ABSTRACT

Title of Dissertation: CHORAL IMPROVISATION: TOWARD A CURRICULUM FOR UNIVERSITY CHORAL SETTINGS

Steven Ross Seigart, Doctor of Musical Arts in Choral Conducting, 2017

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The regular practice of musical improvisation in an ensemble context has been shown to have many benefits, including the improvement of individual musical skills, ensemble cohesiveness, and the potential to help teach music theory and history. In addition, group improvisation has been proven to have positive non-musical effects, such as the reduction of social anxiety and stress, the improvement of communication and attention, and the acquisition of higher-order thinking skills. Many of these studies focus on these effects only among children, but the growing number of adult choral ensembles that regularly improvise suggests that these benefits may be gained in any level ensemble and in any age singer, including the university choral ensemble and the typical university student.

Historically, improvisation and composition were considered as one creative process, with the latter often following the former. Even when the distinction between the two was acknowledged, the most prominent composers were also the
finest improvisers. Toward the twentieth century and beyond, notation became gradually more specific, and the need for in-the-moment decision-making became obsolete.¹ Modern classical ensembles largely do not improvise, precisely for this reason: the music they perform does not require it. Outside of classical music (with a few notable exceptions), improvisation is a part of almost every musical genre worldwide.

In this document I have suggested a series of modules toward a improvisation-based curriculum, which can be freely combined and adapted to serve a number of functions and attempted in any order and in any sequence. These modules address fifteen compositional techniques, from simple canons to harmonic progressions, with more than fifty total distinct points of entry. The hope is that collegiate choral ensembles at every level will find these modules at once practical and accessible, so that students can begin reaping the benefits of regular improvisation practice.

CHORAL IMPROVISATION:
TOWARD A CURRICULUM FOR UNIVERSITY CHORAL SETTINGS

by

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# Table of Contents

List of Figures iv  
Chapter 1: Introduction 1  
Chapter 2: Definitions 5  
Composition-Improvisation Continuum 5  
Historical Definitions 6  
As An Element of Musical Fluency 8  
Audiation 10  
Musical Empathy 10  
Creativity 12  
Chapter 3: Historical Significance 16  
History of Research 17  
Improvisation and the Beginnings of Notation 18  
Standardized Notation and Harmony 21  
The Renaissance and Improvising Counterpoint 23  
Baroque and Ornamentation 27  
Late Baroque and Classical Varied Reprises and Cadenzas 30  
Romanticism and the Rapid Decline of Improvisateurs 32  
Conclusions 34  
Chapter 4: Current Trends 35  
Introduction 35  
Improvisation in Current Grade School Curriculum 36  
Improvisation at the College Level 41  
Non-Academic Choirs 45  
Conclusions 52  
Chapter 5: Review of Research 53  
Introduction 53  
Early Childhood Research 54  
Secondary and Collegiate Level Research 60  
Other studies 61  
Conclusions 63  
Chapter 6: Modules/Exercises 64
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>64</td>
</tr>
<tr>
<td>Creating a Safe Environment</td>
<td>65</td>
</tr>
<tr>
<td>Role of the Conductor</td>
<td>67</td>
</tr>
<tr>
<td>Physical Set-up</td>
<td>68</td>
</tr>
<tr>
<td>Prior Knowledge</td>
<td>69</td>
</tr>
<tr>
<td>Incorporating Improvisation into the Warm-up Sequence</td>
<td>71</td>
</tr>
<tr>
<td>Audiation</td>
<td>72</td>
</tr>
<tr>
<td>Modules</td>
<td>74</td>
</tr>
<tr>
<td>A Word About Texts</td>
<td>75</td>
</tr>
<tr>
<td>Chapter 7: Conclusions</td>
<td>86</td>
</tr>
<tr>
<td>Bibliography</td>
<td>89</td>
</tr>
</tbody>
</table>
List of Figures

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Figure 1</td>
<td>Common cadential formulas for a single mode</td>
<td>21</td>
</tr>
<tr>
<td>Figure 2</td>
<td>Rules for melodic interval choice in two-voice canons (lower fifth highlighted)</td>
<td>25</td>
</tr>
<tr>
<td>Figure 3</td>
<td>Montaños, stretto fuga at the fifth below, ornamented</td>
<td>25</td>
</tr>
<tr>
<td>Figure 4</td>
<td>Possible two-part canon, no overlap</td>
<td>78</td>
</tr>
<tr>
<td>Figure 5</td>
<td>Possible two-part canon, with overlap</td>
<td>78</td>
</tr>
<tr>
<td>Figure 6</td>
<td>Possible three-part canon, with overlap</td>
<td>78</td>
</tr>
<tr>
<td>Figure 7</td>
<td>Four possible bass lines</td>
<td>80</td>
</tr>
<tr>
<td>Figure 8</td>
<td>Possible chord progressions</td>
<td>80</td>
</tr>
<tr>
<td>Figure 9</td>
<td>Possible harmonies and harmonic rhythms</td>
<td>82</td>
</tr>
<tr>
<td>Figure 10</td>
<td>The five simplest psalm tones with number of syllables remaining in green</td>
<td>84</td>
</tr>
</tbody>
</table>
Chapter 1: Introduction

Improvisation, in the broadest sense of the term, involves making decisions in the moment of performance. Its function as an essential component of musical fluency can be understood as representing the ability to engage creatively and express meaning through the spontaneous assembling of basic musical components. As analogous to the process of natural language acquisition, improvisation represents the ability to carry on a meaningful conversation, assembling components of language in a new but coherent way. In general, performance of notated music is seen as the ultimate musical goal in music education as well as the ideal form of assessment, whereas improvisation is regarded as a secondary or specialized “craft,” despite its encouragement in prominent music curricula.

Historically, improvisation and composition were considered as one creative process, sometimes verging toward one side or the other, with composers until relatively recently having skills in both spontaneous composition (improvisation) and a more refined pre-composition, since improvisation was a part of every musician’s training. From historical accounts and the recreations of modern scholars, the regular study of improvisation even over a short period of time can produce a piece indistinguishable from a pre-composed one. The true and full understanding of past musical traditions necessarily involves the study of the process and circumstances in which music was created, including the innovation-driving process of improvisation. Furthermore, the music that comes down to us in notation represents only a fraction of performed music, and even in that which is notated, the notation, in many cases, reflects only certain aspects of its realized
performance or performance possibilities. When applied to the study of music theory, history, and performance, these notions are potentially transformative.

The modern models of collegiate choral music generally do not involve improvisation, precisely because improvisation is not a necessary skill for the successful performance of notated music. With the exception of repertoire involving aleatoric or chance music, the creative decisions are generally left to the conductor to dictate, with choristers as obedient executors. However, in childhood music education, improvisation is strongly encouraged and successfully applied in many circumstances, though its application and available resources decrease as age and grade level increases. Available resources for high-school and college choral ensembles are extremely lacking, with those available being largely jazz-centered. Nevertheless, in the last twenty or so years, improvising choirs (or choirs that incorporate improvisation) have been an emerging trend in the choral world, with some choirs formed expressly for the purposes of exploring improvisation.

Though the scientific study of improvisation is still in its early stages, the regular practice of musical improvisation in an ensemble context has been shown to have many benefits. These include improved musical skills, improved ensemble cohesiveness, and the potential to help teach music theory and history. In addition, group improvisation has been proven to have positive non-musical effects, such as the reduction of social anxiety and stress, the improvement of communication and attention, and the acquisition of higher-order thinking skills. Many of these studies focus on these effects only among
children, but the growing number of adult choral ensembles that regularly improvise suggests that these benefits may be gained in any level ensemble and in any age singer, including the university choral ensemble and the typical university college student.

Implementing improvisation to the collegiate choral curriculum is not currently adequately addressed in the available literature. Teachers may feel ill-prepared or ill-equipped to address improvisation in the choral rehearsal. In addition, because of the available materials and the connotations of the term improvisation, many may feel that jazz is their own entry point into improvisation. Fear is another common stumbling block, with teachers hesitant to shift the power dynamics of the rehearsal into the hands of the students to explore and make their own musical decisions, and students afraid of making mistakes or embarrassing themselves in front of their peers. Indeed, creating an open, safe environment in which students feel their choices are valid and valued is a crucial prerequisite for attempting improvisation in the choral rehearsal. For collegiate choirs, the warm-up sequence is an ideal time to implement improvisation, since improvisation can engage all the components of mind and voice that a traditional warm-up addresses and does not take time away from the rest of the rehearsal.

Though there are endless possibilities for incorporating improvisation into the choral warm-up, in this document I have suggested a series of modules toward an improvisation-based curriculum, which can be freely combined and adapted to serve a number of functions and attempted in any order and in any sequence. These modules address fifteen compositional techniques, from simple canons to harmonic progressions, with more than
fifty total distinct points of entry. The hope is that collegiate choral ensembles at every level will find these modules at once practical and accessible, so that students can begin reaping the benefits of regular improvisation practice.
Chapter 2: Definitions

Improvisation in music is an essential component of the musical creative process, both historically and in the present day. Along with the interpretation of pre-composed music, the practice of improvisation produces a concrete musical product, but is also itself a process. Composition and improvisation, then, are complementary, but not mutually exclusive, processes, the principal difference being the element of time. A pre-composed work may be freely edited, but an improvised work unfolds in real-time and cannot be revised. The performance and the composition of a pre-composed work are temporally separate events, whereas improvisation is simultaneously both process and product.

Composition-Improvisation Continuum

Alperson (1984) and Sarath (1996) discuss improvisation and composition as processes along a continuum. At one end would be an improvisation with no parameters set in place (sometimes called free improvisation) and at the other would be a composition so specific that it could be exactly recreated (i.e., with the use of a machine). On this continuum would therefore exist performances of pre-composed music where the output varies (as would be the case in any human performance), as well as improvised works with specific-enough parameters that the products are similar in output. These varying “levels” of improvisation have been widely discussed, with Flohr’s hierarchy of “exploratory improvisation” (or “musical exploration”), “free exploration” (or “free

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improvisation”) and “guided improvisation” being widely accepted as delineating general areas along this continuum.

**Historical Definitions**

In his seminal work, *Improvisation: Its Nature and Practice in Music*, Derek Bailey advocated that there could be no one definition of improvisation:

> “Improvisation is always changing and adjusting, never fixed, too elusive for analysis and precise description…any attempt to describe improvisation must be, in some respects, a misrepresentation, for there is something central to the spirit of improvisation which is opposed to the aims and contradicts the idea of documentation.”

Indeed, there are seemingly as many definitions for improvisation as there are those who improvise. In the 1954 edition of *Grove*, it was defined as “the art of thinking and performing music simultaneously”; clearly oversimplified, since in all performance surely the performers are engaged mentally as they do so. A more recent entry in the 1985 *The Oxford Dictionary of Music* defines improvisation as “A performance according to the inventive whim of the moment, i.e. without a written or printed score, and not from memory.” This also excludes the realm of “guided improvisation” where visual aides (a score) provide materials and/or structure, aleatoric sections in otherwise pre-composed works, or even lead sheets or basso continuo parts. In Neil Sorrell’s 1992 entry in *The Companion to Contemporary Musical Thought*, he suggests that improvisation “conveys something that is insufficiently prepared and of no lasting value.” Here, clearly, improvisation is a pejorative, inferior to composition because it does not last and was not sufficiently thought-out or structured. In fact, the Latin origins of the word literally mean

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“without foresight” or “not prepared,” and from this we get the adjective “improvisatory” which generally describes something with no form or structure beyond a connected series of in-the-moment decisions. However, there are improvisations indistinguishable from composed counterparts, and current scholarship suggests that even the most complicated of forms and processes can be improvised. Historically, the most prominent composers also happened to be famed for their skill at improvisation (Bach, Mozart, Beethoven, Liszt, etc.), and improvisation was considered a highly-valued skill in the musical climate they inhabited. In fact, outside of the jazz world, improvisation is still taught, practiced, and valued by organists and those who specialize in early music (in which the less-specific notation provides ample opportunities for in-the-moment musical choices). The most recent entry from *Grove* (2014) offers a definition recognizing improvisation’s inherent value: “The creation of a musical work, or the final form of a musical work, as it is being performed.”\(^4\) Acknowledging the product as a musical work, or even as the final form (slightly ambiguous) is important in equally valuing the final result of both improvisation and composition. The entry continues, “It may involve the work’s immediate composition by its performers, or the elaboration or adjustment of an existing framework, or anything in between.”\(^5\) This is in line with the continuum theory, where all musical performance of composed works has improvisational elements; conversely, even “free” improvisation can embody elements of pre-composed works.

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\(^5\) Ibid.
As An Element of Musical Fluency

Approaching it from a purely academic standpoint surely does miss the fact that improvisation does not exist outside of its practice, and that perhaps those who practice it are best equipped to define it. As Bailey points out, this is precisely why there can be no theory of improvisation. Improvisation exists in nearly all world musics, and is an integral element of performance in cultures without written notation, where music is transmitted aurally. In some cultures, improvisation extends beyond the musical realm to a “way of being,” i.e., embodying flexibility, risk-taking, and exploration. In fact, improvisational scholars Higgins and Mantie (2013), outline three possible definitions: 1) an integral component of musicianship; 2) an aspect of a situated form of musical practice; and 3) an integral mode of behavior (including outside the musical world). Limb and Braun (2008) elaborate on this, stating:

“The process of improvisation is involved in many aspects of human behavior beyond those of a musical nature, including adaptation to changing environments, problem solving and perhaps most importantly, the use of natural language, all of which are unscripted behaviors that capitalize on the generative capacity of the brain.”

For practical musical application and in order to fully understand the pedagogical importance of improvisation, the natural language model is an oft-used parallel (Azzara 1993, Gordon 2012, Dobbins 1980). In this model, the process of natural language acquisition is extended to the language of music. As a child, even in the womb, we begin

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6 Bailey, x.

7 Lee Higgins and Roger Mantie, “Improvisation as Ability, Culture, and Experience,” Music Educators Journal, 100, No. 2 (December 2013): 38-44.

to acquire language by hearing the sounds around us, and when we begin to “babble,”
those around us encourage us to make sound as we start to associate sound with meaning.
We are eventually able to comprehend entire sentences and not only reproduce that which
we hear, but also combine the elements of language to create new, meaningful series of
sounds. Then we begin to learn to read, matching the meaningful sounds we already
know to their notation. At first we are read to, and soon we begin reading ourselves. We
then borrow elements of written language as models to integrate into our own spoken
language. We never lose the ability to “read” the notation by simply hearing the sounds
(and understanding their associated meanings) in our head without having to physically
produce the sound. Finally, we learn to write our own meaningful language that express
thoughts and feelings. This is what is meant by fluency in a language: the ability to
converse, read, write, and to have both listening and reading comprehension. As Bill
Dobbins put it:

“Full proficiency in a verbal language must include the ability to command a
considerable vocabulary with equal facility at the reading, conversational, and
intuitive levels. The development of proficiency in a music “language” involves
the same general process. The ability to play a Beethoven sonata or an Art Tatum
solo is, by itself, no more an indication of musical creativity than is the ability to
read a Shakespeare play an indication of the ability to use the English language
creatively.”

Azzara concurs, stating that the ability to improvise means that “an individual has
internalized a music vocabulary and is able to understand and express musical ideas
spontaneously, in the moment of performance.” A possible definition based on this


model might be an integral element of musical fluency in which musicians spontaneously express meaningful musical thought and feeling through the synthesis of musical vocabulary.

**Audiation**

Audiation, or the ability to accurately mentally predict a sound before it physically occurs, is what distinguishes this type of improvisation from musical exploration. Kratus (1990), in his suggested curriculum for implementing improvisation, posits that making sound without the ability to predict accurately the resulting sound is not improvisation (as a child exploring an instrument for the first time making spontaneous sound). Improvisation only occurs when a person is able to audiate the sound that will occur.\(^\text{11}\) Edwin Gordon takes this idea further, suggesting that part of the skill of improvisation is related directly to the accuracy and complexity of the audiation: “the act of music creativity and improvisation is the act of audiating familiar tonal patterns and rhythm patterns and then reorganizing them into an unfamiliar order and sequence.”\(^\text{12}\) Audiation is an acquired skill, and repeated practice in audiation expands that ability while increasing accuracy between imagined and actual sound results.

**Musical Empathy**


Group improvisation embodies all the previously delineated elements of expressing musical thought fluently and audiation, but a new element emerges commonly labelled “musical empathy,” turning improvisation into a social process and activity. Though beyond the scope of this document, the social processes and implications of group or ensemble improvisation are vast. Advanced active listening skills are developed when a person responds to and interacts within a group, and can help foster an environment of acceptance which values all choices and modes of expression and strengthens community and interpersonal relationships.\textsuperscript{13} These types of environments have been thoroughly studied and documented in folk, jazz, and world music, and in many cultures the environments that exist around improvisation also extend to other social contexts (or are embedded within them).\textsuperscript{14}

Group improvisation also has the potential, as musicians are added, to increase the creative possibilities, and therefore, complexity of the improvisation. Walduck proposes that audiation- or musicianship-related shortcomings of individuals are often mitigated in group improvisation, where a collective mind can conceive and play more complex ideas and forms. Each individual can contribute his/her strengths while minimizing weaknesses, leading to the possibility of improvisations “being richer than the


conceptions of a single composer.”¹⁵ Although the process of revising or reworking musical material is normally found in the compositional process, it is possible that, in a single group improvisation, material could be altered in subsequent repetitions (if indeed the improvisation so unfolds) by different members of the ensemble.

Creativity

Since improvisation is a creative process, it will be helpful here to define creativity and the process of creating. Kratus (1990) suggests that the “creative act” (a creation) involves three essential components: the person, the process, and the product.¹⁶

For him, the person is fluent in their language or medium, flexible in responding to external stimuli (environment), and original in that they are able to generate unique ideas. Charyton et al (2013), identifies cognitive risk-taking (developing and sharing ideas despite possible opposition) as an additional personal attribute. Their study with college students and “creative risk tolerance” found that the most creative students were the ones with the greatest capacity for cognitive risk-taking.¹⁷

The process involves the types of thinking that occur in the moment of creating. Webster (1990) divides these types into two categories: divergent thinking, in which one choice or

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problem is met with multiple solutions; and convergent thinking, where logic and reason select one solution. Both are involved in the creative process, and in all phases of creating. Cropley (2010) identifies seven phases of this process: information, preparation, incubation, illumination, verification, communication, and finally, validation. In each phase, Cropley suggests, divergent and convergent thinking are fully integrated.\textsuperscript{18}

Person and process together form a creative act, manifested in the product created. Mishra and Henriksen (2013) argue in their “NEW” definition that a product is creative if it is Novel, Effective, and Whole.\textsuperscript{19} Novel comes from the person, in that they generate unique ideas; effective comes from the combination of divergent and convergent thinking, making the product both logical and valuable; and whole, in that the product is organic and meaningful.

Psychologists and behavioral scientists who subscribe to social constructivism (after the writings and theories of Lev Vygotsky, in particular) have reduced all of human behavior down to two basic acts: reproduction and creation. Creation is the process of generating something new, while reproduction is the act of replicating a previous behavior. Vygotsky suggested that while both processes should be valued equally, only creation (and thus, innovation) has the potential to move the human race forward. In musical terms, the


\footnote{\textsuperscript{19} Punya Mishra and Danah Henriksen, “A NEW approach to defining and measuring creativity: Rethinking technology and creativity in the 21st century,” \textit{TechTrends}, 57, No. 5 (2013): 10-13.}
composition-improvisation continuum represents the creative process, while the performance of pre-composed works is, essentially, a process of reproduction.


Fostering creativity has been acknowledged as an important component of education. Since Benjamin Bloom’s 1956 Taxonomy of Education Objectives: The Classification of Educational Goals, six cognitive levels have been identified as educational objectives, revised in 2001 to better match current educational curricula: remember, understand, apply, analyze, evaluate, and create.21 According to this hierarchy, creating represents the highest level of cognitive activity. However, the National Standards of Music Education (1994) touts performance as the culmination of music-learning, not creativity.22 For a

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continued in-depth discussion on attitudes on improvisation and creativity in educational standards, see Chapter 4.
Chapter 3: Historical Significance

“This joy in improvising while singing and playing is evident in almost all phases of music history. It was always a powerful force in the creation of new forms and every historical study that confines itself to the practical or theoretical sources that have come down to us in writing or in print, without taking into account the improvisational element in living musical practice, must of necessity present an incomplete, indeed a distorted picture. For there is scarcely a single field in music that has remained unaffected by improvisation, scarcely a single musical technique or form of composition that did not originate in improvisatory practice or was not essentially influenced by it. The whole history of the development of music is accompanied by manifestations of the drive to improvise.”

Ernst Ferand, *Improvisation in Music* (1938)\(^{23}\)

Historically, the focus of musicology has been on the written score, primarily, and only secondarily on the process and circumstances of its composition. Perhaps influenced by historical traditions of visual art and literature, musicologists and music theorists prefer to analyze the finished product handed down as artifact than its creative generation or the performance traditions or oral history that led to its creation.\(^{24}\) Or perhaps because improvisation is found in and associated most commonly with non-Western, folk, and even minority societies and their culture, it is taken less seriously than Western art music, considered by some to be “a third world of music,”\(^{25}\) and less worthy of serious study than meticulously written-down scores that represent the genius and laborious craft of specific composers. To the traditional “musical establishment,” music worth studying embodies discipline, reliability, and predictability, while improvised music represents the absence of those characteristics.\(^{26}\) After all, the study of music involves analysis of

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\(^{23}\) Ernst Ferand, *Die Improvisation in der Music* (Zurich: Rhein-Verlag, 1938).


\(^{26}\) Ibid., 6-7.
immortal scores, and the absence of scores or other printed materials suggests a musical practice insignificant enough not to merit preservation. In this chapter and the one that follows, I will argue that improvised music, historically and in the present, is not inferior to the written score, nor does it represent the insignificant “craft” of undisciplined individuals. In fact, I hope to prove that the dedicated regular study of improvisation can yield a product indistinguishable from pre-composed counterparts, and that in many cases the compositional process helped to codify an already-understood improvised practice or simply served as a backbone for a largely improvised performance.

History of Research

Until recently, the historical practice and cultural significance of improvisation has been largely ignored. Bruno Nettl even suggests that as recently as forty years ago, only one musicologist had undertaken any kind of in-depth study into the history of improvising music and the process of improvisation: Ernst Ferand (1887-1972).\(^{27}\) Ferand’s book *Die Improvisation in der Musik* (1938) is concerned mainly with Western music, though he does touch on some non-Western examples of improvisation.\(^{28}\) Along with Ferand, several music educators, notable among them Émile Jaques-Dalcroze, and scholars in the increasingly important field of ethnomusicology began to discuss and express interest in improvisation in the early and mid-twentieth century. The historically-informed performance movement that arose beginning in the 1970s added to this interest, seeking to understand better the practices and conventions of Western music pre-1750 (though

\(^{27}\) Ibid., 1.

\(^{28}\) Ferand (1938).
this field has gradually increased to include study into the improvisations of Mozart, Beethoven, Chopin, and even as late as Liszt). But most of the extant serious study in historical improvisation has taken place only in the period since 1990, with this author’s argument being that the bulk of this research has yet to be done. For the most part, the average music student’s study in improvisation exists only to fill the gap in otherwise specifically-notated scores: e.g., a singer seeking to ornament his/her bel canto arias, a pianist creating a cadenza for a Mozart concerto without one notated, or a violinist taking inspiration from the graces for a Corelli sonata. Current music history and theory curriculum take only a cursory (at best) glance at improvised music, and performing teachers often either avoid repertoire that might require improvisation, or seek to codify ornaments or cadenzas (dictated by the teacher or borrowed or compiled from other artists) by eliminating spontaneity altogether. However, this is missing the point entirely, and a review of the extant literature on historical improvisation clearly shows that improvisation was a practiced and highly-valued skill by composers and performers of nearly all Western music written through the nineteenth century (and beyond, if one includes the field of liturgical organ playing).  

**Improvisation and the Beginnings of Notation**

Because of the absence of musical scores prior to the development of notation and the general ambiguity of early notation, one can only guess at the musical generative process. Perhaps music was transmitted aurally, by rote memorization, and performances varied

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only to the extent that the performer could not accurately recall that which they had been taught. Or perhaps creative individuals used the music they had learned as the basis for elaboration, or the music they performed may have been completely spontaneous. We have only a few clues about the types of music being created prior to the advent of notation, among them Aristotle’s *Poetics* (c. 335 BCE), which suggests that Greek drama began as improvisation of poetry, melody, and rhythm but, by the time of his writing, could be codified into a set of rules regarding its construction and performance.\(^{30}\) Nearly six hundred years later, St. Augustine wrote about the improvisation of the *jubilus* as being a spontaneous outburst of joy expressed through an extended melisma in an otherwise familiar chant (scholars have pointed out that this is *not* the same *jubilus* as appeared later in the singing of the *Alleluia*, but rather applied to melismatic singing in general).\(^{31}\) Later on, the *jubilus*, in this Augustinian sense, appeared in notation in Psalm antiphons, Alleluias, and countless other instances to express in music a joyful text.\(^{32}\) In both instances, the practice of improvisation predates the codification.

It is generally understood that the practice of chant-singing predates its notation, as evidenced by the slow process by which a reliable system of notation was developed. Music was performed and created prior to the advent of notation, and the earliest notation does not reflect complete melodies but rather a written reinforcement of what a singer has done.


already learned. Because of the varied early notational procedures and the varying dates when we begin to see this notation, a few assumptions can be drawn. Firstly, the fact that there exists any notation signals that the practice of chant was, at different points, becoming too complex to remember in full, or that the powers at be were attempting to regulate what was being sung. Secondly, the variety of notational practices and varied amount of notation that accompanied early liturgical texts suggests that differently skilled singers required different strategies or reminders (and perhaps that the more trained or skilled the singer, the less notation they required). Thirdly, the chants contained in themselves a repertoire or vocabulary of typical gestures (e.g., ending formulas) that did not necessitate notation. This has been pointed out by a number of scholars: that chants in the same mode include similar thematic materials, recycled in different positions based on the syntactical structures of the text and their function within the liturgy. This hints at a controlled improvisatory technique in which soloists could teach an entire chant or cue other singers simply by the choice of mode and sequence of vocabulary used in the intonation (see Figure 1). Whether this was an entirely improvised practice or the process of giving enough clues in order for the singers to effectively recall what they had been previously taught is unknown.

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However, the increasing complexity of the notated chant over time suggests either a flexible nature of the musical content of the chant or reflects an improvised practice of elaboration which was standardized over time. Scholar Richard L. Crocker argues for the latter, stating that solo singing of an experienced singer most likely included improvisation. A new elaboration (melisma) or variation (changing of an existing melody) could then be incorporated as modeled by the larger ensemble of singers based on aural, or in some cases, physical, cues.\textsuperscript{34} This is the process by which the chants changed over time, and by which new ones were incorporated.

\textbf{Standardized Notation and Harmony}

The relative standardization of notation, especially in the introduction and dissemination of the staff, that occurred in much of Western Europe in the period 800-1200 (staff notation beginning c. 1030), greatly facilitated the practice of improvising harmony to existing monophonic music.\textsuperscript{35} Sources like the \textit{Winchester Tropers} certainly notate


adding harmony to an existing melody, but the exact intervals between the two voices cannot be determined (either a reminder of previously taught or worked-out harmony or, as Horsley suggests, the transcription of an improvisation). Improvising harmony required a technical and theoretical knowledge, particularly in recognizing visually or aurally and understanding the concept of vertical dissonance and consonance as well as the conventions of improvising a monophonic chant (like the syntactical vocabulary available). The first treatises on this subject are the 9th century *Musica enchiriadis* and *Scolica enchiriadis*, which, in the later chapters, deal expressly with adding harmony to a pre-existing chant (organum). Later manuals included Guido of Arezzo’s *Micrologus* (early 11th century), and examples of organum (and early discant style as well) can be found in manuscripts from Santiago de Compostela (especially the *Codex Calixtinus*), Limoges, St. Martial, and Paris (including the *Magnus liber organi*, collected and revised by several scribes from the 11th-13th centuries to reflect a variety of monophonic and polyphonic practices). In the late 14th century, especially in England and Burgundy, adding one or two organal voices in similar motion with the principal voice resulted in the technique known variously as *gymel, fauxbourdon, faburden*, and a slew of other terms, though the manuscripts show an incredible variety and flexibility of the organal

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36 Horsley, “Improvisation.”

37 Ibid.

voices, including elaborate upper voices, oblique motion, and discant-style cadential formulas—not just parallel first-inversion chords as some later sources generalize.\textsuperscript{39}

Scholars agree that the process of adding harmony, whether organum (in all its varieties), discant, conductus, or motet, was widespread by the time of these treatises and examples, and that these manuals were an attempt to help guide the improvisatory process.\textsuperscript{40} The majority of these, collectively an extension of the medieval practice of troping, or adding to a pre-existing manuscript, reflect a continued urge to elaborate, revise, and ultimately, to create and, therefore, innovate. Rob Wegman even argues that all those named and unnamed individuals charged with creating or revising these primary sources should not be considered composers, but rather co-“makers” and performers seeking to refine and guide their craft of improvising. Wegman suggests that the role of the composer as working out a piece beyond the skills of these performing co-creators did not arise until the late fifteenth century.\textsuperscript{41}

**The Renaissance and Improvising Counterpoint**

Until recently, it had been assumed, based on notated examples, that the types of counterpoint that arose in the Renaissance are so notated because their complexity is beyond the abilities of the improvising choir or choral ensemble. There are multiple


sources indicating that Renaissance choral singers studied improvisation (including counterpoint) regularly, and that they continued to improvise in the liturgy (as exemplified by the numerous improvisational treatises that continued to be written through this period). It might seem, then, that if the newer, more complicated genres and compositional techniques were outside their capabilities, then the music they continued to improvise consisted of the aforementioned genres of monophonic chant and organum. But this defeats the nature of improvisation, which at its core represents creativity and innovation. Furthermore, the part- and choir-books that do come down to us of motets from this period were composed without the aid of scores (visually lining up the voices to confirm voice-leading, etc.). If composers did not use scores, how could they accurately predict that the lead voice of a chant-based canon, for example, would yield a successful three- or four-voice motet? A study recently undertaken by Julie Cumming and Peter Schubert found that, after studying and practicing various techniques mentioned in Renaissance treatises on counterpoint every day for several months, they were able to re-create this process of improvising motets based on the stylistic conventions outlined in the treatises. Depending on the desired time unit and pitch interval above or below the lead voice, there were a limited set of choices for each new pitch that would produce a successful canon. Once the first-species realization of this

42 Canguilhem, Philippe (author), and Alexander Stalarow (trans.), “Singing upon the Book According to Vicente Lusitano” in Early Music History 30: 45-6 (2011).

process was solidified, the voices could be elaborated and ornamented based on fifth species principles (see Figures 2 and 3).

Figure 2. Rules for melodic interval choice in two-voice canons (lower fifth highlighted)

<table>
<thead>
<tr>
<th>Rules for melodic interval choice for the Guide (lead voice)</th>
</tr>
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<tbody>
<tr>
<td>at the 8\textsuperscript{th} below</td>
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<td>at the 8\textsuperscript{th} above</td>
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<tr>
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<td>3\textsuperscript{↓}</td>
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Figure 3. Montaños, stretto fuga at the fifth below, ornamented

\[\text{unornamented stretto fuga at the lower fifth}\]
\[\text{ornamented stretto fuga at the lower fifth}\]
\[\text{ornamented stretto fuga at the lower fifth (alternate)}\]

\[\text{44 Julie Cumming and Peter Schubert, “Chant-Paraphrase Canon,” Presented at: Colloque FABRICA (Ressources pour l’étude des polyphonies orales et savantes), Toulouse, April 26, 2012 (assisted by Catherine Motuz); and the Medieval and Renaissance Music Conference, Barcelona, July 6, 2011.}\]

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After studying existing Renaissance motets, the two found that they could recognize the compositional technique of each new phrase, which suggests that the composer was less an innovator of a through-composed series of independent voices, but rather the architect of form in determining the time delay and pitch of the imitation for each section.\footnote{Cumming, “Renaissance Improvisation and Musicology” (2013).}

Furthermore, they found that chant melodies could be readily adapted to form a lead voice by either rhythmicizing or paraphrasing it in a certain way: indeed, it is exactly this process that they found in all the settings published by Petrucci between 1502 and 1508.\footnote{Cumming and Schubert, “Chant-Paraphrase Canon,” (2011).}

Adding a third voice with knowledge of the guiding principles of the first two voices is also entirely possible, and Zarlino describes this process in \textit{Le istitutioni harmoniche} (1558) in detail.\footnote{Gioseffo Zarlino, \textit{Le istitutioni harmoniche} (Venice: 1558), Book 3.}

Peter Schubert also describes four-voice techniques, based on treatises by Buchner (ca. 1525), Thomas de Sancta Maria (1565), Montaños (1592), Morley (1597), and Cerone (1613) as both combinations of pairs of canonic duos and adding two separate voices (one higher and one lower) to the original duo.\footnote{Peter Schubert, “Counterpoint Pedagogy in the Renaissance,” \textit{The Cambridge History of Western Music Theory} (Cambridge: Cambridge University Press, 2002): 503–33.}

Though this is far from an exhaustive list of all of Renaissance treatises or all compositional techniques employed in this period, it does serve to illustrate that even the most complex of compositional procedures can be and were improvised, and, as Julie
Cumming points out, “something that any musician (not just geniuses like Josquin and Bach) can do on the spot.”

**Baroque and Ornamentation**

Beyond the Renaissance, treatises on vocal ensemble improvisation continued to be produced; however, with the advent of monodic opera, these handbooks begin to focus less on contrapuntal techniques, and more with ornamentation and embellishment of a pre-existing line against a basso continuo. At the same time, treatises for instrumental improvisation, especially for “perfect instruments” (those on which a full polyphonic composition could be realized by a single performer) became more prevalent.

The process of ornamenting an existing melody is an extension of previous techniques, particularly discant style and the increasing levels of species counterpoint. The examples from Montaños given above of embellished species counterpoint in canon, along with earlier treatises by di Ganassi (1535), Lusitano (1553), and Vicentino (1555), Pontio (1588), Tigrini (1588), Picerli (1631), cover this practice of creating *divisions*, or dividing longer notes into a series of shorter ones, though usually against a cantus firmus (called *passaggi* when against a basso continuo). In the early baroque, it was common for earlier motets or madrigals to be published for perfect instruments (keyboards or lutes), with the upper voice highly ornamented, perhaps even as a guide for singers to improvise

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49 Cumming (2013).

50 Horsley, “Improvisation.”
the melody line while they accompany themselves.\textsuperscript{51} The earliest operas (e.g., those by Peri, Caccini, and Monteverdi) give us great insight into vocal ornamentation, especially those where multiple versions are found of the score. One notable example is Caccini’s \textit{Il rapimento di Cefalo} (1600), which, when fragments were published in his \textit{Le nuove musiche} (c. 1601), illustrated the ornamentation practices of some of the most prominent singers of the time (Palantrotti, Peri and Rasi). Caccini clearly distinguishes between the three singers’ choices of ornamental \textit{passaggi}.\textsuperscript{52} Another more familiar example is the two versions of the aria “Possente spirto” that Monteverdi included in the publication of \textit{Orfeo} (1607), one simple and one ornamented.\textsuperscript{53} Some have identified the two versions as equally valid performance choices; however, taken with other examples of the period, the ornamented one was simply a tool to indicate the ornamental possibilities and to guide one’s own improvisations. In France, the same processes were discussed and developed in the genres that pre-dated French opera, the \textit{air de cour} and dramatic \textit{récit}. The treatises and examples from this time (1637-1678) indicate the types of ornamentation used, though more as an arsenal of available choices than as a specific \textit{mode d’emploi}.\textsuperscript{54} As opera developed, both in Italy and France, the basso continuo practices and notation became more specific, and so too composers began to exert more control over vocal

\begin{footnotesize}
\begin{enumerate}
\item \textsuperscript{51} Ibid.
\item \textsuperscript{52} Caccini, \textit{Le nuove musiche} (Florence, 1602).
\item \textsuperscript{53} Claudio Monteverdi, \textit{Orfeo} (Venice: Ricciardo Amadino, 1609).
\end{enumerate}
\end{footnotesize}
embellishment, introducing a set of symbols as shorthand to indicate various types of ornamentation that varied according to regional practice.

The vocal ensemble improvisation of the “learned” forms of canon, fugue, and counterpoint over a cantus firmus continued to be practiced and discussed throughout the baroque as well. In fact, the so-called *contrappunto alla mente* was still such a valued skill that it was a requirement of singers entering the papal choir as recently as 1647, and improvised counterpoint is documented in performance practice in Rome and in treatises elsewhere in Italy throughout the 17th century. Later examples of improvisation in Italy and elsewhere shift toward instrumental improvisation, with treatises or sets of pieces designed to teach improvisation. Keyboard treatises and collections included those by Banchieri (1622), Frescobaldi (1624-1627), Louis Couperin (1716), Mattheson (1719 and 1735), C. P. E. Bach (1753 and 1787), notable string and wind collections that include alternate versions with ornamentation include Christopher Simpson (1659, viol), Rousseau (1687, viol), Corelli (1710, violin), Babell (c. 1725, violin), Quantz (1752, flute), and Cartier (1798, violin), and general treatises on ornamentation include Montéclair (1736) and Geminiani (1751). Through the late baroque and early classical period, it was expected that the performer would extemporize ornaments and divisions in

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55 Adriano Banchieri, *Cartella musicale* (1614), G. B. Doni (1647)
DOI: 10.5642/perfpr.201318.01.03

56 Michael Collins and Greer Garden, “Improvisation, ¶3. The Baroque Period.”
good taste and according to convention, and have the skills necessary in order to do so, these treatises serving as a helpful tool toward their acquisition.

**Late Baroque and Classical Varied Reprises and Cadenzas**

Though much of the above literature points to the continued practice of altering repeated music, this practice came to the fore in vocal music of the High Baroque and Classical period, particularly in the related genres of opera and oratorio. In addition, the cadenza became an increasingly-discussed topic in vocal and instrumental music of this period, especially as it pertained to the perceived abuses of such moments.

It is generally assumed that repeated sections or even phrases would be changed in some way upon repetition in both instrumental and vocal music. In the latter, varied reprises were mandatory. Commonly found in *da capo* arias of cantatas, operas, and oratorios, the singer was expected to alter substantially the return of the A section, as P. F. Tosi explains:

“In the first they require nothing but the simplest of Ornaments…in the second they expect, that to this purity some artful Graces be added, by which the Judicious may hear, that the Ability of the Singer is greater; and, in repeating the Air, he that does not vary it for the better, is no great Master.”

Several treatises cover the processes and conventions for varied reprises, including C. P. E. Bach (1753), Manfredini (1775), Hiller (1780), and Türk (1789), and contemporary accounts like that of Charles Burney (1771) and Domenico Corri (1810, with notated

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ornaments) confirm the widespread practice of vocal ornamentation for *da capo* arias. A few publishers in London and Paris even produced vocal scores with a particular singer’s ornaments on a separate small staff. A few of Mozart’s vocal embellishments survive as well, including an ornamented version of J. C. Bach’s “Cara la dolce fiamma” from *Adriano in Siria* and of an aria of his own from *Lucio Silla* (1772), which show examples of *appoggiaturas*, *acciaccaturas*, syncopations, and *passaggi* that connect or fill in leaps or decorate longer note values. It is notable that multiple theorists guard against more than one singer (or singer plus an *obbligato* instrument) improvising simultaneously, which explains the necessity of Mozart composing out nearly all cadenzas for which this applies (e.g., “Ah perdona” in *La clemenza di Tito* and “Et incarnatus est” from *Mass in C minor*).

Just as the late Renaissance saw a flood of treatises on improvisation on “perfect instruments,” the Baroque and Classical writings and accounts continued this thread with the most notable improvisers being keyboard players: Sweelinck, Buxtehude, Handel, J. S. Bach, Mozart, and Haydn were all known for their astounding improvisations, and all contributed literature composed expressly for the purpose of teaching their techniques. Keyboard genres of the *toccata*, *praeludium*, *fantasia*, *partita*, *chorale-prelude*, and even

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58 Michael Collins and Greer Garden, “Improvisation, ¶3. The Baroque Period.”


61 Crutchfield.
the ricercare or fugue were all available and widely practiced improvisational genres. A more universal skill for keyboard players was the realization of basso continuo (including in concerti) and the elaboration of dance forms.

**Romanticism and the Rapid Decline of Improvisateurs**

Free ornamentation remained an integral part of an opera singer’s training through the nineteenth century, and numerous vocal methods and annotated performing scores (including by the composers themselves) give great insight into the performance practice of the bel canto period and beyond. From a comparative study of the annotations in the early period (Donizetti and Rossini) to the highly intricate arias of the later period (Verdi), the gradual incorporations of these ornaments into notation indicate either the composer’s desire for a singular product or a gradual consensus of a standard ornamentation practice. The ornamental revisions these composers made when transporting or adapting their operas to different national theaters reflected different tastes in houses in France than in Italy, for example.

Will Crutchfield, in his studies on the earliest existing operatic recordings, found that singers in the 1890s (trained mostly in the 1850s and 1860s) through the turn of the century demonstrate much less ornamentation than the method-books and annotated scores of mid-century and earlier indicate, and that over time the performers exert much more adherence to the printed score. He suggests that the nationalistic pride that arose

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62 Lablanche (1829), Duprez (1845), Garcia (1840), J.-B. Fauré (1870), Delle Sedie (1876 and 1885). Crutchfield, “Improvisation ¶4 Vocal music.”
precisely during that time led non-Italian composers and singers to purposefully
ornament less (and write in more) in order to draw contrast and define their national
styles. In recordings in the early part of the twentieth century, Crutchfield notes a sudden
emergence among singers working with Italian conductors of new ornamentation not
previously practiced or written in that become surprisingly standard throughout
subsequent recordings through the rest of century.\textsuperscript{63} Essentially, the advent of sound
recording muted the practice of free ornamentation, with performers and conductors
seeking to recreate a specific performance (immortalized through its preservation).

Similar trends in instrumental improvisation also manifest themselves throughout the
nineteenth and into the twentieth century. Virtuoso musicians like Hummel, Chopin,
Liszt, and Paganini were famed for their improvisations, especially those on themes
suggested from the audience. But the critics of the time discounted this practice as
nothing more than a cheap trick, with improvisers relying on the same few techniques to
capture the audience’s attention, and by the late 1840s, these types of performances had
all but died out.\textsuperscript{64} The remaining types of instrumental improvisation existed purely for
functional reasons, as in organ liturgical music or chamber ensembles or soloists for
social gatherings. In the twentieth century, pianists and organists improvised soundtracks
for silent films, and the genre of jazz soon became synonymous with improvisation. A
brief but fizzling re-interest in improvisation under the umbrella of classical music
occurred in the 1960s with experimental composers like Terry Riley, La Monte Young,

\textsuperscript{63} Ibid.

\textsuperscript{64} John Rink, “Improvisation, ¶5. The 19th Century.”
and, to some extent, John Cage seeking to play with the triangular relationship between composer, performer, and listener. Only since the Historically-Informed Performance movement began to explore the treatises and method books described above, has any renewed interest in improvisation gained any traction, but the practice of improvisation to produce new works is still generally viewed as secondary to pre-composition.65

Conclusions

From the earliest notations to the mid-nineteenth century, improvisation was part of every musician’s training. Improvised music, whether the spontaneous composition of a new entire work or the extemporized ornaments or embellishments upon repetition, represent the manifestation of musical thought and the synthesis of musical meaning by a fluent individual. Based on historical accounts and the recreations of modern scholars, the regular study of improvisation even over a short period of time can produce a piece indistinguishable from a pre-composed one. Furthermore, improvisation played a role in the development of nearly every genre of Western music, even the “learned” contrapuntal techniques of motet and fugue. The full comprehension of the history and development of Western music necessarily involves the study of all compositional practices, including the innovation-driving process of improvisation. The realization that the music that comes down to us in notation represents only a fraction of the music that actually took place, and that the notation, in some cases, reflects only certain aspects of its actual performance, is potentially transformative in the way we view and study Western music.

Chapter 4: Current Trends

Introduction

If indeed improvisation helped shape and define all areas of Western art music to some degree, as I have argued in the previous chapter, what is the current attitude toward improvisation as an essential area of musical study? Gabriel Solis, in his introduction to *Musical Improvisation: Art, Education, and Society* (2009), argues that improvisation has come a long way in recent years, in that it has gained a “newfound academic respect” among researchers in the fields of musicology, music education, and music psychology, but that it fails to “trickle down” to practicing musicians or music students. Both Nettl and Solis maintain that integrating improvisation into curricula for performance-, history-, and theory-based classes would require a “reinvention of musicology” and that the study of music-making (i.e., the creative process) “would have to take on a more central role in all of musicology…and that improvisation would have to become central to the teaching of music more generally.”66 On the other hand, it could be argued that the study of improvisation is growing as of late, with the growing rate of conservatory-level jazz, early music, and ethnomusicology programs, which all necessarily and at some level incorporate improvisation. However, this is still relegating the study of the creative process to specialty fields, and not to the canon-based Western traditions in which we are currently entrenched. In fact, Lydia Goehr, in *The Imaginary Museum of Musical Works* (1992), states that musicology pedagogy is becoming more narrow-minded, focusing more and more on music as simply a collection of “works” worthy of study, suggesting

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that others outside the canon are unworthy and leaving little to nothing to say about the process or the context.67

A closer look at current curricula, however, show that improvisation is far from ignored, especially in music education. Though the general trends show both that improvisation is being increasingly mentioned in music education curricula, its inclusion and implementation decreases as grade level increases. Childhood music improvisation is an essential place to start, however, and this chapter will provide an overview of the state of improvisation in current curricula to the extent that it is available, from early childhood to the college-level, along with commentary from several studies that indicate to what extent the recommendations and requirements are actually being implemented, especially in choral ensembles at the secondary and collegiate level. Extending from there will be a survey of other choral ensembles and trends in choral music beyond the college level who regularly improvise, including those based on the circlesong model. Though improvising choirs still make up a small fraction of the world’s choral activities, they appear to represent an emerging trend and one that continues to grow and garner attention and reflect a wide variety of new thought on bringing the choral ensemble into the twenty-first century.

**Improvisation in Current Grade School Curriculum**

“We should emphasize the particular importance of cultivating creativity in school-age children. The entire future of humanity will be attained through the

creative imagination; orientation to the future, behavior based on the future and
derived from this future, is the most important function of the imagination. To the
extent that the main educational objective of teaching is guidance of school
children’s behavior so as to prepare them for the future, development and exercise
of the imagination should be one of the main forces enlisted for the attainment of
this goal.” L. S. Vygotsky (1967, trans. 2004)

Current Common Core Standards for language arts and mathematics, though not
mandatory, have been adopted by 43 states and the District of Columbia, and do not
include any specific mention of student creativity or innovation, instead promoting high-
stakes testing as the highest-level assessment of learning.\(^6^9\) In music education,
researchers have found much the same attitude: students’ musical learning is only
measured through evaluation of performances.\(^7^0\) The National Standards of Music
Education (1994) supports this, with performance as the culmination of music learning.
In an effort to encourage the acceptance of music education as a necessary and distinct
academic discipline, the researchers charged with creating the National Standards
attempted to model them on other disciplines, with measurable standards, of which
performance would retain priority.\(^7^1\) As published by the Music Educators National
Conference in 1994, there are nine measurable standards by which student achievement
in music can be evaluated:

1. Singing, alone and with others, a varied repertoire of music.

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\(^6^8\) L. S. Vygotsky, *Imagination and creativity in childhood* (M. E. Sharpe, Inc., trans.), *Journal of Russian
and East European Psychology*, 42: 7-97 (original year of publication: 1967).


2. Performing on instruments, alone and with others, a varied repertoire of music.
3. Improvising melodies, variations, and accompaniments.
4. Composing and arranging music within specified guidelines.
5. Reading and notating music.
6. Listening to, analyzing, and describing music.
7. Evaluating music and music performances.
8. Understanding relationships between music, the arts, and disciplines outside the arts.
9. Understanding music in relation to history and culture.\textsuperscript{72}

According to these guidelines, the third and fourth standards involve creative processes, and would appear to be as important as any other of the standards. The standards drew sharp criticism, however, as in Maria Barkley’s 2006 study which found that only standards one, two, and five were regularly enforced. She concluded that teachers seldom assessed creative activities (improvisation and composition), whereas they consistently monitored performance (singing and playing instruments) as well as the ability to read music (reading and notating).\textsuperscript{73} The more recent National Core Arts Standards (2014) narrowed the nine standards into three essential processes: creating (process components), performing (enduring understandings), and responding (essential questions). This, along with a set of assessments and benchmarks helped to shift the focus from performance to understanding/independence and literacy. According to the founders of the standards, this shift must take place in the relationship between teacher and student, where both parties engage in all three processes both “fully and jointly.”\textsuperscript{74} They acknowledged the need for creative studies as an essential component in musical literacy,

\textsuperscript{72} National Standards for Arts Education: What Every Young American Should Know and Be Able to Do in the Arts, (Reston, VA: Music Educators National Conference, 1994).

\textsuperscript{73} Maria Barkley, "Assessment of the national standards for music education: A study of elementary general music teacher attitudes and practices,” PhD diss. (Detroit: Wayne State University, 2006).

and recognized its importance as a necessary 21st-century skill. These standards, available online, contain many prompts and questions to get students of all grade levels immediately involved in the creative process. They link to “model cornerstone assessments,” which for our purposes includes multi-level materials to help guide ensemble improvisation and the creative process more generally with information like prerequisite discussions, sample exercises, peer review and evaluation handouts, assessment rubrics, and links to further reading. While these documents are still in their early stages (updated between August 2015 and October 2016), they offer an invaluable resource to the teacher in simply getting started in “creating” with their students.

So far, only 15 states have adopted the new standards, and several other states never adopted the 1994 standards either. Though each state may well have its own standards that involve curricula that address the creative process and improvisation, a full investigation is beyond the scope of this paper, and current information from the National Coalition for Core Arts Standards does not relate states’ individual standards to the 2014 Core Arts Standards. Beyond this, it is even more difficult to know, even in states that have adopted the new standards, if and/or how teachers are implementing them and how they are being assessed.

75 Ibid, p. 19.


One interesting example that may or may not be representative of current practices in other states is in the state of Florida, which does not follow the 2014 National Core Arts Standards. Instead, music educators are required to follow the state’s own standards, the “Next Generation Sunshine State Standards” (2015). The wording of the standards is similar to the core standards, however, focusing on “the process of creating, interpreting, and responding” to art.\(^7\) Caitlynn Ensley’s 2016 study of the use of improvisation in secondary-level choral classrooms in the state found that only 29% reported using improvisation in choir. Furthermore, 87% did not believe that improvisation could help students develop musically, at least in the choral context, and 77% did not consider improvisation an important skill. Only 40% were even aware that improvisation was a required national and state standard.\(^7\)

Previous studies around the country have similar findings. In regard to elementary music, Byo (2000) found that teachers felt least prepared to teach improvisation or composition, but that they would if they had better resources and more time.\(^8\) In 2013, Niknafs found that the majority of Illinois K-8 music teachers cited lack of experience in improvisation as the main reason for its exclusion.\(^8\) Beckstead (2013) suggested that the amount of

\(^7\) Caitlynn M. Ensley, "The Creative Commodity: A Study of Improvisation in Middle and High School Choral Classrooms in Florida," Honors thesis (Southeastern University, 2015).

\(^7\) Ibid.


improvisation decreases as grade level increases, and Conway (2008) found that improvisation was only addressed in many secondary schools in jazz ensemble or related classes, and posited that a high school student would have to enroll in all of the students available music-related courses in order to receive instruction that addressed all nine of the 1994 standards. And with the exception of Ensley’s 2016 study, there are no other existing studies that deal with the actual implementation of improvisation in secondary choral classrooms.

**Improvisation at the College Level**

At the collegiate level, there are similar problems. Although both the National Association of Schools of Music (2013) and the College Music Society’s Task Force on the Undergraduate Music Major (2014) include improvisation, composition, and other creative tasks as essential components for collegiate curricula, its implementation is not widely assessed, nor have there been any scholarly studies on the topic. In fact, a recent survey by the College Board (2012) among music schools accredited by the NASM shows that outside of jazz programs, only a very small percentage of students enrolled in music courses are given the opportunity to improvise. Azzara and Snell conclude in the October 2016 “Assessment of Improvisation in Music” that though improvisation may

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occur at the collegiate level in a variety of settings, it is still not central to curriculum, and more studies are needed to assess its role in current collegiate music courses.\textsuperscript{84}

One recent, though non-US, approach to choral improvisation in a collegiate choral program came from Wilfrid Laurier University (Ontario, Canada) as a result of the Fall 2011 residency of Dr. Peter Wiegold. Dr. Wiegold brought three different approaches to choral improvisation to each of their three choral ensembles: experimenting with aleatoric sections in precomposed pieces, improvising interludes between precomposed pieces, and improvising based on “backbones” (graphic scores). They presented these three strategies in a concert at the end of the semester, and many of the students responded positively to the experience, commenting in particular on the increased sense of community and a newfound unlocked ability to express their own creativity and artistry. The current choral directors at the time, Gerard Yun and Lee Willingham, in their review of the semester, found that improvisation challenged the norms of choral music, in particular the model of obedient choristers and dictatorial conductor. They found that regular improvisation shifted the decision-making and sense of responsibility to the choristers, who, though initially uncomfortable, found that this model gave them confidence and enabled a deeper type of listening that Yun and Willingham have described as musical empathy:

“Choristers…put deep listening into practice by creating ‘inclusive sound’ where their own voice was neither completely subsumed nor dominant in the musical texture. Using musical empathy they created a local space where everyone’s

doi: 10.1093/oxfordhb/9780199935321.013.103
musical ideas could be acknowledged, supported, and in many cases passed along and developed.\textsuperscript{85}

Whereas in the traditional model of choral singing, the conductor is responsible for error correction and mitigating issues of balance and blend, this improvisation-based model uses musical empathy to enable individual choristers to collectively create a more cohesive, communicative ensemble.\textsuperscript{86}

Another successful collegiate model comes from Dr. Matthew Potterton of East Tennessee State University, who regularly uses improvisation in the warm-up period with his choirs. Taking inspiration from fellow collegiate choral conductor Sue Williamson, he discovered early on that a common stumbling block to the implementation of improvisation at the collegiate level is that teachers generally believe that “jazz is the only genre that facilitates improvisation,” but that improvisation can be introduced through nearly every genre, and that improvisation can be a helpful teaching tool.\textsuperscript{87}

Edward Sarath, prominent improvisation pedagogue, often speaks of the value of trans-stylistic improvisation, where, when musicians are simply guided to use a specific set of common musical building blocks, the improvisations can take the form or style of any number of genres, or a mixture of genres.\textsuperscript{88} Dr. Potterton advocates for various styles and exercises in the choral warm-up, stating that the warm-up is the best time to introduce


\textsuperscript{86} Ibid.

\textsuperscript{87} Sue Williamson, “Artistry through improvisation in the choral rehearsal,” \textit{Wisdom, Wit, and Will} (Chicago: GIA Publications, 2009), 281-301.

improvisation, since students can both prepare the vocal mechanism and learn or reinforce musical elements in an active way. This, he argues, puts students “in charge of their own learning” by forcing them to think and engage with the basic elements of musical fluency. Among his suggested warm-ups are those that teach the harmonization of melodies in various styles, adding harmony above a bassline, melodic improvisation on a text found in the choirs’ current literature, and counterpoint through the accumulation of new melodic lines against a repeated melody. One of his oft-cited warm-ups is one teaching improvisation in various styles, where the refrain of a precomposed piece is improvised in the style of that piece (the example in Williamson’s article is Thomas Morley’s “Sing We And Chant It” and the choir improvises the “Fa la la…” sections). One particularly enlightening testimonial from his choir illustrates the far-reaching power of regular improvisation:

“In performance, it’s not ever acceptable to sing a wrong note, but with these exercises and Matt’s help to step out from our normal roles as singers, I’m discovering that it’s flowing into my classical work. I’m becoming able to come up with ornamentations for my Baroque pieces and it’s so much easier.”

Other students spoke to the emotional power of being given permission to fully express one’s individual emotions through music among a supporting community of peers doing likewise. Some even spoke to the amelioration of anxiety, at least when it came to music-making. Dr. Potterton points to a higher degree of confidence from the individual singers, as they come to realize that their choices are always valid and their contributions valued.

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90 Williamson, p. 297.

91 Williamson, p. 296.
It takes the shyest students, usually the slowest to warm up to the process, out of their shells and helps them overcome anxiety in the rehearsal room.92

**Non-Academic Choirs**

Beyond the collegiate sphere, improvising choirs constitute but a fraction of the thousands of choral ensembles around the world. However, there are a few notable examples, and their growth and persistence have, this author believes, made the phenomenon of the improvising choir more than a passing trend. The fact that these choirs are found in every circumstance, at nearly every level, in varying capacities (some choirs only improvise, some improvise along with other precomposed pieces, and some only improvise as part of their rehearsal process), and are met with the same enthusiasm that we have seen from the above collegiate examples illustrate the success of this model, and merit its inclusion by all choirs.

The Choir of Trinity Church, Wall Street (New York, New York), is only one of the most successful models of regular improvisation. Though the choir performs a variety of precomposed music during regular Sunday worship, their service of compline (with its pre-notated liturgical texts) on Sunday evenings features improvisation as a central component. Their director, Julian Wachner, guides the improvisatory process, continually expanding the level and variety of devices, week after week. The choir, though professional, varies from week to week in terms of the voice types and numbers, and the choir’s roster has some turnover year to year. In addition, Wachner is not present every

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92 Potterton, 18.
Sunday, but others from the ensembles take turns, as willing, to lead. An essential vocabulary has been integrated, over the years, including a fluency with both the church modes (used especially in their improvisations based on psalms) and modern modes (whole-tone, octatonic, etc.), the techniques of droning, creating canons, adding organum-style harmony to a pre-existing melody, and harmonizing a melody. In addition, Wachner has crafted a set of hand signals, which indicate everything from who does what to dictating specific chords within a harmonic framework. Through the hand signals, Wachner can assume the role of composer, as in the assembling of specific musical motives or harmonic loops (like a ground bass), serve as the role-giver (in assigning specific singers to specific tasks), or as the architect of larger forms; conversely, Wachner can choose to do nothing and the singers can instead assume all responsibility for the creative process. This variety of techniques and historical styles illustrates the possible scope when weekly dedicated practice in improvisation is applied in a professional context.\(^{93}\)

The Genetic Choir (Amsterdam, Netherlands), freely improvises all their concerts, recordings, and focuses on avant garde techniques. They have no conductor, only a leader (Thomas Johannsen) who does not involve himself in the creative process, and all music is free improvisation in that the singers do not discuss or agree on any structural elements beforehand. They consider themselves a “research garden” in that any singer can join in their sessions and workshops to help develop their voice and musical creativity. Their improvisations are usually (but not always) atonal and incorporate

\(^{93}\) Trinity Church Wall Street. see website, podcasts (https://www.trinitywallstreet.org/music/events/compline), videos. Improvisations are well-documented.
extended techniques, often involving other art forms (dance or visual art).\textsuperscript{94} One of the important contributions of the Genetic Choir and Johannsen has been the creation of the first-ever International Interdisciplinary Improvisation Festival from March 9-13, 2017, recognizing the need for a workshop-style festival for the “practice and research” of improvisation. Hosted in Amsterdam by the Genetic Choir, the first festival included ensembles, individual artists, and researchers from Amsterdam, Berlin, London, Paris and Goteborg.\textsuperscript{95}

The Element Choir (Toronto, Ontario) has been a unique experiment involving both instruments and singers (“choir” is its historical sense), conducted by Christine Duncan. The ensemble has more than 200 musicians on its roster, but only 20 to 45 attend each of their sporadic sessions. Duncan, like Wachner, considers herself more the architect of form and facilitator, focusing more on organizing time and encouraging individuals instead of defining the specifics of what that person should do, although she considers her style “non-structured improvising.”\textsuperscript{96} The Element Choir uses a variety of historical and contemporary creative processes in both tonal and non-tonal contexts, and in a variety of stylistic idioms, ranging from jazz to the avant-garde (depending largely on the combination of instruments and voices present).\textsuperscript{97}


\textsuperscript{95} “IIIF beta 0.1: Three Open Sessions 9/11/13 March,” March 3, 2017: https://instantcomposition.com/2017/03/03/iiif-0-1-starting-thursday-9th-three-open-sessions/

\textsuperscript{96} David Dacks, "Christine Duncan and the Element Choir,” \textit{Exclaim!} (Mar 26, 2010): http://exclaim.ca/music/article/christine_duncan_element_choir

Voices Nordicae (Stockholm, Sweden), founded in 1999, embraces the complete continuum of improvisation in their performances, which, at least to an audience member would appear to be completely spontaneous, and where perhaps, only the performers are aware of the particular point on the continuum at any given moment (from free improvisation to the pre-composed repertoire). Conducted by Lone Larsen, this 17-member mixed ensemble sings their varied written repertoire from memory, making the improvised pieces indistinguishable from the pre-composed repertoire. They often incorporate avant-garde techniques, elements from non-western traditions, jazz, and movement, though they state that their focus is on the canon of a cappella music and on folk traditions.98 Voices Nordicae has also commissioned and premiered works by Kjell Perder, Olle Lindberg, Gunnar Eriksson, and Ola Gjeilo.99 As far as their size and ability allows them, Voices Nordicae can be seen as representing the most comprehensive view of the a cappella mixed choral tradition, including improvisations that resemble the earliest choral singing traditions, an extremely varied repertoire of pre-composed music from the Renaissance to the present day, and improvisations involving contemporary techniques. Voices Nordicae is also intensely focused on using choral music to effect social change and raise awareness for global environment issues. This totally encompassing view of choral traditions can be seen in their 2015 commission for an opera for choir called Earth and Wind by Kjell Perder, which involves some original music, music by Karin Höglielm, Claudio Monteverdi, and J. S. Bach, improvisation,


99 Ibid.
dance, and film projections. It was performed in Paris in December 2015 for the United Nations Climate Change conference, and later in collaboration with the World Wildlife Fund during Earth Hour on March 28, 2015, completely in darkness, blurring the distinction between improvised and pre-composed music.¹⁰⁰

TIC TOC Sing (London, United Kingdom), is a multi-stage training program for improvising ensemble singers, in that the entire program contains two basic choirs, The Improvisers’ Choir (TIC) and The Open Choir (TOC), each with a respective training program, The Improvisers’ Practice Choir and Vocal Tai Toc. Founder and conductor Jenni Roditi envisions the entire program as sequential, with singers joining in at an appropriate level. Vocal Tai Toc is a variant on Roditi’s “Vocal Tai Chi,” which are four-hour intensive sessions that offer “a new place for people to enter into a genuine creative and healing process from wherever they are along the path of music, voice, improvisation, breath, body and energy.”¹⁰¹ The Open Choir, the next level, is for confident singers with some improvisation experience which teaches basics of tuning and Roditi’s specific “guided conducting” techniques (which she adapted from Peter Wiegold’s work with his instrumental ensemble Notes Inégales), but requires no audition. The Improvisers’ Practice Choir fills the middle ground between The Open Choir and The Improvisers’ Choir (specifically for those preparing to audition for the latter). Finally, The Improvisers’ Choir is a professional, auditioned mixed choir of highly-skilled singers


who practice “shaped vocal improvisation” based on Roditi’s creative vision and her “directed conducting.” Roditi assumes general control of the shaping of each piece, as Wachner and Duncan do, picking up on certain ideas that individual singers present and encouraging others to join or accompany. She also often divides the ensemble into groups and assigns roles to each, but rarely uses any predetermined pitch or rhythmic content.102

Another widespread phenomenon of group vocal improvisation is the circlesong movement, popularized in part by Bobby McFerrin and his Voicestra project and their subsequent album Circlesongs (1997).103 The practice of circlesinging, though rooted in several non-western traditions, has become a worldwide phenomenon, with no less than 50 currently active circlesong societies in urban centers across the globe.104 The basic premise of circlesinging is the accumulation of “looped” layers (ostinati), either improvised by a single person and adopted by others in the circle or layer by layer by a teacher, on which a soloist or several soloists can improvise. McFerrin’s model uses a dozen singers from varied cultures and traditions, where each contributes his/her own layer or group of layers, often reflective of their own musical traditions. Many of these twelve singers have gone on to spread circlesinging in their own communities (notable among them are Rhiannon, David Worm, Joey Blake, and Judy Donaghy Vinar). In the last few years, there has even been a push to incorporate circlesinging into the choral


classroom, with method books by Roger Treece (*Circle Songs, The Method: Musical Fluency Through Circlesinging*),

105 recent NAfME article “Using Circle Singing to Enliven Choral Creativity,” and a subsequent session at the 2015 NAfME National In-Service Conference in Nashville, TN with the same title. 106 Without the label, the concept of circlesinging (as layered ostinati) is present in many current improvisation manuals, including Roger Dean’s *Creative Improvisation* (1989), 107 Jeffrey Agrell’s *Vocal Improvisation Games* (2014), 108 and Rhiannon’s *Vocal River: The Skill and Spirit of Improvisation* (2013). 109 Writings on circlesinging point to its immediate success with groups of singers from all backgrounds and skill levels, including children, and to its endless possibilities in modeling specific western and non-western genres, or in melding multiple genres. Though the essence of McFerrin’s model is improvisation, it is important to note that not all forms of circlesinging include improvisation, at least for the singers, especially if the layers have been previously worked out by the teacher and there is no


room for solo improvisation (as can be seen in several of Joshua Palkki’s examples at the NAfME National In-Service Conference).\textsuperscript{110}

\textbf{Conclusions}

Though a scattering of studies on the implementation of national and state standards on improvisation and a survey of a handful of currently improvising choirs is far from comprehensive, there are two important points to be made. One, that the collection of pedagogues and researchers who have compiled the standards and have shifted them to focus more on fostering creativity (of which improvisation is an essential component) believe that improvisation is a worthwhile and necessary skill and process, and that its main stumbling block is in the lack of teacher-preparedness in terms of both training and available resources. Two, that the explosion of recent thought on and practice of improvisation in research, curricula, and performance in just the last twenty years points to the inherent value that scholars and performers alike find in the regular practice of improvisation, from its perceived amelioration of anxiety and increased sense of community to its musical benefits in solving group issues of tuning, balance, and rhythm, or of unlocking individual creative musical potential. The next chapter will prove scientifically the benefits of regular improvisation that the above improvising ensembles have reported.

\textsuperscript{110} “Students Impress at NAfME: MSU’s Music Education area strongly represented at prestigious conference for K-12 music educators,” (Michigan State University, 2015): http://www.music.msu.edu/news/students-impress-at-nafme
Chapter 5: Review of Research

Introduction

The benefits of regular music study cannot be denied. Individual music study can help improve motor skills, coordination, discipline, problem solving skills, memory, language acquisition, pattern recognition, auditory processing, and, in some studies, can boost one’s IQ and attention span. Musicians who engage regularly in ensemble singing or playing tout increased creative thinking skills and increased levels of empathy. But the skills valued most for a twenty-first century education include critical thinking, communication, creativity, and collaboration; skills which are best developed musically through ensemble improvisation. The existing studies deal mainly with children, with fewer studies as grade level increases. In addition, these studies generally do not deal with choral music, but rather

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111 The “Four Cs of 21st century learning” that have been identified by the United States-based Partnership for 21st Century Skills (P21) as the most important skills required for 21st century education: critical thinking, communication, collaboration, and creativity. P21’s coalition includes some of the most prominent members of the national business community, education leaders, and policymakers: the National Education Association (NEA), United States Department of Education, AOL Time Warner Foundation, Apple Computer, Inc., Cable in the Classroom, Cisco Systems, Inc., Dell Computer Corporation, Microsoft Corporation, SAP, Ken Kay (President and Co-Founder), and Dins Golder-Dardis. [http://www.p21.org/about-us/p21-framework](http://www.p21.org/about-us/p21-framework)
with individual instrumental or vocal instruction in improvisation. Though there are differences between instrumental and vocal music and between ensemble and individual instruction, for our purposes, we will consider these results as broadly applicable to vocal ensemble improvisation, and across age ranges. More research needs to be done in this area involving both collegiate students and choral ensembles generally.

**Early Childhood Research**

The earliest documented research study on musical improvisation with children is Moorhead and Pond’s four papers (1941, 1942, 1944, 1951) regarding 2- to 6-year old students’s musical activities over a seven-year period at the Pillsbury Foundation School in Santa Barbara. The results of the study included the following observations: 1) vocalization experimentation was common, and generally did not refer to a harmonic system, 2) spontaneous singing was more “plaintive” than the songs taught to them by adults, 3) children sang spontaneously more often when in positions of freedom (either alone or in comfortable group settings), 4) singing was closely related to physical movement, and the more varied the physical movement, the more varied the singing (in both rhythm and melody) 5) solo singing had a wider range than group singing and conformed largely to the words (more like heightened speech), and 6) group singing was more rhythmicized than solo singing.\(^\text{112}\) There are multiple issues with the study, with no information connecting specific spontaneous singing with specific students, their age, or how long they had been at the school. However, the study does illuminate a number of

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essential points: that, when encouraged and comfortable, spontaneous singing (whether musical exploration or improvisation) is a natural form of expression for young children, and that children have the capacity for a variety of melodic and rhythmic frameworks and motives.

Moog’s 1976 study involved a similar age range (six months to five and a half years), but on a much larger scale (50 students and more than 8,000 tests). The main component of his research consisted of home observations of children’s reactions to aural stimuli which ranged from traditional children’s songs to non-musical cacophonies (e.g., road traffic). Moog observed the children’s reactions and also recorded the children’s audible responses (with and without the stimuli). He found that infants respond most clearly to musical stimuli with physical motion (e.g., bouncing, swaying), and that children’s vocalizations transitioned from non-musical “babbling” to musical “babbling” (made in specific response to music) in their first and second year. He found that physical response to the stimuli decreased through the third, fourth, and fifth year, suggesting that the children increasingly internalize their response to the music, and use the physical movements and musical “babbling” spontaneously in other situations (like imaginative play or in forming social connections with other children). Again, there are multiple issues with this study: Moog’s methodology was generally unstructured and open-ended, in that he played the tapes for the children and “observed their responses” but did not supply his actual specific observations and did not provide any description of his
analytical procedures. Nevertheless, it is clear that children naturally improvise, but usually only in specific response or reference to musical stimuli.\textsuperscript{113}

Flohr’s 1979 research with 4-, 6-, and 8-year old children examined their ability to improvise on an Orff pentatonic xylophone, and concluded that young children are able to improvise patterns related to musical stimuli, that they are able to form musical improvisations from verbal stimuli, and that, as they get older, their sense of tonality and cohesiveness improves. A subsequent study in 1985, in which Flohr observed 10 children from age 2 to 6 over a four-year period confirmed that children could use musical patterns to create more cohesive improvisations.\textsuperscript{114}

In a study with kindergarten children, Joseph (1983) examined three different groups of students each involved in a different combination of Dalcroze eurhythmics training. Group 1 received “informal” music instruction, group 2 practiced eurhythmics with improvisation, and group 3 practiced eurhythmics without improvisation. The classes that practiced eurhythmics incorporated ear training, rhythmic movement, rhythm games, and relaxation. Joseph concluded that Dalcroze eurhythmics with improvisation should be the method taught in early childhood music education, stating that improvisation with movement helped heighten musical perception and clarify abstract concepts. In addition, improvisation (both vocal and instrumental) is “the synthesis of rhythmic movement and

\textsuperscript{113} Helmut Moog, \textit{The Musical Experience of the Pre-school Child}, (Schott Music, 1976).

\textsuperscript{114} John Flohr, \textit{Musical Improvisation Behavior of Young Children}, Doctoral dissertation (University of Illinois at Urbana-Champaign, 1979).

ear-training; innate creativity and accumulated experiences interact to produce one’s personal musical statement.”

Reinhardt’s 1990 study of the improvisations of 3-, 4-, and 5-year old children on Orff xylophones found that almost all of the children could improvise with a steady pulse and meter when accompanied, and that older students employed a greater variety of rhythmic patterns. A similar study, but with students aged 6-12, by T. S. Brophy (1999) found developmental trends in formal organization, motivic development, and variety of rhythmic patterns as age and facility with mallets increased. This suggests that the complexity and coherency of a student’s improvisation increases over time with continued training.

An interesting study regarding the interaction between learned musical material and improvisation comes from Laczó (1981) in Budapest. In examining the vocal improvisations of children of varying ages and musical education backgrounds it was found that both music experience and the quality of musical education had a substantial effect on improvisational abilities. A subsequent study of 6-year-old Budapest students...

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children’s improvisations by Kalmár and Balasko (1987) found that the improvisations showed correlations to and borrowed heavily in volume, tonality, intervals, structure, phrasing, and rhythmic patterns from traditional Hungarian folk music. They also found that the children with the greatest success in generating original improvisations (i.e., not simply applying the supplied text to the melodies they already knew) were taught in settings where the musical education was of a higher quality and the music teachers were more well-educated and creative. This suggests that the ability to improvise is directly related to the quality of musical education and the training and creativity of the teacher.

A recent study by Koutsoupidou and Hargreaves (2009) examined the effect of improvisation training on creative thinking with six-year-olds. Using Webster’s Measure of Creative Thinking in Music assessment, the researchers found that children who received training in improvisation scored significantly higher in creative thinking in music, specifically the ability to manipulate the parameters of: extensiveness (the length of time involved in a musical response), flexibility (the range of musical expression in terms of soft to loud, fast to slow, and low to high), originality, and syntax (the extent of manipulation of musical sounds in a musical manner according to patterns of musical repetition, contrast, and sequencing). This suggests that improvisation training increases musical creativity and originality.

Azzara’s 1992 research with elementary school-aged (5th and 6th grade) instrumentalists examined the effect of audiation-based improvisation techniques on both sight-reading

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and prepared performances. Azzara designed a curriculum which included the following components: learning to sing and play a repertoire of melodies and bass lines by ear; singing, playing, and improvising rhythmic patterns in various meters; singing, playing, and improvising tonal patterns in various harmonic contexts; learning solfège and rhythm syllables; improvising rhythmic patterns to familiar bass lines and improvising rhythms on specific harmonic tones; improvising melodies based on harmonic outlines, and; combining these components to improvise an original melody. Students either were taught using this researcher-designed curriculum or using the above curriculum without the improvisational components. Student achievement was measured through the instrumental performance of three melodies: a student-prepared etude, a teacher-assisted etude, and a sight-read etude. The students that received the improvisational training performed at a much higher level in each of the three etudes, and had higher composite scores than those who did not receive improvisation training. This suggests that training in improvisation has a significant positive effect on student's music achievement in terms of the performance of notated music, prepared or read at sight.\(^{120}\)

McPherson’s 1996 research confirms much the same information, though it was set out to find correlations between five musical abilities: sight-reading, performing rehearsed notated music, playing by ear, playing from memory, and improvising. Of all the correlations, the most significant connection existed between improvising and playing by ear. Less strong correlations were also found between 1) sight-reading and performing

\(^{120}\) Christopher Azzara, “The effect of audiation-based improvisation techniques on the music achievement of elementary instrumental music students,” Doctoral dissertation (Eastman School of Music, 1992).
rehearsed music and 2) sight-reading and improvising (as in Azzara’s 1992 study). This was true for both age groups (third/fourth grade and fifth/sixth grade). A subsequent study by McPherson, Bailey, and Sinclair (1997) confirmed the connection between the ability to sight-read and improvise. These studies suggest that study in improvisation may increase the ability to sight-read.

Secondary and Collegiate Level Research

Studies with high-school and collegiate students are more rare, but there a few significant examples. Among them are Wilson’s 1971 study which employed the improvisation method of Lukas Foss and Richard Duffalo as adapted by Silverman (1962) with high school instrumental students. The method teaches a hierarchy of tones and their progression as related to a tonal center. The results showed that the students with this improvisation experience made greater improvements in the aural recognition of both melodic and rhythmic elements and in sight-reading than the control group. With college students, Montano’s 1983 study found that students in an elementary group piano class who received improvisation training had better rhythmic accuracy in sight-reading than the control group. Kleinmintz, et al (2009), in a study with adults 18-39 separated


into three groups (musicians with improvisation training, musicians without
improvisation training, and non-musicians), found that musicians with improvisation
training were much more creative individuals (in their assessment of non-musical tasks
which required divergent thinking).\textsuperscript{125}

The most relevant study to this document is Whitman’s 2001 research regarding the
effects of regular improvisation study with two high school (grades 9-12) choral
ensembles, one which received 15 minutes of improvisation study in each rehearsal and
one which did not. The remainder of the rehearsal time for both ensembles remained the
same. After comparing pre- and post-test data, Whitman found that individuals in the
choir that received the improvisation training showed increased skill in aural theory,
music theory, and sight-reading skills.\textsuperscript{126}

\textbf{Other studies}

In the field of music therapy, Montello (1990) examined the effects of a music therapy
intervention with high-anxiety freelance musicians, which included relaxation and breath
exercises, improvisation, and verbal, free association exercises in reaction to the
improvisation. The results proved that this type of music therapy with an emphasis on
improvisation was extremely effective in reducing performance anxiety and improving

\textsuperscript{125} Oded Kleinmintz, et al, “Expertise in Musical Improvisation and Creativity: The Mediation of Idea

\textsuperscript{126} Georann Whitman, \textit{The effects of vocal improvisation on attitudes, aural identification skills,}
\textit{knowledge of music theory, and pitch accuracy in sight-reading of high school choral singers}, Master’s
Thesis (University of Missouri—Kansas City, 2001).
self-confidence. More recently, MacDonald and Wilson (2014) found that regular improvisation in individuals undergoing therapy for a wide range of mental health conditions showed many possible benefits, including the amelioration of neurological damage, reductions in stress and anxiety, and improved communication and joint attention behaviors.

Though restricted to jazz, a recent study by Limb and Braun (2008) examined the cognitive processes involved using fMRI of six jazz pianists while playing a learned scale or piece of music and while improvising. They found that, generally, playing learned material activated only the lateral portions of the prefrontal cortex (associated with planning, implementation of steps toward a task, and effortful problem solving) and improvising activated only the medial prefrontal cortex (associated with “multiple cognitive functions in the pursuit of behavioral goals” and “maintaining an overriding set of intentions while executing a series of diverse behavioral subroutines”). Beckstead, in his analysis of Limb and Braun’s work, suggests that one could see this as “right- and left-brain processing with the creative, right side being associated with improvisational tasks and the logical, sequencing left side associated with learned-passage playing and sight-reading.” The authors of the study suggest that improvising may indeed help

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develop the skills associated with this part of the prefrontal cortex like multitasking and creativity, forming new neural connections, though additional study is needed.

**Conclusions**

Though the scientific study of improvisation is still in its early stages, a few conclusions emerge. First, that improvisation can only benefit the individuals and ensembles who regularly practice it. Second, that depending on the type of improvisation, those benefits may include improved musical skills (sense of tonality, adherence to a pulse, sight-reading, performance of notated music, playing by ear, playing from memory, musical creativity and originality, aural and written theory) and non-musical benefits (improved extra-musical creativity, reduced anxiety, improved self-confidence, improved communication skills, and improved attention). Third, the ability to improvise can be learned and that the regular, continued study of improvisation improves ones skill in improvising. Finally, that more study is needed in all of these areas to expand and deepen our understanding of improvisation’s effect on individuals of all ages, backgrounds, and abilities.
Chapter 6: Modules/Exercises

Introduction

“Improvising music teaches us to value not only cooperation, but also compromise and change… The value of improvising music lies not in the outcome of a single performance, but rather it emerges over time through continued musical and social interactions. Improvising music together does not necessarily produce optimal outcomes, but the decision to improvise music together does.”

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Though we have cited the benefits of regular improvisation, the next step of implementation is perhaps the one that is least addressed by the existing literature. As seen in Ensley’s study, teachers felt ill-prepared and ill-equipped to teach improvisation to their students, even though they understood its importance and its inclusion in multiple state and national standards. According to Azzara, stumbling blocks include two words that come to mind when many think of improvisation: “fear” and “jazz.” Fear, in that teachers almost necessarily have to turn the traditional model of conductor as dictator and final arbiter on its head, shifting responsibility to the students, and therefore feel they have less control. Related to this is fear of the unknown, in that the outcomes of improvisations are new each time and cannot fully be predicted. For the students as well, fear may be an initial stumbling block, with students fearing they might make mistakes or not have the skills to improvise. Jazz, the genre most associated with improvisation, for many seems the only entry point, with which student and teacher alike might not be thoroughly acquainted. Indeed, many of the manuals, method books, and articles that exist to facilitate the implementation of improvisation deal expressly with jazz (including those on vocal improvisation). Additionally, Jeffrey Agrell points out that many who

131 David Borgo, Sync or Swarm: Improvising Music in a Complex Age (New York: Continuum, 2005).
choose to use his method book *Vocal Improvisation Games for Singers and Choral Groups* complain about the lack of notation.\(^{132}\) This idea, that all music should be performed from notation, should be disposed of immediately. Even choral ensembles spend at least a portion of each rehearsal on warm-ups, sung without notation. When we equip our teachers with adequate resources, dispose of the discomfort of upending traditional choral power-relations, dispose of the fear of making mistakes, dispose of the notion that improvisation must be jazz-centered, and emphasize listening skills over reading skills, we are in a good position to begin expanding our musical horizons and reaping the benefits of regular improvisation practice. This chapter aims to address all of these issues.

**Creating a Safe Environment**

Along the lines of effectively transferring power (and therefore responsibility) from teacher to student, one of the prerequisites of successful improvisation is the establishment of a supportive, non-judgmental environment.\(^{133}\) Students should be told explicitly that entering into improvisation is also entering into an environment that encourages it, where all choices are valid and valued. “Mistakes” as such, should be regarded as learning opportunities, and as Konowitz suggests in his method book, all creative contributions should be met with neutral or positive feedback, but never negative

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\(^{132}\) Agrell.

\(^{133}\) Yun, *Jabble!*

critique.\textsuperscript{134} The teacher, then, must be encouraging and open-minded, especially since a realized improvisation will, by definition, differ in some way from even the best prediction of its outcome. The students also must learn to respect each other’s choices (e.g., learning the fine line between laughing together and making fun of someone’s choices).\textsuperscript{135} Williamson suggests the initial stages of setting an atmosphere conducive to improvisation might include improvisations in which either all singers improvise simultaneously or some singers sing a repeated or predictable pattern and another portion of the choir improvises.\textsuperscript{136} In this manner, no one student feels individual pressure or is singled out by the conductor. Nachmanovitch has written extensively on the topic of eliminating fear in performing, namely the fear of being thought a fool (loss of reputation) or the fear of actually being a fool (lack of skill). Werner suggests that the continued practice of improvisation in a supportive environment will necessarily involve the “taming of the mind, the dissolution of the ego, and the letting go of all fear.”\textsuperscript{137} Agrell and Potterton both suggest that the word improvisation might be avoided altogether because of some of its unfortunate connotations, and that the words “game” or “play” might be employed, or that the conductor/leader might simply give an instruction and not a label.\textsuperscript{138} Specifying the parameters of an improvisation can be likened to


\textsuperscript{135} Agrell.

\textsuperscript{136} Williamson, p. 283.

\textsuperscript{137} K. Werner, \textit{Effortless mastery: Liberating the master musician within} (New Albany, IN: James Aebersold Jazz, 1996).

\textsuperscript{138} Agrell.

Potterton.
explaining the rules of a game, though the environment should not be competitive (after all, there are no winners or losers in the creative process) and instead akin to a supportive team. Being careful about the language used with the ensemble can help mitigate the preconceived notions and fears some may have about improvising.

**Role of the Conductor**

The role of the conductor or leader as either an encourager and facilitator, as an non-interfering supervisor, or as co-creator must not be understated. Wright and Kanellopoulos’s 2010 study with teachers of improvisation found that the most common themes were in egalitarian enterprise and mutual respect between teacher and student.\(^{139}\) However, Burnard’s 2002 study with a student-led (no conductor) improvisation ensemble found the group demonstrated skills in cooperative group decision-making, shifting roles, and shared leadership, even while playing or singing.\(^{140}\) Hickey’s study with free improvisation teachers found that these teachers shared a common vocabulary in their feedback, in that they tended to avoid qualitative assessment, and instead focused on constructive (objective) feedback and leading critical dialogue among the musicians. Another important skill Hickey notes is the pedagogue’s comfortability with spontaneity, especially in the common occurrence of the players or singers violating the parameters set forth in the instruction. Hickey notes a complete acceptance on the part of the teacher

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to accept and even encourage all choices, in some cases adapting further instruction to develop those unexpected elements that emerged. Finally, all of the teachers in Hickey’s study at times fulfill all three roles at various points: as facilitator, as non-interfering supervisor, and as co-creator (the teachers would play or sing with the ensemble). In any case, the teachers can be seen not only as improvising players but also as improvising teachers.

**Physical Set-up**

Though perhaps this idea of the teacher assuming multiples roles seems incompatible with the traditional choral model, the consideration of the physical space and set-up can help facilitate this. Agrell, Williamson, Hickey, Yun, Azzara, and others have all noted that the ideal set-up is one that helps individuals communicate with each other and in which the conductor is simply another member of the ensemble (or even outside the ensemble). For many, this is realized as a circle, a semi-circle, or, more rarely, two concentric facing circles. A standing ensemble can feel free to move more, while a seated ensemble can encourage a more easy-going, communicative atmosphere. Specific exercises in which the conductor exerts more control over or communication with the ensemble may find that organizing the ensemble in sections (SATB, in whatever order befits the music), or in “clover”-formation (with each voice type forming its own semi-circle within a larger circle or semi-circle), may be more beneficial.

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141 Hickey, 2015.
Prior Knowledge

Another consideration should be the musical and gestural vocabulary with which your ensemble members are acquainted. It is possible to structure an improvisation without any musical or gestural vocabulary, as in a purely abstract improvisation in which the conductor instructs the ensemble to create the soundscape of “a day at the beach” or create the soundtrack to a 1940s cartoon (though even that assumes some prior knowledge about style); however, even basic improvisations and certainly more complex ones rely on the student’s knowledge of both musical elements and conductor-based gestures. It goes without saying that an instruction to improvise a pentatonic melody in 6/8 meter means nothing if the ensemble members do not know the pentatonic mode or the rhythmic patterns that constitute or suggest 6/8 meter. Therefore, in the exercises that follow, both the teacher and student alike should acquaint themselves with the musical vocabulary necessary, remembering that often the most effective way to teach a new musical term or technique can be to “play” with it. At the very basic level, the choir should be fluent with a system of solmization (solfège, scale degrees, letter names, etc.), a variety of common musical terms (durations, articulations, dynamics, tempi, etc.), and some simple organizational forms and compositional devices.

In terms of gestural vocabulary, collegiate-level choirs will likely already understand traditional conducting beat-patterns, manipulation of dynamic through the enlargement of the pattern or in the raising or lowering of the arms, nuances of articulation, manipulation

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of tempo, breath and release cues, and simple cues like a finger point for a specific person to begin or a head nod for validation or encouragement. To this can also be added a number of specific gestures that the conductor will have to teach the choir. Both Julian Wachner and Jenny Roditi have come up with their own set of gestures, which may be used as a point of departure for developing one’s own. A few examples: hand palm-down in a stirring, circular motion can indicate a drone; both hands pointing index fingers toward each other and circling around can suggest the continuation of an idea already presented; a fist can indicate a gradual return to a local tonic unison or stable sonority; and a finger pointed toward one singer or group of singers with the other hand on the ear might suggest that others treat what those singers are doing as a melody, or that they should join in singing that musical idea. Of course, these gestures can be combined as well, as in a conducted beat pattern that becomes the two-pointer-finger circle to indicate the continuation of that beat pattern.

To indicate specific harmonies, Wachner has devised a simple system involving holding up the number indicating the Roman Numeral within a diatonic harmony. For example, given a tonic pitch, holding up one finger represents the tonic major triad, two fingers represents the supertonic minor triad, three fingers is the mediant minor, etc. Turning the finger upside-down (pointing down) indicates a modal borrowing (mixture) from the parallel minor. For example, upside-down one becomes tonic minor, upside-down three becomes flat mediant major, and upside-down seven becomes subtonic major. A complete modal shift (or modulation) can then be indicated by pointing with the other hand to the Roman Numeral shown and then changing it to its function in the new key. For example,
a piece in C major can shift to C minor by pointing to the upside-down one and shifting it right-side up, and a piece in B-flat major can modulate to D-flat major by pointing to the upside-down three and shifting it to right-side up one. A piece could be through-composed in this manner by the conductor, however, the most common usage by Wachner is in setting up a chord progression ostinato (like I-ii-I-bVII) or ground-bass ostinato (i-v-VI-V) on which the ensemble can choose to support the harmony or create a melody above.

Though any number of gestures can be used, it is up to the conductor to create, perhaps even in consultation with the ensemble, a shared vocabulary which facilitates creativity but that requires minimal instruction. For most of the exercises below, a specific gesture is not explicitly prescribed; rather, the conductor can choose to develop a gesture or simply explain the technique or instruction, depending on that conductor’s perception of their own role in the process (as active in shared music-creation or not).

Incorporating Improvisation into the Warm-up Sequence

The warm-up sequence is an ideal part of the choral rehearsal to incorporate improvisation, because improvisation can necessarily engage all the components of mind and voice that a traditional warm-up addresses, while also adding creative elements to build higher-level critical thinking skills. While much has been written about the choral warm-up that incorporates exercises that foster relaxation, breath and body awareness, range extension, tuning, vowel creation and matching, very little has been written about the creative choral warm-up that encourages singers to engage with musical elements and
with each other, combining theory and practice in a creative way that fosters understanding and active listening. For those teachers concerned with time management within a rehearsal, incorporating improvisation into the warm-up does not have to take away any time from the rest of the rehearsal, and can serve the same purpose as the traditional choral warm-up.

**Audiation**

The first place to begin in the improvisation process must necessarily be audiation. As discussed in Chapter 2, audiation distinguishes improvisation from musical exploration. In musical exploration, one cannot adequately predict the sounds one produces, whereas in improvisation, one audiates the sound prior to the production. Most singers already possess a basic level of audiation in that they can match pitch (they hear a pitch, process it, and produce the same frequency). However, audiating an entire phrase, even one known well, can prove to be a challenge, as can looking at a piece of music and hearing the sounds of the music in one’s mind. Because this skill is integral to improvisation, it must at once be taught and reinforced. After all, it isn’t improvisation if the sound produced is not the choice consciously made (see Chapter 2).

Audiation can be taught and reinforced in areas outside the warm-up (have the singers hear their part in their mind’s ear while working with other parts, for example), but the inclusion of audiation exercises at the very beginning of the rehearsal encourages singers to activate listening skills immediately. A simple exercise to begin the rehearsal might be to choose a pitch (“middle C,” for example) and ask all students to imagine the note in
their mind, and when ready, begin to hum it together. Realistically, only those with
absolute pitch (if there are any in the ensemble) will be successful, at least initially.
Eventually, the ensemble will agree on a single frequency, and that can be either
confirmed or adjusted with the aid of the piano. Though it was not a scientific study
whatsoever, I began each warm-up sequence with the University of Maryland Chamber
Singers with this “pitch test” for a period of three months, and noticed a substantial
increase in the general accuracy and a decrease in the amount of time until the ensemble
agreed on the pitch, to the point where I could change the starting pitch to any other note
name and the choir could, without the aid of the piano, pick it out.

A next step in this process, after agreeing on the first pitch, would be to ask for another,
by either note name or by interval above or below the first. Again, encourage the singers
to imagine the pitch in their minds’ ear before beginning, and then to enter together. This
process can be extended to chords (giving the tonic and naming a quality, or giving a
tonic and naming a Roman Numeral), pitch collections (giving the tonic and the type of
scale, or giving the tonic and scale and naming a scale degree), or harmonic progressions
(name a Roman Numeral sequence and ask the singers to imagine a simple conjunct
melody that fits it). One possible exercise would be to give a pitch and ask them to
imagine all the notes in a particular scale (major, minor, pentatonic, modal, etc.), and then
to choose one to sing altogether (which will create a chord cluster). Another might be to
model a modal melody, have them listen for the pitch collection, and then sing the scale
altogether. To facilitate audiation skill acquisition, encourage the singers to begin and end
their sound together without a cue from the conductor, as to not have any member begin
before the other. A side-effect of this instruction is to create an organic cohesion among
the ensemble. At first, it may be manifested through watching the breath of the other
singers, possibly accompanied by an obvious body movement by a few or all of the
singers. But especially when encouraged to do the same with their eyes closed, the
singers eventually become more attuned to each other’s breath and respond as a cohesive
unit. As Julie Lyonn Liebermann suggests:

“Removing the musician’s eyes from the process of making music can produce
truly astonishing results … you will will hear a dramatic increase in the group’s
musicianship almost immediately. Members of the ensemble will listen more
carefully and be more aware of how they use their bodies to produce sound.”

As in the traditional choral warm-up, this can be a good time to address vocal technique
in regard to breathing awareness, onset, tuning, and vowel matching.

Modules

The following modules represent a culmination of that which has been presented so far:
an understanding of the continuum from composition to improvisation, historical models,
techniques used by current improvising choirs, and current research and writings. In
addition, the modules presented here have been “field-tested,” and modified where
necessary, with the University of Maryland Chamber Singers during the fall of 2016. The
modules are in no particular order, though each module generally progresses in increasing
complexity, followed by a number of variations. It is not intended that each module is
presented in its entirety during each warm-up period. Instead, as seemed to work best
with the Chamber Singers, the same module should be repeated over successive

rehearsals with new layers of complexity or variation added in each repetition to develop specific skills over time. The conductor or teacher should do his/her best to anticipate the possible results of the module, but remain open-minded and flexible about the strong possibility that in rehearsal, students may violate certain parameters or that the improvisation may take an unexpected turn. In most cases, the non-texted modules are open-ended enough that durations may have to be decided upon, though the conductor/teacher may feel free to interfere to help guide an improvisation to a conclusion (using, for example, the raised fist gesture to indicate that the singers should return to tonic). In the interest of providing a supportive environment where all choices are valid, and considering that even elements of duration are a choice, where time permits, the conductor should let the exercise naturally come to its own organic conclusion. And finally, the conductor/teacher should not feel obliged to start at the beginning of each module, nor should he/she feel limited by the ending point. Should the improvisation take an unexpected turn, perhaps those new ideas can be further developed into a new module. Nearly anything, even notated repertoire, can be turned into an improvisation module, as the singers “improvise to learn music,” “learn to improvise,” and “improvise music to learn.”

A Word About Texts

Some of the modules presented here suggest the use of pre-determined texts, which can include everything from sacred texts in Latin to newspaper clippings. There are

seemingly infinite choices of texts, though there are a few deciding factors to keep in mind when selecting these texts:

1) Quality (or Literary Merit). Though subjective, a text without coherency or clarity will have less opportunity for dramatic realization and may lead to an incoherent and ambiguous improvisation.

2) Usefulness. Some modules presented here require or at least benefit from a certain type of text to be successful. For example, chanting and psalm-singing require poetry organized into couplets, module 7 requires a text with a clear narrative structure that is not too long, whereas the texts for module 4 might be more informal and speech-like.

3) Musical associations. A text with an obvious musical association may influence the musical decisions based on previous exposure to or experience with it. For example, asking the ensemble to improvise a new melody to “Happy Birthday” may be nearly impossible because of the melodic, harmonic, and rhythmic associations of its text with its tune. Conversely, a text with a myriad of musical associations, like “Kyrie eleison” may help foster creativity precisely because of its varied settings.

With the University of Maryland Chamber Singers, I used a large poetry anthology called Top 500 Poems which represents the top 500 most anthologized English poems. It proved a versatile and fairly comprehensive source of useful, quality texts for improvisation.
Module 1: Drone
1. Set a drone by either choosing a pitch or letting the ensemble converge on a single note on a hum or [u].
2. Encourage the ensemble to experiment with vowel shape and listen for different overtones created naturally (e.g., [u] [o] [a] or even mixed vowels [y] [œ] or [ø]). Variation 1: Encourage the ensemble to shift vowels together, matching vowel sounds at all times.
3. Ensemble members can now shift notes at will to sing the resulting overtones, making sure some are continuing the original drone is still sounding.
4. Once the standard overtones are sounded (octave, fifth, third), the singers should experiment with dissonances one step above or below the current pitch, always returning to the main note.
Variation 2: Conduct the shift to the neighboring tone, as well as the shift back to the main note.
5. Once a variety of overtones are present (even overtones of the overtones may result), singers may shift to any note, experimenting with vowel, timbre, and dynamic.
Variation 3: Point to a singer whose overtone is prominent and make that the new fundamental around which the ensemble should orient.
Variation 4: Have the singers begin to walk around the room as they choose new pitches, taking a step only when they change pitch.
Variation 5: Have a singer or a few singers create a stepwise melody line above the drone and overtones. If there are multiple singers, they may want to move slowly enough to find a way to communicate the direction of the notes and the rhythm. This can be untexted or use a common text like “dona nobis pacem” or “kyrie eleison.”

Module 2: Wave Canon
1. Arrange the ensemble in a circle and stand or sit among them. Instruct them that you will raise your hands high and lower them (“the wave”), and that the person to your right (or left) will mimic you, beginning just after you, passing the gesture around until it reaches full circle.
2. After an attempt or two, encourage them to make the move as smooth and consistent as possible.
3. Change the gesture to drawing an arc, rolling your shoulders, or blinking.
4. Make a combination of audible gestures in sequence (e.g., clap, snap, then stomp your feet). The singers may not begin the sequence until the previous person has finished; if this happens, wait until the next round and remind them that the sound or gesture should overlap.
5. Sing a single pitch on any syllable.
6. Sing a series of pitches, in increasing complexity (e.g., start with “do re mi” or “do mi sol” and then move to “do sol la sol mi fa sol”), and varying the rhythm.
   Variation 1: Have the singers initiate the wave canon. Either select someone to begin or wait for someone to start at will (this keeps everyone on their toes since they could be the person adjacent to the one starting!).
   Variation 2: Try any of the audible wave canons with eyes closed.

Module 3: Strict Canon
1. Sing a simple two- or three-note pattern that fits within a 4/4 bar (e.g., “do re” or “do re mi”) and motion for the ensemble to repeat in time in the following bar. Do several of these with different pitch combinations (see Figure 4). Keep a steady pulse (can be facilitated by swaying or conducting).

Figure 4. Possible two-part canon, no overlap

2. Sing a simple three-, four-, or five-note pattern that spans two bars (e.g., “do re mi” or “sol fa mi re do”) and motion for the ensemble to begin on your final note (overlap, see Figure 5).

Figure 5. Possible two-part canon, with overlap

3. Continue this for as long as you like. If you feel comfortable improvising your own themes, be spontaneous! If you don’t, you may wish to write it out beforehand.

4. Experiment with other modes, time signatures, articulations, rhythms, etc.

   Variation 1: With the ensemble in either a circle or semi-circle, pass the canon to groups of singers (instead of the whole ensemble). A three-part canon could be Conductor/Men/Women (see Figure 6), and a five-part canon could be Conductor/Basses/Tenors/Altos/Sopranos.

Figure 6. Possible three-part canon, with overlap

   Variation 2: Vary the entrance time of the subsequent voice(s), either earlier (more overlap) or later (requires more listening ahead).
Variation 3: Try any of the previous strategies, but with individual voices (an N-part canon where N is the number of singers), making certain that each singer cues in the next singer.

Variation 4: Using Peter Schubert’s chart from Chapter 3 (Figure 2), have a singer-volunteer craft a canon in half-notes to which the ensemble will respond at the lower or upper octave, fifth, or fourth, as dictated by the leader.

Module 4: Scale Ostinato
1. Choose a mode (e.g., natural minor, mixolydian, octotonic) and starting pitch and have the ensemble sing a scale on long-notes, up and down one octave, repeating, matching pace, vowel, and dynamic.
2. Have a volunteer or group of volunteers create a countermelody or countermelodies to the long-tone scale, choosing from the notes within the scale. The volunteer or group of volunteers should “tag” in someone to take their place at the end of the scale.
   Variation 1: Have the scale played on the piano, and have the choir freely harmonize the scale, note against note.
   Variation 2: Have a volunteer conductor conduct the ensemble, manipulating tempo, meter, articulation, dynamic, rhythm, etc.
   Variation 3: For an added restriction, have the sopranos and tenors harmonize the scale a third above while the volunteers are crafting their countermelodies.

Module 5: Scale Convergence
1. Choose a mode and starting pitch and have the ensemble sing a slow ascending scale on solfège or scale degrees.
2. On the way down, have them stop on any pitch and sustain.
3. If the singer wants to change the pitch up or down a step, they must then take a step forward, otherwise they must continue sustaining a single pitch.
4. As the singers begin to walk around the room, encourage them to vary their pace (and therefore rhythm).
5. To conclude the exercise, signal that all should return to tonic (e.g., with a raised fist), and that all should return to their starting position.
   Variation 1: As the singers are moving around the room, ask them to “sync up” with another singer in the room by speeding up or slowing down his/her stepwise melody to match the other singer’s pitch. At this point, the two singers should walk beside each other, singing the same pitches at the same time.
   Variation 2: Try the same module or Variation 1, but on a neutral syllable of the individuals choosing. If trying Variation 1, the pitch convergence should also be accompanied by a gradual convergence of the vowel or syllable.

Module 6: Cluster Convergence
1. Arrange the ensemble in a circle. Give a mode and starting pitch, and have the ensemble sing a scale, up and down, on solfège or scale degrees.
2. Have the choir audiate any pitch in the scale, and then, when ready, they should enter together on solfège or scale degree. Then should cut off together. Keeping repeating this step.
3. In the silence between the chord clusters, instruct the singers that their next pitch should be only one step away from or the same as their last pitch. Then, they should begin to converge their pitch with the person adjacent to them.

4. The exercise is over when all have reached the same pitch (this can take a very long time, so the conductor may wish to guide all toward tonic with a raised fist gesture).
   Variation 1: Do not use a system of solmization, but rather a neutral syllable or a hum.
   Variation 2: Try this with eyes closed or with the lights off.

Module 7: Ground Bass
1. Dictate a simple bass line in a four-, six-, or eight-bar phrase (see Figure 7 and have the basses repeat this, agreeing on tempo, articulation, rhythm, etc.

   Figure 7. Four possible bass lines

   a)  
   b)  
   c)  
   d)  

2. Part by part, have the tenors add harmony above, then altos in the next repetition, and finally sopranos. Each part should eventually converge on a single line which they repeat.

3. When the basses feel the harmony has stabilized, they can begin to manipulate the musical parameters of rhythm, tempo, meter, articulation, vowel, etc. The other three parts should react to this and re-stabilize.
   Variation 1: Have a singer or a few singers create a melody line above the ground bass. This can be untexted, use a common text, a dramatic poem, or be improvised.
   Variation 2: Shift the ground “bass” to the sopranos or altos, and have the other three parts harmonize downwards or around the ostinato.
   Variation 3: All voices can be free to harmonize at will (not with their section), including basses, who may abandon the ground bass altogether.
   Variation 4: Apply a system of solmization to this module as well as the variations, so that all singers understand their melodic choices within the harmonies presented (this can aid in part-convergence in step 2).

Module 8: Chord Progressions
1. Using Wachner’s system and given a tonic and mode, dictate a simple four-bar chord progression (see Figure 8). Show the Roman Numerals for the first three or four repetitions until it is solidly in place. Singers can use solfège or scale degree numbers to understand function within the diatonic framework, or on another syllable.

   Figure 8. Possible chord progressions
Major: I IV V I  Minor: i iv i V  
I V vi IV  i iv VII III  
I ii I V  i ii° V i  
I vi IV V  i VI III VII  
I iii vi IV  i III VII i  
I bVII IV I  i v VI III  
I v iv I  i IV i v  
IV I vi V  iv i V i  

2. Conduct a variety of dynamic shapes, articulations, rhythms, while keeping a steady pulse, manipulating specific groups of people (e.g., sopranos singing legato whole notes, and the lower three voices are singing repeated eighth notes with accents on beats one and four).

3. Pass the baton onto a volunteer to do likewise.
   Variation 1: Have a singer or a few singers create a melody line above the ground bass. This can be untexted, use a common text, a dramatic poem, or be improvised.
   Variation 2: This can also be attempted with other modes (e.g., dorian, mixolydian), which will change the function of each Roman Numeral as well as eliminate the possibility for modal mixture.

Module 9: Circle Song
1. Arrange the choir in a circle, and begin by stepping a steady pulse.
2. One singer begins to sing, until a clear, regular repetition is established.
3. All the other singers of the first singer’s section adopt the ostinato.
4. While the first ostinato continues, a singer from another section creates a compatible ostinato, which is then adopted by all the other members of that section once it has stabilized.
5. The other two sections (or more if you wish) create their ostinati until all are singing.
6. Once a “groove” is established, a soloist or soloists may assert themselves over the texture.
   Variation 1: Incorporate gesture, body movement, and even body percussion to the ostinati.
   Variation 2: Come up with four sentences or phrases in a story that each section will use for their ostinati. For example, “Let me introduce you to my best friend _____”, “He/She’s the best friend I ever did have,” “He/She’s ____ and ____ and oh so ____,” and “I can’t wait for you to meet him/her.” The ensemble could come up with the whole story beforehand, or each section could decide on the text once the previous ostinato is stable.

Module 10: New Refrains/Verses
1. If the ensemble knows a piece with a refrain, select one or two people from each section to improvise new music to the refrain (Potterton’s example uses Morley’s “Sing We and Chant It” and the choir improvises the “Fa la la” sections). Possible

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145 Potterton.
choices include “Deck the Halls,” “Too Much I Once Lamented” (Tomkins), “It Was A Lover and His Lass” (Morley), or even “Angels We Have Heard on High.”

2. For each successive refrain, select a different group of people to improvise.
   Variation 1: Suggest a style in which to improvise (e.g., Bach, Mozart, bluegrass, jazz).
   Variation 2: The same strategy can be applied to songs where the verse-structure is open-ended, especially spirituals. For example, in “My Lord, What A Morning” a soloist could improvise the music (and even the text) to the verse, keeping the end intact (“When the stars begin to fall”) in order to cue the chorus back in.
   Other good examples include “Go, tell it on the mountain” and “There is a Balm in Gilead.”

Module 11: Harmonizing a Melody
1. Select a well-known melody or teach a new melody aurally to the ensemble and sing through it in unison.
2. Have the ensemble sing the scale implied by the collection of pitches in the melody.
   Variation 1: At this point, guide the choir through possible chord progressions within the mode, using Wachner’s Roman Numeral system.
3. Pause to let the ensemble audiate possible harmonies and then select one portion of the choir to sing the melody and the others to add harmony.
4. Pause between repetitions to allow the ensemble to envision alternate harmonies and to give instructions shifting different portions of the choir to different roles (melody or harmony).
   Variation 2: If the ensemble gets stuck in a rut of the same progression or harmonic rhythm for multiple repetitions, have a few options prepared to dictate using Wachner’s system. Consider Figure 9 below, with alternate harmonies and harmonic rhythms for the Irish tune “My Love Nell.”

Figure 9. Possible harmonies and harmonic rhythms

![Figure 9](image)

Variation 3: Harmonize every pitch of the melody, note against note. This is best done at a slower tempo, encouraging step-wise motion from the inner voices.

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Variation 4: Have one section sing the melody in ostinato and another section converge on a note-against-note harmonic counter-melody above or below (thirds and sixths work well for beginners). Once one section reaches agreement, add the third, and finally the fourth voice until all are harmonizing distinct counter-melodies.

Module 12: Chorale-style Harmonization
1. Choose a Bach chorale, and teach the melody aurally with or without its text, repeating until the ensemble can repeat it independently of the conductor/leader.
2. Have the sopranos continue the chorale, while the rest of the ensemble converges on a bass line.
3. While basses continue the established bass line and sopranos continue the melody, altos and tenors converge on supporting consonant harmony in their respective ranges.
4. Encourage each part to add ornamentation in the form of non-harmonic tones (passing tones, suspensions, upper and lower neighbors, escape tones) or trills. Discuss the text and its meaning and suggest that the choice of ornamentation should reflect the text.
   Variation 1: Conduct the ensemble in their harmonization, complete with dynamics, fermatas, and tempo modification. Encourage volunteers from the ensemble to conduct as well.
   Variation 2: Study the harmonizations of the same chorale-tunes by Bach, Mendelssohn, and Brahms, for example, and discuss the differences. Try this module with a specific composer’s style in mind.

Module 13: Chant
1. Choose a text or set of texts with either line divisions or internal punctuation and make it accessible to the ensemble (either on a board, screen, or printed). Texts that work well for this include poems with lines of relatively equal length, like sonnets, Latin hymn texts, some psalms, and any other poetry organized into couplets.
2. Instruct the singers to create a melody using the first sentence of the text in which the first and last note are the same and the motion is entirely conjunct. They may use melismas, but they should start and end at the same time and on the same pitch. Encourage their musical choices to follow the meaning and expression of the text.
   Variation 1: Instead of lining up the final unison pitch with the end of the sentence, the final note could be reached at the end of each line, or each pair of lines.
   Variation 2: Instead of reaching a unison, the ensemble could reach a tonic triad or other stable harmony containing the tonic. Alternately, the ensemble could reach specified harmony at the end of the odd lines (like IV in dorian or VI in natural minor) and then resolve to tonic at the end of the even lines.
   Variation 3: Instead of each singer moving largely independently of each other, the entire poem could be partitioned into couplets or even individual lines, and sections of the ensemble could be assigned to specific couplets or lines and asked to converge on a single monophonic melody.
3. Give a starting pitch, specify a mode, and let the ensemble naturally begin and end each musical phrase.
   Variation 4: Instead of specifying a pitch and mode, have one soloist sing one entire musical phrase, beginning and ending on tonic, and have the choir respond by singing the next musical phrase within the pitch collection and beginning and ending on the tonic that the soloist set up. Alternately, the soloist could sing just half of a musical phrase, and the ensemble could complete it.

Module 14: Psalm Tones
1. Using the same texts as suggested for Module 12, teach the simplified psalm tones to the ensemble as well as how to point texts based on text stress and number of remaining syllables at the ends of lines (see Figure 10).

   Figure 10. The five simplest psalm tones with number of syllables remaining in green\textsuperscript{147}

   \begin{figure}[h]
   \centering
   \includegraphics[width=0.5\textwidth]{psalm_tones.png}
   \caption{The five simplest psalm tones with number of syllables remaining in green.}
   \end{figure}

2. Apply any of the psalm tones to any of the texts in unison. The ensemble will have to spontaneously decide when to move from the reciting tone to the ending.
   Variation 1: Have one singer intone the psalm (full verse) and the ensemble respond with the next verse in the correct mode.

3. Given a specific tone and starting pitch, have a portion of the ensemble harmonize the psalm tone using the pitch collection suggested by the tone (filling in the missing notes if needed), either homophonically with the psalm tone or on a neutral syllable.
   Variation 2: Divide the ensemble in half and have the two halves face each other. Then one “choir” decides either explicitly or converging on a tone and sings a verse, to which the other “choir” responds with the next verse in the same tone. Either “choir” may decide to change the tone at any point, however. For an added challenge, when either “choir” is not singing the verse, they may accompany (e.g., drone) or harmonize the other “choir.”

\textsuperscript{147} “Five Simple Psalm Tones,” www.stutler.cc. \url{http://www.stutler.cc/russ/5_simple_psalm_tones.pdf} (prepared by Russell Stutler).
Module 15: Backbones

1. Choose a narrative text, like a children’s book (shorter Dr. Seuss books work well), nursery rhyme, or newspaper article and make it accessible to the ensemble. If there is a chalkboard or a white board in the choral rehearsal room, the singers can orient themselves around that. Instruct the singers that they will be collaboratively creating a musical setting of the story.

2. At this point, the conductor should not be involved in making musical choices, though they can encourage the singers to consider the following:
   1. Form and overall structure as dictated by the text
   2. Expressive moments and their musical realization
   3. Compositional devices (drones, canons, ostinati, etc.) and their application to specific parts of the text
   4. Any melodic content
   5. Starting pitch, modes, and meters, if applicable
   6. Assigning roles (who does what, when)

       Note: If the text is lengthy, the singers may wish to delegate certain portions of the text to different sections of the ensemble.

   7. Transitions (how to get from one section to another)

3. The singers may then wish to rehearse all or portions of this, and/or notate some of the results of their discussion on the board as memory aids.

4. The singers should then perform their composition from the backbone written on the board. Time permitting, this should be repeated with the possibility of discussion and revision between performances.

   Variation 1: Perform the composition several times without any discussion in between to let the students experiment within their own parameters. If possible, preserve the written backbone (take a photo of it) and return to it the next rehearsal and perform it again without any discussion.
Chapter 7: Conclusions

When we understand and accept that improvisation is an essential component of musical fluency, it must at once become a part of every musician’s musical education. A musical education that focuses primarily on performance, of reading and interpreting only notated music, treating knowledge of theory, history, and composition as only secondary is one-sided to a fault. A musician that never learns how to engage in the creative process can never truly understand the works they study beyond the theoretical and aesthetical.

The language analogy again is a useful one: a musician that only has knowledge and skill toward of goal of reading and executing musical notation possesses the analogous skill of an actor who learns to decipher the sounds of words in order to orate in a certain language. Judging only by that one skill, one would not necessarily know if the actor understood the meaning of the words he/she produced, let alone if the actor could carry on a conversation in the same language. Performing a piece of music from notation is no more an indication of musical creativity and expression than reading a monologue. Though reading is a valued skill, it is only one component of fluency, which by any number of definitions includes the ability to read (produce the correct sounds), converse (both written and oral), and comprehend (both written and aural). As collegiate musicians, one learns to create the correct sounds represented by notation (read), and to some extent through study of theory and aural skills one learns the meaning of notated or aurally received music (comprehend), but how much does one learn to converse in
written or oral forms? Aside from a passing composition assignment in a theory class, perhaps the answer is never.

Though the modules presented here are, I believe, a strong starting point in developing improvisational skills and reaping all the musical and non-musical benefits previously discussed, the main issue here is a question of values. What is it we value in the study of music? What is it we value in a musical education? What skills do we want our students to have? What does the traditional choral model say about our educational priorities?

Perhaps it is simply that priorities have shifted over time, that improvisation has been relegated to jazz, early music, and ethnomusicology, and ignored in the mainstream study of Western Music only gradually. But perhaps the way in which we view and study music is a reflection of our societal values and priorities. An educational system based on the constant assessment of measurable skills has little place for a subjective area like music, where only the ability to read can be adequately and mathematically measured. When musical achievement is assessed solely on the faithful adherence to a musical score, where the notated score becomes an answer key and the performance a completed exam, the essence and purpose of the music is lost and the creative output of an individual ceases to be a living, breathing entity and becomes instead a museum piece.

This is not to say that improvisation is the sole answer to shifting educational values. Of all musical activities, improvisation is by far the hardest to judge in any objective way. But if we value creativity, innovation, communication, flexibility, and true
comprehension, improvisation could just be the vehicle. In terms of musical curriculum, incorporating improvisation requires a re-structuring of the study of music to be one unified curriculum that teaches a holistic musical training focused on the making of music, from history to theory to composition to performance.

In a sense, this paper invites its own obsolescence, in that the musical education of the future might naturally involve all aspects of musical fluency and students would, from their very first musical encounters, treat music as another language through which they can comprehend others and express meaning. A choral rehearsal of the future might look more like Voces Nordicae’s, whose repertoire runs the gamut from the earliest notations to improvisations with the most avant-garde techniques, but whose purpose is to build musical skills, flexibility, shared leadership skills, a sense of community, and communication. Perhaps the modules included here can be for other choral ensembles the key to unlocking the sounds within them, toward genuine musical expression, toward communication, toward innovation, and toward a more inclusive future.
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