, p. 145).

In the context of my inquiry, the musical interdependency of art and science is manifest in my methodological fusion of ABR and KM. While I would hesitate to describe KM as a scientific approach, the logical organization of its instructional process is inconsistent with the fluid malleability of ABR. Nevertheless, I have blended the essential features of both, creating a messy integration of science and art, product and process. In terms of artistic representation, my inquiry is divided in two: the first part comprises the LGs, or my creative product; and the second part comprises the narrative, or my creative process. Consequently, my rendering of an integrated music theory pedagogy involves an experience of art (ABR) filtered through the science of systematically sequenced instruction (KM). Positioned at this art/science intersection, my guided instructional approach allows for the discovery of *music* in music theory.

As a whole, my inquiry in music theory pedagogy does not adhere to the conventions of standard research practices, even for ABR. This is not an intentional disregard for standard practice, but an acknowledgement that my square peg does not fit the proverbial round hole. I envision conventional research on a circular path, starting with a hypothesis, then experimenting, analyzing, drawing conclusions, and finally returning to the hypothesis with either supporting or refuting evidence. This process does *not* describe my inquiry. Instead, I followed a linear path

that connects my not-knowing with my knowing. I chose ABR, not because it gave me an excuse to avoid a conventional path, but because it allowed for a process of unfolding in which I could coax a state of knowing into becoming or “coming to be.” For me, the act of writing is an essential source of insight, and this insight has facilitated my becoming.

On the surface, it may seem that I am exploiting the research process for my personal gain. I cannot deny that it has served my personal interest, but this interest has been actioned on behalf of my profession. I have tasked myself with bringing integration to music theory pedagogy. True, it is a task of my own making, but I feel compelled to take up the torch, so to speak. I saw a void more than forty years ago and I see now that the void is as yet unfilled, although the scholarship in music theory pedagogy is undeniably moving in this direction. With the experience gleaned from my inquiry, I have accumulated both the requisite theoretical understanding and the artistic inspiration to pursue such a venture. And so I shall.

My inquiry, borrowing from an “artistic practice [that allows] for *emergence*” (Leavy, 2015, p. 28, original emphasis), is best described as a quest narrative. In this fictional genre, the protagonist journeys toward a specific goal, typically overcoming great obstacles. My journey originated in my personal experience and spread to the literature of relevant research communities, including ABR. From this gathering of information, I formulated a plan and a prototypical product with which to engage members of my professional community. Their feedback provided more information and my interaction with it/them widened from specific to holistic, until I reached the pinnacle. At the end of my quest, I have no answers, only a deep-seated knowing that will prompt my next steps.

The questions that guided my journey should be revisited. The formative question:

- How can the teaching of intervals and chords be integrated with repertoire from the Royal Conservatory’s (2016e) intermediate theory curriculum?

Recognizing the absence of integrated teaching materials, particularly ones that met my repertoire-based parameters, I created the LGs as exemplars.

The interrogative question:

- How can an integrated pedagogy for the teaching of intervals and chords according to the Royal Conservatory’s (2016e) intermediate theory curriculum be implemented?

The LGs were written as supplements for the music history portion of RCM’s (2016e) theory curriculum. As such, they function as tools of reinforcement, enabling students to develop a

better understanding of the chosen repertoire. They were put into effect by five of my participants who worked with their own students. I used them with two of my students as well.

The reflective question:

- How can the implementation of an integrated pedagogy for the teaching of intervals and chords according to the Royal Conservatory's (2016e) intermediate theory curriculum be improved by the participants in my research study?

I interrogated the data collected from my participants in two stages, with the first analysis stage divided between two data sets. The introductory focus group discussions tended to focus on small details – the minutia that comprise the inner workings of my pedagogical process. Six themes arose from the data, each associated with one of my perspectives: analyzing, researcher; layering, teacher/practitioner; deepening, author/pedagogue; preparing, examiner; connecting, student; and singing, artist/musician. The concluding focus group discussions tended more toward big-picture thinking which blurred the boundaries of my six themes. From this data, I extracted a narrative thread that wove them together as a composite integrating theme.

My data analysis emphasized the implementation/improvement of the LGs. I asked my participants for an appraisal of both product and process, wanting to know if my pedagogical ideas could be used effectively and whether they could be made better. I received an abundance of recommendations/suggestions that I weighed against their feasibility and the integrity of my purpose, consulting the literature when/where appropriate. All the organizing themes reflect aspects of an integrated pedagogical process for the teaching of music theory.

The summative question:

- How can the harmony component of the Royal Conservatory's (2016e) advanced theory curriculum be enhanced by an integrated artistic/scientific pedagogy at the intermediate level?

My research problem stems from my observations of widespread student struggles with RCM's advanced-level harmony examinations (see **Appendix 2.2**). The root of the problem, however, is in the students' lack of understanding or misunderstanding at elementary/intermediate levels. RCM (2016e) has taken steps to rectify the problem with the current *Theory Syllabus* – by introducing a melody writing strand at level 1, for instance. This is a welcome addition and its impact is already noticeable. Similar experiences, particularly creative experiences that include

more than a survey of the “rules” (Paul, 1984), will no doubt enhance students’ future interactions with harmony.

My data synthesis, the second stage of interrogation, is perhaps the most unconventional aspect of my inquiry because I did not circle back to the place from which I began. My quest trajectory compelled me to push forward toward my final goal. Indeed, the driving force, the momentum to reach a place of knowing was gripping/pressing. In chapter 4, I viewed the LGs through my own eyes, in much the same way that I viewed music theory pedagogy through a personal lens in the first chapter. In chapter 5, I viewed the LGs through the eyes of my participants, taking careful note of potential improvements – the most obvious being the addition of comprehensive CLGs for teachers. However, as I became more deeply immersed in the data, I became aware of a recognizable reluctance/resistance lurking just below the surface of my participants’ responses. I could not see it, but I could feel it, and my awareness grew.

Through chapters 4 and 5, my vision was focused inward, at the component parts of the LGs. In chapter 6, I adjusted my vision to look outward, at the whole of the LGs and their positioning in the professional community for which they were written. It was also necessary to confront my participants’ reservations, to bring them out of the shadows and to examine them in the light of what I have learned from the scholarly literature. Assuming the general emphasis of this chapter to be “next steps,” I had earlier set aside bits of data and pieces of literature that I thought would be relevant – just as Choksy (1999b) advises studying the harmonic minor scale when it appears in the repertoire.

I pulled out materials that seemed to lead toward the next logical step for an integrated music theory pedagogy. Some were disappointing (Braaten & Wiksyk, 2006-2007; Houlahan & Tacka, 2012), but others were reassuring (Paul, 1982-1984; White, 2002). And to the reassuring list I will add Clendinning and Marvin’s (2016) *The Musician’s Guide to Theory and Analysis*, which I reviewed, in an earlier edition, for my master’s thesis. This text comes closest to my integrated ideal for the teaching of tonal harmony but for music rudiments, it is Paul’s (1982-1984) holistic text that is most closely allied with my ideas. In conjunction with my culminating effort to find repertoire-based instructional materials, I also scrutinized my participants’ reservations – about singing, experiential learning, and integration – synthesizing them with experience and knowledge gleaned from the literature. Ultimately, I reached my moment of truth, encased in the word *non-compartmentalization*.

With this epiphany, I realized that the neatly organized packaging of musical/theoretical concepts into self-contained units (scales, intervals, triads/chords) is the one instructional ingredient that music theory pedagogues do not disturb. They debate the *order* of teaching, but they do not open the time-honoured packages. In the scope and sequence documents I prepared for RCM's *Celebrate Theory* series, I initially separated scales into major scales and minor scales, but my common-sense division was ultimately rejected. A repertoire-centered integrated pedagogy calls for a music-logic organization. This will overturn the subject-logic organization of traditional music theory teaching. Even the repertoire-centered experiments in my lightning talks were imagined in the context of a piano lesson, rather than a theory lesson. But I have arrived at the edge of a precipice. Do I go back and accept a partial integration of repertoire in the teaching of music theory? Or do I leap into the unknown, open the standard packaging of musical/theoretical concepts, and create fully integrated instructional materials?

I find myself thinking of Arnold Schoenberg (1874-1951), an Austrian-born composer and music theorist. As leader of the Second Viennese School, which included his students Alban Berg (1885-1935) and Anton Webern (1883-1945), Schoenberg abandoned the hierarchical organization of tonality to embrace what he called the “emancipation of dissonance” – leading to the inevitability of atonality or the absence of a tonal centre. But without a “tonal backbone,” atonal music lacked formal coherence (Burkholder et al., 2014, p. 816). In response, Schoenberg formulated his “method of composing with twelve tones” as a systematic compositional technique that provided the missing coherence.⁹⁶ His innovative method, however, was divisively controversial.

Schoenberg's leap into the abyss of atonality was not really a leap at all. It was a deliberate acceptance of extended techniques that represented the “next steps” for tonality. Eventually, he adopted the functional/hierarchical freedom of atonality and his twelve-tone method completed the transition. From Schoenberg's example, I have learned that some form of organization is necessary, even if it seems, in the eyes of its detractors, like organized chaos. Consequently, if I go ahead with writing a set of fully integrated music theory books – and I *will* accept the challenge – I must find a new organizational structure. There was a period of several years in

⁹⁶ Twelve-tone composition is based on an ordered row of twelve pitches that may be used both successively as melody and simultaneously as harmony. The row may appear in its original (prime) form, in inversion, retrograde, or retrograde inversion, and in any of the twelve possible transpositions of these four forms (Burkholder et al., 2014).

which Schoenberg published no music. This was his time of thinking. I, too, will need some time to think.

In the context of my inquiry, I have three regrets. The first involves the concept of consonance/dissonance. At the outset, I was interested in providing experiences for my students that required artistic or musical discernments, thinking I could use consonance and dissonance to foster aesthetic judgements. Tenney's (1988) review of historic attitudes concerning acoustical and psychological preferences triggered my thinking since these preferences are roughly equivalent to scientific and artistic judgements, respectively. Although the notion of consonance/dissonance frequently surfaces in my work, it is underdeveloped as an instructional tool. Further rumination is required.

The second regret involves my participants. While I was privileged to work with a remarkable group of music theory teachers, their mix of education and experience may not adequately represent the views of an "average" teacher. While their insightfulness was extremely helpful at this trial phase of my pedagogical journey, I may not be sufficiently prepared for the resistance to come – although my outlier participant and my disgruntled ORMTA colleague have given me a small taste. Future studies may wish to expand beyond the teacher-centered focus of my data collection to explore student-centered responses to the LGs' instructional process.

The third regret involves my trial data, or the relative lack thereof. Since less than half of the participants actively utilized the LGs in their classrooms/studios, I am not well-positioned to offer conclusive evidence regarding the potential usefulness of my instructional materials. Rather, I am reminded of the "dichotomous dance" that opened my prelude: in *theory*, my participants championed the integration of art and science in music theory pedagogy but in *practice*, they did not fully endorse my integrated ideal. However, my sense is that their hesitancy stems from the newness of my pedagogical approach. Further exposure is required.

Concluding Remarks

Despite the time-honoured conventions of its teaching, music theory is frequently disconnected from the music it was intended to explain. A pedagogical reconnection is long overdue. My research mission, rooted in more than forty years of personal/professional experiences, is the building of an instructional bridge that fully integrates the art of music and the science of music theory. It is a mission – a call to action – fuelled by an unwavering, deep-seated passion. My dissertation represents a significant portion of my pedagogical journey toward

integration. It chronicles my meaning-making through dialogic interactions, for “[w]ith Socrates, we know ... that a dialogue can lead people to discover things of great depth and wisdom” (Bruner, 1966, p. 19). According to Siegesmund and Cahnmann-Taylor (2008), the outcome of this deep learning is “personal agency: autonomous individuals who have the capacity to imaginatively shape their own lives by having the courage to write their own stories” (p. 244). I hope my story inspires the deep learning of “professional agency,” with the capacity to shape an integrated future for music theory pedagogy outside my immediate circumstance.

At the heart of Kodály’s (1974) pedagogical vision was his belief that music should be taught as a basic academic subject equivalent to linguistic, mathematic, and scientific studies, resembling the “Greek ideal of education that cast music in a central role” (p. 119). Choksy’s (1999b) vision echoes Kodály’s as a passionate plea for the universality of musical literacy: “The time has come for music to take its place with the other academic disciplines as a subject worthy of serious study” (p. 190). My vision moves beyond advocacy since for me, music is ubiquitous. Although I recognize that this is not the case for many individuals, universal musical literacy is not my battle. RCM’s sizeable community already understands the significance of music education for developing human potential. My battle is for a *better* understanding. I believe that by casting music in the center of music theory pedagogy – teaching musical literacy with, about, in, and through music (Cornett & Smithrim, 2001) – the resulting integration will topple the eighteenth-century codification or “scientizing” of music theory for instruction. I also believe that by embracing a holistic music-logic approach to instruction, a fully integrated music theory pedagogy will topple the hierarchical organization of its subject matter, allowing for the “emancipation” of compartmentalization.

Instinctively/intuitively, I understand that every piece of music holds a unique set of secrets – an aural message delivered through the interpretation of a musical performance. Secrets are also coded in the visual cues/clues of a musical score. It is the role of music theory to unlock the secrets of music’s symbology and to decode the messages contained within. But it is the role of music theory pedagogy to illuminate *both* the aural and the visual mysteries of music through an art/science integration.

Postlude

The universe as we know it is a joint product of the observer and the observed.

– Pierre Teilhard de Chardin (1881-1955)

Final Thoughts

The following quotation has accompanied me through most of my dissertation writing:

The intellectual promise of art-based methods is that they allow the researcher to not only work with the symbolic tools of words and numbers, but that they expand the researcher's palette to allow attention to the relationships of qualities (Dewey, 1934) in data collection, analysis, and reporting. A quality might be the solidity or transparency of a mass, the rhythmic intensity of meter and beat, or the shape of gesture made by the body in space and time. Our awareness of qualities comes from attending to the particular. We must pay attention to note a quality. Paying attention is the habit of a disciplined mind. (Siegesmund & Cahnmann-Taylor, 2008, pp. 234-235)

Aside from the obvious reminder to “pay attention,” it encouraged me to think about relationships. My research project began with a theory/practice dichotomy that has found relevance in a long list of other such oppositions, including science and art. My approach to the art/science dichotomy began as a contest and ended in a truce. But the implementation of this truce in music theory pedagogy will be uncomfortable. Art, for so long neglected as a peripheral embellishment, has a great need to be fully present. Science, for so long the center of attention, has a great need to embrace the perceptual qualities of instinctiveness or intuitiveness.

To be clear, I am not arguing against science, I am arguing *for* art. While Brady's (1991) artful-science label could be useful in describing an art/science integration in music theory pedagogy, it implies that science is the noun and art is a decorative adjective. But what if the roles are reversed and art becomes the noun? Scienceful-art? Scienced-art? Somehow, scientific-art does not seem quite right. In the end, a label is of superficial value. Packaging or presentation should not take precedence over content – in education or in research. Indeed, an art/science “messiness” brings an indispensable melding of unique perspectives to any pursuit. Together we are stronger.

My inquiry, which is deliberately open to tacit or intuitive knowledge, embodies the integration of artistic expression and scientific analysis. Its unfolding narrative shapes its validity. Does it satisfy Barone and Eisner's (2012) criteria for relevance?

- Does the story ring true?
- Is the analysis cogent and credible?
- Is the tale coherent?
- Are the meanings generalizable?

I do not know. These questions have guided my writing, but they are not mine to answer. Will my inquiry augment the scholarly literature in music theory pedagogy? Will it impact the future direction of my subject discipline? Perhaps.

A composer cannot foresee the impact of her/his composition. Music requires intermediary interpretation by a performer. There is no direct link between the composer and her/his audience unless the composer and the performer are one and the same. As music teachers, we tend to focus on training the performer, which involves the acquisition of physical skills. Not surprisingly, the finest musicians use thinking to enhance their playing/singing. But sometimes the intermediary interpreter is a music theorist, whose training is focused on the acquisition of intellectual skills. Surely the finest theorists use playing/singing to enhance their thinking. Either way, the composer is left at the mercy of her/his interpreter.

I *do* know, however, that my study has stretched beyond conventional practices for the teaching of music theory. I have embraced the instructional potential of a holistic experience of music theory and explored its sensory promise with a music-centered approach. What might an integrated music theory pedagogy look/sound/feel like? This question will fuel the next leg of my journey. In her keynote address at the 2000 OAKE (Organization of American Kodály Educators) conference in Seattle, Washington, Choksy (2014) emphasized that she was not a Kodály teacher, she was a *music* teacher. In similar fashion, I want my music theory students to understand music – both as an art and as a science. More expansively, I want *all* music theory students to understand music as an integrated whole.

Cognizant of Elliott's (1995) words, "[d]oing implies intention" (p. 50), I feel a responsibility to take action – to take the next creative step toward a fully integrated music theory pedagogy – not only on behalf of my students, but for the benefit of my chosen profession. I am inspired by the scholars who have laid the necessary groundwork and assisted me in coming to this place at this time. I am also inspired by my participants, one of whom gave me this encouragement:

AC: It's the old thing: tell me, I'll forget; show me, I may remember; let me do it and I'll know it. I remember years ago, learning, hearing some [kind of] a study that teachers of the arts, whether visual or musical or whatever, sometimes are seen as more credible by their students because they're actually doing the things that they're teaching. They're not just... As much as I love history, they're not just talking and writing about history. Even if they don't have a performing career or an exhibit somewhere, they're physically doing what they're teaching their students to do. (20)

My quest narrative metaphorically traces a tonal trajectory (McClary, 2000) that symbolizes a musical score or the notational representation of an acoustic event. I hope that the story of my pedagogical journey – my quest for an art/science integration in music theory pedagogy – will persuade others in my profession to chart a similar course. It is time to explore the educational benefits of teaching music theory with, about, in, and through music (Cornett & Smithrim, 2001).

*A bird does not sing because it has an answer.
It sings because it has a song.*

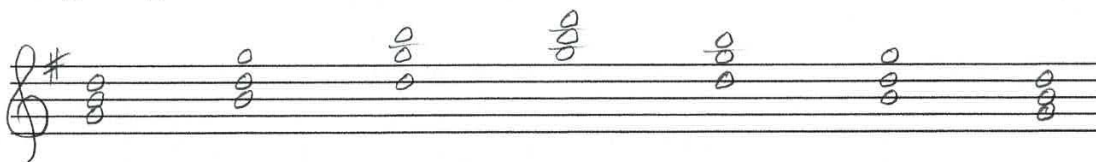
– Joan Walsh Anglund

Appendix 1.1: Sample Pages from *A Student's Recordbook, Grade 1*

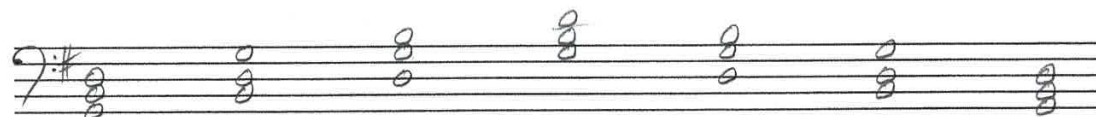
Major Triads

Major Key: C major solidRelative Minor: E minorKey Signature: F#

Fingerings:



LH	letter names	RH	LH	letter names	RH	LH	letter names	RH	LH	letter names	RH	LH	letter names	RH	LH	letter names	RH	LH	letter names	RH
1	D	5	1	G	5	1	B	5	1	D	5	1	B	5	1	G	5	1	D	5
3	B	3	3	D	2	2	G	3	3	B	3	2	G	3	3	D	2	3	B	3
5	G	1	5	B	1	5	D	1	5	G	1	5	D	1	5	B	1	5	G	1



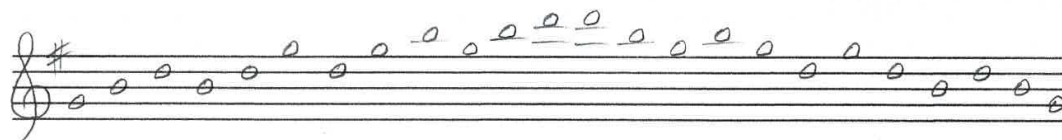
sol-fa syllables	s	d	m	s	m	d	s
	m	s	d	m	d	s	m
	d	m	s	d	s	m	d

Tip: do finger movements on a tabletop.

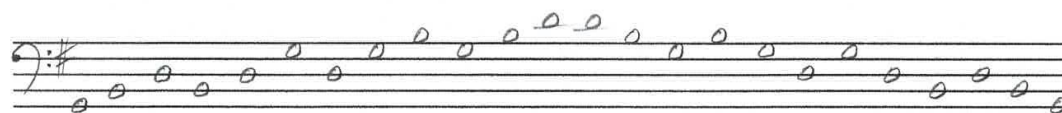
Grade 1

Major Key: C major brokenRelative Minor: E minorKey Signature: F#

Fingerings:



RH	1	3	5	1	2	5	1	3	5	1	3	5	5	3	1	5	3	1	5	2	1	5	3	1
letter names	C	D	E	F#	G	A	B	C	D	E	F#	G	A	B	C	D	E	F#	G	A	B	C	D	E
LH	5	3	1	5	3	1	5	2	1	5	3	1	1	3	5	1	2	5	1	3	5	1	3	5



sol-fa syllables	d	m	s	m	s	d	s	d	m	d	m	s	s	m	d	m	d	s	d	s	m	s	m	d

Major Triads

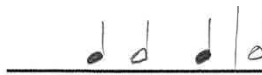
Grade 1

Appendix 1.2: Sample Pages from *A Student's Guidebook, Romantic Ideals**the music*

chapter 22

18. Complete the fixed idea as it appears in the first movement:

Allegro agitato e appassionato assai

19. What rhythmic motive opens the march? 

20. Write the descending minor scale that forms theme A:

21. Add the syncopated motive from the opening to theme B:

duple-metre
march

47

Symphonie fantastique

Symphonie fantastique

the music

chapter 22

22. Add the loud chord that cuts off the *idée fixe*:

Clar Solo

pp dolce assai e appassionato *ff* tutti

23. What does this chord represent? "the fall of the axe"

24. Add the trills and grace notes that transform the *idée fixe* into a "vulgar tune" in the final movement:

Allegro

ppp

25. What is its instrumentation? high clarinet

26. Write the *Dies irae* melody:

f

27. Add the opening motive to the "Dance of the Witches" as it was forecast earlier by the violas:

ff

Dies irae

Dance of the Witches

Appendix 2.1: Basic Harmony Requirements

Examination length: 3 hours

Co-requisite for: Grade 9 Practical Examination, Elementary Piano Pedagogy

Recommended theory pre-requisites: Advanced Rudiments, Introductory Harmony

The Basic Harmony examination tests candidates' knowledge of the requirements for Introductory Harmony plus the additional material listed below. *These elements will be tested in major and minor keys.*

Chords

Root position and all inversions

- all triads, including the cadential 6/4 chord
- dominant 7th and supertonic 7th chords
- V/V, V⁷/V, and vii^o/V
- qualities of 7th chords: major 7th, major-minor 7th (dominant 7th), minor 7th, half-diminished 7th (diminished-minor 7th), and diminished 7th. For 7th chords other than V⁷, ii⁷, and ii^{o7}, only identification of quality is required.

Chord symbols

- root/quality chord symbols
- functional chord symbols

Pedal Points

- on the tonic and dominant scale degrees

Sequences

- *do-fa-ti-mi* (descending 5ths)

Modulation

- to a traditional goal key: to V from major keys and to III or v from minor keys
- in formal analysis only: identification of modulations to all closely related keys

Non-Chord Notes

- passing notes, accented passing notes, neighbour notes, accented neighbour notes, incomplete neighbour notes, *échappées*, suspensions, anticipations, and *appoggiaturas*

Form

- binary, rounded binary, and ternary

Examination Questions

Candidates should be prepared to answer the following types of examination questions:

Melody with Added Bass Line at the Cadences

- Extend a given melodic opening to create a sixteen-measure composition with four four-measure phrases.
 - The style will be that of an 18th-century dance.
 - The composition is to be in rounded binary form with repeat signs appropriate to this form.
 - The melody will remain in the principal key; modulation is not required.
 - The four phrase endings of the melody are to be accompanied by a bass part and functional chord symbols; candidates will be required to name the type of each cadence. Two-part (melody and bass) cadences are required; stem directions are to be consistent with two-part writing.
 - The first eight measures or fewer will be given, with both the melody and the bass part at the cadences. Candidates will complete the melody and add the bass part at the cadences and will mark the phrasing for the entire composition.
 - The third phrase should demonstrate some melodic contrast and inventiveness while remaining consistent with the style of the given opening. Literal restatement, transposition, etc. are discouraged in the third phrase.
 - Candidates may also be asked to indicate the implied harmony throughout the composition using either functional chord symbols or root/quality chord symbols.

Harmonization I: Given Chord Symbols

- Harmonize in four parts (SATB) a series of given functional chord symbols.

Harmonization II: Given Melody (major keys only)

- Harmonize in four parts (SATB) a given melody with or without a given bass line.
 - The melody may be a chorale or hymn, an excerpt from a chorale or hymn, or a melody in a similar style.
 - When a text is present, candidates are to write a correct rhythmic setting of the text.

Harmonic and Structural Analysis

- For a given example:
 - Provide chord symbols (root/quality chord symbols or functional chord symbols or both).
 - Indicate pedal points for their entire duration.
 - Circle and classify non-chord notes.
- For a given simple dance movement containing modulations to closely related keys:
 - Mark the structural phrasing.
 - Identify cadences (perfect, plagal, imperfect, or deceptive) and their keys.
 - Identify the form (binary, rounded binary, or ternary) and label the sections of the form by placing letters (A, B, etc.) directly on the score.
- Answer brief questions concerning the musical elements found in a given piece or excerpt.

(RCM, 2009, pp. 22-23)

Appendix 2.3: Grade 2 Piano Requirements

Candidates at the Grade 2 level continue to explore various historical styles. Character pieces allow for exploration of pedaling, expression, and balance of tone. Scales played hands together, including the formula pattern, are introduced to help candidates achieve facility with this repertoire.

Repertoire

Candidates must prepare *three* contrasting selections: *one* from each of List A, List B, and List C. Repertoire selections must be memorized.

- *one* selection from List A: Baroque and Classical Repertoire
- *one* selection from List B: Romantic, 20th- and 21st-century Repertoire
- *one* selection from List C: Inventions

Technical Requirements

Studies

Candidates must prepare *one* selection from the *Syllabus* list of studies/etudes. Memorization is *not* required.

Technical Tests

Major keys: C, G, F, B-flat

Minor keys: A, E, D, G

- scales: C, G, F, B-flat major; A, E, D, G minor (natural, harmonic, and melodic); HS (hands separate); 2 octaves
- *staccato*: C, G, F, B-flat major; HS; 1 octave
- parallel motion: C, G major; HT (hands together); 1 octave
- contrary motion: G major; HT; 2 octaves
- formula pattern: C major; HT; 2 octaves
- chromatic: beginning on C; HS; 1 octave
- triads (root position and inversions) broken: C, G, F, B-flat major; A, E, D, G minor; HS; 1 octave
- solid (blocked): C, G, F, B-flat major; A, E, D, G minor; HS; 1 octave

Ear Tests

Clapback

Candidates will choose to either clap, tap, or sing the rhythm of a short melody after the examiner has played it *twice*.

- time signature: 2/4, 3/4
- approximate length: three to four measures

Intervals

Candidates will be asked to identify the following intervals. The examiner will play each interval *once* in broken form.

or

Candidates may choose to sing or hum the following intervals. The examiner will play the first note *once*.

- above a given note: major 3rd, perfect 5th

Playback

Candidates will be asked to play back a melody based on the first five notes of a major scale. The melody may include skips of a 3rd. The examiner will name the key, play the tonic triad *once*, and play the melody *twice*.

- beginning note: tonic or dominant
- approximate length: five notes
- keys: C, G, F major

Sight ReadingPlaying

Candidates will be asked to play a passage that is divided between the hands and lies within the compass of the staff. The melody will include whole notes, half notes, quarter notes, and eighth notes.

- time signature: 4/4
- approximate length: four measures
- keys: C, F, G major

Clapping

Candidates will be asked to clap or tap a rhythm. A steady pace and rhythmic accentuation are expected.

- time signature: 4/4
- approximate length: two measures

Theory Co-Requisites

None.

(RCM, 2008b, pp. 36-41)

Appendix 2.4: Neeffe's *Allegretto in C Major*

The musical score is for Neeffe's *Allegretto in C Major*, measures 1 through 18. It is written for piano in 2/4 time. The score is divided into three systems, each with a treble and bass staff joined by a brace. Measure numbers 9 and 17 are indicated at the start of their respective systems. Dynamics include *mf* (measures 1, 11, 17), *f* (measures 9, 13), and *mp* (measures 11, 12). The melody in the treble staff features eighth-note patterns, often beamed in pairs, with some measures containing triplets or sixteenth-note runs. The bass staff provides a simple harmonic accompaniment with half and quarter notes. The piece concludes with a double bar line at the end of measure 18.

(RCM, 2008a, p 8)

Appendix 2.5: Sample Worksheet for Neefe's *Allegretto in C Major*

Preparation

Supply the missing information in the following paragraph.

Christian Gottlob Neefe (1748-1798) was a _____ composer who wrote music mainly for the theatre. He lived and worked in _____ as a theatre musician and a court organist, but he is generally remembered as _____'s early teacher.

Conscious Awareness

Play the scale of C major.

Observe the LH (left hand) in mm. 3-4 of *Allegretto in C Major*.

Name the scale degrees in these two measures: _____ and _____.

Play the C major scale again, stopping on scale degree seven.

Describe how it sounds: _____.

The leading note has a strong tendency to move or resolve to the tonic.

Find this resolution of the leading note (B) to the tonic (C) in two other LH locations: _____ and _____.

Identify this interval as a whole tone or a half tone: _____.

A rising half tone in the LH may indicate a temporary leading note/tonic relationship.

Observe the LH in mm. 9-10 and mm. 11-12.

Name the temporary tonics: m. 10 _____ and m. 12 _____.

The presence of a temporary tonic implies the tonicization of a temporary key.

Name the tonicized keys: m. 10 _____ and m. 12 _____.

Reinforcement

Melody: Observe the melodic pattern in mm. 9-10, comparing it to mm. 11-12 and mm. 13-14. Name this melodic technique: _____.

Rhythm: Write two rhythmic motives derived from the RH (right hand) part (except m. 15): _____ and _____.

Clap these rhythms.

Harmony: Play the first phrase (mm. 1-4), substituting 2 quarter notes for each LH half note. Circle one dissonance (non-chord tone) in each measure. Label the implied harmony above the treble staff, using root/quality chord symbols.

Texture: Imagine this piece as a duet between two solo instruments. Name the instruments you imagined: _____ and _____.

Form: Name the structure of this piece: _____. Label the structure directly on the score, using the letters A and B.

Expression: Define *allegretto*: _____.

Assessment

Play the RH melody in phrase 1 without the non-chord tones, inventing a new rhythm. Play your improvised melody with the LH part. Write a new melody for the RH, using chord tones that fit the implied harmonies. Play your composition HT (hands together).



Complete the following statements about your composition:

I hear _____.

I think _____.

I wonder _____.

Preparation: German; Bonn; Beethoven

Conscious Awareness: leading note; tonic

unfinished

mm. 13-14; mm. 19-20

half tone

F; D

F major; D minor

Reinforcement (Melody): sequence

(Rhythm): 4 eighth notes; 2 quarter notes

(Harmony): m. 1, D; m. 2, E; m. 3, C; m. 4, D

C; Dm; G; C

(Form): rounded binary

m. 1, A; m. 9, B; m. 17, A

(Expression): fairly fast, a little slower than *allegro*

Appendix 3.1: Recruitment Letter

Mind the Gap: An Integration of Art and Science in Music Theory Pedagogy

Dear Theory Examiner,

This letter is a request for your assistance with a research project I am conducting in partial fulfillment of the requirements for my doctoral degree in Education at the University of Ottawa. My project, under the supervision of Dr. Richard Barwell and Dr. Roxane Prevost, explores the instructional gap between music theory and the music it is intended to explain.

The purpose of my study is to experiment with alternative practices for music theory instruction that integrate both artistic and scientific views of music. Influenced by the Kodály concept of music education, these practices incorporate repertoire selections (art) in the teaching of music theory (science). Information generated from this study may benefit other music theory teachers and their students.

As a member of the Royal Conservatory's College of Theoretical Examiners, I would like to invite you to participate in my research project. I believe that your examining experience gives you a unique understanding of music theory pedagogy. To begin my study, I will write four Listening Guides based on required works from RCM's (2016) Intermediate Theory curriculum. These Listening Guides facilitate student listening experiences with brief teaching segments. During the course of my study, I will conduct two focus group discussions of approximately two hours each: the first to initiate a critical review of my Listening Guides and the second to conclude a continuing dialogue. The participants will be encouraged to use one or more of the Listening Guides and to describe their experiences in an electronic document shared with the group. Each participant will also be invited to respond to the others' experiences. At the end of my study, their collective expertise will be woven into the story of my pedagogical journey. The publication of my dissertation will circulate the collaborative knowledge gained across a wider music theory community.

Four participants will be selected on a first-come, first-serve basis. If you are interested in participating, please contact me to discuss this study in further detail. Your participation is completely voluntary. You will receive a consent form that includes information about your right to withdraw from the study at any time.

The group sessions will be audio taped to ensure that I can accurately reflect on our discussion. The tapes will be reviewed only by me and they will be destroyed after I have transcribed and analyzed the data. Excerpts or quotations from the transcriptions will be used to support the findings of my study. These results may be published or presented at professional conferences, but your identity will not be revealed. All paper notes will be destroyed after five years and all electronic data will be stored indefinitely on a CD with no personal identifiers. Other than myself, only my supervisors will have access to these materials.

There are no known or anticipated risks to participants.

If you have any questions regarding this study or would like additional information to assist you in reaching a decision about participation, please contact me at _____ or by e-mail _____. You may also contact my supervisors, Dr. Richard Barwell (_____) or Dr. Roxane Prevost (_____). If you have any questions about your rights as a research participant, you may contact the Office of Research Ethics and Integrity at the University of Ottawa, _____ or _____.

Thank you for your consideration.

Kindest regards,

Lori Lynn Penny
PhD Candidate
Faculty of Education
University of Ottawa

Appendix 3.2: Revised Recruitment Letter

Mind the Gap: An Integration of Art and Science in Music Theory Pedagogy

Dear Music Theory Teacher,

This letter is a request for your assistance with a research project I am conducting in partial fulfillment of the requirements for my doctoral degree in Education at the University of Ottawa. My project, under the supervision of Dr. Richard Barwell and Dr. Roxane Prevost, explores the instructional gap between music theory and the music it is intended to explain.

The purpose of my study is to experiment with alternative practices for music theory instruction that integrate both artistic and scientific views of music. Influenced by the Kodály concept of music education, these practices incorporate repertoire selections (art) in the teaching of music theory (science). Information generated from this study may benefit other music theory teachers and their students.

As a member of the Ottawa Region Branch of the Ontario Registered Music Teachers' Association, I would like to invite you to participate in my research project. I believe that your teaching experience gives you a unique understanding of music theory pedagogy. To begin my study, I will write four Listening Guides based on required works from the Royal Conservatory's (2016) Intermediate Theory curriculum. These Listening Guides facilitate student listening experiences with brief teaching segments. During the course of my study, I will conduct two focus group discussions of approximately two hours each: the first to initiate a critical review of my Listening Guides and the second to conclude a continuing dialogue. The participants will be encouraged to use one or more of the Listening Guides and to describe their experiences in an electronic document shared with the group. Each participant will also be invited to respond to the others' experiences. At the end of my study, their collective expertise will be woven into the story of my pedagogical journey. The publication of my dissertation will circulate the collaborative knowledge gained across a wider music theory community.

Four participants will be selected on a first-come, first-serve basis. If you are interested in participating, please contact me to discuss this study in further detail. Your participation is completely voluntary. You will receive a consent form that includes information about your right to withdraw from the study at any time.

The group sessions will be audio taped to ensure that I can accurately reflect on our discussion. The tapes will be reviewed only by me and they will be destroyed after I have transcribed and analyzed the data. Excerpts or quotations from the transcriptions will be used to support the findings of my study. These results may be published or presented at professional conferences, but your identity will not be revealed. All paper notes will be scanned and all electronic data will be stored indefinitely on a CD with no personal identifiers. Other than myself, only my supervisors will have access to these materials.

There are no known or anticipated risks to participants.

If you have any questions regarding this study or would like additional information to assist you in reaching a decision about participation, please contact me at _____ or by e-mail _____. You may also contact my supervisors, Dr. Richard Barwell (_____) or Dr. Roxane Prevost (_____). If you have any questions about your rights as a research participant, you may contact the Office of Research Ethics and Integrity at the University of Ottawa, _____ or _____.

Thank you for your consideration.

Kindest regards,

Lori Lynn Penny
PhD Candidate
Faculty of Education
University of Ottawa

Appendix 3.3: Introductory Focus Group Questions

The second stage of my research in music theory pedagogy examines an alternative approach for teaching intervals and chords. Influenced by Choksy's adaptation of the Kodály Method, I have developed four Listening Guides that integrate both *scientific* and *artistic* views of music. Based on Levels 5 through 8 of RCM's revised theory curriculum, these Listening Guides are to be collaboratively reviewed by the participants through a moderated "conversation" that addresses my interrogative question: How can an integrated pedagogy for the teaching of intervals and chords according to the Royal Conservatory's (2016) Intermediate Theory curriculum be implemented?

Prelude

Do you help your rudiments students connect intervals and chords to their ear training? How? Do you connect their study of intervals and chords (as separate musical *parts*) to their repertoire (as models of a musical *whole*)? How? What kind(s) of repertoire do you feel are the most accessible for rudimentary analysis? Why?

Level 5: Mozart, "Queen of the Night" Aria (No. 14) from *The Magic Flute*

What musical concepts about intervals and chords are required before listening to this work with understanding? Are they adequately prepared in the Listening Guide? (explain)
What specific concepts are derived from this work? Are they unambiguously presented and clearly labeled or notated? (explain)
Are the activities in repeated listening experiences pedagogically sequenced? Is there a recognizable purpose for each experience? (give examples)
How does this work contribute to the generalization of musical concepts about intervals and chords? Is it appropriate for this level of study? Why or why not?

Level 6: Bach, Invention No. 1 in C Major, BWV 772

simile – the "Mozart" questions are intended to be suitable for each level.

Level 7: Mendelssohn, Overture to *A Midsummer Night's Dream*

simile

Level 8: Josquin des Prez, *El grillo*

simile

Postlude

Lois Choksy (1999b) writes:

The approach suggested here is very different from the ones commonly in use ... The focus is on the music, throughout. It is better to study two works a year in this kind of depth than to listen to ten works superficially, because this analytical approach makes generalizations possible. The student who has studied Mozart's Symphony No. 40 in G Minor, who knows the work thoroughly, can sing its themes, follow its forms and its harmonic progressions and key changes, can then listen with much greater understanding to all Mozart and Haydn symphonies. He or she is able to transfer the knowledge acquired and, even more importantly, the appreciation that goes with the knowledge to other works in the same style and period. (p. 79)

What is your position on the issue of breadth vs. depth in student listening experiences? Why? How might these listening experiences contribute to the systematic development of both theoretical concepts and aural skills?

Appendix 3.4: Reflective Questions

In the third stage of my research project, the participants are encouraged to use one or more of my Listening Guides in their classrooms or studios. Integrating both *scientific* and *artistic* views of music, these Listening Guides reinforce the teaching of intervals and chords with the concepts of consonance and dissonance. Prompted by my questions, each participant is asked to describe her/his experience(s) and the remaining participants are invited to respond with insights drawn from their own experiences. I will extend the dialogue by probing my reflective question: How can the implementation of an integrated pedagogy for the teaching of intervals and chords according to the Royal Conservatory's (2016) Intermediate Theory curriculum be refined by the participants in my research study?

Prelude

Which Listening Guide(s) did you “audition” either in whole or in part? (explain)

Were they used in individual or group lessons?

How many students were involved?

What was your timeline? (specify the number, frequency, and duration of your trial uses)

Interlude

How did you implement the Listening Guide(s)? (describe your procedure)

How did you engage your students? (give examples)

Did you feel that the Preparing experiences were successful? Why or why not?

... the Listening experiences?

Did you “improvise”? If so, how?

Did you experiment with subjective discernments of consonance and/or dissonance?

How did your students respond to this subjectivity?

Would you consider using the Listening Guide(s) again? Why or why not?

How would you improve them?

Postlude

Defending Kodály's pedagogical approach, Choksy quotes Dobszay (1992): “I have become increasingly convinced that the direction of music teaching can best be determined by the inner logic of music itself” (p. 10). Simply stated, the music must come first. It must be elevated from its secondary function (as illustrative example) to become the primary focus for teaching.

Do you agree with Choksy's belief that much music teaching is backward? Why or why not?

How do you suggest we preserve the *music* in our teaching of music theory?

Appendix 3.5: Concluding Focus Group Questions

At the final stage, I am seeking recommendations for the artistic-scientific integration of music and music theory from the collective expertise of the group. Our communal effort, which will supplement my Listening Guides with added value, is inspired by my summative question: How can the harmony component of the Royal Conservatory's (2016) Advanced Theory curriculum be enhanced by an integrated artistic-scientific pedagogy at the intermediate level?

Prelude

introductory questions based on the preceding Reflective dialogue

Interlude

How has your pedagogical thinking been influenced by the Listening Guides? (consider both your review and your classroom/studio trial)

Has your teaching of music theory been influenced by the Listening Guides? If so, in what way?

Do you feel that the inclusion of repertoire (art) in the teaching of music theory (science) encourages the development of student subjectivity? Is this important? Why or why not?

How should we, as music theory teachers, bridge the instructional gap between the objective elements of rudiments and the subjective workings of harmony?

Postlude

Defending the purpose of music theory, Rogers (2004) summarizes his position: "Acquiring musicianship, however it is defined, is intimately bound up with theory training ... It all finally comes down to the competence to use our thinking ability to improve listening and our listening ability to improve thinking. As long as this cycle can be kept in motion, real education takes place; we learn so that we can learn even more. Each new accomplishment leads to yet more sophisticated and more challenging levels of investigation and perception that were never even imagined before. The helix is never completed which is why music theory ... is endlessly intriguing" (p. 12).

How can we, as music theory teachers, inspire this sense of endless intrigue in our students?

Appendix 4.1: Level 5 Listening Guide for Mozart's Aria

Listening Guide, Level 5

1

ACTIVITY #1

MOZART: "QUEEN OF THE NIGHT" ARIA (NO. 14) FROM *DIE ZAUBERFLÖTE* (*THE MAGIC FLUTE*)

The following rhythm is in common time. It begins with an anacrusis or upbeat.

What time signature does **C** represent? _____

- Clap and speak this rhythm.

a

C

ti-ka-ti-ka ti - ti ti - ti ti - ti ti - ti too

ti-ka-ti-ka

ti - ti ti - ti ti - ti ti - ti too

ti-ka-ti-ka

ti - ti ti - ti ti - ti ti - ti ti - ti ti - ti

ti - ti ti - ti ti - ti ta

The opening motive is labelled as **a**. It is eight beats long. Motives may be repeated or extended.

- Label the second and third motives as **a** (repeated) or **a₁** (extended).

The structure of a rhythm helps us to remember it.

- Clap the rhythm again. Memorize it as you clap.

- Ask your teacher to cover or hide the first two lines. Clap the rhythm.

- Ask your teacher to cover all four lines. Clap the rhythm.

Shorter motives may be combined into phrases. A phrase is generally four measures long.

How many beats are in a four-measure phrase in common time? _____

How many phrases are in the given rhythm? _____

ASSIGNMENT

- Rewrite the rhythm from memory on the following staff. Finish with an incomplete measure.

ACTIVITY #2

MOZART: "QUEEN OF THE NIGHT" ARIA (NO. 14) FROM *DIE ZAUBERFLÖTE* (THE MAGIC FLUTE)

Adding pitches to a rhythm also helps us to remember it.

In common time, weak beats are sometimes beamed together with strong beats or medium beats.

- Play this melody on your instrument or sing it with a neutral syllable (such as *loo*).

m r m f s s s s s s s s d d t d r m m m m m m m m l l s l t

d d d s r r r s m d m s d s l f s d m s d s l f s

What is the key of the melody? _____

In major keys, the *solfa* syllable for the tonic or keynote is *do* (*d*).

- Sing the melody with *solfa* syllables.

What syllable begins the melody? _____ What syllable ends it? _____

What is the syllable of the highest note? _____ What is the syllable of the lowest note? _____

- Sing the melody again. Memorize it.

Some instruments or voices use pitches in higher registers. Some use pitches in lower registers.

Melodies may be transposed to fit these higher or lower registers.

ASSIGNMENT

- Transpose the melody up one octave. Adjust the stem directions, if necessary.

Is it possible for you to sing the melody in the transposed register? _____

ACTIVITY #3

MOZART: "QUEEN OF THE NIGHT" ARIA (NO. 14) FROM *DIE ZAUBERFLÖTE* (THE MAGIC FLUTE)

Mozart uses the transposed melody in an aria from his opera *The Magic Flute* (see Activity #2).

An aria is a solo vocal piece with instrumental accompaniment.

This aria is sung by the Queen of the Night.

- Listen to a recording of the aria or watch a video performance.

How many times do you hear the melody? _____

The "Queen of the Night" Aria is sung by a coloratura soprano. It requires a very high voice.

- Name the singer you heard. _____

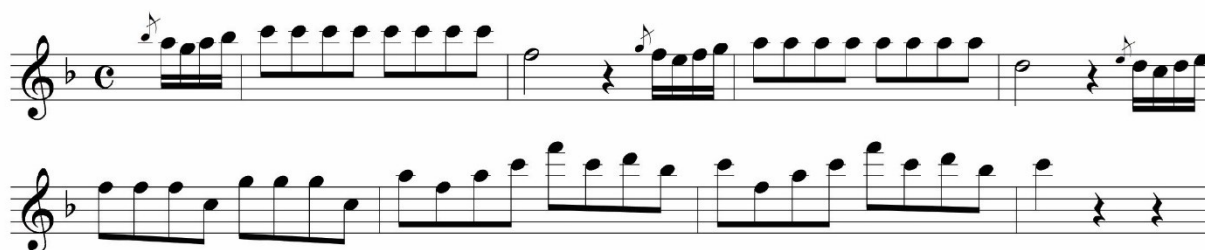
Articulation marks affect the aria's performance. Grace notes add decoration.

- Add *legato* markings to the groups of sixteenth notes.

How should these notes be sung? _____

- Add *staccato* markings to the repeated eighth notes in the first four-measure phrase.

How should these notes be sung? _____



In this scene from Mozart's opera, the Queen of the Night orders her daughter Pamina to kill Sarastro, the high priest. Pamina refuses.

How do you think the queen feels? _____

How does Mozart show her feelings in the music? _____

ASSIGNMENT

- Watch this animated summary of the opera's story (Baldwin, 2014).

<https://www.youtube.com/watch?v=-laVXO0IYKY>

- Match each character with his or her description.

_____ Pamina	a. I appear when the bird catcher rings the magic bells.
_____ Papagena	b. I befriend the prince after he is saved from the serpent.
_____ Papageno	c. I face the trials of water and fire with the prince.
_____ Queen of the Night	d. I fall in love with the princess when I see her portrait.
_____ Sarastro	e. I give the prince a magic flute to help him rescue the princess.
_____ Tamino	f. I kidnap the princess to protect her from the queen.

- Translate the German title of the queen's aria into English.

Der Hölle Rache kocht in meinem Herzen _____

ACTIVITY #5

MOZART: "QUEEN OF THE NIGHT" ARIA (NO. 14) FROM *DIE ZAUBERFLÖTE* (THE MAGIC FLUTE)

Most melodies use notes from the scale to fill the skips or leaps between triad members.

Sometimes melodies use notes that do not belong to the scale. These notes require accidentals.

- Play the following melody or sing it with words. If necessary, transpose the melody to a register that fits your instrument or voice. Memorize it.
- Circle the notes that do not belong to the tonic triad of F major. Draw a box around the circled notes that do not belong to the scale of F major.

The distance between triad members may be filled with whole steps or half steps.

- Label each pair of notes as a whole step (W), a diatonic half step (DH), or a chromatic half step (CH).

Mozart uses this second melody to complete the first melody in the queen's aria (see Activity #4).

What scale degree (tonic or dominant) ends the first melody? _____

Does it sound finished? _____

What scale degree ends the second melody? _____ Does it sound finished? _____

The Queen of the Night is furious. In her emotional distress, she seems to make musical mistakes:

- 1) She sings the first melody without words, like a vocal exercise or vocalise.
- 2) The first time she sings the second melody, it is shortened from four measures to three measures.

ASSIGNMENT

- Write the dominant 7th chord of F major in solid/blocked form on the first staff.
- Listen to a recording of the aria. Use notes from the dominant 7th chord to complete the shortened version of Mozart's second melody. Check your melody by playing or singing it.

What scale degree belongs to both the tonic triad and the dominant 7th chord? _____

ACTIVITY #6

MOZART: "QUEEN OF THE NIGHT" ARIA (NO. 14) FROM *DIE ZAUBERFLÖTE* (THE MAGIC FLUTE)

The middle of the queen's aria is in the key of F major.

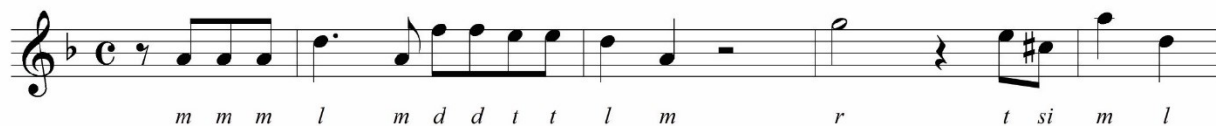
The beginning and ending of the aria are in the key of its relative minor.

What is the relative minor of F major? _____

In minor keys, the *solfa* syllable for the tonic or keynote is *la* (*l*).

What scale degree (subtonic or leading tone) uses the syllable *si* as a raised *so*? _____

- Sing this melody with *solfa* syllables. If necessary, transpose it to a register that fits your voice.



The melody's opening motive is based on a D minor triad.

What type of chord uses the notes in measure 3? _____

What chord member is missing? _____

In performance, Mozart's opera is accompanied by an orchestra.

- Ask your teacher to help you find an orchestral score for the "Queen of the Night" Aria.
- List the instruments that are included in the score. Group them into orchestral families.

woodwinds _____	brass _____	percussion _____	strings _____
woodwinds _____	brass _____		strings _____
woodwinds _____			strings _____
			strings _____

In rehearsal, the orchestral parts are transcribed or rewritten for piano.

ASSIGNMENT

- Circle all the D minor triads (solid/blocked and broken) in the piano accompaniment.

What form of the D minor scale is used in measure 2? _____

Allegro assai

CHALLENGE: What musical mistake is made by the Queen of the Night at the end of her aria?

RESOURCES

MOZART: "QUEEN OF THE NIGHT" ARIA (NO. 14) FROM *DIE ZAUBERFLÖTE* (*THE MAGIC FLUTE*)

Baldwin, Brett. "The Story of Mozart's The Magic Flute." YouTube video, 3:04. Posted by "Classical MPR," January 3, 2014. <https://www.youtube.com/watch?v=-laVXO0IYKY>.

Choksy, Lois. *The Kodály Method II: Folksong to Masterwork*. Upper Saddle River, NJ: Prentice-Hall, 1999.

English National Opera Guides. *The Magic Flute – Die Zauberflöte: Mozart*. Edited by Rodney Milnes, David Cairns, and Nicholas John. London: John Calder, 1980.

Mozart, Wolfgang Amadeus, and Emanuel Schikaneder. *Die Zauberflöte, K. 620*. New York: Edwin F. Kalmus, n.d.

Mozart, Wolfgang Amadeus, Emanuel Schikaneder, and Carl Ludwig Giesecke. *The Magic Flute (Die Zauberflöte): An Opera in Two Acts*. Translated by Ruth and Thomas Martin. Milwaukee, WI: G. Schirmer, 1951.

Royal Conservatory of Music. *Theory Syllabus*. Toronto, ON: Frederick Harris Music, 2016.

Royal Conservatory of Music. *Celebrate Theory: Level 5*. Toronto, ON: Frederick Harris Music, 2016.

Appendix 4.2: Level 6 Listening Guide for Bach's Invention

Listening Guide, Level 6

1

ACTIVITY #1

BACH: INVENTION NO. 1 IN C MAJOR, BWV 772

A motive is a short musical idea. It uses a distinct pattern of notes and/or rhythms.

The following motive is in the key of C major.

- Write *solfa* abbreviations (*d, r, m, f, s, l, t*) below each note.
- Sing the motive. Memorize it as you sing.



Motives are used to build larger musical structures, such as phrases or periods.

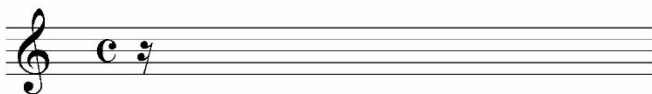
Motives may also be used to build entire compositions.

- Listen to a piano or harpsichord recording of Bach's Invention No. 1 in C Major.

Do you hear the given motive throughout the invention? _____ Is it always the same? _____

Bach uses transposition to move his motive from one pitch level to another.

- Transpose the motive up a perfect fifth. Use a key signature.

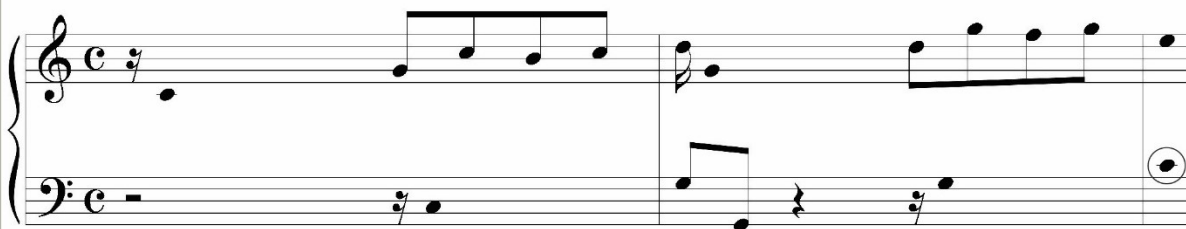


What is the new key? _____ Does its key signature affect any notes in the motive? _____

An invention is a keyboard composition that combines two independent musical lines.
These two lines or melodies often use the same motive.

ASSIGNMENT

- Write Bach's motive and its fifth transposition on both the treble staff and the bass staff. Use the stemless notes in measures 1 and 2 as starting pitches.



What interval separates the motives in measure 1? _____

What interval separates the transposed motives in measure 2? _____

Does the circled note fit the transposition correctly? _____ If not, what note should it be? _____

ACTIVITY #2

BACH: INVENTION NO. 1 IN C MAJOR, BWV 772

Transposed motives may move to another key. They may also remain in the original key.

- Write *solfa* abbreviations below each note. Use G-do for the transposition on the first staff. Use C-do for the transposition on the second staff.
- Sing the motive with both sets of syllables.



What syllable ends the second transposition? _____. Is this a stable pitch? _____

At the beginning of measure 3, Bach alters the transposed motive to end on a stable pitch in C major (see Activity #1). His alteration of the melody supports the surrounding harmony.

- Refer to the score on pages 5 and 6.

What chord is implied by the C and E on the downbeat of measure 3? _____

- Write its functional chord symbol below the staff.

Bach transposes the motive to a number of different pitch levels.

- Listen to a recording of Invention No. 1. Follow the score as you listen.
- Identify eighteen (18) complete motives with a coloured highlighter pen. Fill this box ☐ with the same colour.

How many motives have altered endings? _____

Bach's motive begins on the second sixteenth note of beat 1 or beat 3.

It ends on a strong beat or a medium beat.

This placement within the measure gives rhythmic importance to the ending note.

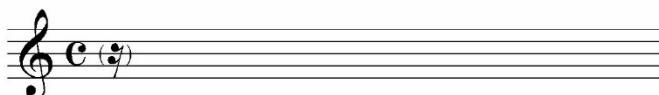
ASSIGNMENT

- Name the melodic interval between the last two notes of the original motive. _____
- Name four intervals that replace it in motives with altered endings.

- Circle the final note of a motive that ends with an altered shape or contour.
- Circle all the letter names from the C major scale that are used as starting pitches for transposed motives. C D E F G A B

How many transpositions include accidentals that do not belong to the key of C major? _____

- Use the following clues to locate a specific transposed motive. Copy the motive below.
It begins on the dominant of A minor.
It uses accidentals from the melodic form of this scale.
It has an altered ending.



In what measure did you find the motive? _____

ACTIVITY #3

BACH: INVENTION NO. 1 IN C MAJOR, BWV 772

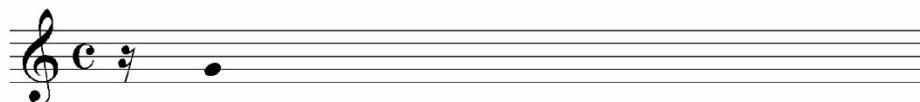
Transposition changes the pitch of a motive but its shape or contour generally stays the same.

Inversion changes the contour of a motive by turning it upside down.

- Analyze the original motive from Bach's invention. Label the direction and interval (size only) between each pair of notes.



- Invert the motive by changing directions. Keep the numerical intervals the same. Use the given note as your starting pitch.
- Sing the inverted motive with *solfa* syllables in C-do.



This inverted motive appears on the lower staff in measure 9. It has an altered ending.

What interval (size) separates the last two notes in Bach's inversion? _____

This alteration is used for inversions and transposed inversions throughout the invention.

Bach wrote fifteen two-part inventions as keyboard exercises for his son Wilhelm Friedemann. They were also written as composition exercises that demonstrate the techniques of two-part counterpoint. These techniques or compositional devices are manipulations of the motive.

ASSIGNMENT

- Follow the score as you listen to a recording of Invention No. 1.
- Identify nineteen (19) complete inversions with a coloured highlighter pen. Choose a colour that is different from the one you chose for motives. Fill the box ☐ with this new colour.

What interval (size and quality) separates the inversions in measure 9? _____

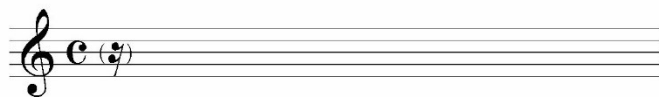
What interval separates the inversions in measure 10? _____

- Write the letter names for the starting pitches of these four inversions. Arrange them in the order of their appearance. _____

What interval separates the second inversion from the third inversion? _____

How many inversions include accidentals that do not belong to the key of C major? _____

- Copy an inverted motive that starts with an accidental.



ACTIVITY #4

BACH: INVENTION NO. 1 IN C MAJOR, BWV 772

Imitation is used to repeat or transpose the motive. It passes the motive from one part to the other.

A sequence repeats the motive with one or more transpositions in the same part.

Imitations and sequences may manipulate inverted motives as well.

- Refer to Bach's score. Match each description with the measure numbers of its location.

_____ measures 1-2 or 7-8	a. alternating inversions and motives in imitation
_____ measures 3-4	b. inversions in imitation
_____ measures 9-10	c. inversions in sequence in the lower part
_____ measures 11-12	d. inversions in sequence in the upper part
_____ measures 15-18	e. motives in imitation
_____ measures 19-20	f. motives in sequence and imitation

The motive may be fragmented or divided. These fragments may also be manipulated.

They are sometimes used as accompaniment for the motive.

- Write the first four notes of Bach's original motive from memory. Use the first staff.
- Rewrite these same pitches on the second staff with longer note values. Use eighth notes.



The fragment on the second staff is an augmentation of the first fragment.

In Bach's invention, augmented fragments begin on the second eighth note of beats 1 or 3.

They end on the same beat as the motives or inversions they accompany.

In what measure do you see the augmented fragment notated above? _____

Counterpoint comes from the Latin words *punctu contra punctum*, meaning point against point. It requires a contrapuntal or polyphonic texture that weaves together two or more melodic lines.

ASSIGNMENT

- Identify eight (8) augmented fragments with a coloured highlighter pen directly on the score. Choose a new colour. Fill the box ☐ with the colour you have chosen.

Do these fragments accompany motives or inversions? _____

- Underline the word in each bracketed pair that describes the augmented fragments. Each augmentation is a series of four (eighth/sixteenth) notes that (ascend/descend) by (skip/step).

- Identify three (3) inversions of augmented fragments with a coloured highlighter pen. Choose another new colour. Fill the box ☐ with this colour.

Do these fragments accompany motives or inversions? _____

- Circle the final note of an inverted fragment that ends with an altered shape or contour.

- Watch this visual analysis of Bach's Invention No. 1 in C major (Alvira, 2005).

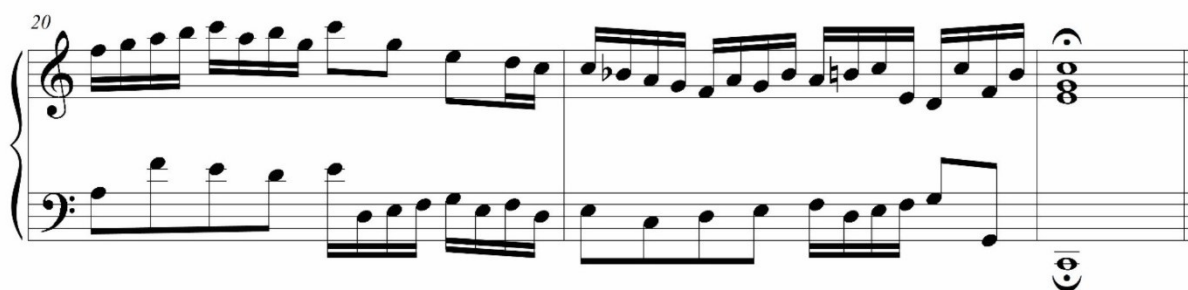
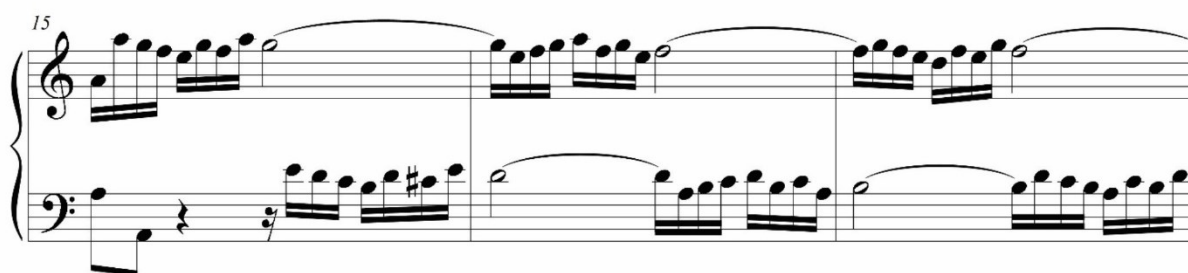
<https://www.teoria.com/en/articles/musica-viva/>

CHALLENGE: What kind of counterpoint does Bach use to exchange the parts in measures 3-4 and measures 11-12? _____

KEYBOARD SCORE

BACH: INVENTION NO. 1 IN C MAJOR, BWV 772

The image displays the first nine measures of J.S. Bach's Invention No. 1 in C Major, BWV 772, for keyboard. The score is written in C major, common time (C), and consists of two staves (treble and bass clef). The notation includes various musical symbols such as notes, rests, accidentals, and articulation marks (accents and slurs). Measure numbers 1, 3, 5, 7, and 9 are indicated at the beginning of their respective systems. The piece is characterized by its simple yet elegant melodic lines and rhythmic patterns, typical of Bach's early keyboard works.



RESOURCES

BACH: INVENTION NO. 1 IN C MAJOR, BWV 772

Alvira, José Rodríguez. "Analysis of the C Major Invention (BWV 772) by Bach." *Teoria: Music Theory Articles*, 2015. <https://www.teoria.com/en/articles/BWV772/>.

Alvira, José Rodríguez. "Bach's C Major Invention (BWV 772)." *Teoria: Music Theory Articles*, 2005. <https://www.teoria.com/en/articles/musica-viva/>.

Bach, Johann Sebastian. *Inventionen und Sinfonien*. Edited by Ludwig Landshoff. Leipzig: C. F. Peters, 1933.

Choksy, Lois. *The Kodály Method II: Folksong to Masterwork*. Upper Saddle River, NJ: Prentice-Hall, 1999.

Palmer, Willard A., ed. J. S. Bach: *Inventions and sinfonias (Two- and three-part inventions)*. Van Nuys, CA: Alfred Publishing, 1991.

Royal Conservatory of Music. *Theory Syllabus*. Toronto, ON: Frederick Harris Music, 2016.

Royal Conservatory of Music *Celebrate Theory: Level 6*. Toronto, ON: Frederick Harris Music, 2016.

Solomon, Larry. "Bach's Invention No. 1: Analysis." *Solomon's Music Resources*, 2002. <http://solomonsmusic.net/bachin1.htm>.

Appendix 4.3: Level 7 Listening Guide for Mendelssohn's Overture

Listening Guide, Level 7

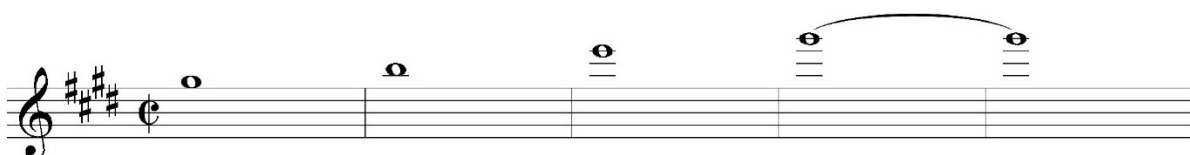
1

ACTIVITY #1

MENDELSSOHN: OVERTURE TO A MIDSUMMER NIGHT'S DREAM

A broken triad may be extended to create a melody.

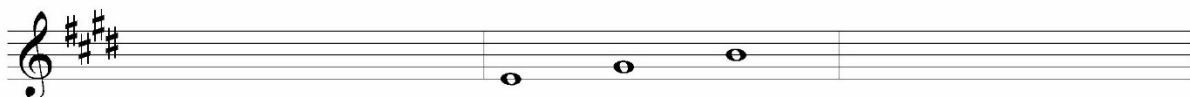
- Play the following triad on a piano. If necessary, ask your teacher to help you.
- Identify the root _____, quality _____, and position _____ of the triad.



In what key is this the tonic triad? _____

Some members of the tonic triad are also members of the subdominant or dominant triads.

- Write the subdominant triad that is a fifth below the given tonic. Use broken form.
- Write the dominant triad (broken form) that is a fifth above the given tonic.



IV

I

V

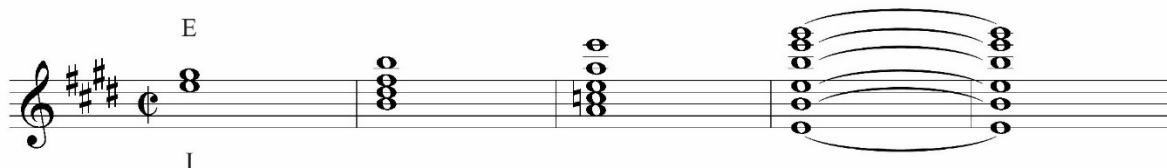
What scale degree is shared by the subdominant and tonic triads? _____

What scale degree is shared by the tonic and dominant triads? _____

In a melody, the shared scale degrees may be accompanied by the tonic triad. They may also be accompanied by the subdominant or dominant triads. These accompanying triads are sometimes reduced to incomplete chords or they are expanded to become larger chords.

ASSIGNMENT

- Play the broken triad melody and its accompaniment on a piano.
- Label each chord with a functional chord symbol below the staff.
- Write root/quality chord symbols above the staff.



How did the accidental in measure 3 affect the chord's quality? _____

Is the final chord in close or open position? _____

Is it possible to play all of the accompaniment with your left hand? _____

ACTIVITY #2

MENDELSSOHN: OVERTURE TO A *MIDSUMMER NIGHT'S DREAM*

Mendelssohn uses the following four chords as the introduction for his overture.

- Ask your teacher to help you play all the notes of each chord on a piano.

Mendelssohn's Overture to *A Midsummer Night's Dream* was first performed by the composer and his sister Fanny as a piano duet. It was later performed by an orchestra.

In the orchestral version, the introduction is written for pairs of woodwinds and French horns.

- Name the four instruments included in the woodwind section.

Each instrumental pair uses a separate staff. Some instruments, such as clarinets and French horns, must be transposed.

ASSIGNMENT

- Refer to the piano score above. Transpose the clarinet parts up a minor third.

What is the interval of transposition for the French horns? _____

ACTIVITY #3

MENDELSSOHN: OVERTURE TO A *MIDSUMMER NIGHT'S DREAM*

Mendelssohn's overture is based on Shakespeare's play *A Midsummer Night's Dream*.

The play involves four young lovers and a group of clownish tradesmen who are manipulated by woodland fairies. The characters are connected by events surrounding the wedding of Theseus (Duke of Athens) and Hippolyta (Queen of the Amazons).

The overture's opening chords introduce the mysterious realm of the fairies.

- Listen to a recording of Mendelssohn's Overture to *A Midsummer Night's Dream*. Ask your teacher to stop the recording at the end of the introduction (see Activity #2).

How does Mendelssohn create the mysterious mood? _____

The first theme is a musical depiction of the fairies. It is written for first and second violins.

- Follow this excerpt as you listen to the recording again. Stop it when you hear a *fortissimo* chord at the end of the fairies' theme.

The musical score shows measures 8 to 12. Violin I is marked 'divisi' and 'pp' (pianissimo). Violin II is marked 'div.' (divisi). The music features rapid sixteenth-note passages in both hands, creating a fluttering effect.

How are the fairies' fluttering wings depicted? _____

Instrumental music that is intended to evoke or express nonmusical ideas, images, or events is known as program music. It may be inspired by a mood, a painting, a scene, or a story.

ASSIGNMENT

- Watch this video summary of Shakespeare's play (Crowther, 2010).

<https://www.youtube.com/watch?v=M1wMfOwLAZ8>

Which character, sometimes called Puck, uses pranks to create mischief? _____

What does Oberon (King of the Fairies) send him to find? _____

What magical task does it perform? _____

ACTIVITY #4

MENDELSSOHN: OVERTURE TO A MIDSUMMER NIGHT'S DREAM

The Overture to *A Midsummer Night's Dream* is a concert overture.

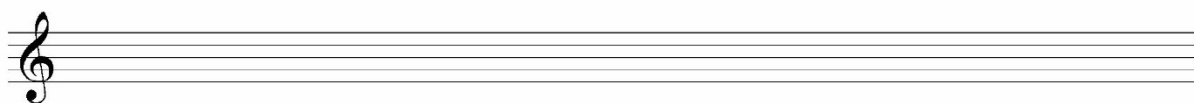
This is a category or genre of program music. It is generally a single movement in sonata form.

- Name the three sections of sonata form.

In Mendelssohn's exposition, the first theme is not in the expected key of E major (see Activity #3).

What two accidentals are consistently added throughout the excerpt? _____

- Write the minor scale (ascending and descending) implied by the first two phrases of this theme. Use the scale's key signature along with any necessary accidentals.
- Name the scale. Include its form (natural, harmonic, or melodic). _____



How is this scale related to the scale of E major? _____

Like broken triads, scales may be extended to create melodies.

- Name the scale that begins the following transition theme. _____
- Identify the root _____ and quality _____ of the chord outlined in measure 65.

Violin I

ACTIVITY #5

MENDELSSOHN: OVERTURE TO A MIDSUMMER NIGHT'S DREAM

Theme 2a is a musical depiction of the young lovers. It connects two phrases that are both repeated.

Which instrument's phrase uses the same rhythm as your melody (see Activity #4)? _____

- Circle one note in Mendelssohn's theme that does not belong to the scale of B major.

What scale degree is altered? _____ Is it raised or lowered? _____

The solfa syllable for a lowered *ti* ($\downarrow 7$) is *ta*.

- Write solfa abbreviations (including *ta*) below each note in theme 2a.
- Sing the theme. Adjust the register to fit your voice.

Theme 2b depicts the clowns. It is more difficult to sing.

- Circle two descending intervals that are larger than an octave.

These wide leaps suggest the "hee-haw" or braying of a donkey.

- Name the clown whose head is transformed into a donkey's head. _____

Each group of characters from Shakespeare's play is associated with a distinct theme. Each theme is introduced in the exposition of Mendelssohn's overture. The themes are then varied in the development section and restated in the recapitulation.

ASSIGNMENT

- Listen to a recording of Mendelssohn's Overture to *A Midsummer Night's Dream*.
- Compare articulation marks for the young lovers' theme and the fairies' theme (see Activity #3).
How are they different? _____
- Compare dynamic marks for the clowns' theme and the fairies' theme.
How are they different? _____
- What theme is featured in the development section? _____
- What musical element returns at the beginning of the recapitulation? _____
- What theme is missing from the recapitulation? _____

ACTIVITY #6

MENDELSSOHN: OVERTURE TO A MIDSUMMER NIGHT'S DREAM

In sonata form, a coda usually follows the recapitulation. Coda is an Italian word that means "tail." It is a passage or section that ends a musical work.

In the coda of Mendelssohn's overture, the fairies' theme (theme 1) reappears. Like the exposition, it is interrupted by a *pianissimo* chord.

- Name the type of chord shown by the rearrangement of orchestral parts to the right. _____
- Write the root/quality chord symbol above the staff. _____



A slow-moving scale descends to a chord played by clarinets and French horns alone. It is incomplete. What chord member is missing? _____

- Identify the type of chord _____ and the position _____.
- Write the functional chord symbol below the staff. _____
- Name the interval between clarinet parts on the treble staff. _____



The royal theme (transition theme) also reappears. It is transformed.

Violin I

poco riten.

663

pp

Vln. I

667

3

3

3

ASSIGNMENT

- Listen to a recording of Mendelssohn's Overture to *A Midsummer Night's Dream*.
- Compare the coda's transition theme with the original version (see Activity #4).

What is missing from measures 663 to 666? _____

How is the rhythm altered in measures 667 to 670? _____

- Define *poco riten.* _____

How is this change of tempo reflected in the theme's alterations? _____

CHALLENGE: What low brass instrument is included in the overture's orchestral score?

_____ What Renaissance instrument did it replace? _____

What modern instrument is its replacement? _____

RESOURCES

MENDELSSOHN: OVERTURE TO A *MIDSUMMER NIGHT'S DREAM*

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Machlis, Joseph, and Kristine Forney. *The Enjoyment of Music*, 6th ed. New York: W. W. Norton, 1990.

Mendelssohn-Bartholdy, Felix. *First Concert Overture to Shakespeare's A Midsummer Night's Dream, Op. 21*. London: Ernst Eulenburg, 1939.

Royal Conservatory of Music. *Theory Syllabus*. Toronto, ON: Frederick Harris Music, 2016.

Royal Conservatory of Music. *Celebrate Theory: Level 7*. Toronto, ON: Frederick Harris Music, 2016.

ACTIVITY #2

JOSQUIN DES PREZ: *EL GRILLO*

The original source for *El grillo* is a book titled *Frottole libro tertio* (*The Third Book of Frottole*).

- Scroll to pages 122 and 123 of the following document (Petrucci, 1505).

http://ks.imslp.net/files/imglnks/usimg/c/c0/IMSLP306302-PMLP495480-frottole_3.pdf

- Find the bass part. Compare the melody at the beginning of the second system with the bass part in our transcription (see Activity #1).

Are the pitches the same? _____ Is the rhythm the same? _____

What metrical element is missing? _____

The bass part uses an early form of the F clef.

How does it mark the position of F on the fourth line of the staff?



What is the modern name for the F clef? _____

The soprano, alto, and tenor parts use C clefs with specific staff placements.

- Draw an early C clef in the space to the right.

This clef marks the position of Middle C between its second and third horizontal lines.

On what staff line is Middle C positioned for each voice part?

soprano _____ alto _____ tenor _____

Which part could use a modern alto clef without rewriting the notes? _____

ASSIGNMENT

- Write the tenor's refrain on the treble staff at the same pitch. Sing the melody.

El gril - lo, el gril - lo è buon can - to - re, Che

tie - ne lon - go ver - - - - - so.

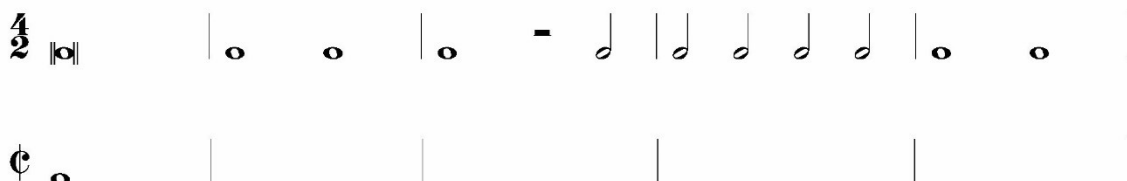
Why is it helpful to write the tenor part an octave higher than it sounds? _____

ACTIVITY #3

JOSQUIN DES PREZ: *EL GRILLO*

In modern transcriptions of *El grillo*, the separate voice parts are notated together in open score. They are also notated in diminution with shortened note values.

- Clap the following rhythm. Rewrite it in cut time. Clap your new rhythm.



The vertical alignment of text in Josquin's *frottola* creates a predominantly homorhythmic texture. Sometimes the text is echoed or exchanged between pairs of voices.

- Refer to the modern transcription of *El grillo* on pages 5 and 6.

In what measures do the voices exchange text? _____

Which voices are paired? _____ and _____ ; _____ and _____

Sometimes the text alignment is displaced with rhythmic syncopations.

- Refer to pages 5 and 6 again.

In what measures is the text displaced or misaligned? _____

What Italian word is the most elaborately syncopated? _____

What is its English translation? _____

Composers may use elements of rhythm, melody, or harmony to reflect the meaning of the text.

This musical pictorialization is known as word painting.

ASSIGNMENT

- Translate the Italian text of *El grillo* into English.

El grillo è buon cantore, _____

Che tiene longo verso. _____

Dalle beve grillo canta. _____

Ma non fa come gli altri uccelli, _____

Come li han cantato un poco, _____

Van de fatto in altro loco; _____

Sempre el grillo sta pur saldo. _____

Quando la maggior el caldo, _____

Alhor canta sol per amore. _____

- Listen to a recording of Josquin's *El grillo*. Follow the score as you listen.

How does the music imitate the cricket's chirping? _____

How does the setting of *longo verso* illustrate the text? _____

ACTIVITY #4

JOSQUIN DES PREZ: *EL GRILLO*

Josquin's word painting established an expressive relationship between music and text. His approach to melody and harmony foreshadowed many elements of our modern tonal system.

Josquin des Prez (c.1450-1521) was a Franco-Flemish composer from the region that presently combines northern France, Belgium, and the southern Netherlands. His musical style was influenced both by his early training and the many years he spent working in Italy.

The four parts of Josquin's *frottola* combine to create major and minor chords in root position. Most phrases of text end with cadences. Most cadences end with incomplete chords.

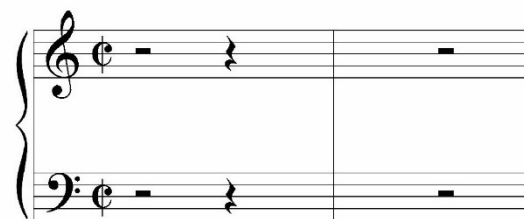
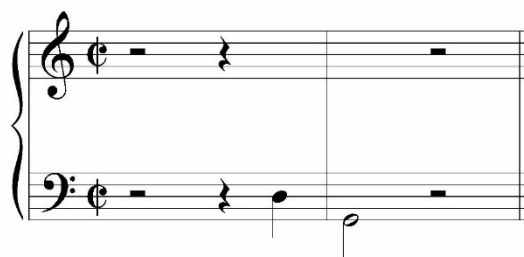
- Refer to the transcription of *El grillo* on pages 5 and 6.
- Write the cadence from measures 4 and 5 on the first staff. Use chorale style.

What member (root, third, or fifth) is missing from the final chord? _____

- Rewrite the same cadence in keyboard style on the second staff. Complete the final chord.

Did you add a major third or a minor third? _____

What key is implied by your cadence? _____ What type of cadence is implied? _____



- Refer back to the score. Find the cadence from measures 4 and 5 in three different locations. List the measure numbers. _____, _____, and _____
- Name the implied key and cadence at measures 36 and 37. Check the surrounding measures for clues. _____

Some aspects of Renaissance music resemble modern tonality, but a modal system of harmony does not function like the tonal system that replaced it during the Baroque era (around 1650).

ASSIGNMENT

- Listen to a recording of Josquin's *El grillo*. Follow the score as you listen.
 - Write root/quality chord symbols above the staff for every change of bass note. Place brackets () around the symbols of incomplete chords.
- What two bass notes are the roots of both major and minor chords? ____ and ____
- Why is B not used as a root? _____
- Circle and label a passing tone (**pt**) and a neighbor tone (**nt**).
 - Name the modal scale in the tenor part at measures 35 and 36. _____
- Which two voices exchange parts in measures 7 to 9? _____ and _____
- CHALLENGE: Does the performance you heard follow the formal structure of the score? _____
- If not, how is it organized? _____
- How are other performances organized? _____

VOCAL SCORE

JOSQUIN DES PREZ: *EL GRILLO*

Soprano

El gril - lo, el gril - lo, è buon can - to - re, Che tie - ne lon - go

Alto

El gril - lo, el gril - lo, è buon can - to - re, Che tie - ne lon - go

Tenor

El gril - lo, el gril - lo, è buon can - to - re, Che tie - ne lon - go

Bass

El gril - lo, el gril - lo, è buon can - to - re, Che tie - ne lon - go

7

S

ver - - - - so. Dal - le be - ve

A

ver - - - - so. Dal - le be - ve

T

ver - - - - so. Dal - le be - ve

B

ver - - - - so. Dal - le be - ve

13

S

gril - lo can - ta, dal - le, dal - le, be - ve, be - ve, gril - lo, gril - lo can - ta. El gril -

A

gril - lo can - ta, dal - le, dal - le, be - ve, be - ve, gril - lo, gril - lo can - ta. El gril -

T

8 gril - lo can - ta, dal - le, dal - le, be - ve, be - ve, gril - lo, gril - lo can - ta. El gril -

B

gril - lo can - ta, dal - le, dal - le, be - ve, be - ve, gril - lo, gril - lo can - ta. El gril -

19 **Fine**

S lo, el gril - lo, è buon can - to - re. Ma non fa co - me gli al - tri uc - cel - li,
Van de fat - to in al - tro lo - co;

A lo, el gril - lo, è buon can - to - re. Ma non fa co - me gli al - tri uc - cel - li,
Van de fat - to in al - tro lo - co;

T lo, el gril - lo, è buon can - to - re. Ma non fa co - me gli al - tri uc - cel - li,
Van de fat - to in al - tro lo - co;

B lo, el gril - lo, è buon can - to - re. Ma non fa co - me gli al - tri uc - cel - li,
Van de fat - to in al - tro lo - co;

25

S Co - me li han can - ta - to un po - co, Quan - do la mag - gior el
Sem - pre el gril - lo sta pur sal - do.

A Co - me li han can - ta - to un po - co, Quan - do la mag - gior el
Sem - pre el gril - lo sta pur sal - do.

T Co - me li han can - ta - to un po - co, Quan - do la mag - gior el
Sem - pre el gril - lo sta pur sal - do.

B Co - me li han can - ta - to un po - co, Quan - do la mag - gior el
Sem - pre el gril - lo sta pur sal - do.

31 **D.C. al Fine**

S cal - do, Al - hor can - ta sol per a - mo - re.
cal - do, Al - hor can - ta sol per a - mo - re, per a - mo - re.

A cal - do, Al - hor can - ta sol per a - mo - re, per a - mo - re.

T cal - do, Al - hor can - ta sol per a - mo - re.

B cal - do, Al - hor can - ta sol per a - mo - re, per a - mo - re.

RESOURCES

JOSQUIN DES PREZ: *EL GRILLO*

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http://ks.imslp.net/files/imglnks/usimg/c/c0/IMSLP306302-PMLP495480-frottole_3.pdf.

Royal Conservatory of Music. *Theory Syllabus*. Toronto, ON: Frederick Harris Music, 2016.

Royal Conservatory of Music. *Celebrate Theory: Level 8*. Toronto, ON: Frederick Harris Music, 2016.

Appendix 4.5: Annotated Score for Bach' Invention No. 1 in C Major, BWV 772

The image displays a handwritten musical score for Bach's Invention No. 1 in C Major, BWV 772. The score is written in C major and 4/4 time. It is annotated with various markings and color-coding. The first system (measures 1-4) is labeled 'A' and includes 'M(18)' and 'PS(5)'. The second system (measures 5-8) is labeled '3' and includes 'M↓(19)', 'P4(3)', and 'a+(2)'. The third system (measures 9-12) is labeled '5' and includes 'P4' and 'C4: I'. The fourth system (measures 13-16) is labeled '7' and includes 'm2(3)' and 'PS'. The fifth system (measures 17-20) is labeled '9' and includes 'm2(6)' and 'b+(2)'. The score also includes a key signature change from C to G major, indicated by 'C → G'.

M: C D E G A (C major pentatonic)

11 $d \rightarrow a$

13 $P8(1) \downarrow$ $a \downarrow$ $a: \downarrow$

15 MZ MZ

18 MZ $F \rightarrow C$ MZ MZ $a + \downarrow(3)$

20 MZ $P4$ MZ a

Appendix 4.6: Petrucci's (1505) Manuscript of Josquin's *El grillo*

IOSQVIN DASCANIO.

L grillo el grillo e bó cãtore Che tiene lógo uerso Dale beue grillo canta Dale dale beue beue grillo grillo

cãta cãta El grillo el grillo e bon cãtore Ma nõ fa como gliãltri ocelli Come li hã cãtato un poco Q ñ la magior
Van de fatto i altro loco Sempre el grillo sta pur fãlido

A capite

el caldo Alhor cãta fol per amore

El grillo el grillo e bó cãtore Che tiene lógo uerso Dale beue grillo cãta Dale dale beue

beue grillo grillo cãta cãta El grillo el grillo e bó cãtore Ma non fa como gliãltri ocelli Come li hã cãtato un poco
Van de fatto i altro loco Sempre el grillo sta pur fãlido

Quãdo la magior el caldo Alhor canta fol per amo

Tenor

1311

Altus

El grillo el grillo e bō cātoe Che tiene longo uerso
 Dale beue grillo cāta Dale dale beue beue
 grillo grillo cāta cāta El grillo el grillo e bō cātoe Ma nō fa como gialtri ocelli Come li hā cātato un poco Qñ la magior
 Van de fatto in altro loco Sempre el grillo sta pur saldo

Bassus

el caldo Alhor canta sol p amore
 El grillo el grillo e bō cātoe Ch tiene logo uerso Dale beue grillo cāta Dale dale beue beue grillo grillo cāta cāta
 El grillo el grillo e bō cātoe Ma nō fa como gialtri ocelli Come li hā cātato un poco Qñ la magior el caldo
 Van de fatto in altro loco Sempre grillo sta pur saldo
 Alhor canta sol per amore

Appendix 5.1: Google Docs Entries

Toronto Focus Group

LLP (March 22, 2017): As I read my Reflective Questions (written *before* the Listening Guides), I was struck by the words “consonance” and “dissonance”! In my early ruminations about infusing the science of teaching music theory with art, I thought the concepts of consonance and dissonance – as discernments of pleasantness and unpleasantness, as well as mathematical proportions – would give me a portal into the subjectivity (or the art) of advanced theory topics such as harmony and counterpoint. I still believe this to be true, but the application of these concepts gradually settled into the background and wasn’t emphasized in the Listening Guides as I had originally intended. Nevertheless, I decided to leave my reference to consonance and dissonance in the Reflective Questions because I don’t want to lose track of their significance. I want to bring them back to the foreground. Your comments would be greatly appreciated.

Regarding my implementation of the Listening Guides, I have one rudiments student who’ll be taking the Level 8 exam in May. He is a 19-year-old vocalist (a tenor), who graduated from an arts high school in 2016. He’s interested in composition and has been accepted into the Music Industry Arts program at Algonquin College. We meet weekly on Friday mornings and began to work with *El grillo* (LG8) on March 10, when we reached the Music History unit in *Celebrate Theory*. He immediately filled in the blanks for Activity #1 and began to ask questions about the breve and the sharps above the staff. In retrospect, I wonder if I should move the accidentals onto the staff... With his previous knowledge of Medieval music, he assumed the melody to be in the tenor and sang it. I missed the opportunity (the teachable moment) when we could have sung the other lines to find the melody in the soprano – instead, I simply told him where to find it! He completed the assignment while I wondered if the staff lines should be bigger... He then asked if we could listen to the piece and I said “not yet.” What was I thinking? Actually, in my mind this is so clearly a pre-listening activity that he surprised me! Overall, he did fine, but I didn’t – I was disappointed by my teaching “performance.” I think I was very shy...

On March 17, he asked for Activity #2! I pulled out my copies of the original score and we had a fairly lengthy discussion. Chris: I was intrigued by your suggestion that the parts may be practically arranged on paper for a gathering of singers, so I asked my student what he thought. Sadly, he wasn’t as intrigued as I am... At any rate, he filled in the blanks and proceeded with the assignment, despite my intention for it to be done outside of the lesson – I didn’t verbalize this intention, so the misunderstanding is mine to shoulder... As he worked, I discovered that there needs to be more space between the second treble staff and the final question, although this “crowding” inadvertently reinforced the answer to my question! He didn’t sing the tenor’s refrain because he had a cold and was protecting his voice for an audition this week. Oddly, I felt relieved. What is wrong with me? I desperately want to bring more music into my teaching of music theory, but again I was too shy to do so. I need to do more than talk the talk – I need to walk the walk! I will see my student again on March 31.

I invite you to respond to my experiences and/or to share your teaching experiences with any or all of the Listening Guides. My entries may be used as models and my Reflective Questions may be used to inspire your thinking, but neither are meant to be restrictive in any way. Please feel free to think for yourselves!

Kanata Focus Group

LLP (March 29, 2017): As I read my Reflective Questions (written *before* the Listening Guides), I was struck by the words “consonance” and “dissonance”! In my early ruminations about infusing the science of teaching music theory with art, I thought the concepts of consonance and dissonance – as discernments of pleasantness and unpleasantness, as well as mathematical proportions – would give me a portal into the subjectivity (or the art) of advanced theory topics such as harmony and counterpoint. I still believe this to be true, but the application of these concepts gradually settled into the background and wasn’t emphasized in the Listening Guides as I had originally intended. Nevertheless, I decided to leave my reference to consonance and dissonance in the Reflective Questions because I don’t want to lose track of their significance. I want to bring them back to the foreground. Your comments would be greatly appreciated.

Regarding my implementation of the Listening Guides, I have one rudiments student who’ll be taking the Level 8 exam in May. He is a 19-year-old vocalist (a tenor), who graduated from Canterbury High School in 2016. He’s interested in composition and has been accepted into the Music Industry Arts program at Algonquin College. We meet weekly on Friday mornings and began to work with *El grillo* (LG8) on March 10, when we reached the Music History unit in *Celebrate Theory*. He immediately filled in the blanks for Activity #1 and began to ask questions about the breve and the sharps above the staff. In retrospect, I wonder if I should move the accidentals onto the staff... With his previous knowledge of Medieval music, he assumed the melody to be in the tenor and sang it. I missed the opportunity (the teachable moment) when we could have sung the other lines to find the melody in the soprano – instead, I simply told him where to find it! He completed the assignment while I wondered if the staff lines should be bigger... He then asked if we could listen to the piece and I said “not yet.” What was I thinking? Actually, in my mind this is so clearly a pre-listening activity that he surprised me! Amy, Danielle, and Kimberley: after our discussion, I’m reminded that my supposed clarity is not clear at all! And my pre-listening activities are not standard practice, so they’ll require more explicit explanation. Overall, my student responded well to Activity #1, but I didn’t – I was disappointed by my teaching “performance.” I think I was very shy about my materials...

On March 17, he was anxious to continue and specifically asked for Activity #2! I pulled out my copy of the original score and we had a fairly lengthy discussion. At any rate, he filled in the blanks and proceeded with the assignment, despite my intention for it to be done away from the lesson – I didn’t verbalize this intention, so the misunderstanding is mine to shoulder... As he worked, I discovered that there needs to be more space between the second treble staff and the final question, although this “crowding” inadvertently reinforced the answer to my question at the bottom of the page! He didn’t sing the tenor’s refrain because he had a cold and was protecting his voice for an upcoming audition. Oddly, I felt relieved. What is wrong with me? I desperately want to bring more music into my teaching of music theory, but again I was too shy to do so. I need to do more than talk the talk – I need to walk the walk! I’ll see my student again on March 31.

I invite you to respond to my experiences and/or to share your teaching experiences with any or all of the Listening Guides. My entries may be used as models and my Reflective Questions may inspire your thinking, but neither are meant to be restrictive in any way. Please feel free to think for yourselves!

Orleans Focus Group

LLP (March 31, 2017): As I read my Reflective Questions (written *before* the Listening Guides), I was struck by the words “consonance” and “dissonance”! As I mentioned during our discussion: in my early ruminations about infusing the science of teaching music theory with art, I thought the concepts of consonance and dissonance – as discernments of pleasantness and unpleasantness, as well as mathematical proportions – would give me a portal into the subjectivity (or the art) of advanced theory topics such as harmony and counterpoint. I still believe this to be true, but the application of these concepts gradually settled into the background and wasn’t emphasized in the Listening Guides as I had originally intended. Nevertheless, I decided to leave my reference to these concepts in the Reflective Questions because I don’t want to lose track of their significance. I want to bring them back to the foreground. Your comments would be greatly appreciated.

Regarding my implementation of the Listening Guides, I have one rudiments student who’ll be taking the Level 8 exam in May. He is a 19-year-old vocalist (a tenor), who graduated from Canterbury High School in 2016. He’s interested in composition and has been accepted into the Music Industry Arts program at Algonquin College. We meet weekly on Friday mornings and began to work with *El grillo* (LG8) on March 10, when we reached the Music History unit in *Celebrate Theory*. He immediately filled in the blanks for Activity #1 and began to ask questions about the breve and the sharps above the staff. With his previous knowledge of Medieval music, he assumed the melody to be in the tenor and sang it. I missed the opportunity (the teachable moment) when we could have sung the other lines to find the melody in the soprano – instead, I simply told him where to find it! He completed the assignment while I wondered if the staff lines should be bigger... He then asked if we could listen to the piece and I said “not yet.” What was I thinking? Actually, in my mind this is so clearly a pre-listening activity that he surprised me, but I’m reminded that my supposed clarity is not clear at all! And my pre-listening activities are not standard practice, so they’ll require more explicit explanation. Overall, my student responded well to Activity #1, but I didn’t – I was disappointed by my teaching “performance.” I think I was very shy about my materials...

On March 17, he was anxious to continue and specifically asked for Activity #2! I pulled out my copy of the original score and we had a fairly lengthy discussion. At any rate, he filled in the blanks and proceeded with the assignment, despite my intention for it to be done away from the lesson – I didn’t verbalize this intention, so the misunderstanding is mine to shoulder... As he worked, I discovered that there needs to be more space between the second treble staff and the final question, although this “crowding” inadvertently reinforced the answer to my question at the bottom of the page! He didn’t sing the tenor’s refrain because he had a cold and was protecting his voice for an upcoming audition. Oddly, I felt relieved. What is wrong with me? I desperately want to bring more music into my teaching of music theory, but again I was too shy to do so. I need to do more than talk the talk – I need to walk the walk!

I saw my student again this morning (March 31) and we launched into Activity #3. He questioned the word “diminution” but seemed to understand its meaning from the exercise. Whenever possible, I like to create exercises that can serve as examples... Because we have the liberty of time – we’re well into the review stages of preparing for his exam – we’ve had many interesting discussions. Today, we talked about homorhythmic textures and syncopations (both terms previously known to him). He suggested a different wording for “In what measures do the

voices exchange text?”, using “alternate” instead of “exchange.” We also talked about *El grillo*’s text, comparing old and new Italian as well as various English translations found on the internet. He chose to translate *Dalle beve grillo canta* as “Drunkenly he sings,” rather than the more literal “In his cups he sings,” or even “Give him a drink so he can go on singing”! This reference puts a whole new spin on Josquin’s *frottola* as a drinking song – no wonder “He [the cricket] sings all the time”! We finished our lesson by listening to several YouTube recordings in both choral and ensemble renditions.

I invite you to respond to my experiences and/or to share your teaching experiences with any or all of the Listening Guides. My entries may be used as models and my Reflective Questions may inspire your thinking, but neither are meant to be restrictive in any way. Please feel free to think for yourselves!

Appendix 6.1: Sample Classroom Discussion

Musical work: J. S. Bach's Fugue in D-sharp Minor from *The Well-Tempered Clavier*, volume 1

Theoretical concepts: fugal exposition, tonal answer, codetta

Aural preparation: previous listening/classroom discussion of both prelude and fugue, without the score

Visual preparation: individual analysis of first 14 measures, outside of class

Pertinent information: the exposition ends midway through m. 10; students have been asked to account for the entry in m.12 (redundant fourth entry in a three-voice fugue)

Setting: sophomore theory class – teacher at the piano, prepared to play excerpts in the course of discussion; students at their desks with annotated scores

Teacher: *Where does the exposition of this fugue end?*

Student A: At the third beat of measure 10.

Teacher: *Why there?*

Student A: Because at this point all three voices have presented the subject.

Teacher: *How long is the subject?*

Student A: Two and a half measures.

Teacher: *Then there is a subject entry every two and a half measures?*

Student A: Um, no, the third voice doesn't come in right after the second.

Teacher: *Why not?*

Student A: I'm not sure, but I suppose Bach wanted to make the exposition longer.

Student B: No, it's for a modulation.

Teacher: *Why do you need a modulation?*

Student B: To get back to the tonic for the entrance of the third voice.

Student C: Yeah, the second voice modulates to A-sharp minor, so now we have to get back to the D-sharp minor tonic for the entrance of the third voice.

Teacher: *The second voice modulates? But I thought the second voice had to answer in the key of the dominant. Shouldn't it already be in the key of A-sharp minor?*

Student C: No, it actually starts in the key of the tonic and on the tonic chord itself. In fact it leaps from the fifth scale degree up to the tonic note. Then it modulates.

Student A: Oh, I see, that's a clear-cut cadence at measure 6 where the second voice ends – an authentic cadence in A-sharp minor. Then the next two measures have a real purpose, don't they? They get us back to D-sharp minor for the entrance of the third voice. But why doesn't the second voice start right out in the dominant?

[No one responds. The teacher allows the class to savour the silence in the hope of an answer. Then he cautiously proceeds with more Socratic dialogue.]

Teacher: *Well, let's look at the subject itself. It doesn't modulate, does it? It simply ends in D-sharp minor. Does that give you any ideas?*

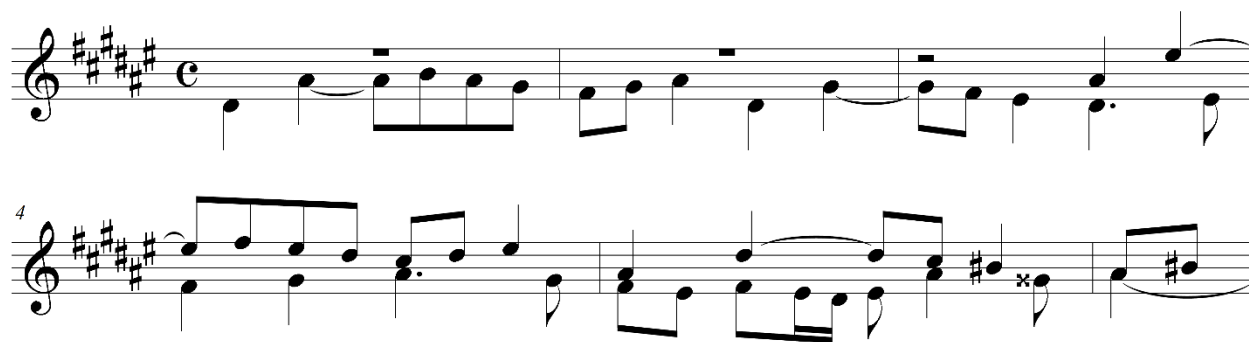
Student D: Well, I remember your telling us about several types of tonal answers. This is one of them, isn't it? The leap of tonic to dominant is answered by the leap of dominant to tonic.

You said it would go to the wrong key. If we used a real answer here, the third voice would be in the key of E-sharp minor and that doesn't sound right.

Student B: Well, why didn't Bach modulate back to D-sharp minor just as he did here? Then you could have a third [entry] and the third voice could be in D-sharp minor again. He put in the two measures anyway.

Teacher: *Okay, I think you understand the problem, but you've got to think like eighteenth-century listeners, too. They expected the opening emphasis on the tonic and they expected to hear the key of the dominant pretty soon, too. All eighteenth-century music – just about – moves to the dominant. Eighteenth-century ears would have been very puzzled if it didn't. But listen to what happens if I put in a real answer. [Teacher plays an altered version of the first 5 measures, using a real answer.]*

Figure 6.1: Altered Version of Bach's Fugue in D-sharp Minor from *The Well-Tempered Clavier*, volume 1 (mm. 1-6)



Student D: That doesn't sound right. It's too abrupt. Bach's way is better.

Teacher: *What! Better than mine?*

[Laughter]

Teacher: *Listen to this fugal exposition. [Teacher plays the opening of Bach's "Little" Fugue in G Minor through the entrances of the first two voices.] Shouldn't that fugue have a tonal answer? It begins with the leap of tonic to dominant, just like this one. But look, here's the answer and it's a real answer.*

Figure 6.2: Bach's "Little" Fugue in G Minor (mm. 1-7)



[Silence]

Student A: This one sounds right, too.

Student C: I guess Baroque composers didn't always follow their own rules.

Teacher: *Tonal answers are a pretty long-standing practice. Even sixteenth-century composers used them in imitative choral works. Look, here's one in a Canzonet by Thomas Morley, an Elizabethan composer. [They examine the Canzonet.] There is reason for Bach using a real answer here in the G Minor Fugue. Listen again. [Teacher plays the opening of the "Little" Fugue in G Minor again.]*

Student C: Wait a minute. In the D-sharp Minor Fugue the subject doesn't modulate. Does this one modulate to the dominant?

Student A: That's it! You got it! But it's a kind of implied modulation. You don't get any C-sharps, but the subject is so long that Bach can get our ears to hearing D minor in time for the answer to actually be in the key of the dominant.

Student B: Yeah, that's why he could use a real answer here. The other one still had to emphasize the tonic at the beginning of the answer.

Student D: But if the subject modulates, and the answer is real, that means that the answer will modulate, too. The third voice would end up in A minor, and that won't be right for a fugue in G minor.

Student C: I'll bet there's another extra section at the end of the answer to modulate back to the tonic. What do you call those sections in a fugal exposition where there's no subject?

Teacher: *The generally accepted term is codetta. Let's use that, but the important thing is to understand the function. Let's see if you're right. Let's look at that G Minor Fugue to see if there is a codetta. [They examine the score.]*

dialogue (White, 2002, pp. 138-141) with the term *bar* replaced by *measure*

Appendix 6.2: Bach's Fugue in D-sharp Minor from *The Well-Tempered Clavier*, volume 1 (mm. 1-14)

The image displays the first 14 measures of the Fugue in D-sharp Minor from J.S. Bach's *The Well-Tempered Clavier*, Volume 1. The score is written for a grand piano (treble and bass staves) in 4/4 time, with a key signature of three sharps (F#, C#, G#). The notation includes various musical symbols such as notes, rests, accidentals, and dynamic markings (e.g., *mf*, *f*, *ff*). The first system (measures 1-4) shows the initial entry of the fugue theme in the treble staff, with the bass staff providing a simple harmonic accompaniment. The second system (measures 5-8) continues the theme in the treble staff, with the bass staff providing a more complex accompaniment. The third system (measures 9-12) shows the theme in the bass staff, with the treble staff providing a complex accompaniment. The fourth system (measures 13-14) concludes the first section of the fugue.

Appendix 6.3: Response to a Disgruntled Colleague

Dear [ORMTA colleague],

I'm sad to know that you're disappointed with the new *Celebrate Theory* series. I've been thinking about the points you raised and wanted to address some of your concerns.

Although there was insufficient time to fully test the new books *per se*, they were written by a team of experts who have extensive experience in teaching music rudiments. I learned a great deal from my colleagues – I also learned that reviewing and writing are very different processes! And writing with others requires a great deal of compromise in order to reach consensus.

Let me give you a little bit of background, which isn't necessarily public knowledge, so I would appreciate your discretion.

RCM brought together a panel of international music theory pedagogues, who reviewed the previous syllabus and made several recommendations that resulted in a complete reworking of the rudiments curriculum. This reworking enabled a very positive and progressive move to integrate the study of music theory and the study of a practical instrument – to make theory relevant. RCM also surveyed teachers who had submitted students for theory exams and their responses encouraged the conservatory's move toward integration. To support the new syllabus requirements, RCM decided to author a complete set of theory textbooks (all subjects at all levels) – a shift that began with the last history series. Mark Sarnecki was approached to revise/write the rudiments series, but he declined. RCM then approached Brenda Braaten and Crystal Wiksyk (authors of the *Sound Advice* series), who began submitting their manuscripts in the fall of 2014. I became involved with the syllabus (as a reviewer) at approximately the same time, but in the spring of 2015, I was asked to revise the rudiments manuscripts, which unfortunately required a rewrite. RCM was looking for a new approach and my doctoral research happened to align with their vision.

My post-secondary training is in elementary school music, specifically the Kodály Method, which encompasses what many educators now call discovery learning. It's the polar opposite of the rote learning/memorizing that characterizes most theory teaching. Rather than teacher-led "telling," it enables student-led "deriving" or "experiencing."

Let me explain how this impacts the new rudiments series and how it can be used very effectively in your studio.

These books are written as an introduction to the specific musical/theoretical concepts necessary for the understanding of a student's practical repertoire. Music theory was "invented" for this purpose, but over time it has become separated from the music it was initially intended to explain. Music theory is now a set of abstract rules that need to be memorized in order to write a compulsory exam. I would like to change that, and I'm extremely fortunate that RCM has embraced my ideas – at least to some extent. But I also feel responsible for any criticism they receive.

The presentation you've seen in the books is a drastically compressed version of my work and that of my colleagues. There are very pragmatic reasons for this: the page-count must be controlled in order to manage cost; the content must be user friendly; the language (particularly the *amount* of language) must be carefully and consistently maintained. But more importantly, there must be room for individual

creativity. To borrow an analogy from [one of my co-authors], the books are a black-and-white illustration of music theory, the teacher adds colour!

In the elementary levels (preparatory to level 4), every unit contains required elements that are introduced with simple concept statements and relevant notation. Often, there is a brief student activity (identified with a wedge in the left margin) that can be done at the lesson as part of the teacher's explanation. In short – a “picture” (especially one completed by the student) is worth a thousand words!

Every concept statement is designed to be transferrable, meaning that it is true in the current context as well as in future contexts (an example of an *untrue* statement that confuses many students is: minor intervals are lower than major intervals – this is true when the upper note is altered, but *not* true when it becomes necessary to alter the lower note). Every concept is also reinforced with a spiral curriculum, meaning that concepts are continually revisited with increasing levels of difficulty. RCM's syllabus is well suited to this type of learning – with intervals, for instance, appearing as steps, skips, and repeats at the preparatory level, then eventually as all simple and compound intervals (including inversions) at level 8.

Musical/theoretical concepts are organized both horizontally and vertically (in a manner of speaking) – horizontally reinforced within each book (from beginning to end) and vertically reinforced from one book to the next (within each specific topic). Although the rhythm content can more-or-less stand on its own, the pitch content (scales, intervals, chords, etc) is cumulative, with intervals dependent on knowledge of scales and chords dependent on knowledge of intervals, etc.

Regarding reinforcement (which you mentioned on Monday): there is a difference between reinforcement and practice. Reinforcement implies a “revisiting” that augments or increases knowledge – that adds another piece to the puzzle or unlocks another mystery. This, I believe, is covered very thoughtfully in the new books. But I agree with you, there isn't enough practice.

My natural response is defensive: this wasn't my decision! But there are more helpful arguments. First, the elementary levels move through the rudiments requirements very, very slowly – so much so that level 5 (which is similar to basic rudiments) is essentially a review of the previous material. Incidentally, it was also designed as an entry point for older students, so they don't have to take “baby steps” through the first series of books. Second, and more importantly, if students can connect their study of theory with the music they're playing or singing, they'll be much more likely to understand it and to reproduce it. For example, if a student is playing a piece of music in D major, he or she will know that both F-sharp and C-sharp are necessary to make the piece sound as it should, but a memorized key signature is likely forgotten the day after an exam.

However, I still need to address the practice issue.

Formally, RCM is in the process of creating on-line supplements for each level of *Celebrate Theory*. They are also creating printable one-page worksheets (currently complete to level 4), which can be found on their website (in the teacher portal as resources). Informally, your students' repertoire is the best source for practice with music theory. Every unit in the theory series concludes with an excerpt from one of RCM's repertoire books – representing a variety of instruments – which is intended as a review exercise. If I had had my way, these excerpts would have been positioned at the *beginning* of each unit, where the new learning could be questioned and “discovered.” But every time you examine a score with your students, you are practicing music theory. Consider asking them to carry a folder of manuscript (free printable staff paper is readily available) and to write scales related to their repertoire. Or,

assuming they have original copies of their music, ask them to scan a page and identify or colour-code specific intervals with highlighters. Every score has its own “secrets” to reveal, and because your students are intimately attached to their repertoire, these kinds of activities have the added bonus of connecting a symbol (or an explanation) with an actual sound, which compliments their ear training.

In terms of melody writing, I agree that this topic can’t be taught in a few pages, but these pages aren’t intended to be the “whole story.” In the same way that students of language learn spelling and grammar before embarking on creative writing, students of music theory must learn basic melodic principles – an absolute necessity based on examining encounters with thousands of terrible melodies on thousands of junior harmony exams!

Melody writing is also an especially useful reinforcement tool. Students of language demonstrate comprehension by using new vocabulary in a sentence. Similarly, students of music theory should be able to demonstrate their understanding of musical vocabulary in melody writing. Too many students associate creativity with “anything goes,” but as you are well aware, there’s a significant difference between a melody that works (or sounds good) and one that doesn’t work. Even Bach learned his craft through careful study of other composers’ music. Through their MUSIC – not a rulebook.

To this end, the melody writing segment begins with very tight parameters that are gradually relaxed as the student gains more and more experience. But once the topic has been introduced, students are encouraged to continue the activity independently – both observing/analyzing melodies in their repertoire and writing melodies of their own (another reason to keep a steady supply of manuscript). Not all writers of language become great authors, nor will all “melodists” become great composers, but every student can learn to communicate musically – however rudimentary.

Please forgive my long-windedness – I didn’t mean to go on and on! I only wanted to help you understand the “why” behind the *Celebrate Theory* series. It was written with the very best intentions. I hope you’ll consider using it to help your students make connections between the music they see, the music they hear, and the music they write.

Thank you for sharing your concerns,
Lori Lynn

Appendix 6.4: Chopin's Prelude in A Major, op. 28, no. 7

Andantino

p dolce

Ped. *

6

Ped. *

12

Ped. *

Appendix 6.5: Bartók's *Jest* (mm. 1-16)

Allegramente

f

giocoso

p poco rall.

a tempo

f

Appendix 6.6: Motives Derived from Bartók's *Jest*

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