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PREPARING CHORAL VOICES FOR HISTORICALLY GUIDED VOCALISM IN THE RENAISSANCE, BAROQUE, CLASSICAL, ROMANTIC, AND CONTEMPORARY STYLES

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Jason D. Paulk
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A DOCUMENT

APPROVED FOR THE SCHOOL OF MUSIC

BY

_____
Dr. Dennis Shrock, Major Professor

_____
Dr. Roland Barrett

_____
Dr. Steven Curtis

_____
Dr. Eugene Enrico

_____
Dr. Roy Knapp

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ABSTRACT

PREPARING CHORAL VOICES FOR HISTORICALLY GUIDED VOCALISM IN THE RENAISSANCE, BAROQUE, CLASSICAL, ROMANTIC, AND CONTEMPORARY STYLES

BY: JASON D. PAULK

MAJOR PROFESSOR: DENNIS SHROCK

The purpose of this study is to propose a historically guided approach to timbre, volume, vibrato, and pitch in the performance of choral repertoire. This is accomplished in part by documenting primary sources that suggest ideals of vocal production in the High Renaissance, Baroque, Classical, Romantic, and Contemporary eras. Additionally, warm-ups, conceived and created with performance repertoire in mind, are presented as models for an efficient means of teaching historically guided vocalism to choirs.

Chapter one of the study reviews current conducting and methods textbooks, and recent and related research specific to choral tone production.

Chapters two through six provide primary source quotes that convey ideals of timbre, volume, vibrato, and pitch in each historical era from the High Renaissance through Contemporary eras. Furthermore, warm-ups are offered to encourage the accomplishment of these elements, with rationale and suggestions for effective implementation.

Chapter 1

INTRODUCTION

Historically, the tone with which a choral ensemble sings has been the result of a composite of aesthetic qualities indigenous to geographical traditions of performance. For instance, vocal production ideals among Eastern and Western cultures have traditionally demonstrated distinct differences. Choirs from eastern hemisphere countries such as China, Korea, and Japan have been and are characterized by a much brighter, forward placed, and driven vocalism than choirs from western hemisphere countries such as the Americas and Europe. While there have been less distinct differences in the choral tone production of western cultures, various incongruities have been apparent when comparing Eastern European and Western European tone productions. Choirs from Bulgaria, Hungary, and Romania, all eastern European countries, have produced noticeably brighter and more forward vocalisms than choirs from Western European countries such as Germany, England, and France. Furthermore, Western Europe's choral tone production has often reflected the idiosyncrasies of a specific choir's native language. For example, Germany's choral tone, traditionally, has manifested darker and more rounded sounds than France's thinner, brighter tone production.

Tone production has varied not only from culture to culture, but also across temporal boundaries, evidenced by era-specific traditions of performance. For example, choral singing in the High Renaissance was characterized by the consort principle; all parts of a musical composition were played by instruments of the same family, and thus all parts (soprano, alto, tenor, and bass) were characterized by a similar timbre. In addition, volume was much softer than it became in later eras, there was almost no use of

vibrato, and pitch ranges were adjusted to suit the comfort of singers and the limitations of certain instruments. In the Baroque and Classical eras, sweetness, elegance, gentility, and flute-like tone production were ideals of choral singing, especially in high ranges. The primary concern of text expression was accomplished with a clear, pure tone, not pushed in volume above that which was considered natural for speaking. The Romantic era witnessed the burgeoning of amateur choruses and large-scale choral orchestral works, which demanded more projection, resonance, and volume from choral singers in order to fill larger performance venues with sound. However, nineteenth century projection, resonance, and volume were not nearly as loud as they became in the latter portion of the twentieth century. Nor were they as loud as many people today currently believe they were. The present-day qualities of projection, resonance, and volume are twentieth century phenomena.

The few preceding examples provide a general overview of the differences in the varied sound qualities of traditional geographical areas and historical eras. More specific and detailed information regarding characteristics of timbre, volume, vibrato, and pitch in each historical era will follow in later chapters.

Discerning the vocal sound qualities of past historical eras poses many challenges. Aural musical samples do not exist before the twentieth century. However, past historical era sound qualities have been described in written reviews, performance notes, and descriptions by historians, theorists, composers, and performers from each stylistic era. These performance practices, which have been recorded in treatises, dictionaries, and numerous other primary sources throughout the centuries, can lead one toward a rather specific view and understanding of the sound characteristics associated with each

historical period. While some difficulties may arise when analyzing written descriptions of sound—due to the ambiguity of language and the sometimes subjective description of aural acoustical properties—certain objective sound descriptions can be gleaned from studying these written materials. Furthermore, there appears to be relative consistency concerning the performance practices of timbre, volume, vibrato, and pitch amongst the primary sources, regardless of geographical region.

Since the vast majority of primary sources suggest that Renaissance pitch was adjustable, there was little vibrato, and the tonal ideals were "soft and sweet," one is inclined to accept these subjective statements as overriding trends due to the substantive recurrence of the language. Conversely, if there happened to be a single statement in all of the sources that mentioned the writer's preference for hearing very nasal, robust, and throaty singing, it would be dismissed due to its singular status amongst the corpus of evidence calling for antithetical vocal production. In addition, contemporary scholarship and performance is enhanced by primary sources that make comparisons between vocal and instrumental sound models, since today we have actual original instruments and faithful reproductions.

While choirs from the Americas and Europe have traditionally demonstrated similar vocal productions, contemporary evidence demonstrates an evolution in American choral sounds during the twentieth century. Various philosophical and musical influences from America's melting pot culture became evident in distinct choral performance traditions during the first half of the twentieth century. Choral tone, or the representative *sound* of an ensemble, differed greatly among individual choral ensembles. These performance traditions are discussed in Howard Swan's extensive contribution to *Choral*

Conducting: A Symposium,[1] in which he outlines six schools of choral singing in America during this time period. Each school is distinctive in its philosophical approach and physical tone production. The heads, or founders of each school, include: John Finley Williamson; Father William J. Finn; F. Melius Christiansen; Fred Waring; Joseph Klein; and Robert Shaw.

The Westminster Choir College school, headed by founder and first conductor John Finley Williamson, was founded for the purpose of training choral directors and providing them with the opportunity to perform the great choral orchestral masterworks. The school's major pedagogical thrust was the growth of the individual singer. Each physical action, vocalise, and detailed musical instruction was geared toward the maturation of the individual musician. The tone of this school is described by Swan as "big, dark, intense, and colorful."[2] Furthermore, it is characterized by a rich and vibrant resonance in the men's voices and a somewhat lighter and softer vocalism in the women's voices.

Father William J. Finn, founder of the Paulist Choristers, a choir of men and boys in Chicago and later New York, became internationally known through concert tours and radio broadcasts in the first decades of the twentieth century. "His choral techniques were much sought after by directors of mixed choruses, and resulted in five decades of professional influence on the art of choral singing."[3] Father Finn's school of choral

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[1] Harold A. Decker and Julius Herford, *Choral Conducting Symposium*, 2nd ed. (Englewood Cliffs, N.J.: Prentice Hall, 1988).

[2] Ibid., 18.

[3] Don L. Collins, *Teaching Choral Music*, 2nd ed. (Upper Saddle River, N.J.: Prentice Hall, 1999).

singing was focused on the development of choral sounds modeled on the classification of individual voices with instrument-like characteristics (flutes, reeds, horns, strings). Soft singing and skillful balance, achieved by the careful placement of individual singers within sections containing similar vocal production, were commonalities of the choral tone in this school.

The subordination of individual vocal goals to the overriding goal of blend and unity within the chorus was the primary philosophical approach of the St. Olaf choral school, headed by F. Melius Christiansen. The St. Olaf Lutheran Choir was highly regarded for the performance of *a cappella* choral music during much of the first half of the twentieth century. The tone of this school was characterized by straight tone singing and uniformity of production and dynamics within and between sections.

The school associated with Fred Waring and his ensembles was guided by natural speech patterns. Their tone was generally soft, in order to accomplish clear radio recordings, and homogeneous as a result of detailed diction rehearsal. "The Fred Waring Pennsylvanians was one of the first professional choral ensembles to travel America and bring popular-style choral singing to the masses."[4] The overriding belief that sung words should be as clearly understood as spoken words guided all aspects of their performance.

Joseph Klein, head of the "scientific"[5] school of choral singing, placed primary emphasis on the development of each individual singer's vocal mechanism. This unique perspective contributed greatly to the present-day emphasis that is often placed on voice pedagogy in the choral rehearsal. The choral tone associated with this school was usually

[4] Kenneth H Phillips, *Directing the Choral Music Program*. (New York: Oxford University Press, 2004).

[5] Ibid., 32.

loud, resonant, and dark, with much use of vibrato, often to the detriment of choral balance and blend.

Finally, fundamentals of rhythmic drive, musical phrase, and vocal energy guided the school associated with Robert Shaw. The tone is varied, but relies on rounder, fuller production in the bass, tenor, and alto sections, with straight and thin qualities in the soprano voices.

Three decades after Swan's description of the six distinct choral schools, choral tone tends to be more similar than dissimilar amongst choral ensembles in America. The choral schools described by Swan have given way to more generic tone production across the country. As a matter of fact, a comparison of present-day performances by the St. Olaf Choir and the Westminster Choir would clearly demonstrate this phenomenon: listeners might find it difficult to recognize significant differences in the choral tone between the two schools. Furthermore, a choir prepared by a Robert Shaw disciple would sound very much like every other choir in America.

As communication between conductors in various state and national choral organizations has increased, and as performances and recordings have become increasingly more prevalent, tone production has become more standardized. Moreover, the dramatic increase in the numbers of conventions, choral clinics, and choral tours presently available for conductors has provided an environment in which it is nearly impossible to be isolated from multiple, international influences.

While there remains a distinction between Western and Eastern cultures regarding choral tone production, nearly all Western culture choirs continue to converge toward one similar tone production. American, European, Scandinavian, and French choral

ensembles are difficult to distinguish by choral tone alone. Similarities are not only evident in the comparison of tone production between the ensembles, but even more apparent is the invariable tone production employed by individual choirs in performances of repertoire from varied stylistic genres and historical eras. Any number of choral ensemble recordings reveal that a similar tone production is commonly employed for a Renaissance motet as for a Romantic part song. While there may be some slight lessening of vibrato for the Renaissance work, the characteristics of timbre, volume, and pitch are usually approached in the same manner. A Classical era mass is often indistinguishable from a secular, Contemporary era choral/orchestral work in terms of the choral tone production. While some choirs are presently performing with historically appropriate vocalism, the elements of timbre, volume, vibrato, and pitch are, in most cases, produced in the same manner, without regard for the vast differences in conception, historical context, or aesthetic expressiveness of choral tone.

A survey of numerous present-day published resources for choral music educators displays these generic choral tone production tendencies as well. Authors of published materials often discuss the fundamental aspects of singing—including posture, breathing, resonance, range extension, vowel unification, etc.—to the exclusion of implementation of stylistic vocal demands which vary from era to era. Choral methods and conducting texts, dissertations, and journal articles display great similarity in the approach to building choral tone as a purely mechanical development of skills. What one fails to grasp in this approach is the deep historical roots that choral singers share with traditions of the past, and that focusing solely on vocal skill development limits a singer's ability to

become reliant on stylistic and historical elements for guidance in musical interpretation and performance.

Most conductors agree that choral singers deserve the experience of singing a wide variety of repertoire and styles. If singers are to understand and fully appreciate the historical implications of a particular selection of choral repertoire, choral tone production focused on historically guided vocalism is beneficial. Specifically, an approach to choral tone production that takes into consideration the historical context and aesthetic qualities of individual eras increases the perception, awareness, and sensitivity to musicological aspects that benefit the singers by broadening their understanding of culture and self.

That is why preparing choral singers for the vocal performance demands that will be encountered in varied historical styles of repertoire is important. While this task is not simple, it is nevertheless, beneficial. To illustrate, an analogy will be drawn from the discipline of painting. Suppose university art students are assigned the task of restoring a Rembrandt painting. Would they attempt this task with the same painting technique which they use for copying the style of Picasso or Dali? Surely not. Before any serious student of art would undertake a project of this nature, careful study of the medium and technique would be digested to insure the success and quality of the restoration. The conscientious student might investigate the physical brush strokes, pressure, direction, characteristics of paint, paper material, brush material, and many other facets of the original artwork before venturing into the actual restorative painting process. If technique, colors, perspectives, and the subject matter remain true to the original model,

it is possible for present day artists to emulate historic painters through the use of contemporary materials.

Contemporary society has placed great significance on the ability of artists and architects to restore paintings and architectural structures to original conditions. Painstaking efforts are made in researching the design of original models so that the restored work of art will convey the intentions of the original artist. In addition, techniques are employed to achieve a product that is as close as possible to that which originally existed. Interestingly, the stamp, or signature of the restorer is so unimportant that it is not included on the artwork itself. Art and architectural restorers understand the charge of preparing an artwork to be viewed as the original artist would have intended for it to be viewed.

Rarely do choral artists hold themselves to the same standards as contemporary visual and architectural restoration artists. Often, choral conductors are most interested in achieving a choral sound that pleases *them*, without much thought given to the intentions of the composer. In reality, the task of restoring a choral work from the original blueprint of the musical score is quite similar to the restoration projects described above: a complete understanding of the techniques, colors, and context of the original composition is necessary in order to reconstruct a performance that the composer would have intended. Questions that the choral conductor might ask in this process include: What would composers have expected to hear from musicians of their own day? What type of ensemble would have performed the repertoire? What tone production would they have employed? How loudly would they have sung? At what pitch level would they have

performed? How much vibrato would have been employed, and would it have been pervasive or used as decoration?

Without a doubt, the task of uncovering the original model in the realm of choral singing is more difficult than in the example of the painting students above. As previously mentioned, there was no technology to preserve aural examples of compositions from past centuries that can now be emulated. Previous centuries provide only the musical score and peripheral written materials from composers, theorists, singers, and listeners. These materials provide considerable information about performance, however, and tone can be understood clearly as it is described in its appropriate historical context. Present-day musicians also have the advantage of examining and hearing many older instruments and instrumental ensembles which reveal numerous performance ideals from the period in which they were produced.

In order for conductors to achieve an appropriate representation of the choral art they strive to master, techniques for preparing voices for various historical styles of repertoire should be realized by applying the performance traditions described in the primary source materials and present-day research into period instruments, rather than overlaying one general concept of choral tone onto every type of composition. This type of restoration of choral compositions would then represent the wishes of their composers, rather than the subjective desires of those who restore them.

The valuable information about the performance traditions of choral repertoire from past historical eras, accessible in numerous primary sources, provides insight into the appropriate aesthetic standards of a particular age. These insights are particularly valuable because, while present-day singers easily ascertain contemporary musical

demands, it is more difficult for them to comprehend and appreciate earlier historical contexts. Edward Menerth describes the dilemma clearly:

> Today's musicians bring to contemporary and nineteenth-century music a complex set of attitudes, inclinations, and perceptions both directly apprehended and instinctually assimilated. Even so was the relationship of Renaissance musicians to their [own] works. If Palestrina and his methodically-trained choir singers of the Capella Giulia at St. Peter's were suddenly confronted with the Verdi Requiem, their performance would reflect archaic techniques and hopelessly inappropriate points of view. In a direct reversal of this hypothesis, so would a twentieth-century group, unaware of the Renaissance milieu and Renaissance man's attitude toward the function and interpretation of his music, fall short of its accurate realization.[6]

Certainly, choral conductors have many needs to balance when planning for a choir's success. Artistic needs of the ensemble, development of the individual singer, audience education and development, and performance schedules combine to create a difficult mix of priorities that must be assimilated in order to achieve success. The many contributions in choral methods and conducting textbooks demonstrate the various aspects of expertise that are required of any conductor. "Jack of all trades, master of none" may be an apt description of many young conductors when they reach their first leadership position. Their many listening, performing, and educational experiences combine to embody the knowledge these conductors will relay to their own students. Often missing in this body of knowledge is an understanding of, and a connection between, the historical performance aspects of choral music and the practical application of building choral tone that reflects composers' intentions and the performance traits of each stylistic era.

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[6] Edward F. Menerth Jr., "Singing in Style: Renaissance," *Music Educators Journal* 52, 5 (April-May 1966): 58.

NEED

The need for a resource that assists conductors in preparing choral singers for historically guided vocalism in music from the Renaissance through Contemporary eras is apparent. Since performance practices of timbre, volume, vibrato, and pitch have varied from era to era, conductors have a responsibility to understand how these characteristics affect choral tone, and conductors should be able to instruct their choirs to implement historically guided vocalism in order to achieve an appropriate performance of music from multiple and varied stylistic periods. In order to fully realize a composer's intentions, singers should sing pitches and rhythms according to the performance conventions of the time in which they were composed, as well as perform with the appropriate vocalism of the work in question.

Choral conducting students commonly learn physical conducting techniques, repertoire, rehearsal techniques, and possibly an introduction to performance practice techniques—usually through a music history or research course—before beginning their careers. In choral methods classes, students are often taught to identify wrong pitches, out-of-tune singing, discipline and behavior techniques, and are equipped with prescriptive treatments for other choral ensemble issues. Rarely, are they prepared for teaching choral repertoire from each major style period with an understanding of specific, historically appropriate tone production ideals. While students may be armed with generic lists of style features from each historical era, they often do not have the depth or breadth of knowledge to apply these features.

If an important goal of conducting pedagogy is to instill within students an aesthetic and ethical obligation to reveal the wishes of each composer's music they

conduct, it should also stand to reason that conductors should understand the historical perspective regarding specific elements of choral tone. The present study will address these issues.

PURPOSE AND PROCEDURE

The purpose of the present study is to provide conductors with information that will deepen the understanding of physical sound characteristics—timbre, volume, vibrato, and pitch—associated with choral tone. A discussion of how each sound characteristic is addressed in writings throughout history will, hopefully, give the conductor a practical understanding of the differences in vocal production from the High Renaissance through Contemporary eras. Tone quality ideals will be suggested for each era, leaving considerable room for flexibility based on the desires, needs, and goals of the conductor and ensemble. The application of this information will be demonstrated through warm-up exercises[7] which combine traditional voice building principles with stylistic features in order to promote historically guided vocalism.

A survey of primary source quotes, information from conducting texts, performance practice texts, dissertations, and journal articles which deal with timbre, volume, vibrato, and pitch will serve as the groundwork for the present study. Specific musical examples from each historical era will be selected to illustrate the technical need for each warm-up procedure. The warm-up exercises will evidence the specific stylistic requirements of the musical example, while serving as a model for the development of further exercises based upon new repertoire.

[7] For the purposes of this study the terms *warm-ups*, *warm-up exercises*, and *vocalises* will be used interchangeably.

LIMITATIONS

While this study will illuminate and discuss multiple characteristics of choral tone organized by era-specific categories, it is not meant to serve as a comprehensive performance practice text for choral conductors. It is limited by its scope of dealing only with sound related issues—timbre, volume, vibrato, and pitch—as well as by its focus on achieving a manageable number of exercises in order to be used as a practical tool. It will not arrive at hard and fast rules for developing characteristics of choral tone. Only suggestions related to material in primary sources and performance practice texts which deal directly with timbre, volume, vibrato, and pitch will be offered. Furthermore, this study will not be an exhaustive source of vocal exercises. It will serve as a representative example of how to approach building choral tone based upon historical performance ideals, as well as how to implement those ideals in warm-ups related to specific musical examples in order to achieve historically appropriate vocalism.

DISCUSSION OF RELATED LITERATURE

A discussion of literature related to preparing choral voices for historically guided vocalism reveals the need for the present study. Voluminous amounts of information have been written about building choral tone, warm-ups in general, and meeting the stylistic demands of repertoire from various eras. However, few discussions in the literature exist that link any of the three subject areas together in a manner that allows for practical application.

The sources consulted for the present discussion include choral methods and conducting textbooks, practical warm-up guides, scholarly documents, and journal

articles. Selected were choral methods and conducting textbooks that include a discussion of warm-ups and general stylistic considerations. Authors of these textbooks rarely rely on stylistic guidance in their discussion of vocal technique, choral tone building, or warm-up exercises. Instead, they focus on the purely mechanical development of fundamental vocal skills. Numerous practical methods are described for building choral tone and achieving individual vocal progress. In addition, most of these textbooks offer a brief historical review of each musical period, accompanied by generic stylistic checklists. However, none of the authors link these stylistic features with warm-ups for practical application. Furthermore, primary sources are rarely quoted to guide students in their thinking about aspects of performance practices related to historical vocalism. In other words, the textbooks lack a synthesis of historical perspective which can be employed in a methodology for preparing choral singers to sing with stylistically appropriate timbre, volume, vibrato, and pitch.

The warm-up guides cover practical techniques that can be used in group vocal training. Few complete warm-up methodologies exist, unfortunately, leaving the remaining publications to cover basic matters of the textbook author's bias. These sometimes whimsical examples generally include group voice-class warm-ups which are guided by no particular perspective and which exist for the consumption of conductors who want to add variety to their rehearsals through the use of group voice pedagogy. Conversely, other textbooks, including James Jordan's[8] contribution, along with Wilhelm

[8] Frauke Haasemann and James Mark Jordan, *Group Vocal Technique* (Chapel Hill, N.C.: Hinshaw Music, 1991).

Ehmann and Frauke Haasemann's textbook,[9] represent a thoughtful and pedagogical approach to warm-up implementation and effectiveness. The remaining materials in this category range from the sublime to the ridiculous,[10] covering most areas in between.

Finally, the dissertations, scholarly documents, and journal articles focus directly on warm-ups and voice building procedures in the choral rehearsal. These dissertations, documents, and articles were chosen because they have been published recently or cited with regular frequency in recent studies. Although little research has been undertaken in the area of choral warm-ups, dissertations and other scholarly works reveal general trends that exist in choral conducting textbooks about choral tone, as well as other more specific research data about choral warm-up effectiveness.

The review of journal articles shows multiple perspectives about warm-ups in the ensemble setting. Some authors defend the need for warm-ups, while others offer suggestions for useful techniques. Still, others describe how to apply vocal pedagogy through the warm-up, while the remaining authors stress vocal health reasons for pre-rehearsal vocal exercises.

Choral Methods and Conducting Textbooks

A survey of choral methods and conducting textbooks reveals myriad opinions of approaches, philosophies, and techniques for achieving a successful choral program. In general, these texts seek to serve as an all-inclusive how-to manual for the developing

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[9] Wilhelm Ehmann and Frauke Haasemann, *Voice Building for Choirs*, Rev. ed., The Westminster Library; (Chapel Hill, N.C.: Hinshaw Music, 1982).

[10] Robert Briggs, "Vocal Warm-ups: From the Sublime to the Ridiculous," *Teaching Music*, 7 (April 2000): 36.

teacher/conductor. Each varies depending upon the topics deemed important by the author. A wide range of topics vary from the practical to the historical to the intensely philosophical, and to all areas in between. For instance, a comparison of Paul Roe's *Choral Music Education*[11] and Don Collins' *Teaching Choral Music*[12] shows two divergent philosophies at work in the training literature for music educators. Eleven of twelve chapters in Roe's textbook focus on practical application of skills—ranging from conducting technique to diction to vocal technique—in the choral music classroom, with no mention of philosophy or educational psychology. In contrast, Collins' textbook devotes five substantial chapters to philosophical and educational psychology issues such as "developing a philosophy of teaching choral music," and "understanding the adolescent." Neither of these approaches is illustrated here as an ideal; the comparison is simply pointed out as an example of the varying content in these types of textbooks, depending upon the bias of the author.

Although the topics covered in each of the textbooks in this category vary considerably, a similarity amongst all of them is the recurring theme of building choral tone and teaching vocal fundamentals. According to Steven Hart,[13] choral methods and conducting textbooks since 1939 include much information about improving choral tone. However, "after five decades of choral conducting books, accurate characteristics and

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[11] Paul F. Roe, *Choral Music Education*, 2nd ed. (Englewood Cliffs, N.J.: Prentice-Hall, 1983).

[12] Don L. Collins, *Teaching Choral Music*, 2nd ed. (Upper Saddle River, N.J.: Prentice Hall, 1999).

[13] See Steven Robert Hart, "Evolution of Thought and Recurrent Ideas in Choral Conducting Books and Secondary Music Education Texts Published in English from 1939-1995" (Ph.D. diss., University of Colorado, 1996).

detailed descriptions of the ideal choral tone are absent from the literature."[14] It is possible that no descriptions exist of the ideal choral tone because the only ideal tone is one that achieves the demands of the music at any particular time. Hart suggests that timbre is difficult to describe clearly in words, since the use of words such as "dark," "bright," "warm," etc., lack the detail to convey differences in choral sonority.

It is common in choral methods and conducting textbooks for the authors to discuss vocal warm-ups as analogous to athletic warm-ups. Robinson and Winold say the following:

> A good rehearsal begins with a well-planned warm-up period. Because singing is first and foremost a physical activity, the muscles must be "loosened-up" so that the rehearsal or performance that follows will have the advantage of maximum vocal efficiency. It would be unthinkable for an athlete to begin an intense practice session without some kind of warm-up activity; the same is true of the choral rehearsal. A carefully planned and efficiently executed warm-up period is a necessity if the continuous musical growth and vocal development of the choral ensemble is to be assured.[15]

Other authors who discuss the athlete analogy include Durant,[16] Garretson,[17] Busch,[18] Boyd,[19] Miller,[20] and Demaree and Moses.[21] While the mechanical development of vocal

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[14] Ibid., 66.

[15] Ray Robinson and Allen Winold, *The Choral Experience: Literature, Materials, and Methods* (Prospect Heights, Ill.: Waveland Press, 1992), 176.

[16] Colin Durrant, *Choral Conducting: Philosophy and Practice* (New York: Routledge, 2003).

[17] Robert L. Garretson, *Conducting Choral Music*, 5th ed. (Boston: Allyn and Bacon, 1981).

[18] Brian R. Busch, *The Complete Choral Conductor: Gesture and Method* (New York: Schirmer Books: London, 1984).

[19] Jack Boyd, *Rehearsal Guide for the Choral Director*, 2d ed. (Champaign, Ill.: M. Foster Music Co., 1977).

skills is a worthwhile goal of a warm-up sequence, there are other goals that these authors do not present, such as stylistic vocalism, ear training, and theory skills.

The subject of choral tone development is often discussed in relation to fundamental voice building vocalises. Authors frequently suggest that the warm-up is the time to work toward an ideal choral tone. The discussions of choral tone building in the choral methods and conducting textbooks are limited to specific topics such as posture, breath, resonance, range, agility, diction, vowel unification/modification, and articulation. Though there may be slight variations, these topics are discussed in nearly every textbook.

Busch[22] discusses warm-ups in a fairly thorough and helpful manner. His philosophical approach hearkens to the F. Melius Christiansen school described previously. He discusses the warm-ups as divided into six categories: blend and balance; tone-quality development; range extension; flexibility and agility; diction and articulation; and control of air supply. Musical examples follow each category in an easy-to-apply format. He says that a "good choral sound is essential if the singers are to have an aesthetic experience."[23] His concept of good sound includes a homogeneous, open, forward tone that is produced in a relaxed manner.[24]

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[20] Kenneth E. Miller, *Vocal Music Education: Teaching in the Secondary School* (Englewood Cliffs, N.J.: Prentice Hall, 1988).

[21] Robert W. Demaree and Don V. Moses, *The Complete Conductor: A Comprehensive Resource for the Professional Conductor of the Twenty-First Century* (Englewood Cliffs, N.J.: Prentice-Hall, 1994).

[22] Bush, *The Complete Conductor*.

[23] Ibid., 247.

[24] Ibid., 249.

Other textbooks that follow the pattern of describing a choral voice building concept proceeded by exercises for implementation include those by Ehmann,[25] Lamb,[26] Hylton,[27] Durant,[28] Garretson,[29] Phillips,[30] Demaree and Moses,[31] Miller,[32] Robinson,[33] and Brinson.[34] Although all of the exercises presented by these authors may prove beneficial in the development of fundamental vocal skill, few other benefits exist. Overall musicianship is subjugated to the goals of building standard model voices, i.e., voices which produce pure spacious vowels, resonance, and vibrancy, with constant breath support. There is no mention of stylistic concerns in the development of individual voices or in the development of choral tone, and the vocal concepts are rarely presented with any

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[25] Wilhelm Ehmann, *Choral Directing* (Minneapolis: Augsburg Pub. House, 1968).

[26] Gordon H. Lamb, *Choral Techniques* (Dubuque, Iowa: Wm.C. Brown Co. Publishers, 1974).

[27] John Baker Hylton, *Comprehensive Choral Music Education* (Englewood Cliffs, N.J.: Prentice Hall, 1995).

[28] Durrant, *Choral Conducting: Philosophy and Practice*.

[29] Garretson, *Conducting Choral Music*.

[30] Kenneth H. Phillips, *Directing the Choral Music Program* (New York: Oxford University Press, 2004).

[31] Demaree and Moses, *The Complete Conductor: A Comprehensive Resource for the Professional Conductor of the Twenty-First Century*.

[32] Miller, *Vocal Music Education*.

[33] Robinson and Winold, *The Choral Experience: Literature, Materials, and Methods*.

[34] Barbara A. Brinson, *Choral Music Methods and Materials: Developing Successful Choral Programs (Grades 5 to 12)* (New York: Schirmer Books, 1996).

sense of historical context related to repertoire being rehearsed. None of the exercises make a connection between appropriate historical vocalization based on the repertoire being studied and the physical production of sound.

Brinson[35] argues for the development of broad ranging musical skills in the choral setting, not only those related to performance experiences, but also sequential learning of vocal, historical, and theoretical skills. She suggests that often, conductors teach from performance to performance in a drill and practice manner without regard to the learning that should be taking place in between. Furthermore, Brinson says:

> If directors broaden their focus to include a systematic study of music reading, vocal technique, style, history, aural skills, basic theory, and music terminology, students will gradually learn important skills and knowledge necessary to build a firm foundation for musicianship.[36]

Although Brinson discusses the development of skills in the high school choral curriculum in the quote above, the same concepts apply to choirs of any age and ability. According to Brinson, with a systematic approach to building total musical knowledge, singers become better equipped for individual achievement and deeper musical understanding in the ensemble setting. Unfortunately, her textbook approaches the teaching of vocal techniques to choirs as a mechanical skill, guided only by the individual vocal concept of each exercise, in the manner of most other choral methods and conducting textbooks. This practice does little to further her philosophy of including systematic study to provide for a "firm foundation for musicianship."

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[35] Brinson, *Choral Music Methods and Materials.*

[36] Ibid., 56.

Several choral methods and conducting textbooks vary from the standard model described above. Wilson, [37] Boyd,[38] and Roe[39] each discuss the importance of choral tone meeting the demands of the music at hand. In a chapter about "Developing Choral Tone," Wilson discusses individual singers' tone as it relates to different styles of music. He begins the chapter by stating:

> Singing is an art and therefore tone must respond to mood and style. Tone must vary with mood and style or else the singing of a chorus will sound the same for all types of compositions. Undoubtedly this is the reason that few opera singers can sing popular songs successfully, or that few folk singers can sing an art song artistically.[40]

He proceeds to discuss legitimate singing, or art music, as it compares with folk singing and popular singing. While it is helpful that Wilson makes distinctions between styles of the current time, he does not suggest differences in tone production as related to historical styles.

Boyd's[41] choral methods textbook devotes an entire chapter to "Developing Proper Choral Tone and Style in the Rehearsal." He suggests that singing all repertoire with one basic choral sound, or timbre, is a mistake. Also, he suggests that some music responds better to certain choral timbres than others. "Trying to force the wrong style of

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[37] Harry Robert Wilson, *Artistic Choral Singing: Practical Problems in Organization, Technique, and Interpretation* (New York: G. Schirmer, 1959).

[38] Boyd, *Rehearsal Guide for the Choral Director*.

[39] Roe, *Choral Music Education*.

[40] Wilson, *Artistic Choral Singing*, 189.

[41] Boyd, *Rehearsal Guide*.

sound on a piece of music might waste rehearsal time, as well as keep the work from getting the proper interpretation."[42]

According to Boyd, choral musicians should seek to discover why a "Mozart sound," a "Palestrina sound," and a "Brahms sound" differ, and how the different sound qualities can be achieved through rehearsal. He does not give specific instructions on how to achieve this goal, nor does he attempt to characterize these sounds. He issues the warning that describing stylistic sounds with nebulous terms is confusing and often interpreted in multiple ways by different ensembles. For example, "words such as 'soft,' 'heavy,' or 'bright,' occasionally give an improper meaning," and that "merely to describe a sound as 'Mozartean' or 'Wagnerian' to an amateur choir is to waste breath and rehearsal time."[43]

Boyd states that there is always "the ever-present problem of forcing singers into improper singing techniques when a new tone quality is asked for."[44] He relates his personal experiences of hearing young choirs seeking to imitate advanced or professional level choirs whose members were capable of producing a type of tone quality not obtainable from young singers. Boyd suggests that this problem should be monitored. He does not mention any connection between historical era vocalisms and healthy singing techniques. Moreover, he does not point out that many choirs, in an attempt to please their conductors, often strive for overly dark, pressed, or mature vocal productions which

[42] Ibid., 89.

[43] Ibid., 91.

[44] Ibid., 95.

are not so much demanded by style or history as from subjective preference of the individual conductor.

After devoting an entire chapter to the discussion of the development of "proper choral tone and style," Boyd follows it with a chapter discussing "successful warm-up techniques." One might view this sequence as theory followed by application and practice, which is a successful model in the teaching of new skills. The practice, in this instance, unfortunately, includes no reference to the theory of producing historically guided vocalism. It continues in the fashion of the aforementioned textbooks that offer concept learning of mechanical vocal skills without any historical context.

Roe[45] discusses the positive effects of elements of stylistic singing and musical tradition in conductor training programs. He suggests

> that knowledge of and sensitivity to style and musical tradition help to organize all of the musical elements into a cohesive whole. Without an understanding of style, the student learns only unrelated "parts"—pitches, dynamics, tone color, etc.—out of meaningful context with the music. With "style," all of these elements fuse into meaning, with music logically related to art and the other humanities.[46]

With regard to many musical decisions, Roe says an educated guess must be made, since the "old masters" left few specific performance instructions in the musical score. "Even while generalization of historical style by era may be deficient in some respect, it is important to understand overriding concepts of style within specific eras as well as among specific composers."[47] He suggests it is important to understand the traditions of

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[45] Paul Roe, *Choral Music Education*.

[46] Ibid., 278.

[47] Ibid., 279.

how repertoire is and has been performed, lest conductors open themselves to just and deserved criticism from other musicians. No mention is made of the primary sources that can be employed in assisting contemporary performers with an understanding of past performance practices. Moreover, no mention is made of the importance of trying to uncover the intentions of the composer whose work is being performed.

Roe guides the reader in a narrative description of the elements of style that might be encountered in each historical period. As has been mentioned in regard to similar textbooks, this information is helpful, but not nearly as helpful as it could be with historical concepts synthesized into active learning exercises for the reader. In Roe's generic format, the style list reads like a music history lesson, and its applicability is not evident to all conductors. He does not suggest any practical application of how historical vocal production might be taught efficiently through warm-ups, or even how the style lists that he offers can be incorporated into the musical rehearsal.

Roe's discussion of vocal fundamentals is limited. He says that "good singing is the primary goal of the teacher."[48] Good singing is defined as "attractive tone quality, aesthetically satisfying interpretation, careful intonation, satisfactory vocal range, flexibility and agility, superior breath control, relaxed jaw, and the singer's self confidence."[49] Furthermore, he says "tone quality is made attractive by brilliance (resonance), fullness (depth), hum-like placement, a correct vibrato, 'moving tone,' and an even scale."[50] Only vocal fundamentals are discussed, with few suggestions for related

[48] Ibid., 62.

[49] Ibid., 62.

[50] Ibid., 62.

exercises, in a manner similar to other choral methods textbooks. Noticeably absent from the list of vocal fundamentals are dynamics, timbre, and other characteristics associated with successful choral tone production. While Roe does mention "aesthetically satisfying interpretation" in his list of good singing attributes, he does not offer suggestions for achieving this goal. Nor does he define a "correct" vibrato or offer any insight for achieving one. The chapter closes with a list of common vocal problems accompanied by prescriptive suggestions called "causes, cures, and cautions,"[51] which are indicative of the sometimes flippant trends in teaching voice techniques to choirs.

A more recent publication covering philosophy, educational psychology, and practical matters involved in choral music education is Collins'[52] *Teaching Choral Music*. Collins begins his choral methods textbook with a historical review of the roots of choral music from the Greeks and Romans through the twentieth century. In a similar manner to all other methods textbook authors, he discusses generic stylistic features and important events in each historical era. In contrast to the seeming importance of placing this historical information first in the book, he proclaims to teachers of adolescent choirs in a subsequent chapter: "you have succeeded if you produce a technically and musically literate choir who sings with choral artistry in one style. To teach the students to sing in several styles is virtually impossible."[53] This seeming contradiction in philosophy is troublesome.

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[51] Ibid., 117.

[52] Collins, *Teaching Choral Music*.

[53] Ibid., 331.

Collins seems to contradict the view of numerous pedagogues who have shown that young people thrive while learning multiple styles at once. For instance, children frequently learn multiple languages in school. Furthermore, it has been shown that young students excel at all language skills while learning multiple languages. Finally, educational psychologists have proven that the only limitation to students' learning is the limitation of expectations imposed by teachers.[54] Collins goes on to say,

> Most middle-level and high school choral directors may determine that achieving good tone production and executing the music in the proper mode with good choral technique may be as close to Renaissance authenticity as they can get. Others should admire and emulate choirs who have achieved that much authenticity.[55]

In a closely related discussion regarding the difficulties of achieving stylistic choral singing, Howard Swan speaks to the problem of accomplishing the varied stylistic demands of the music: "the chorus is under a far greater handicap in this respect than is the soloist, because . . . in front of him is one . . . who cannot will himself to change from song to song, and neither can his chorus."[56] Swan obviously places the onus of responsibility for the achievement of stylistic choral singing on the conductor, in contrast to Collins, who suggests that students may not be capable.

Although Collins' overall philosophical approach regarding the instruction of choirs to sing in varied styles is questionable, he goes further than most authors in describing techniques to teach vocal fundamentals and musicianship skills in the choral

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[54] Sometimes referred to as *expectancy effects*.

[55] Ibid., 334.

[56] Howard Swan, *Conscience of a Profession: Howard Swan, choral director and teacher* (Chapel Hill: Hinshaw, 1987), 81.

rehearsal. Twenty-one vocal exercises are introduced, ranging from posture and exhalation exercises to staccato octave leap exercises. Purposes of each exercise precede the musical example. Originating with Ferdinand Grossman, conductor of the Vienna Boys Choir and the Kapellmeister of the Imperial Chapel, these warm-up exercises have been employed by numerous virtuosic boy choirs and are described as a tradition handed down through the twentieth century.

Collins suggests that each exercise should be learned, beginning with the non-vocal and single-tone exercises, and then leading to the multiple-tone exercises. He further instructs that they should each be sung in consecutive order and eventually be used in every rehearsal in order to teach the fundamentals of posture, breath management, resonance, head voice, and management of moving tones (steps and skips). This is one of the few complete sequences described in any of the literature regarding warm-ups and their use in the development of fundamental vocal skills.

As can be seen in the sources noted above, generic historical information regarding stylistic features is common in choral methods and conducting textbooks. However, little practical application exists in the area of warm-up exercises that synthesize the theoretical into the actual production of sound. In addition, while reading any of the aforementioned texts the reader might question the origin of the historical information being presented. Is it based upon primary source material? As Head[57] discusses in his research, "rarely are specific allusions made to allow the [reader] to

[57] Paul Head, "Teaching Choral Repertoire through Score Study and Performance Practice" (D.M.A. diss., University of Oklahoma, 2001).

realize the actual source of [the author's] knowledge."[58] These sources are extremely important, and should be divulged in order to promote deeper understanding and further scholarship in areas related to performance practice and historically appropriate choral singing.

Practical Warm-up Guides

The practical warm-up guides reviewed for the present study encompass several categories of texts. The first group includes guides which serve as a compendium of exercises for choral singers. Several of the authors associated with this type of publication include Robinson, [59] Maybee,[60] Scarmolin,[61] Van Camp,[62] Albrecht,[63] and Telfer.[64] These guides focus on the development of fundamental vocal skills only, without regard to stylistic guidance. Although they contain no information related to historically guided vocalism, the Albrecht and Telfer guides are useful.

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[58] Ibid., 22.

[59] Russell Robinson, *The Complete Warm-up handbook: A sourcebook for choral directors* (Van Nuys: Alfred, 1995).

[60] Harper Maybee, *Tuning-up Exercises for Ensemble Singing* (Boston: Oliver Ditson Co., 1930).

[61] A. Louis Scarmolin, *The Chorister's Daily Dozen* (New York: Pro Art Publications, 1951).

[62] Leonard Van Camp, *Choral warm-ups for minds, ears and voices* (New York: G. Schirmer, 1971).

[63] Sally Albrecht, *The choral warm-up collection: a sourcebook of 167 choral warm-ups contributed by 51 choral directors* (Van Nuys: Alfred, 2003).

[64] Nancy Telfer, *Successful Warmups*, Conductor's ed., 2 vols. (San Diego: Kjos Music Co., 1995).

The warm-ups in Albrecht's guide are contributed by conductors from throughout the United States. The categories of warm-up exercises include: physical warm-ups, vowels, diction, flexibility, scales, intervals, intonation, phrasing, blend, dynamics, range, chords, and rounds. Based on the contributors' years of experience, the material is presented as anecdotal prescriptions for vocal development.

Telfer's collection of "Successful Warmups" is more thorough and pedagogically sound than Albrecht's. Whereas Albrecht simply lists numerous warm-up examples, Telfer focuses more discussion on the reasons why each particular exercise is useful. Warm-ups are divided into four general categories: breathing, tone quality, vocal flexibility, and ear training. The purpose of the exercises is to assist singers in producing a good quality sound throughout their full range as well as to promote an understanding of good vocal health. Telfer's opinion of a good quality sound is the optimization of a singer's potential for producing resonance, diction, and dynamic variation with vocal freedom. Telfer's guide offers approximately three hundred vocal exercises to assist with various needs of the developing choral singer. The focus is on the fundamental development of vocal technique and not on the development of total musicianship. One helpful and unique aspect of her text is the diagnostic chart found in appendix A, which includes a column for symptoms that can be cross-referenced with possible causes and remedies. Teachers with limited experience in working with young or immature voices might find this type of chart beneficial. Neither Albrecht nor Telfer makes any mention of variation in tone quality or other physical characteristics of voice production with regards to style or historical perspective.

Practical warm-up guides that are based on a voice class model comprise the second category of literature reviewed for the present study. In these textbooks, exercises are offered for specific treatment of vocal faults or for the development of fundamental vocal skills as they might be incorporated in private voice instruction. In addition, they often contain in-depth pedagogical information to describe why each exercise is employed. This information differentiates the voice class model from the compendium/collection type discussed above. Two examples of these textbooks are authored by William Fenton[65] and Paul Nesheim.[66]

Fenton's contribution has only four chapters: realizing the potential of young singers; choral techniques; singing in multiple languages; and ear training. The first chapter is a method of teaching group voice lessons in the high school choral setting. The four goals of the chapter include: formation of a basic singing technique; understanding vocal production; growth in musicianship and interpretation; and the development of self-confidence in performance. In the choral techniques chapter, the author suggests developing the characteristic, or identifying sound of the ensemble through daily vocalization exercises. There is no mention of stylistic or historical guidance in his suggestions for the development of choral voices.

The title page of Nesheim's textbook clearly states that *Building Beautiful Voices* is "a concise, yet comprehensive study of vocal technique for the choral rehearsal or private instruction." Despite the statement of purpose for the book, the entire text is set

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[65] William C. Fenton and Sarah O. Johnson, *Choral Musicianship: A Director's Guide to Better Singing*, 1st ed. (Lebanon, IN: Houston Pub., 1990).

[66] Paul Nesheim and Weston Noble, *Building Beautiful Voices: A Concise, yet Comprehensive Study of Vocal Technique for the Choral Rehearsal or Private Instruction*, Director's ed. (Dayton, Ohio: Roger Dean Pub. Co., 1995).

up as a solo singer's guide to "building the beautiful voice." It includes no vocalises for more than one voice part. However, many of the exercises might be useful for individual singers and conductors who have trouble harmonizing their own warm-ups on the piano, since each exercise is accompanied by a harmonization.

The book is divided into the following categories: stretching, breathing, resonance, legato, dynamics, consonants, legato, sostenuto, and tone quality (brilliance and depth). Interestingly, no mention is made of the need for change in vocal production, or any adjustments whatsoever needed for a singer to function effectively within the choral ensemble. Historically, Weston Noble (co-author) and the Luther College Choir have been associated with the singing school[67] that promotes group needs over individual goals of vocal development.

In discussing the aesthetic qualities of vocalises, Nesheim offers a quote by Richard Miller:

> It is often overlooked that vocal timbre itself is emotive, and that every vocalise should be treated as a musical expression, an emission of sound that in itself is communicative. It is naïve to assume that technical work is non-creative and that creativity enters only when literary ideas are expressed. Were that the case, approximately half of the standard vocal literature from previous centuries would fail to qualify as performance-worthy, because of its emphasis upon pure vocalization.[68]

Miller goes on to suggest that vocalises should not be rote drill. "A vocalise should not be just a number of notes, but should be treated as a beautiful phrase in its own right."[69] He also says, "There is seldom value in practicing any vocalise that does

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[67] Decker, *Choral Symposium*.

[68] Richard Miller, "Creative Practicing," *NATS Journal*, 45, 3 (1989): 29.

[69] Ibid., 29.

not have musical merit. . . . Every phrase, brief or long, fast or slow, loud or soft, must present a musical experience."[70] This musical experience is described by Nesheim as the result of its "particular melodic, rhythmic, dynamic, articulatory, and/or harmonic interest."[71]

The musical experience of vocalises described by Nesheim is somewhat helpful, but limited in its synthesis of scholarship in choral singing. Nesheim makes no statement to the effect that vocal exercises can also assist in the achievement of other goals such as appropriate historical vocalism. He suggests only that vocalises should be treated as an artistic goal in their own right, with no consideration given to the historical context of the music being rehearsed.

The third category of practical warm-up guides includes books that thoroughly examine the role that warm-ups play in the vocal development and musical skill building of a choral ensemble. Few guides exist that are dedicated to a complete choral warm-up methodology. Most simply list various exercises from which conductors can choose to address specific problems. The books in this category differ by their discussion of goals, expectations, and outcomes related to the particular method. The two most successful examples share an author. *Voice Building for Choirs*[72] was co-written by Wilhelm Ehmann and Frauke Haasemann, while *Group Vocal Technique*[73] was co-written by Haasemann and James Jordan. These three authors have had long-standing associations

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[70] Ibid., 29.

[71] Nesheim, *Building Beautiful Voices*, 30.

[72] Ehmann and Haasemann, *Voice Building for Choirs*.

[73] Haasemann and Jordan, *Group Vocal Technique*.

with Westminster Choir College. Furthermore, the voice building exercises promoted in each of the texts serve as the foundation for the development of most of the choral singing at Westminster Choir College.

In *Voice Building for Choirs*, Ehmann and Haasemann discuss the importance of teaching healthy singing technique through creative strategies associated with daily life. Their goal is to teach choral singing concepts through the application of comfortable activities, without overloading the singers with technical jargon. The basic elements of a productive warm-up, as enumerated by the authors, include relaxation, posture, breathing, and resonance. Many specific concepts and warm-up techniques are discussed in chapters one and two.

Chapter three is entitled "Warm-up Exercises Based on Chapters [1] and [2], Designed to Develop Various Choral Sounds Indicative of Musical Style Periods and to Confront Specific Problems of Individual Compositions." The authors give a very detailed need for the chapter:

> The instruments of each epoch of music history had different shapes and sounds. (Refer to museum catalogues and encyclopedia descriptions.) Musical results correspond to the instruments upon which the works were played. One defines a "sound ideal" for each compositional period. One assumes that vocal works were influenced by these concepts also. Music of Mozart (Classic) does not resemble the music of Wagner (new German-late Romantic-culmination). Nor is Bach's style (late Baroque) like that of Max Reger (late Romantic). Thus a specific vocal interpretation must be designed for choral voice training to bespeak these style periods.[74]

After an introduction that speaks so specifically to the stylistic and historical interpretation of choral music, one expects more from the final chapter of the text. Many exercises are offered by the authors that may assist in the development of an amateur

[74] Ehmann, *Voice Building for Choirs*, 69.

choir into one that has more control, flexibility, and beauty. However, specific examples of exercises that will promote any noticeable aesthetic difference when singing a Renaissance motet as compared to a Classical Mass are missing. The goal of this chapter is well stated and quite needed, but the actual execution is greatly lacking.

For instance, beginning with the Renaissance era and culminating with the Contemporary era, the authors outline the "sound ideals." The following Renaissance sound ideal is offered: "between polyphony and homophony, static and forward motion, blended sound, minimal vibrato, legato."[75] For Baroque music, the sound ideal is detailed as "bright, rich in overtones, slender, intense, stream of resonance, monochromatic, martellato."[76] In the Classical era: "bouncy, flexible, individual, sensitive, extended high and low registers."[77] The Romantic era sound ideal is described as "dark, supple, warm, round, wide, intimate, and expressive."[78] Finally, the Modern sound ideal is described as "hard, cool, objective, with extreme shifts of dynamics, development of high and low sound regions, rapid changes, and ecstatic."[79]

While the sound ideals convey general descriptions of each era, they are vague and subjective, and according to historical sources, some of their recommendations are simply wrong. Even more importantly, they lack any definitive source. The reader is expected to accept the authors' expertise in their descriptions of stylistic qualities as

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[75] Ibid., 73.

[76] Ibid., 76.

[77] Ibid., 78.

[78] Ibid., 82.

[79] Ibid., 85.

gospel. The exercises that follow each designated period's sound ideal focus primarily on articulation and dynamic contrast. No physiological or musicological description is offered for the difference in era-specific timbre, vibrato, or pitch. More detailed exercises that address these topics would help to achieve the need the authors' so clearly state at the outset of chapter three: meeting the varied demands of vocalization from each historical era.

Group Vocal Technique[80] is another voice building method that focuses on easily understood exercises derived from daily life (e.g. sighing, crying, and laughing). The authors state that amateur singers are easily frustrated by technical voice jargon and must be able to understand vocal exercises in order for them to have the desired effect. The text is closely related to *Voice Building for Choirs*;[81] however, it is more detailed and specific in its pedagogical scope and purpose. Specific goals are set for the conductor and singer in this method. The purpose of *Group Vocal Technique* is not to produce solo singers or even to address individual vocal progress, the purpose is to develop the choral instrument by teaching fundamentals of vocal technique that aid in the accomplishment of a healthy and dynamic choral sound. Though not defined explicitly, the authors suggest that a healthy and dynamic choral sound is created by singers who produce a relaxed, resonant tone, capable of varied musical demands, including leaps and legato singing in high and low ranges, with consistency between registers.

[80] Haasemann and Jordan, *Group Vocal Technique*.

[81] Ehmann, *Voice Building for Choirs*.

The authors suggest that the conductor will save much time and energy when the teaching and learning of vocal techniques are both a musical experience and a music education. Furthermore, they state:

> Every choir rehearsal should begin with a short period of warm-ups which involve some fundamental exercises: relaxation, posture, diaphragm activity (diction), resonance, runs, the five pure vowels (without diphthongs), and high and low range. That can be accomplished in five to seven minutes. If the first piece of the rehearsal is from the Romantic period, the tools for dark sound necessary for that style can be imbedded into the singers' minds during that warm-up period.[82]

The primary *Group Vocal Technique* concepts begin with the building blocks of posture and the "yawn-sigh." They progress through the teaching of breathing, resonance, dynamics, register consistency, range extension, flexibility, pure vowels, and end with style. "The concepts are listed . . . in pedagogical order from the most basic to the most complex, i.e., style, which requires the singer to combine many of the elements of *Group Vocal Technique*."[83] It is true that style is the most complex of the elements listed in the authors' pedagogical order. Unfortunately, the authors make no attempt to point out that style also *guides* many of the same concepts, and that without the guidance of historical perspective, or style, one can not possibly know the appropriate type of resonance, dynamics, articulation, or even consistency of register to employ.

Although style is listed as the culmination of the foundational concepts, the authors never reveal exercises to achieve historically guided vocalism. In the summary of the book, they state that the conductor should "know the general guidelines for idiomatic

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[82] Haasemann and Jordan, *Group Vocal Technique*, 6.

[83] Ibid., 8.

sound of the different styles of music."[84] As in other texts, the authors proceed to offer a few basic characteristics of each of the style periods from Renaissance through Contemporary eras. For example, in the Renaissance, they mention that one might expect a bright sound, little vibrato, *messa di voce*, low range for soprano, high range for tenors, and dynamics ranging from *piano* to *mezzo forte*. Unfortunately, the characteristics for each era are far too general, and as opposed to every other concept that is introduced in the book, no practical application for the production of era-specific vocalization is provided.

Theses, Documents, and Dissertations

Considering the vast amount of information available in choral methods and conducting textbooks and in the practical guides about warm-up exercises, one might expect numerous academic studies related to the topic of warm-ups. This is not the case. Only a few studies examine the role of choral warm-ups in the rehearsal process. Several studies focus on the efficiency of warm-up exercises in the choral rehearsal, including those by Betty Davis, [85] Joseph Dean,[86] and Timothy Coker,[87] which provide useful arguments for the implementation of carefully considered warm-up exercises for increasing rehearsal efficiency.

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[84] Ibid., 171.

[85] Betty L. Davis, "The Development of a Program of Warm-Up Activities to Implement Choral Rehearsal Efficiency" (M.E. thesis., Ashland College, 1983).

[86] Joseph Henry Dean, "The Effect of a Systematic Choral Warm-Up Strategy on Student Pitch-Matching Skills, Knowledge of Intonation Concepts, and Self-Reported Attitudes Toward Singing" (D.M.A. diss., University of Missouri, Kansas City, 1991).

[87] Timothy Coker, "Choral Warm-up Exercises as a Key to Teaching Music Literature and Vocal Technique" (Ph.D. diss., University of Southern Mississippi, 1984).

Davis' study is divided into two distinct sections. The first section is a practical experiment designed to develop a working set of choral warm-up activities for a specific high school choral program in order gain choral rehearsal efficiency. The experiment commenced with surveys that were sent to Ohio choral directors and high school students to gather opinions about warm-up exercises. The choral directors felt that: warm-ups are important; they were not given sufficient training in warm-up exercises; their choristers need explanations about, and reasons for, the warm-ups employed in rehearsal; and the efficiency of the warm-up period does affect the efficiency of the rehearsal as a whole. Students felt that although warm-up exercises were not liked by everyone, they are necessary and vital in the process of vocal development, and they strongly prefer to be told why each exercise is important and what it does for their vocal development before they perform it. Since these preferences are likely to be an indicator of widespread preference among choral singers, this finding has significant implications for the present study.

Based on a more scientific model, the second aspect of Davis' study tests the efficiency of a specific set of warm-up exercises. A control group received no vocalization over the course of eighteen weeks, while the experimental group received a carefully planned warm-up period of eight to ten minutes each day. The exercises employed in the study represent the types of warm-ups discussed in the choral methods and conducting texts—the development of fundamental vocal skills. Pre- and post-test tapes, evaluated by a panel of judges, indicate that substantially more vocal production improvement took place in the experimental vocalise group than in the control group. The reader can ascertain that consistently implementing vocal warm-ups assists in the

development of fundamental vocal skills more efficiently than rehearsing repertoire alone.

Dean's study[88] also investigates the influence of a systematic choral warm-up strategy. His primary objective was to determine if a specific series of warm-up exercises could increase student skill in pitch-matching and singing in tune. A further objective was to assess student attitudes toward warm-up exercises.

The experimental treatment was seven weeks, during which students participated in a five minute choral warm-up in each rehearsal. The strategies for the warm-ups were to provide the opportunity to develop awareness of intonation concepts, discuss factors affecting vocal intonation, and practice singing in tune. Experimental groups were allowed to supplement the five-minute treatment with their own traditional warm-ups so as not to disturb established routines. The total warm-up session did not exceed ten minutes.

Results indicate that pitch matching skills in the experimental group improved dramatically more than in the control group. Experimental group students gained confidence in their ability to sing in tune and notice small changes in pitch. Finally, the systematic warm-up strategy created more positive group attitudes toward warm-ups and singing skills in the experimental group, while control group attitudes became slightly more negative.

These results suggest that such an instructional strategy could be used to successfully modify attitudes in a positive direction. "It is speculated that as students learn more about skills of sensitive listening and accurate singing, they may become more

[88] Dean, "The Effect of a Systematic Choral Warm-Up Strategy."

interested, more motivated, and eventually better musicians."[89] These findings evidence the need for more research in the area of concept learning, especially as it applies to choral warm-up strategies. Since conductors have ascertained that concept learning can effectively be established through warm-ups, other skills might effectively be introduced in the same way.

In a dissertation more closely related to the aims of the present research, Coker[90] sets out to determine whether warm-up exercises deliberately derived from music being rehearsed are more effective and efficient than traditional warm-up exercises which are only incidentally related to the repertoire. The study employs the use of warm-up exercises derived from specific musical examples compared to warm-up exercises based on the diatonic five-tone scale.

Coker's guidelines for the repertoire derived experimental warm-up exercises are to: "1) emphasize one concept; 2) be brief; 3) stress musical as well as technical aspects of music; 4) be within capabilities of the choir; 5) provide for opportunities to make clear connections between what is utilized and what might occur in musical context; and 6) emphasize idiomatic compositional devices, [including] melodic intervals, canons, repetition, chromaticism, scale passages, cadence points, suspensions, chord progressions, cross relations, rhythmic motifs, passages of high or low tessitura, extra-musical devices, textural and breathing problems."[91]

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[89] Ibid., 65.

[90] Coker, "Choral Warm-up Exercises as a Key to Teaching Music."

[91] Ibid., 22.

Coker's six guidelines are useful, but not thorough enough to totally prepare the singers for a foray into the designated repertoire. It may not be feasible to focus on only one concept per exercise, since numerous judgments, based on multiple concepts, are made when singing even a single melodic phrase. Coker does not employ any additional language/instruction prior to the notated warm-up exercises in order to place them in a historical context, or to convey an appropriate sense of vocalism. Furthermore, he employs few specific articulation markings and dynamic indications to assist in these goals.

The control group in Coker's study was given traditional exercises based on the diatonic five-tone scale, while the experimental group was treated with exercises derived from the music being rehearsed. Two specific musical selections from each historical era were chosen for the experiment, determining both the experimental warm-ups and the performance repertoire for the choirs. After each warm-up period the music was rehearsed in both groups.

Evaluations of the two groups after the trial period indicate that the greatest differences in their performances were in the areas of dynamics and interpretation (musical effect). The group that included the warm-ups derived from the repertoire demonstrated more dynamic contrasts and greater overall musical effect than the control group. The hypothesis that warm-up exercises which are derived from music under rehearsal facilitate choral learning more efficiently than warm-up exercises which are only incidentally related to the music was accurate.

These findings have substantial implications for choral directors who employ warm-up exercises. Since the results indicate that the use of warm-ups and learning of

concepts based on music being rehearsed assists in the achievement of more dynamic and musical performances than warm-ups that focus only on fundamental vocal skill, conductors should strive to employ interpretative and stylistic concepts in the warm-up process. These findings also substantiate the present study's focus by providing support for the implementation of warm-ups based on repertoire of varied historical eras. The success of Coker's study suggests that warm-ups based on the achievable goal of historically guided vocalism might also achieve effective results.

Dissertations by Gerald Darrow[92] and Steven Hart,[93] while not specifically about warm-ups, are peripherally related to the present study because of the broad nature and scope of their research. Both authors discuss recurrent ideas in choral conducting and music education textbooks, and include sections that deal extensively with choral tone.

Darrow includes seven categories in his study of thirty-three years of published writings: tone quality; breathing; posture; intonation; range; dynamics; and diction. Warm-ups are mentioned only as they are discussed in the literature for the achievement of musical goals within these categories. For instance, Darrow finds exercises recommended for developing breathing technique, listening skills, range extension, vowel formation, placement, and dynamic control. However, no mention is made about exercises designed to improve historical vocalism or variation in choral tone production based upon stylistic guidance.

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[92] Gerald Darrow, "The Nature of Choral Training as Revealed Through an Analysis of Thirty-Three Years of Published Writings" (Ph.D diss., Indiana University, 1965).

[93] Steven Hart, "Evolution of Thought and Recurrent Ideas in Choral Conducting Books and Secondary Music Education Texts Published in English from 1939-1995" (Ph.D. diss., University of Colorado, 1996).

Darrow does, however, discuss the need for variety of tone quality, and cites the following quote by Fred Waring:

> We must also sing in the dramatic or emotional range—using choral tone that is bright or dark, mellow or harsh, strident or subdued, according to the demands of the song. . . . I rather doubt that there is any such thing as absolute or pure beauty in choral tone. It can have only dramatic integrity, and it is beautiful only when it actually says what it is trying to say.[94]

However, again Darrow offers no solutions. He does not suggest that if conductors are to achieve the musical drama that a composer intends, an intrinsic requirement is to rely on historical stylistic demands of the music.

In a like manner, Hart[95] states that performance practice ideas have become a part of choral methods and conducting books and that there is much information regarding techniques for improving or working toward good tone. However, "description of an ideal choral tone is absent from the literature." He suggests, as Darrow[96] does also, that the difficulty of describing choral tone lies in imprecise language. He suggests that "more meaningful discussion of choral tone could be enhanced by the creation of more accurate language . . . including the possibility of scientific acoustical language."[97]

Unfortunately, Hart never concludes that an ideal tone is non-existent, or that an ideal tone is only ideal for the moment, meeting the demands of the music of a particular composer at a specific time. He suggests that the use of scientific acoustical language might serve as an alternative to the subjective nature of conductor's descriptions of choral

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[94] Waring, Quoted in Darrow, "The Nature of Choral Training," 19.

[95] Hart, "Evolution of Thought."

[96] Ibid.

[97] Hart, "Evolution of Thought," 66.

tone. He does not, however, suggest that the language should be based on primary source materials in order to convey the scientific acoustical language appropriate to each historical era.

Journal Articles

Numerous articles exist that discuss the issue of warm-ups in the choral rehearsal. A sampling of these articles reveals three types. The first type includes articles that provide motivation for conductors to employ warm-ups in the choral rehearsal. The second group of articles discusses the need for teaching vocal pedagogy through warm-ups. Finally, the increase of rehearsal efficiency through warm-ups is the focus of the third group of articles.

The first group of articles is not scholarly in nature. For example, Marilyn González's[98] article argues the point that warm-ups should be employed by church choir directors who often feel such activities are a waste of time. She offers the following benefits of implementing warm-ups prior to beginning the rehearsal of repertoire: loosening necessary breathing muscles, tuning vowels, and extending ranges. She concludes the article with a twelve minute sampling of warm-up exercises, including breathing, yawn-sighs, descending intervals, leaps, arpeggios, vowel unification, and the inclusion of potential rehearsal problems.

In a similar article, Robert Briggs[99] addresses a public school teacher audience.

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[98] Marilyn González, "Why do Warm-ups?" *The American Organist*, 24, 1 (1990): 84.

[99] Robert Briggs, "Vocal Warm-ups: From the Sublime to the Ridiculous," *Teaching Music*, 7, 5 (April 2000): 36.

In his own implementation of warm-ups, he says that his goal is to awake and prepare voices for rehearsal. He recommends that the conductor prepare the voice, mind, and breathing mechanism through the warm-up period. Furthermore, he suggests interchanging the title "activation exercise" for "warm-up exercise," in order to better capture the engagement of the entire singer in the process. He recommends three types of warm-ups: the sublime; middle ground; and ridiculous. The sublime category incorporates plainchant melodies, which are an often overlooked resource for quality unison training repertoire. The second group, or middle ground, centers on four-note scalar passages. The third group, the ridiculous, includes tongue twisters sung as simple melodies or scale patterns. The author relates that these exercises are fun to sing, and add freshness and imagination to the rehearsal.

While Briggs does list reasons *why* these melodies serve as good warm-up exercises, he neglects to mention *how* the exercises might be sung, just that they should be sung. For instance, he does not mention that consideration might be given to the original use of the plainchant melodies and the type of tone that would have been associated therein.

In a more thorough article presenting the effectiveness of warm-ups, Sandra Frey Stegman[100] suggests that "a thoughtfully planned warm-up period can help singers enhance their singing, listening, and learning skills."[101] She asserts that a ten-minute warm-up period focused on preparing singers to sing, listen, and learn establishes the

[100] Sandra Frey Stegman, "Choral Warm-ups: Preparation to Sing, Listen and Learn," *Music Educators Journal*, 89, 3 (2003): 37.

[101] Ibid., 37.

direction of the rehearsal and furthers the ongoing vocal and musical development. In the preparation to sing section, she presents numerous examples of effective exercises in four subcategories: posture/breath; vocal production; vowel formation; and vocal development. In the preparation to listen section, several helpful examples for teaching audiation (internal hearing) and listening to other singers in the choir are given. In the preparation to learn section, the author suggests warm-ups that are useful for introducing and furthering musical reading, conceptual learning, and musical expression, and she states that these skills can be connected with the choral repertoire by employing passages drawn from music to be rehearsed.

Leon Thurman focuses on vocal pedagogy in the choral rehearsal in his two-part article for *The Choral Journal*.[102] Thurman stresses the importance of warming-up choral singers, which he calls vocal athletes, before engaging in rehearsal singing. He says, "those who use their voices to an extent which is beyond occasional, quiet conversation are engaging in athletic voice use."[103] Conductors should always spend time warming up voices, according to Thurman. He suggests:

> The warm-up time lengthens muscles/tendons and fills muscles with blood, thus increasing their temperature and nutrient supply. They are then more relaxed and pliable. This affects tone quality and pitch-interval and pitch-speed agility in the voice. Ideally, warm-ups should begin with body stretching and massage exercises, followed by "stretching and massaging" vocal muscles that begin softly and breathily, in upper registers, mid-range, and proceeds downward from higher pitch areas. Seven to ten minutes is recommended.[104]

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[102] Leon Thurman, "Putting Horses Before Carts: A Brief on Vocal Athletes," *Choral Journal*, 23, 7 (March 1983): 15; and Leon Thurman, "Putting Horses Before Carts: When Choral Singing Hurts Voices," *Choral Journal*, 23, 8 (April 1983): 24.

[103] Thurman, "A Brief on Vocal Athletes," 35.

[104] Ibid., 27.

Thurman discusses the difficulty of teaching voice skills to choral singers. Though not easy, he suggests it can be done by taking into consideration the age and experience of the learner and by varying learning strategies so that some concepts are introduced metaphorically while others are introduced concretely through vocalises. He concludes with the following sentiment about the responsibility of teaching technical and musical details to singers:

> At some point . . . the overall "feel" for the whole act of singing must become part of the total expressive experience of the music. Singers must just let the music . . . flow through them. They will not be aware of the details of vocal coordination, but the details will occur in a synergistic whole (to the extent that they have been learned by those parts of the brain which activate automatic, unconscious responses). Then the singer does not put together the puzzle pieces of music-with-singing-act, but responds wholistically [*sic*] to the expressive needs of the music. She or he becomes a "vessel" through which Brahms speaks to the heart.[105]

Thurman fails to mention that purely automatic, mechanical vocal skills do not ensure musically expressive or historically accurate performances. He suggests only the technical aspects of vocalization, divorced from any sense of historical guidance necessary for achieving a composer's intentions.

In like manner, Lynn Corbin[106] discusses practical applications of vocal pedagogy in the choral warm-up. She addresses the traditional areas covered in methods textbooks, including posture, breathing, tone quality, blend, and intonation. Although no specific warm-ups are offered to address these areas, an interesting point is made in her discussion of vocalizations at the beginning of rehearsal:

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[105] Ibid., 21.

[106] Lynn Corbin, "Practical Applications of Vocal Pedagogy for Choral Ensembles," *The Choral Journal*, 26, 8 (March 1986): 5.

> This is the time when there is no excuse (don't know the notes, too high/low, foreign language) for not concentrating purely on the requested vocal sound or technique. We can mold and shape the sound of a particular vowel in a particular register, or work on extending range, increasing flexibility or any other problems the choir exhibits. This is the prime opportunity to instill sound vocal habits that provide the basis for the whole choir's improvement and vocal growth of each choir member.[107]

Corbin makes no suggestions for teaching vocal fundamentals to choral singers in a way that operates concurrently with theoretical, aural, and historical concepts, in order create well-rounded musicians.

Oren Brown[108] suggests that many conductors approach choral vocalizing in an unhealthy manner. He asserts that vocalizing from the bottom of the scale up is one of the most damaging practices in vocal training. He advises conductors to start tones from above and let them descend in an easy, medium range. In order to allow the upper and lower parts of the voice to mix, he suggests that the larynx must rest in a low position.

Brown's comments regarding lowered larynx singing and voice mixture suffer from the same near-sighted perspective that many conductors' concepts of choral tone do. He discusses *all* singing from a Romantic and present-day perspective, rather than considering the practices of the past. The concept of lowered larynx singing is a relatively recent trend of the Contemporary era. Singers of previous eras did not rely on the lowered larynx position of vocalism, since there was no need to achieve the louder sounds required to fill very large spaces.

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[107] Ibid., 8.

[108] Oren L. Brown, "Maintaining Vocal Health," *Teaching Music*, 6, 5 (1999): 33.

High school choral students assisted Cynthia Cooper[109] in an article dealing with singers' vocal health in the choral setting. The article was the culmination of an eight week study about vocal health. Cooper was intrigued by the number of students who would tell her that they had "lost their voice," or had "sore throats," or would say "I can't sing well today." A vocal health survey was developed to determine common contributors to poor vocal health in the high school choir. Questions were asked to determine the following: amount of time spent in voice abusing activities outside of class; the amount of beverages other than water consumed in a daily period; understanding of fundamental support concepts; and understanding of physiological factors associated with singing.

After an eight week vocal health unit, including focused warm-up periods and guided readings about specific aspects of vocal health, the students took the survey again. The results indicated improvements in almost every area of the survey. As a culmination to the project, the students developed a chart to hang in the classroom which contains "vocal care jewels of wisdom."[110] The following categories are listed as topics associated with achieving and maintaining vocal health: understand your voice; warm up your voice; body alignment; keep your voice relaxed; take care of your voice; environment; hydration; nutrition; rest; keep warm; illness; medications; and warning signs of vocal damage.

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[109] Cynthia Cooper, "Choral Voice Care Jewels: Nurturing Singers' Vocal Health," *Teaching Music*, 10, 1 (2002): 55.

[110] Ibid., 55.

According to Richard McChesney,[111] choral rehearsal efficiency is increased by the use of properly designed warm-ups, which, in his opinion, should be derived from the music being rehearsed at the present time so that they lead naturally into the rehearsal. He says that any warm-up that considers challenges in the repertoire only enhances rehearsal efficiency. "Circumstances condition method."[112] Therefore, he says, if the problems are basically rhythmic, the warm-up should focus on rhythmic aspects; if the problems are intonation, the warm-up should focus on tuning the problem chords. He suggests that as a rule, there will always be a need for both interval and rhythm drill.

He further suggests that rote vocalization, or the haphazard five-tone scales implemented so frequently, cannot be expected to accomplish significant vocal development. Furthermore, he adds that by the time of day most rehearsals occur, voices are warmed up sufficiently for singing through daily speech and do not need to spend the time vocalizing and extending range. McChesney's argument that singers do not need to spend time preparing their voices for rehearsal is in direct opposition to Leon Thurman's[113] vocal athlete analogy, which suggests that due to the intense demands required of specific muscles in singing, warm-up routines should be employed to reflect a certain preparedness that casual speaking cannot offer.

McChesney's suggestions of implementing repertoire problems in vocal exercises are valid and effective uses of warm-up time. Coker[114] proved in his dissertation that

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[111] Richard McChesney, "Some Thoughts on Choral Vocalizing," *American Choral Review*, 11, 1 (1968): 23.

[112] Ibid., 24.

[113] Thurman, "A Brief on Vocal Athletes," 35.

[114] Coker, "Choral Warm up Exercises as a Key to Teaching."

these techniques are more effective than generic vocalization in producing choral rehearsal efficiency. McChesney further suggests that these types of warm-up exercises "provide considerable aid in developing sight-reading skill."[115] Since intervallic and rhythmic "problems" are solved in the warm-up, they will be more likely to present themselves as solvable challenges in the repertoire.

David Tovey,[116] like McChesney, takes issue with the way some conductors approach warming-up their choirs. He suggests that many of the common warm-up procedures being employed are only "tuneful, appealing gimmicks to get students in the mood for the rehearsal."[117] According to Tovey, conductors often spend more time looking for new techniques than they do evaluating the effectiveness of those already available to them. He points out that little benefit from these warm-ups can be seen, if they are approached as a perfunctory "jump-start" to the rehearsal. Without reinforcement of warm-up concepts during the rehearsal, time is probably being wasted.

The remainder of Tovey's article deals with the development of choral tone. His discussion of tone, which follows, is intriguing:

> Prior to the advent of scholarly research in choral performance practice, many American choirs maintained their own characteristic tone qualities. The tone of a particular choral ensemble, such as the Westminster Choir or the St. Olaf Lutheran Choir, would become that group's hallmark, and only small changes in tone would be made to accommodate material of different styles. . . . Today, even high school choirs are expected to be able to perform English madrigals in a different style from German Romantic motets. . . . This has brought on a greater

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[115] McChesney, "Some Thoughts on Choral Vocalizing," 24.

[116] David G. Tovey, "Warm Up to a Good Sound," *Music Educators Journal*, 63, 5 (1977): 54.

[117] Ibid., 54.

> need for variety in warm-up procedures than existed thirty years ago, when one basic tone quality was all that was necessary for a single choir.[118]

After reading this type of declaration, readers expect to be further enlightened about new choral warm-ups which focus on historical performance practices. Unfortunately, Tovey stops short of the expectation, simply rehashing much of the material about which others have written. He divides warm-ups into three categories: calisthenics; those that actively exercise the voice mechanism, or "Voice-builder" type exercises; and those that promote a higher degree of auditory and mental acuity. The only mention he makes of stylistic preparation for choral singers is when he reminds the reader that it is helpful to employ materials from the choir's current repertoire to develop warm-up exercises.[119] Specific examples of this practice are suggested through the use of melismas extracted from Baroque repertoire. Again, the *what* is discussed by proposing the types of new warm-ups that focus on historical attributes, but *how* the exercises should be performed is not addressed in a specific or helpful manner.

Barbara Levy[120] stresses the importance of connecting warm-up exercises and vocal concepts to the performance of music in rehearsal. She says that exercises in a warm-up are inefficient if they cannot be directly applied to solving the problems in the repertoire to be rehearsed. Building vocal technique from the repertoire, she suggests, not only aids in teaching correct singing, but reinforces difficult pitches and phrases.

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[118] Ibid., 55.

[119] Ibid., 77.

[120] Barbara A. Levy, "Teaching Vocal Technique from the Musical Score," *Choral Journal*, 20, 1 (1979): 16.

Furthermore, she proposes that voices do not need much more "warming-up" physiologically than they already receive from the act speaking and interacting.

In an attempt to apply her theories, Levy discusses three pieces of repertoire with examples of problems that the conductor might face. The repertoire includes: Victoria, *O magnum mysterium*; Poulenc, O *magnum mysterium*; and Bach, *Singet dem Herrn ein Neues Lied*. Prescriptive vocal exercises are suggested for problems that might be encountered in each piece, including a breath related exercise for teaching long phrases in the Renaissance motet, dynamic variance drills in the Poulenc, and scalar passages for teaching the Bach melismas.

While these recommendations are helpful and should assist in preparing choral singers for specific musical selections, Levy does not discuss appropriate tone production. More detailed instruction needs to be offered to singers than simple excerpts of their rehearsal material if historically guided singing is a desired result.

Roger Folstrom[121] asks the question: Do we correctly implement the vocalise during warm-ups? He suggests a number of justifications for the employment of warm-ups, all of which have previously been discussed, as well as some frequent misuses. Most of the misuses are concerned with the automatization, or flippant approach to singing meaningless or redundant exercises. The overriding goal of the article is to point out that warm-ups must evolve with the types of repertoire being composed. Folstrom suggests that contemporary music demands new skills, such as *sprechstimme*, wide vibrato, straight tone, glissandi, quartile harmonies, and other miscellaneous sounds. This practice

[121] Roger Folstrom, "The Choral Warmup: A Look at Avant-Garde Music," *Choral Journal*, 14, 4 (1974): 22.

reinforces the "efficiency model" suggested by Coker,[122] Levy,[123] Tovey,[124] and McChesney.[125] Additionally, however, Folstrom suggests that traditional warm-up exercises should be incorporated in combination with these new skill building exercises, in order to promote continued long range vocal development.

In an article that combines warm-up strategies with aural training concepts, Edward Cetto and Gabrielle Dietrich[126] suggest that the "first five minutes of the choral rehearsal have the potential to be a dynamic, vital, interactive learning experience . . . engaging the kinesthetic, musical, and cognitive intelligences of each singer."[127] As others have pointed out, many warm-ups are stuck in the rut of ascending and descending major scales and arpeggio patterns. The authors propose a curriculum of teaching ear training through warm-up exercises in order to build singers' overall musical understanding. They also suggest that due to the limited amount of choral rehearsal time most conductors have at their disposal, the warm-up would prove more efficient if it focused on ear training.

Cetto and Dietrich provide a curriculum of warm-ups based on five-tone diatonic patterns, parallel major and minor patterns, and exercises focusing on three-note groupings. They point out that the alternating patterns of "moveable do" *solfege* patterns

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[122] Coker, "Choral Warm up Exercises as a Key to Teaching."

[123] Levy, "Teaching Vocal Techniques."

[124] Tovey, "Warm up to a Good Sound."

[125] McChesney, "Some Thoughts on Choral Vocalizing."

[126] Edward Cetto and Gabrielle Dietrich, "Aural Theory Training in the Choral Warm-Up: A Warm-Up Curriculum," *Choral Journal*, 43, 10 (2003): 19.

[127] Ibid., 19.

teach intervallic relationships that are necessary for further musical learning. In addition, the authors recommend using these warm-ups in combination with familiar chromatic exercises, "since the pure vowels and free singing in traditional exercises are necessary in warming up the voice."[128] The final paragraph of the article states:

> The objective in a warm-up is to make the whole singer—voice, mind, and ear—ready to work. The key is to balance these elements as carefully and use them as equally in the warm-up as one would in any other component of the rehearsal. Singers whose mental appetites are whetted from the first warm-up exercise will be singers who perform at their fullest potential throughout the rehearsal. Total musicianship, a lifelong goal and gift, will be the fruit of theoretical and vocal practice.[129]

Choral singers would benefit greatly from the addition of an added historical element to the authors' description of total musicianship: theoretical, *historical*, and vocal practice should at least assist in the development of total musicianship.

SUMMARY

A survey of the published research related to preparing choral voices for historically guided vocalism provides the following areas of interest: 1) all of the publications—choral methods and conducting textbooks, practical warm-up guides, dissertations, and journal articles—offer suggestions of warm-ups for the mechanical development of fundamental vocal skills; 2) choral methods and conducting textbooks offer generic stylistic features of specific historical eras as distinct and unrelated concepts to choral tone; and 3) scholarly works reveal the efficiency of employing warm-ups that are related to repertoire in rehearsal, compared to the practice of generic vocalization.

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[128] Ibid., 25.

[129] Ibid., 25.

While a few authors in the literature present the need for an adjustment of choral tone as it relates to the stylistic demands of varied stylistic eras, none provide practical applications for this type of approach.

Even in the small amount of literature that proposes a need for warm-ups based on stylistic trends, the warm-ups are offered without guidance as to *how* they should sound. Authors continually answer the question of *what* exercises need to be performed to achieve specific skills, and sometimes even *why*, but fail to answer *how* those exercises need to be performed for the achievement of appropriate historical vocalism.

Also missing in the literature is detailed information regarding stylistic trends of past eras. The generic historical checklists provided in much of the literature do not delve deeply enough into the performance traditions of each era. Conductors need to understand how singers of each individual age produced and thought about physical vocal production.

A comprehensive approach to building choral tone and teaching fundamental vocal skills that are historically appropriate is lacking.

DEFINITIONS

Timbre—*Timbre,* which is defined as tone color or the character of a sound, is considered first in each of the following chapters because it is the most identifying characteristic of physical sound production.

Volume—*Volume* is simply defined as how loud or soft an instrument or voice sounds.

Vibrato—*Vibrato* is defined as a tremulous or pulsating effect produced in a tone by variations in pitch.

Pitch—*Pitch* will be discussed as it relates to standards or uniformity of fundamental frequency levels.

Vowel Sounds
Use of the phonetic alphabet will be employed in the warm-up section of each chapter. The following pure vowels are important to recognize since they will be employed frequently:

[i] = ee
[e] = ay (with no diphthong)
[a] = ah
[o] = oh
[u] = oo

RATIONALE FOR WARM-UPS

In the course of the following chapters, warm-up scenarios will be suggested that address the following questions. 1) *What* exercises? 2) *Why* should the exercises be performed with appropriate historical vocalism? 3) *How* are the exercises performed? Exercises will be determined based upon repertoire selections from each historical era. The following pages will clearly identify ideals of vocal sound qualities in each historical era, as indicated by primary sources, and serve as part of the reason for performing with appropriate historical vocalism. Another reason for performing with appropriate historical vocalism is to achieve, as closely as possible, the result in musical means that a given composer intended in written compositional form. Finally, instructions and rationale will be given for each warm-up to assist in the achievement of historically guided vocalism.

Chapter 2

HIGH RENAISSANCE ERA

Singing flourished in the High Renaissance, especially in choral ensembles. As proof, numerous choral activities existed in sacred and secular settings including performances of masses, motets, madrigals, and chansons. Church choirs were generally made up of men and boys, or men only, while men and women participated in secular ensembles. Also, it was common that in both sacred and secular settings choral music was performed with accompaniment; rarely were there purely *a cappella* performances.

Ideals of vocal production are clearly revealed by numerous primary sources of the sixteenth century. The specific vocal ideals revealed by Franco-Flemish, Italian, English, and German theorists, composers, and listeners, contribute to the corpus of information on which present-day singers can rely in their quest for historically guided vocalism. Whether for the church or the parlor, homogeneity was greatly praised as a performance ideal for all ensembles. This particular ideal is evidenced by many references to the consort principle, in which like-sounding instruments perform together with uniform timbre.

There is great consistency in the many descriptions of timbral ideals during the sixteenth century, despite geographical boundaries. The appropriate vocal timbre was for Renaissance musicians a prerequisite for other performance attributes. For instance, a sweet timbre allowed for soft volume and minimized vibrato, which were other praiseworthy performance elements of the High Renaissance. Likewise, pitch levels were chosen that would support the appropriate timbral ideal. Without the appropriate timbre

as a starting point, the other elements of performance could not be achieved. Evidence of this fact will be clearly demonstrated through the numerous primary quotes to follow.

Timbre

Terminology

The most common term that writers of the Renaissance era employed in characterizing the ideal timbre of the day is "sweet." The preference for sounds described as "sweet" is clear based upon the many uses of the term in primary sources. This specific term was frequently employed in praising performances or in describing an ideal tone quality. There is general agreement that certain aesthetic qualities are ascribed to a sweet sound, including, but not limited to gentleness, elegance, pleasantness, smoothness, naturalness, agreement, charm, flexibility, suavity, and balance. Moreover, these terms often accompanied descriptions of the ideal singing timbre of the day.

An examination of sixteenth century sources reveals the fondness for sweetness and grace in singing. Sources, including those by Giovanni de Bardi,[130] Cesare Crivellati,[131] Hermann Finck,[132] Vincenzo Galilei,[133] Giovanni Maffei,[134] Thomas

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[130] Oliver Strunk, *Source Readings in Music History* (New York: W.W. Norton & Company, 1950).

[131] Nigel Fortune, "Italian 17th-Century Singing," *Music and Letters* 0 (1954), 206-219.

[132] Carol MacClintock, *Readings in the History of Music in Performance* (Bloomington: Indiana University Press, 1979), 62.

[133] Oliver Strunk, *Source Readings in Music History* (New York: W.W. Norton & Company, 1998), 462.

[134] MacClintock, *Readings,* 38.

Morley,[135] Michael Praetorius,[136] Samuel Quickelberg,[137] Georg Quitschreiber,[138] Nicola Vicentino,[139] Lodovico Zacconi,[140] and Gioseffo Zarlino[141] describe a vocal timbre that favors gentility over power of production and softness over strength of volume. For example, Giovanni de Bardi in his *Dialogo della music antica, et della moderna* (c. 1580) stresses the quality of sweetness:

> The nice singer will endeavor to deliver his song with all the suavity and sweetness in his power, rejecting the notion that music must be sung boldly, for a man of this mind seems among other singers like a plum among oranges or like a man of fierce appearance showing the *giaro* [trash] among city dwellers and well-bred people.[142]

Another example of the sweet ideal praised by sixteenth century musicians is provided by Adrian Coclico in his *Compendium musices* (1552), in which he discusses refinement, ornamentation, and pronunciation in singing. He advises:

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[135] Thomas Morley, *A Plain and Easy Introduction to Practical Music*, ed. R. Alec Harman (London: J.M. Dent and Sons, 1952).

[136] Michael Praetorius, *Syntagma Musicum III*, ed. Jeffery Kite-Powell (New York: Oxford University Press, 2004).

[137] Ruth Halle Rowen, *Music Through Sources and Documents* (Englewood Cliffs, NJ: Prentice Hall, 1979), 118.

[138] Thurston Dart, "How They Sang in Jena in 1598," *Musical Times*, 108, 1490 (April 1967), 316.

[139] Mauro Uberti, "Vocal Techniques in Italy in the Second Half of the Sixteenth Century," *Early Music*, 9, 4 (October 1981), 491.

[140] Ibid., 493.

[141] Piero Weiss and Richard Taruskin, *Music in the Western World: A History in Documents* (New York: Schirmer, 1984), 128.

[142] Strunk, *Source Readings*, 299.

> To the young boy wishing to learn the art [of singing] well and elegantly, I advise him first to select a teacher who, by natural instinct, sings beautifully and smoothly and makes music beautiful by ornamenting his phrases; shunning the hawkers, who, by their shouting and other unsuitable things, bring most noble music to be hated by man.[143]

What specific sounds contributed to the sweet, ideal timbre of the sixteenth century? From the quotes above, and numerous others, one can see that much praise was given for smoothness, sweetness, and suavity, with avoidance of raucous, loud, and robust sounds.

Physiology and Vocalism

In addition to the descriptions above, several sixteenth century treatises discuss the vocal production of the singer and the ideal characteristics of appropriate vocalism. Giovanni Maffei's *Discorso dela voce* (1562), Hermann Finck's *Practica Musica* (1556), and Gioseffo Zarlino's *Institutioni harmoniche* (1558) each reveal contemporary insights about the ideal timbre of the time. Common insights include comments about sweetness and elegance, physiological functions of the body and voice, space inside the mouth, and the flexibility requirements of healthy singing.

Giovanni Maffei, an Italian doctor and philosopher, provides an early description of the physiology of the vocal tract, including an explanation of the windpipe and larynx.

> The top of the trachea (or windpipe) is composed of three cartilages, of which the largest appears to us as a shield; and it is the "knot" that is seen in the neck of every man, which is hard in order to protect that place, like a shield. So it is called "shield cartilage"; and inside this there is another, for better protection if the first is not sufficient, and it has no name. Inside of this one in the middle, there is still another, called the *cimbalare* [glottis], shaped like the tongue [reed] of a bagpipe; and here is produced the repercussion of the air and the voice. [144]

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[143] MacClintock, *Readings*, 30.

[144] MacClintock, *Readings,* 38.

As an early example of voice science, Maffei's description is very helpful, although subsequent research has more clearly defined and communicated the functions of the vocal mechanism.

Maffei also describes the differences between a rigid and flexible voice: flexible being "a pliable voice, that is, one that is varied sweetly so that the ear is satisfied," and rigid being "a hard one that varies in no way, so that the ear is disturbed when it hears it." Furthermore, he adds, "if the throat is soft, it will produce a flexible, pleasing, and variable voice, but if it chances to be hard, it will produce a rigid and harsh voice. When the instrument is hard it cannot yield (as would be necessary); and when it is soft, yielding easily, it can form and imitate every sort of voice."[145] This type of flexible voice was necessary not only for a sweet sound, but also for the execution of *passaggi*, or florid passage work.

Further rules and guidelines are offered to assist singers in producing the idealized vocal production. In one, Maffei suggests, "make no movement in any part of the body except in that *cimbalare* [throat] cartilage, because if those people appear ugly to us who, when they sing, shake their heads, tremble in their legs, or move their hands and feet, we must be sure that we appear ugly to others when we do the same thing."[146] Contemporary musicians should understand this rule as part of a general physiological requirement; the body works synergistically in order to produce a supported sound as well as to limit unwanted tension.

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[145] Ibid., 43.

[146] Ibid., 45.

Another rule states, "extend the tongue so that the tip touches the base of the lower teeth" and "keep your mouth moderately open, no wider than when you are conversing with friends."[147] These suggestions display the importance of a clear tone for text expression, guided by a consistent tongue position and vowel production similar to that of speaking. Furthermore, the limits placed on opening the mouth demonstrate the preference for a simple, speech-like vocal production, which being limited in range, did not require much space for high tessitura.

The last rule that is applicable in this context, states, "let out the breath a little at a time with the voice, and take care that it does not go out through the nose or through the palate, for each would be a great mistake."[148] Maffei's focus on a measured release of air implies a careful control of phonation, and is compatible with the lighter mechanism of the Renaissance performer as compared to more contemporary approaches to singing.

Hermann Finck (1556) also offers suggestions for singers to achieve ideal vocal sounds. For instance, he suggests:

> A discant singer sings with a tender and soothing voice, but a bass with a sharper and heavier one; the middle voices sing their melody with a uniform sound and pleasantly and skillfully strive to adapt themselves to the outer voices. . . . Then, lest one voice blunt or disturb another by its own sound, it should be seen to that the discantus and the alto not rise higher than they should, or that no singer strains his voice; for many singers change their tone colors, becoming black in the face and come to the end of their breath. . . .
>
> Basses, indeed, make raucous noises, like a hornet enclosed in a leather pouch, or they exhale like a pierced balloon. What pleasantness is there, what charm? How can this kind of singing please? For singing does not arise out of bellowing, rather you receive all sounds from your mind and intelligence. Let them correct these mistakes; a beautiful song can be sung and brought to performance by such

[147] Ibid., 45.

[148] Ibid., 45.

> delightful, thoroughly refined and well-blended voices that one could not ask for it to be better. For no song is embellished by roaring and screaming. . . . The higher a voice rises the quieter and lovelier should the note be sung; the more it descends, the richer the sound.[149]

While these insights might appear comedic to the present-day reader, they offer a sense of the dismay with which sixteenth century listeners must have reacted to harshness, extreme resonance, or disparate singing. One also recognizes from Finck's comments the importance of consistency of tone production throughout the phrase.

Zarlino, like Finck, also suggests moderation of volume and homogeneity of timbre for singers. He says:

> A singer should . . . not force the voice into a raucous, bestial tone. He should strive to moderate his tone and blend it with the other singers' so that no voice is heard above the others. Such pushed singing produces more noise than harmony. For harmony results only when many things are tempered so that no one exceeds the other.[150]

With regard to physiology and production, it is important to distinguish a likely difference in laryngeal position between Renaissance and more contemporary singing. Manuel Garcia's *Traité complet de l'art du chant* (Paris, 1840) presents in systematic detail a "new" vocal technique and singing style which Garcia had encountered in Italy around 1837. Garcia states that the new technique differs greatly from older singing techniques in that the larynx remains in a constantly lowered position.[151] This evidence leads an informed musician toward the conclusion that Renaissance era singers performed with the larynx in a more natural/neutral position, allowing for increased

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[149] MacClintock, *Readings*, 62.

[150] Weiss and Taruskin, *Music in the Western World*, 128.

[151] Uberti, "Vocal Techniques," 488.

flexibility in *passaggi*, clearer diction, softer production as the voice ascended in range, and a more homogeneous blend with other voices.

Instruments and Voices

Contemporary performers can also gain insight into sixteenth century timbral ideals by listening to the sounds of original or faithful reproductions of original instruments of the time. Since there was much interplay between voices and instruments during the sixteenth century, it is important to recognize the similarities between the two. Rarely were compositions labeled as specifically vocal or instrumental, and frequently the same composition could have been performed by an instrumental ensemble one day and a vocal ensemble the next. Moreover, it might have been performed by both instruments and voices, depending upon the occasion and what resources were available.

Renaissance singers and instrumentalists influenced each other through frequent collaborations. Girolamo Dalla Casa, the Venetian instrumentalist, describes the cornett as "the most excellent of all instruments"[152] because it has the same expressive qualities of the human voice. Likewise, the noted Italian viol and recorder teacher Sylvestro di Ganassi (*Fontegara*, 1553), suggests that the recorder student always "imitate the expression of the human voice," and that one should "regulate the breath and nature of the recorder to the capabilities of the human voice."[153] Martin Agricola's *Musica*

[152] Eleanor Selfridge-Field, "Bassano and the Orchestra of St. Mark's," *Early Music* 4, 2 (April 1976), 153.

[153] Sylvestro Ganassi, *Fontegara*, Venice, 1553, trans. Hildemarie Peter; trans. from the German and ed. by Dorothy Swainson (Berlin: Robert Lienau, 1956), 87.

instrumentalis (1528) comments on the influence of voices on instrumental playing technique: "For music is the foundation from which all instruments flow." "Music," in this context refers to the art of singing.[154] Agricola also observes: "He who knows singing can play with ease; . . . A song will bring you your reward, with instruments it is simply so."[155]

From the descriptions of wind and string instruments, it seems clear that their sound was quite similar to the timbre of the human voice; at the very least, instruments relied on voices as ideal models of expressivity. Voices can therefore be considered an extension of the consort principle: all parts of the musical texture of sixteenth century music were homogeneous, consisting of uniform timbres amongst all ranges of singers and between specific instrumental families. It can be concluded that the timbral ideals of the High Renaissance were limited not only to the specific individual production of a singer or instrumentalist, but also to a more contextual influence concerning the nature of all of those performing forces in the ensemble.

Performers, for instance, would have understood their role within the ensemble with regard to specific production ideals, uniformity, and homogeneity, not to mention balance and volume (which will be discussed in the next section). Thus, another aspect of timbre can be revealed by understanding the use of instruments in consorts, or instrumental families. The sixteenth century witnessed the burgeoning of the consort principle, in which instruments of a similar timbre performed together. This consort

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[154] David Galiver, "Cantare Con La Gorga: The Coloratura Technique of the Renaissance Singer," *Studies in Music*, VII/7 (1973), 16.

[155] Martin Agricola, *Musica instrumentalis deudsch*, trans. W. Holloway, Ph.D. diss. North Texas State University (Ann Arbor: University Microfilms, 1972), 11.

principle was opposed to the broken consort, which was characterized by the rich mixtures and colors of instruments employed during the fourteenth and fifteenth centuries. Consorts of viols, recorders, and sackbuts—with instruments from each vocal range—were common. When all parts of a musical ensemble are performed with the same timbre, the resultant sound is more homogeneous and natural than a sound created by a consort of mixed instruments. This naturalness and homogeneity was an ideal striven for by composers and performers of the sixteenth century. Important contributions on this subject can be found in the writings of Giovanni Artusi,[156] Michael Praetorius,[157] Baldassare Castiglione,[158] and Arnolt Schlick,[159] all of which focus on the importance of homogeneous ensemble production.

A representative example of the types of information in these treatises is contained in Giovanni Artusi's, *L'Artusi overo delle imperfettioni della moderna musica* (1600), which characterizes timbre in regard to volume, balance, and blend.

> Any person who has to perform either with the voice or on an instrument, should perform more with the ear than the voice or instrument. . . . It is necessary for one person to listen to another. . . . In this way equality of voice and of sounds are achieved in such a sweet manner that the listeners derive infinite pleasure. . . . I want to tell you about music that is distorted or, as we might say, disparate. I will describe an ensemble of two instruments, of which one has a rather large and robust body and the sound of the cornett; and the other is of common size and medium volume, gentle in nature. The former is predominant and does not blend.

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[156] Rowen, *Music Through Sources*, 135.

[157] Michael Praetorius, *Syntagma Musicum III*.

[158] MacClintock, *Readings*, 22.

[159] Arnolt Schlick, *Spiegel der Orgelmacher und Organisten* (1511), trans. Elizabeth Berry Barber (The Netherlands: Fritz Knof, 1980).

> The latter, being by nature weak rather than vigorous, sounds very charming and graceful, and the listeners are extremely fond of it.[160]

Artusi's description, along with descriptions by other writers of the time, captures the high regard that this era held for blend, equality, and grace in choral and instrumental ensemble performance. Furthermore, it is revealing that in his description of an ensemble comprised of two instruments, the preferred sound is "medium volume" and "gentle," rather than robust.

Sacred vs. Secular

Some modern-day scholars[161] have suggested that there was a great difference in the vocalism of singers performing *cappella* music vs. *camera* music (sacred vs. secular). Due to the large spaces of Renaissance cathedrals, as well as the small choirs employed to provide choral singing for liturgical services, singers were often called upon to sing louder in church than in small chamber performances. While the volume may have been somewhat louder—although certainly not as loud as one would expect to hear in today's churches—the timbre of the singers would likely have remained consistent. For the Renaissance singer, increased volume did not necessarily mean increased resonance and vibrato, as is the case today. Also, one must remember that secular music in chamber performances would have probably been performed by only one singer per part, while sacred music could have had three to a dozen singers per part, thus lessening the burden on the individual singer.

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[160] Rowen, *Music Through Sources*, 135.

[161] Howard Mayer Brown and Stanley Sadie, *Performance Practice: Music Before 1600* (London: The Macmillan Press, 1989), 233.

Both Nicola Vicentino (*L'antica musica*, 1555) and Gioseffo Zarlino (*Le Istitutioni*, 1558) include in their writings guidelines for differences between singing in the chamber or the church. For example, chamber pieces are to be sung "with a soft voice, because they are very sweet,"[162] according to Vicentino. Zarlino makes this point extremely clear when he reminds singers that they

> should know too that in church and in public chapels [they] should sing with full voice, moderated of course as I have just said,[163] while in private chambers [they] should use a subdued and sweet voice and avoid clamor. Singers in such places should use good taste, so as not to leave themselves open to rightful censure.[164]

In other words, Zarlino suggests that singers in "such places" as the chamber *as well as* the church need to use good taste and refinement in their singing, both moderated for blend and agreement of timbre.

Summary

1) The ideal vocal timbre of the High Renaissance was one that was sweet, refined, and blended.
2) An unforced and light vocal production was likely the result of singing with the larynx in a natural, rather than lowered position.[165]

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[162] William Kaufmann, ed. *The Life of and Works of Nicola Vicentino*, Musicological Studies and Documents #11 (American Institute of Musicology, 1966), 220.

[163] Referring to "moderate tone," blend," and "tempered" singing.

[164] Weiss and Taruskin, *Music in the Western World*, 128.

[165] Uberti, "Vocal Techniques," 488.

3) Important effects of a natural, clear timbre are flexibility of tone, clarity of diction, and homogeneity.

Volume

It is logical that the concomitant elements of High Renaissance volume and vibrato aid and support the sweet, ideal vocal timbre of the time. Before discussing what the primary sources have to say regarding singing volume of the sixteenth century, it would be wise to consider volumes of sound in general. Present-day ambient sounds are constant, ranging from buzzing halogen lamps, a constant din of noise created by trains, planes, and automobiles, to radio, television, and telephone noises encountered in nearly every space of public life. It is difficult for the contemporary performer to imagine the relative silence experienced in the High Renaissance. Consider, for instance, just a few of the daily conveniences in the modern home that create over fifty decibels of sound: refrigerator, electric toothbrush, washing machine, air conditioner, coffee maker, and dishwasher.[166] Those few items plus many more equal quite a lot of background noise. In short, while it is impossible to recreate the context of relative quiet that a sixteenth century performer might have experienced, it is important to at least acknowledge the very different aspects of volume with which one would have been surrounded. Furthermore, in direct contrast to sounds in the sixteenth century, extreme volumes abound in the present day. Jet airplanes, large symphony orchestras, car alarms, etc. create volumes of sound that would never have entered into the minds or ears of the High Renaissance era musician. Loud sounds of the sixteenth century would have been much

[166] League for the Hard of Hearing, (http://www.lhh.org/noise/decibel.htm).

softer than any sound considered loud today. Likewise, soft sounds, which were so highly praised, would have been much softer than the relatively soft volumes today.

Voices

Nearly everyone who wrote of singing in the sixteenth century cautioned against singing too loudly. Not only were descriptions of volume included when discussing timbre, as seen above in numerous sources, but many specific quotes relate to tempering the voice with soft volume. For example, Andreas Ornithoparcus in his *Musice active micrologus* (1517) posited about singers, "why they should so delight in such clamoring there is no reason, but either because they have a deaf God, or because they think he is gone to the south-side of Heaven, and therefore cannot so easily hear both the Easterlings and the Southerlings."[167] Writers of nearly every treatise suggest that the ideal vocal sound is soft and that loud and robust volumes are offensive.

Michael Praetorius, in his *Syntagma Musicum III*, emphasizes that "no one must cover up and outshout the other with his instrument or voice, though this happens very frequently, causing much splendid music to be spoiled and ruined."[168] Ludovico Zacconi also warns that "a forced voice, being defective, always offends. . . . Similarly, in singing high notes quietly one should not force them if they do not come out conveniently; because it is better to fake or omit them."[169] This is a distinct difference from contemporary singing pedagogies, which stress the importance of more resonance, space,

[167] Weiss and Taruskin, *Music in the Western World*, 127.

[168] Praetorius, *Syntagma Musicum III*, 252.

[169] Uberti, "Vocal Techniques," 494.

strength, and volume as one ascends in range. Likewise, it displays differences in societal expectations, since contemporary listeners' demands are often to be able to hear a live performance with the same volume as a recording, which is often loud because of the proximity of the listener to the stereophonic speakers.

Instruments

As said, with regards to timbre, sweet and elegant production was preferred, while with regards to volume, softness was preferred. However, it was not only in singing that soft volume was admired. Sixteenth century references yield high praise for the ability of instrumentalists to play softly and to imitate the human voice. Vincenzo Giustiniani acknowledges a player who "played many times in one of my little rooms to the accompaniment of a Cembalo, which was closed up and could scarcely be heard; and he played the Cornett with such moderation and exactitude that it astonished many gentleman [sic] present who liked music, because the cornett did not overshadow the sound of the Cembalo."[170]

Praetorius also makes reference to his preference for soft sounding instruments in a discussion of the *Cornetto Muto*, "a straight cornet the mouthpiece of which is undetachable, having been lathed on the instrument. These instruments are quite soft and quiet in tone and lovely to listen to."[171] He further emphasizes his desire for soft sounds

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[170] Vincenzo Giustiniani, *Discorso sopra la musica*, trans. Carol MacClintock, in *Musicological Studies and Documents 9* (Rome: American Institute of Musicology, 1972), 78-79.

[171] Praetorius, *Syntagma Musicum II*, Ed. Harold Blumenfeld (New York: Da Capo Press), 36.

in a recommendation for employing trumpets in accompanying sacred music: "These concerti are to be arranged in such a way that five, six, or seven trumpeters, with or without a timpanist, are put in a separate place next to the church, in order that each part may be heard clearly and independently. For if they stood within the church, the powerful sound and reverberation of the trumpets would drown out the entire music."[172]

While the preference for soft instrumental sounds was important, the ideal likely followed the natural capabilities of sixteenth century instruments. The capacity for playing loud sounds on Renaissance instruments was limited. The bore on brass instruments, as well as the physical make-up of woodwinds and strings, produced a much softer volume than their contemporary counterparts.

Summary

1) The ideal volume for singing in the sixteenth century was soft; singers were praised for their abilities to blend with one another.
2) Instrumentalists were praised for their abilities to imitate the human voice and play with moderate volume levels.

Vibrato

Most present-day performers take for granted the use of vibrato as a natural and habitual aspect of singing, while singers of the sixteenth century viewed vibrato as an ornamental means of expression. Moreover, the Renaissance era vibrato was narrower in pitch fluctuation than in present-day usage, due to a higher laryngeal position and general

[172] Praetorius, *Syntagma Musicum II*, 284.

aesthetic preference. A marked difference in pitch fluctuation can be heard when a sound is produced with the larynx in a natural, un-lowered position, compared to the same sound produced with a lowered larynx. The vibrato becomes wider and more pronounced as the larynx descends.

Several writers of sixteenth century treatises, including Franchinus Gaffurius, Ludovico Zacconi, Giovanni di Bardi, and Michael Praetorius discuss the importance of avoiding excessive vibrato. Gaffurius, in his *Practica Musicae* (1496) recommends:

> Young singers . . . should not project their voices with an unusual and unsightly opening of their mouths, or with an absurd loud bellowing when they strive after melodies, especially in the divine mysteries. They should also spurn excessive vibrato and voices which are too loud, for they are not compatible with other voices similarly pitched. . . . Because of their own instability they cannot maintain harmonious proportions with other voices.[173]

Zacconi indicates that "the tremolo in music is not compulsory, but its use not only shows sincerity and ardor but also embellishes the song."[174] This comment suggests that vibrato was not constant, but used as an ornamental, expressive device. Likewise, Hieronymus Cardanus in his *De Musica* (ca. 1546) speaks of the important qualities of the lira, commenting that "vibrato tones . . . are intermingled with others"[175] for purposes of melodic expression.

Giovanni de Bardi in his *Dialogo della music antica, et della moderna* (1580) reminds singers that in an ensemble it is important to focus on the corporate sound,

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[173] Franchinus Gaffurius, *Practica Musicae* (1496), Trans. and ed. Irwin Young (Madison: University of Wisconsin Press, 1969), 160.

[174] Uberti, "Vocal Techniques," 495.

[175] Hieronymus Cardanus, *De Musica* (ca. 1546), Trans. and ed. by Clement Miller (Rome: American Institute of Musicology, 1973), 180.

"remembering that good part-singing is simply joining one's voice with the voices of others and forming one body with these."[176] With numerous, disparate vibrato rates, it is difficult to achieve this kind of vocal ideal. It should be noted, however, that vibrato, as it occurs naturally in a well-placed voice, or naturally in a non-vibrated instrumental sound, is altogether different from the audible ornamental vibrato or later Romantic era vocal vibrato that came to be an automatic component of sound production in the lowered larynx style of singing. All musical sounds have naturally occurring rates of vibration, though not necessarily perceptible as beats that can be counted, as in the present-day concept of vibrato.[177] Also, the degree of pitch fluctuation is minimal in naturally occurring vibrato rates as compared to pronounced and measured frequency fluctuations in more contemporary models.

Finally, Michael Praetorius in his *Syntagma Musicum III* (1619) advises that "a singer must . . . have a nice, pleasant vibrato (not, however, like some are accustomed to in school, but clearly restrained)."[178] These comments by Praetorius indicate that restraint in vibrato, as is the case with volume in the High Renaissance, is necessary in vocal performance. One can consider the importance of this restraint when analyzing polyphonic music of the sixteenth century. Polyphonic phrases are blurred when sung with a wide vibrato produced by the lowered larynx. Furthermore, the venues in which sixteenth century performers would have sung provided acoustics that were complimentary for a simple vocal production: churches were usually stone structures that

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[176] Strunk, *Source Readings*, 298-99.

[177] New Grove Article, Singing. Owen Jander/Ellen Harris: 'Singing,' *Grove Music Online* ed. L. Macy (Accessed 2 February 2005), <http://www.grovemusic.com>

[178] Jeffrey Kite-Powell, 215.

allowed sounds to spin freely throughout the space without overworking the vocal mechanism, and chamber venues were small, intimate rooms, in which no vocal strain or tone production concerns should have affected vibrato.

Since many of the treble singers throughout the sixteenth century were boys with non-matured voices, it also follows that they would have sung with limited amounts of vibrato. This head tone model influenced much of the performance of the High Renaissance choral music. And since much emphasis was placed on compatibility, the voices of adult men and female singers would have been produced similarly.

From the primary source quotes above, the reader can conclude that with an un-lowered larynx position and speech-like vowel production—two ideals of Renaissance singing—vibrato is minimized and clarity of diction and vocal flexibility increased.

Summary

1) Singers were admonished to employ a restrained vibrato, seeking blend and homogeneity above all else.
2) Vibrato was viewed as a means of expression, employed occasionally and with limited pitch fluctuation.

Pitch

Pitch Standards

During the Renaissance era the only standards for pitch reference were found in organs and other instruments, such as trumpets, sackbuts, shawms, flutes, and harps. As opposed to any view of absolute pitch levels that contemporary era musicians understand,

the pitch references between these instruments were not standardized; their pitch levels varied greatly from venue to venue and from region to region. Arthur Mendel clearly articulates this phenomenon:

> To musicians before 1750, the notes on the staff, and the names by which they were referred to, represented degrees in a gamut that had no permanent anchor at a standard pitch level, but was freely movable up and down according to the nature of the voices or instruments involved on any given occasion. This attitude was the same as that of the present-day "tonic sol-fa" system, with its "movable do". The gamut itself was at first of small compass, and the limits within which it might move up or down entirely undefined. But as the compass of the gamut was extended, these limits gradually narrowed, until in our own day the amount of variation is slight. For us a^1 means a tone produced by vibrations at the rate of approximately 440 per second. For the musician before 1750, "a" meant any tone related according to a given pattern of tones and semitones to the other tones in use, the actual pitch (varying over the distance of a major third or more) being determined by the convenience or necessity of the moment.[179]

Since pitch varied so considerably in the High Renaissance, performers had to be equipped with the ability to adapt to local pitch standards. For example, if a performer traveled from Weimar to Prague, according to Praetorius, organ pitch standards would have been different. Instruments would likely have tuned to a lower organ pitch in Prague. Furthermore, authors distinguish between multiple levels of pitch in sacred and secular venues in Italy, France, and England. Several influences determined these relative pitch levels of sixteenth century choral music: vocal ranges; instrumental use; transposition; and clef configurations. Of these, the vocal ranges and abilities of the singers seem to be of highest importance.

[179] Arthur Mendel, "Pitch in the 16th and 17th Centuries—Part I," *Musical Quarterly*, 34, 1 (January 1948), 29.

Vocal Ranges

The limited vocal range in most sixteenth century music provides an insight into pitch levels. Since voice ranges rarely extend beyond a ninth or tenth, it is clear that composers held moderation of range as an ideal. Pietro Aron, Nicolo Vicentino, Michael Praetorius, Gioseffo Zarlino, and Ludovico Zacconi each speak of the importance of determining the comfortable range for singers in performance.

Zarlino, in his *Le Istitutioni harmoniche*, cautions composers against overly taxing a singer by stretching the limits of his range:

> The extremes of the vocal ranges should be used only briefly. . . . There is no need to remain overly long in these extreme registers. . . . Each part should remain within its natural limits.[180]

Praetorius goes even further by saying:

> The human voice sounds much more pleasant in the middle and lower part of its range than when it is forced high beyond its powers and made to shriek and cry. . . . The Italians believe, and not without reason, that singing in high range is very unpleasant and without any charm, and that it causes the text to be obscured, sounding like the shrill bawling of a harvester maid.[181]

Singers frequently adjusted starting pitches of choral music in order to achieve a comfortable range. Roger Bowers asserts that notation of Renaissance choral music did not represent an attempt to convey an exact reference pitch; further, he adds that there is no fixed relationship between source pitch and modern performing pitches.[182] Since pitch was frequently adjusted based on the abilities of the ensemble singers, one cannot

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[180] Guy A. Marco and Claude Palisca, trans., The Art of Counterpoint, part III of: *Le Istitutioni harmoniche*, Venice, 1558 (New Haven: Yale University Press, 1968), 111.

[181] Praetorius, *Syntagma Musicum II*, 15.

[182] Roger Bowers, "The Performing Pitch of English 15th Century Polyphony," *Early Music*, 8, 1 (January 1980), 27.

ascertain an accepted model of pitch reference. Only the matter of intervallic relationships, revealed by clef configurations, was deemed essential to Renaissance performers.

A specific example of the practice of adjusting reference pitch is found in a diary from the Sistine Chapel in Rome:

> All pieces, whether chant or polyphony apparently began with an intonation, that is, the senior bass intoned the beginning of the chant (although sometimes the chant was intoned by sopranos or contraltos), and the senior singer of whichever part began the polyphony would sing the first few notes as a means of giving the pitch (rather than humming or singing a single note as might be done today); this was followed by a new start from the beginning by the whole choir for chant or by all the singers of the appropriate part for polyphony. . . . The senior singers would be experienced enough to know when a pitch level was not practicable. At that point . . . they were supposed to stop, tell the choir they were beginning the intonation again, and start on a different pitch.[183]

In this example, not only was an experienced singer from the choir beginning the intonation on a pitch thought to be acceptable, but also adjusting the pitch after the choir entered if the range was not "practicable."

Instrumental Use

Knowledge of instrumental construction and practice adds a great deal to the understanding of pitch variation in the High Renaissance. The writings of organists Arnolt Schlick and Michael Praetorius are two very important sources of information about sixteenth century pitch as related to various instruments.

Arnolt Schlick is one of the earliest writers to discuss pitch and organ building. In his *Spiegel der Orgelmacher und Organisten* (1511) he says, "now . . . the proper length

[183] Richard Sherr, "Performance Practice in the Papal Chapel in the 16th century," *Early Music*, 15, 4 (November 1987), 454-55.

for this purpose, convenient for the choir to sing to, cannot be exactly defined, because people sing higher or lower in one place than in another, according as they have small or large voices."[184] He also describes the need for flexibility on the part of the organist in order to assist the singers in the choir:

> If one could shift the whole of the organ a tone higher or lower when it is already tuned to the correct choir pitch it would be a great advantage to the organist and singers. I have heard that a Positive was made thus years ago. But I know of only one really complete instrument, which with its Rückpositiv, two manuals, pedal and all registers, which are many and unusual, can be drawn a tone higher and down again as often as one pleases and the demands of the chants and other melodies require, which instrument I use daily.[185]

Praetorius discusses the practice of multiple pitch standards that had existed for hundreds of years in his *Syntagma musicum* part II (1619). He designates a chamber pitch (Cammer-Ton) as the standard for instruments and choir pitch (Chor-Ton) as the standard for singers:

> I adhere to the difference which is used in Prague and various other Catholic choirs, where pitches are divided into Chor-Ton and Cammer-Ton and are used very successfully. Then we ourselves should call the usual pitch to which almost all our organs are still tuned the Cammer-Ton, and use it only for amusement at the table and convivial occasions; this would be the most convenient for instrumentalists, either wind- or string-players.[186]

He goes on to say that the choral pitch in Prague is a whole tone lower than the chamber pitch and that the choral pitch is employed only in the church, primarily for the comfort of singers.

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[184] Mendel, "Pitch," 33.

[185] Schlick, *Spiegel der Orgelmacher*, 35.

[186] Nicholas Bessaraboff, *Ancient European Musical Instruments* (Cambridge: Harvard University Press, 1941), 358.

This succinct description of two standards would lead one to believe that matters were simpler than they really were. However, Praetorius continues to describe many other organs that are tuned to different standards than his Cammer-Ton. He says,

> One begins to learn that the pitch of the organ as well as other musical instruments is often quite variable. . . . Meanwhile . . . I discover in many places . . . that the pitch is either too high or too low.[187]

In these statements one can see that "in many places" the standard was neither chamber pitch nor choir pitch, but something entirely different.

Some sources indicate that the Chor-Ton described by Praetorius evolved dramatically throughout the course of the sixteenth and seventeenth centuries.[188] Choir pitch, as Praetorius describes it, may only have existed until the mid-sixteenth century, when it became commonly interchanged for the pitch at which higher instruments were tuned. The confusion and interchangeability of terms throughout the era causes contemporary performers and musicologists to be uncertain of what, if any, standard pitch references there were.

Choir pitch, chamber pitch, and other older standards varied from approximately 7 semitones above to 4 semitones below a1 = 440 according to Arthur Mendel.[189] These variations were determined by analysis of various organ constructions. Another sampling

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[187] Arthur Mendel, "Pitch in Western Music since 1500: A Re-examination," *Acta Musicologica*, 50 (1978), 44.

[188] Bruce Haynes, *A History of Performing Pitch: The Story of "A"* (Lanham: Scarecrow Press, 2002), 44.

[189] Mendel, "Pitch," 221.

of pitch ranges, concerning Renaissance organs is published by Mendel.[190] Figure 2.1 indicates the pitch of the instrument as it relates to contemporary pitch standards (a1 = 440).

Figure 2.1 Organ Pitch in the Renaissance

Date of construction	Location	Semitones above/ below a1 = 440
c. 1550	Kolsterneuburg, Stiftskirche	+1
1561	Innsbruck, Silberne Kapelle	+2
1601	Paris, St. Gervais	-2
1512	Hamburg, St. Jacobi	+3
c.1560	Groningen, Academie	+2
c.1600	Worcester, Cathedral	-3

Transposition

Not only did pitch levels on instruments vary greatly from church to church in various locales, but organists also had to be able to meet the needs of the singers by adjusting pitch for their specific circumstances. Thus, transposition skills were vitally important. Several organists discuss practices of playing to "suit the choir." Juan Bermudo in his *Declaracion de instrumento musicales* (1555), Girolamo Diruta, *Il Transliva*no (1597), and Pietro Cerone in his *El Melopeo y Maestro* (1613) all mention instructions for transposing chants or polyphony so that the pitch is comfortable for the singers. Cerone, for example, says "these [transpositions] . . . are used more by organists, to suit their playing better to the choir, than by composers in composing their works . . . now one and now another according to the high or low pitch of the organ, always using the one that best suits the choirs."[191]

[190] Mendel, "Pitch," 31.

[191] Ibid., 44.

Diruta, Italian organist and composer, also discusses transposition for the benefit of the choir:

> It is necessary to understand another sort of transposition in order to be able to respond to the choir at a convenient pitch-level, whether in polyphony or in chant. And because the majority of organs are high and not at choir pitch, the organist needs to become accustomed to playing outside [the usual keys], a tone and a 3rd lower.[192]

These insights by organists, who would have played frequently with singers in churches, are enlightening for the modern era performer. One can clearly see that pitch levels were freely adjusted in order to meet the needs of the singers, due in part to varying organ pitch levels and ability levels of the singers.

Clef Configurations

Transpositions were also based on information other than singers' abilities and organ pitch levels: clef configurations aided organists and singers, to be sure, in determining voice parts as well as transposition needs.[193] If a singer saw a mezzo soprano clef, they would know not to pitch the music too high or low, but within an approximate range. Composers who comment on clef configurations and transpositions include Vincentius (1611), Morley (1597), Zarlino (1571), and Praetorius (1619), who says, "when the organist does not play in the proper key, and particularly when he transposes a

[192] Andrew Parrott, "Transposition in Monteverdi's Vespers of 1610. An 'Aberration' Defended," *Early Music*, 12, 4 (November 1984), 492.

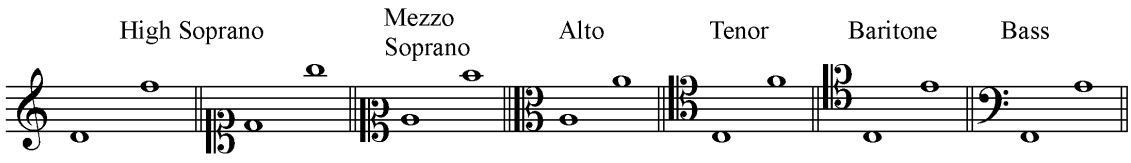
[193] David Wulstan, "Vocal Colour in English Polyphony," *Essays in Plainsong and Medieval Music* (1971), 29-30 in Gary Fisher, "The Munich Kapelle of Orlando di Lasso" (D.M.A. diss, University of Oklahoma, 1987), 134.

piece by a second or thirds in disregard of the cantor, everything must either go too high with a squeaking and a squealing, or too low, with a rumbling and grumbling."[194]

Clef configurations provide an aid to performers in deciding where to pitch Renaissance repertoire. If the original clefs are known, one can determine the approximate ranges of the voice parts. Consequently, one can set the pitch level with some degree of confidence within those ranges. In order to set a pitch that is historically appropriate, accommodations should be made only within the ranges of the original clefs. For instance, a high soprano clef indicates a range of approximately a tenth (from D2 to F3.) These ranges should not be exceeded. Furthermore, one should keep in mind the ideal timbre when setting the pitch level, since timbre was considered an important factor in determining Renaissance pitch.

The most common clef designations that were employed during the sixteenth century are listed below in Figure 2.2 along with their appropriate ranges. These clefs would have indicated an appropriate range for the singers in the choir and for the organists responsible for playing with them. They were not rigid mandates by the composer, however; they were only intended to suggest approximate range and voice part distribution.

Figure 2.2 **Clef Designations**

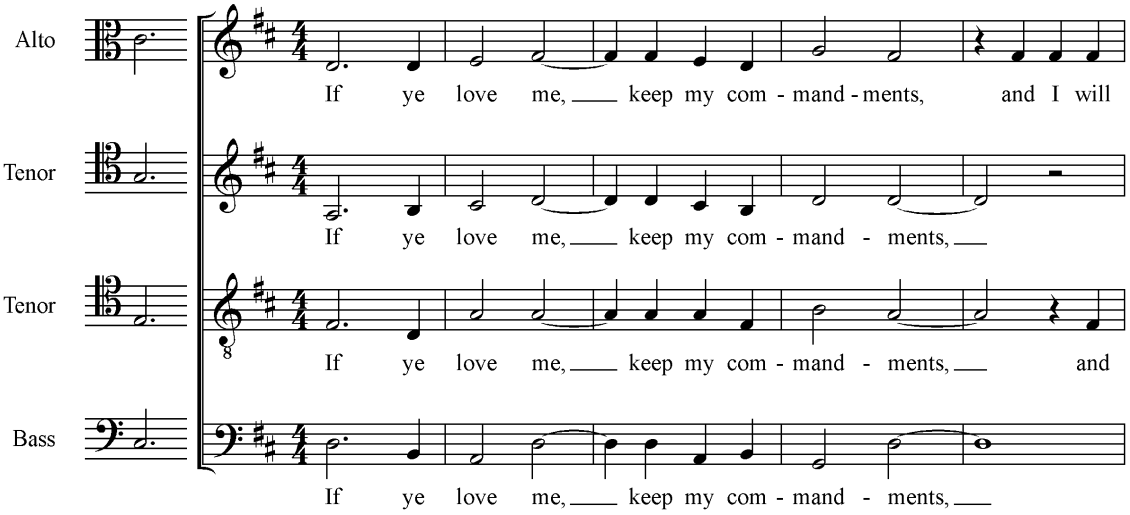


[194] Michael Praetorius, *Syntagma musicum II*.

Virtually all of the sources indicate that transposition of as much as a fifth downward or a fourth upward, depending upon the clef designation and range of the ensemble, is acceptable. Depending upon the types of clefs employed by the composer, along with the comfortable ranges of the singers, the singers and organist would have determined whether to pitch the composition higher or lower.

For example, as seen in figure 2.3 below, Thomas Tallis' "If Ye Love Me" was originally scored for ATTB (alto, tenor, tenor, and bass) voices, not for SATB voices as often performed. Most modern editions are in F major, in order to facilitate an SATB voicing, rather than considering the original clefs, which convey a different pitch range entirely. While pitch was adjusted up or down by a fourth or fifth for accommodation in performance, the clefs clearly indicate the general pitch range a composer had in mind. Therefore, the pitch range of this composition should be adjusted up or down from the original ATTB clef references in order to accomplish a historically guided approach to pitch. Moreover, if one chooses to sing the composition with an SATB ensemble, performers should know that the clefs are being altered from their original states. In order to remain within the range indicated by the original clefs, the pitch should not be set higher than D major or E-flat major: at this pitch level, each voice part is still within the comfortable range of the indicated clefs. Furthermore, the middle parts should be mixed with both altos and tenors in order to approximate the original intention of tenors on both parts.

Figure 2.3 ***If Ye Love Me*** **(Thomas Tallis)**



Summary

1) Sixteenth century compositions merely suggested intervallic relationships rather than strict standards of keys and absolute pitches.

2) Starting pitches were determined by the singers themselves or organists who were performing with them.

3) Three influences determined starting pitches:

A) Comfortable ranges for singers; B) instruments in use; C) and clef configurations.

Warm-ups

In order to facilitate the accomplishment of appropriate sixteenth century timbre, volume, vibrato, and pitch, the following warm-ups based on representative repertoire of the High Renaissance era are recommended. Through continual rehearsal and refinement of these and/or similar warm-ups, the habitual timbres, volumes, vibratos, and pitches that have become ingrained in present-day singers will be able to yield to appropriate historical vocalism. Franklin Zimmerman clearly states this phenomenon:

> No matter how industriously one seeks to discover an early composer's exact intentions, nothing worthwhile in performance will happen until performers themselves understand these in relation to the stylistic tradition to which they belong. It is obvious, too, that the processes of unlearning modern responses, then learning old interpretations anew will require periods of training even before rehearsal and performance can be successfully undertaken. It is equally clear that the relative success of practice and rehearsal sessions governs progress.[195]

The warm-ups that follow—designed to facilitate the unlearning of "modern responses"—will make historically guided High Renaissance vocalism more easily achievable.

The following musical example (Figure 2.4), Arcadelt's *Il bianco e dolce cigno*, will serve as the musical model for all of the proceeding warm-ups. Each exercise will be based on musical material from the madrigal. While the exercises are grouped into the categories of timbre, volume, vibrato, and pitch, it should be remembered that each exercise contains elements of each category. While one exercise may focus on one element (such as timbre) specifically, other elements are aided as well. Therefore, a

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[195] Franklin Zimmerman, "Performance Practices and Rehearsal Techniques," *College Music Symposium*, 9 (Fall 1969): 101—111.

holistic approach should be taken with each vocal exercise, maintaining an appropriate sense of each element, in order to achieve an overall sense of Renaissance vocalism.

Figure 2.4 ***Il bianco e dolce cigno*** **(Jacques Arcadelt)**



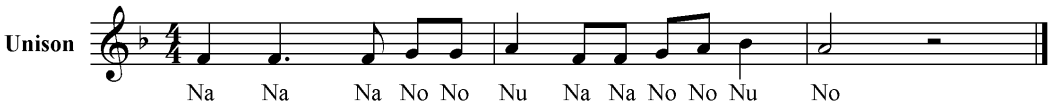
Translation:

The white and sweet swan dies singing, and I,
weeping, approach the end of my life.

Timbre

The timbre of a Renaissance madrigal is determined not only by conventions of the timbral ideals of the time, which have already been discussed, but by textual concerns as well. The meaning of the text assists by directing the singers towards an appropriate character of performance. The translation of *Il bianco e dolce cigno* indicates that the text is intimate and "sweet" in meaning, a meaning one would hope to capture in vocal timbre. Moreover, since it is known that secular works in the Renaissance were frequently performed in venues such as private chambers and small halls, one is further convinced to approach the piece with a certain delicacy.

Exercise 1.



* Ascend and descend by ½ steps for approximately a perfect fifth. Ranges should be limited in order accomplish a relaxed, natural vocalism, as discussed in Renaissance sources.

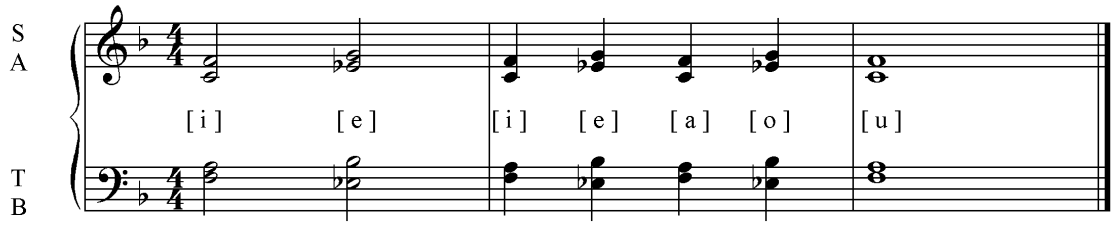
Rationale:
1) Since the exercise is unison, focus on the following:
a. natural production, including a neutral larynx position (non-lowered).
b. tongue at the back of the teeth
c. mouth open only as wide as for speaking in casual conversation.
d. homogeneous, blended ensemble sound.

2) As the exercise ascends be sure to allow the pitches to get softer. The vowels employed above ([a], [o], [u]) will aid in the accomplishment of this type of vocalism. Open vowels, defined as those in which the mouth is more open, transition to more closed vowels in order to assist in this process.

3) The conductor should listen for pure vowels, balance, blend, and homogeneous texture. No voice should be louder than any other. Likewise, restraint in the amount of resonance is important.

4) It is ideal if this and all the following exercises can be performed independently of the piano, since the piano adds a disparate timbre in the mixture of voices.

Exercise 2.



Rationale:
1) The singers should strive to achieve the same production, mouth shape, vowel sound, volume, etc., in order to achieve maximum compatibility.

2) Vowel changes should occur without a [j] glide between pitches. If sliding from pitch to pitch is a problem, separate chords or initiate them with a consonant such as “d”.

3) Care should be taken to tune each chord at the onset of the pitch rather than after the attack.

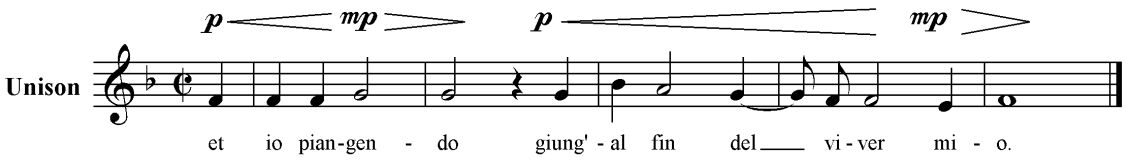
4) Experiment with varying the starting pitch level. The ensemble will find that it tunes better in certain keys than others, which may determine the overall performance pitch of the composition.

Volume

As already discussed, it is difficult for contemporary musicians to understand High Renaissance era volume in its historical context since people today are accustomed to such loud volumes. Therefore, it would prove beneficial to try and establish a context for the kind of quietness that sixteenth century singers might have experienced. This might require turning out the fluorescent lights in the rehearsal space, ensuring that all cellular telephones are turned off and that singers’ ears are actively engaged in *hearing* the silence. It is a phenomenon that most individuals do not experience frequently enough.

Since the character of this particular piece suggests an intimate sound, the volume should correspond. Therefore, the volume should be somewhat soft overall and should correspond to the natural phrase shapes of the polyphonic lines.

Exercise 3.



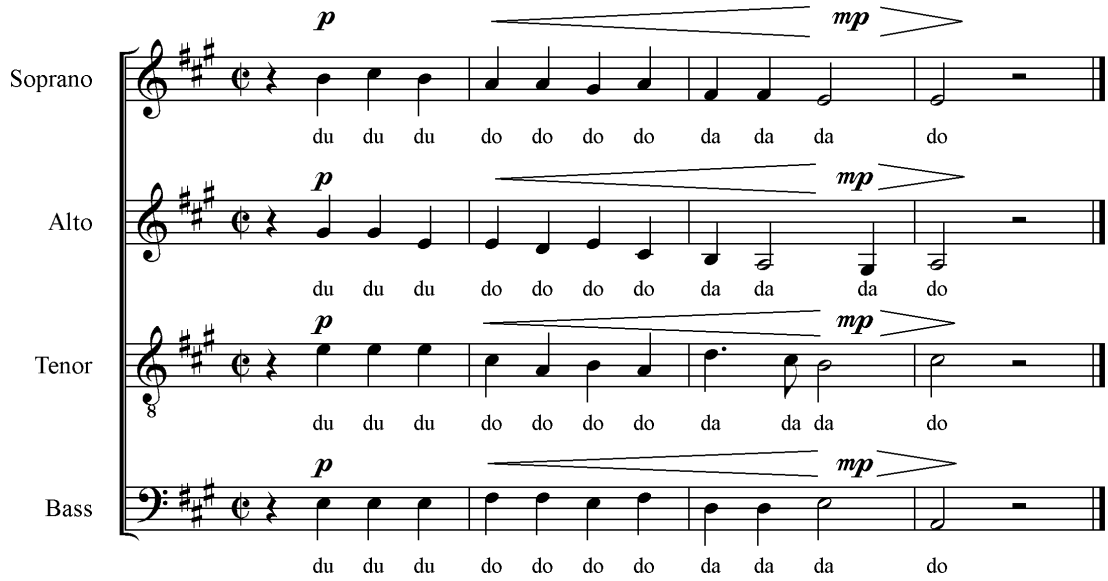
Rationale:
1) The exercise is unison in order for the singers to focus on achieving an even crescendo, without losing the sense of ensemble achieved in the timbre exercises.

2) The dynamic level should increase without a change in resonance. This is accomplished by intensifying the breath pressure while keeping the tongue and the larynx in a natural position.

3) As important as the increase in volume for the crescendo is the decrease in intensity for the decrescendo.

4) Experiment with varying the starting pitch level. By the time this exercise is being rehearsed, the ensemble will likely have settled on a pitch level that seems conducive for performance. For example, the "right" pitch will enable all the historically appropriate aspects of vocalism discussed above, in addition to the key area that tunes the best and provides for the best blend and balance.

Exercise 4.



Rationale:
1) The exercise requires careful balance between parts to ensure that the *crescendos* and *decrescendos* are identical throughout the choir. The crescendo/decrescendo will correspond to the madrigal's natural harmonic and textual phrase shape. In this example, the climax of the harmonic tension and point of oratorical climax determines where the loudest point of the crescendo occurs.

2) Listen to make sure the timbre remains consistent throughout the exercise.

3) Listen to make sure the resonance does not "drive" the crescendo. Rely on consistently increased breath pressure for natural swell and decay, while the timbre remains the same.

4) The vowel choices ([u, o, a]) should help create a natural crescendo due to their gradual change from closed to more open nature.

5) Vary the pitch level in order to provide tuning opportunities in various keys.

Vibrato

A natural, non-manufactured vibrato, as a result of a natural voice production is essential to Renaissance era performance. As already discussed, a natural larynx position aids in this process. Consistent breath pressure and phrase shape also contribute to an appropriate vibrato. A singer should never hold the voice in place in order to achieve a "straight" tone. This can result in unwanted tension and is as unpleasant as too much

vibrato. Singers should focus on the movement of pitch to a point of arrival, so that the motion is never static. The conductor can assist in this process through the conducting gesture during warm-ups, by highlighting arrival points in the repertoire.

Exercise 5.



Rationale:
1) Singers should focus on the phrase shape in order to apply vibrato in the appropriate spots, as decoration rather than habit. As discussed earlier in the chapter, Giovanni Maffei suggests, "let out the breath a little at a time with the voice." Strive to maintain consistent breath pressure until the downbeat of measure three, when increased breath will assist with the vibrato.

2) There should be no change in the position of the larynx between the [i] and the [o] vowel. Even though the [o] vowel is more open and darker, the larynx should remain in a natural position.

3) Maintain the appropriate timbre and volume at all times.

Exercise 6.



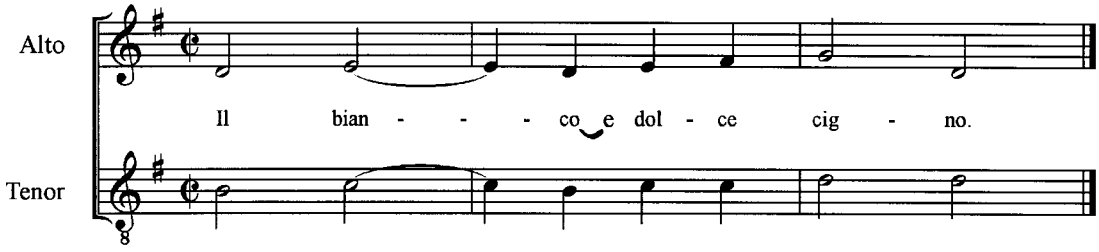
Rationale:
1) Maintain the consistent breath pressure that was discovered in the last exercise.

2) The phrase shape in this exercise is indicated by the long arrow. Each singer should strive to keep the voice moving through the exercise, as opposed to singing note to note. An appropriate vibrato should result. The only place in the phrase where vibrato will likely be heard is on the second syllable of the word "contento."

Pitch

Since pitch in the High Renaissance was such a flexible element of performance, it is necessary to experiment with multiple keys to ensure a successful performance. Furthermore, it might be necessary to experiment with multiple voice combinations, such as the mixture of altos and tenors in some situations, in order to create an appropriate balance and to create a voicing that most closely imitates the aural conception of a composition. This practice affirms the consort principle of the Renaissance, in which all voices were of an identical timbre. The following exercises will offer suggestions for different approaches to this experimentation.

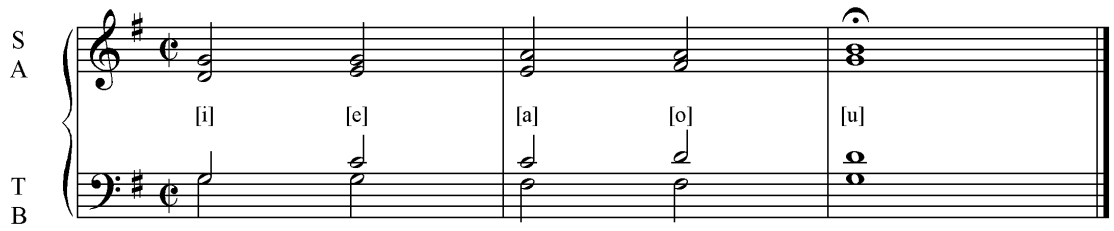
Exercise 7.



Rationale:
1) Allow altos and tenors to choose freely between the two parts in the exercise, as long as the numbers on each part are similar. *Il bianco e dolce cigno* was written for soprano, alto, tenor, and bass, as indicated by the clef configuration (see Figure 2.4). Even though the original alto clef is used, the ranges of the two middle parts are similar. Therefore, it would be beneficial to mix both tenors and altos between the two parts in order to achieve consistency between the men's and women's voices.

2) The singers should strive for a consistent timbre between the two parts. Make sure that as the men ascend in range that they maintain the same quality as the women in the choir.

Exercise 8.



Rationale:
1) Experiment with transposing/adjusting the opening chord of the exercise above to various key areas. Do not exclude chromatic starting pitches, or even pitches "in the cracks," or between half steps. The exercise provides an opportunity to experiment in a way that is appropriate in High Renaissance era choral music. For example, the beginning of *Il bianco e dolce cigno* begins in G. However, one should experiment with beginning the piece in F, F#/Gb, or A, and any other key within the range of a fourth or fifth that feels comfortable. Which works best? Why? The "right" key is the key that allows for the best tuning and timbre compatibility in your ensemble. Give the performers a say in what key feels most comfortable and tunes the best.

Chapter 3

BAROQUE ERA

Singing in the Baroque era was characterized by several specific qualities and attributes: clarity, sweetness, and flexibility. The overriding performance characteristic associated with vocal quality during the Baroque era was textual clarity. Driven by the advent of monody in Florence, along with other new performance styles advocated by the Florentine Camerata, the Baroque era became an oratorical age in which musical affects supported textual ideals and the primary musical objective was to represent "speech in song."[196] Numerous authors discussed the textual clarity ideals of the time, including Giulio Caccini (*Le Nuove Musiche*, 1602) and Giulio Cesare Monteverdi (preface to *Scherzi Musicali*, 1607). Moreover, the music was often described as secondary to the demands of the text, or stated in another way, the "text was the mistress of the music."[197] Therefore, historical vocalism in choral works of the Baroque era must be understood in its appropriate context of aiding the overriding ideals of clear diction and oratorical phrase shape. Furthermore, a vocalism that achieves clarity will support the sweet and flexible properties needed to enable ornamentation in music of this era.

[196] Jacopo Peri, *Euridice* (1600) in Shrock, *Performance Practices in the Baroque Era* (Manuscript, 1988), 2.

[197] Giulio Cesare Monteverdi, *Scherzi Musicali* (1607), in Shrock, 23.

Timbre

Terminology

Writers of numerous treatises, how-to manuals, and musical reference materials throughout the Baroque era described the ideal vocal timbre as sweet, refined, clear, harmonious, and tasteful. These terms, which give contemporary performers insight into the aesthetic consciousness of the Baroque era musician, will be highlighted through primary source quotes below.

Descriptions of the ideal vocal timbre in the Baroque era were consistent among primary source authors. A typical and recurring comment on the idealized singing tone is indicated by the Italian composer Agostino Agazzari in his *Del sonare sopra il basso* (1607): "The voices, when they concert with the organ, should be governed by the ear and by good judgment, being careful that one does not overshadow the other but are sung equally, with sweetness and elegance."[198] Praetorius, the famed German composer and writer of the colossal Baroque resource *Syntagma musicum* (1619), likewise recommends a "delicate and soft tone [for] the singers"[199] when performing choral and organ *concerti*. The French scientist and theorist, Marin Mersenne, describes the ideal voice in his *Harmonie universelle* (1636):

> [A voice should have] sweetness and a certain harmoniousness, on which depends the charms which ravish the hearers, for voices which are hard do not please, however accurate they may be, and possessed of the other qualities I have mentioned, for they have too much sharpness and glitter, which hurts sensitive ears, and which hinders their gliding pleasantly enough into their hearers' spirit to win them, and to carry them whither so ever you desire.[200]

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[198] Shrock, *Performance Practices*, 30.

[199] Ibid., 31.

[200] Ibid., 31.

Finally, Charles Burney, one of the first great English music historians, describes voices he heard in a Handel opera in 1727 as "clear sweet, and flexible."[201]

The clear, sweet, and flexible timbre of the sixteenth century made it possible for the achievement of another highly idealized singing quality: clear textual declamation. Numerous writers comment on this point. For example, Giulio Caccini in his *Le Nuove Musiche* (1602) says that singers should "conform to that manner so lauded by Plato and other philosophers (who declared that music is naught but a speech, with rhythm and tone coming after; not vice versa) with the aim that it enter into the minds of men and have those wonderful effects admired by the great writers."[202] Likewise, Alessandro Guidotti, in discussing the attributes of a good singer, says that "in particular he should express the words well, so that they may be understood."[203] Finally, Michael Praetorius, discusses how important textual clarity is in the training of a fine singer:

> Singing should not be spoiled by inappropriate diminutions of its natural power and grace, given it by the master; instead, each word and sentence should be properly understood by everyone. It is highly necessary that each cantor or singer from early youth practice diligently in singing and articulate enunciation and make himself proficient.[204]

Given that so many Baroque sources discuss clear diction as an ideal component of singing, it should become an interrelated aspect of tone production for those seeking historically guided vocalism.

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[201] Ibid., 38.

[202] Ibid., 3.

[203] Alessandro Guidotti, Preface to Cavalieri's *Rappresentazione di Anima, et di Corpo* (1600), in Shrock, *Performance Practices*, 23.

[204] Michael Praetorius, *Syntagma Musicum III* (1619), in Shrock, *Performance Practices*, 25.

The primary sources lead the present-day performer to a better understanding of differences between the ideal Baroque timbre and present-day singing precepts, which are often governed by a habitual use of extreme resonance, loud volume, and depth of sound. It seems that the Baroque era ideal of timbre was identified by grace, flexibility, sweetness, and the ability to move listeners' emotions based on the clear conveyance of texts. The ability to adapt the voice subtly to changes in color and mood was admired greatly. Moreover, restraint was admired more than forcefulness in singing. Throughout Baroque era sources, the terminology suggests that restraint in volume—as will be addressed in-depth below—was necessary for clear diction and agility, and that a highly refined, sweet vocal production was esteemed.

Physiology and Vocalism

For the most part, Baroque era writers advocate vocal technique similar to that of their Renaissance era forefathers. Most suggested the importance of good posture and appearance, as well as clear diction and good tuning. For example, Wolfgang Caspar Printz, in his *Musica modulatoria vocalis* (1678), lists the general faults in singing as "sharp and flat singing, incorrect intervals, distasteful tone, incorrect rhythm, poor enunciation of text, sloppy intonation and inconsistent tone."[205] Pier Francesco Tosi in his *Opinioni de' cantori antichi, e moderni* (1723) cautions against singing through the nose and choking the voice in the throat. He also stresses the importance of intonation, and

[205] John Butt, *Music Education and the art of performance in the German Baroque* (Cambridge: Cambridge University Press, 1994), 79.

advocates careful attention to accurate vowels, good posture, and appearance.[206] Johann Mattheson lists rules based upon Heinrich Finck's vocal rules of the Renaissance in his *Der volkommene Capellmeister* (1739): "avoid singing through the nose, with clenched teeth or with the mouth open too far; the voice should become lighter the higher it goes, stronger as it goes lower."[207] These quotes demonstrate the carry-over of timbral traits from the Renaissance through the Baroque era.

As was discussed in Chapter Two, the lowered larynx approach to singing was yet to be introduced at this point in the history of singing. A natural larynx position, which was employed in the Baroque era, aids in the production of clear textual declamation, minimal resonance, limited vibrato, and a flexible and supple voice for singing ornamental passages, thus achieving the ideals of Baroque era vocalism.

Instrument and Voice Compatibility

Although the consort principle of the Renaissance became diffused in the Baroque era as various concerted instruments became the norm, vocal and instrumental compatibility remained an essential character of performance. Furthermore, the ideal sound for instrumental playing continued to be modeled after the voice. Instruments throughout the Baroque era were expected to double the voices. This practice, known as *colla parte* playing, can be seen clearly in the "unaccompanied" motets of J.S. Bach, most of which have *colla parte* instrumental parts written in Bach's own hand.

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[206] Ibid., 84.

[207] Ibid., 87.

This common use of instruments and voices together, along with numerous quotes on the subject, lead the contemporary performer to an assumption that voices and instruments likely strove for similar timbres in order to aid in homogeneous performances. As in the Renaissance era, Baroque era instrumentalists were commonly advised to imitate the human voice. Bènigne de Bacilly, in his *Remarques curieuses sur l'art de bien chanter* (1668), suggests that,

> The song of instruments is a sound which art has invented for the purpose of imitating the natural voice. Among the various instruments, there are those which imitate the voice very closely such as the organ, the viol, and the violin.[208]

Likewise, Jean Rousseau, in his *Traité de la Viole* (1687), discusses the similarities between viol playing and singing:

> It is certain that Viol playing does not draw its origin from the plucked Instruments, because its character is very different and the advantage of sustaining sounds, which the Bow gives it, distinguishes it from their character, which is much inferior, since it approaches nearer to the Voice than any other Instrument.[209]

> The Playing of Melodic Pieces is a simple way of Playing and one which requires in consequence much delicacy and tenderness, and it is in this kind of Playing that one must endeavour most particularly to imitate all that is agreeable and charming that the Voice can do.[210]

Finally, Sébastien de Brossard's *Dictionnaire* (1703) has this to say about compatibility:

> Now since instruments were invented only to imitate artificially human voices, either to substitute for them when they are missing or to accompany and sustain them, there are people who extend the term VOCI to the parts intended for instruments.[211]

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[208] Shrock, *Performance Practices*, 78.

[209] Ibid., 78.

[210] Ibid., 79.

[211] Ibid., 79.

Summary

1) Clarity of text was the chief concern of Baroque era singers.

2) A sweet, flexible tone supported the overriding principle of clear textual declamation.

3) Homogeneity in ensemble performance was an important standard.

Volume

The loudness and softness of singing in the Baroque era corresponded to and was determined by the emotional affections of textual references, just as timbral ideals supported this goal. For example, Johann Beyer, author of *Primae lineae musicae vocalis* (1703), suggests in the following quote that singing is successful "when the notes in a song are not sung simply but decorated with beautiful coloraturas and figures in accordance with the text beneath, so that the singer's voice is heard now strong, now weak, now joyful, now sad."[212]

While it was certainly the case that volume levels varied, the present-day performer should keep in mind that the Baroque concept of *forte* and *piano*, or strong and weak, was different than modern ideals. Volume was in its entirety much softer then than now. Examples of instruments (which can be heard frequently in performances and recordings by early music ensembles) made during the Baroque era substantiate this fact. For instance, it is easily recognized that the physical properties of Baroque brass instruments were produced with a smaller bore, resulting in a much softer tone. Furthermore, Baroque violins with gut strings and the shape of the pre-Tourte bow,

[212] Butt, *Music Education*, 83.

produce softer, less piercing tones. Sonya Monosoff, a well respected Baroque violinist and musicologist, has much to say regarding the use of period instruments in aiding the understanding of Baroque performance practices:

> In order to understand how to approximate Baroque results with modern tools, interested string players must experiment seriously with early instruments which, by their nature, force one to think about 17th- and 18th-century music in terms unconventional by modern standards. The violin . . . is without chinrest; . . . The strings are largely gut and with reduced tension because of the straight angle of the neck and, frequently, at lowered pitch; the bow is held loosely with the fingers. These technical facts lead to an entirely different sound, which is softer, gentler, more articulate, clearer and potentially more expressive for Baroque music than the large, broad, gorgeous, smooth sound every 20th-century violinist is taught to cherish.[213]

Voices in the Baroque era would have sung in congruence with contemporary instruments. For example, a singer would not have sung louder than say, a Baroque violin, flute, or trumpet. Similarly, instruments would have emulated the volume of voices since they were the ideal. The result was ensemble music that was balanced and homogeneous. Numerous primary sources support this conclusion. For example, Wolfgang Printz, in his *Musica modulatoria vocalis* (1678), stresses that the singer should not sing too loudly and should cultivate a pleasing sound, and that all the voices should be balanced.[214] Similarly, Daniel Friderici, in his *Musica figuralis* (1618), says, "suitable boys should have a natural control of breath, particularly when they sing high, and should not screech and shout."[215] Finally, John Playford speaks adamantly about the use of soft singing in *An Introduction to the Skill of Musick* (1674):

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[213] Sonya Monosoff, *The Musical Times*, 118, 1618 (Dec., 1977): 1008-1009.

[214] Butt, *Music Education*, 78.

[215] Ibid., 75.

> Increasing of the Voice [crescendo] in the Treble Part, especially in feigned Voices, doth oftentimes become harsh, and unsufferable to the Hearing, as upon divers occasions I have heard. Undoubtedly therefore, as an affection more proper to move, it will work a better effect to Tune the Voice diminishing it, rather than Increasing of it: Because in the first of these ways now mentioned, when a man Increases the Voice, to make an Exclamation, it is needful that in slacking of it, he Increase it the more. And therefore I have said that it showeth harsh and rough. But in the Diminishing of the Voice it will work a quite contrary effect, because when the Voice is slacked, then to give it a little spirit, will always make it more passionate.[216]

Further conclusions can be made regarding volume during the Baroque era by considering the size of the average ensemble. Sizes of the ensembles in the Baroque era were *typically* small, composed of around twenty singers for church and theater, along with similar sized instrumental ensembles. Marco da Gagliano describes a typical theater ensemble in his preface to *Dafne* (1608):

> The chorus enters, formed of nymphs and shepherds, their number more or less in conformity with the capacity of the stage. . . . Half the chorus should . . . consist of six or seven nymphs and shepherds (for the chorus should be made up of no fewer than sixteen or eighteen people).[217]

In a memorandum to town elders in 1730, J.S. Bach discussed basic needs for performances in the church. It seems that he preferred at least as many singers as Gagliano called for in the theater:

> [To each church choir] there must belong, at least, three trebles, three alti, three tenors, and as many basses. . . . [As a minimum,] a motet may be sung with, at least, two voices to each part. (N.B.—how much better it would be if . . . four singers could be available from each part, each choir thus consisting of sixteen persons.)
>
> [The orchestra should be] two or even three Violino Primo, two or three Violino Secundo, two Viola Primo, two Viola Secundo, two Violoncello, One Double

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[216] Shrock, *Performance Practices*, 35.

[217] Ibid., 14.

> Bass, two or three according to need, Oboes, one or two bassoons. Three trumpets, one Drum.
>
> In all eighteen persons, at least for the instruments. N.B.—Added to this since church music is also written for flutes (i.e.—they are either à bec or Traversieri, held sideways—), at least two persons are needed for that; altogether, then twenty instrumentalists.[218]

The size of the previously mentioned vocal ensembles would be described in modern terms as "chamber choirs." Contemporary era chamber choirs would not be expected to sing repertoire such as Carl Orff's *Carmina Burana* or Arnold Schoenberg's *Friede auf Erden*; they would likely perform repertoire that is enhanced by focus on clarity, blend, and balance, rather than breadth of sound and strength. Likewise, the Baroque era ensemble would have performed with a similar mind-set. While the size of the Baroque ensemble does not directly determine the appropriate volume level for performance in the present day, it does aid in the understanding of relative strength and weakness as it would have been appreciated in the Baroque era. Moreover, while there were a few very large performance ensembles in the late Baroque era, accounts suggest that the singing was still very sensitive and restrained. Extremely loud choral sounds, which have come to be expected by many modern-day musicians and audiences, were not part of the Baroque consciousness.

Messa di Voce

Although ornaments are not the focus of the present document, it is important to recognize one of the most important ornaments associated with Baroque era vocalism: the *messa di voce*, defined literally as "placing of the voice." In practice, the term means to

[218] J.A. Phillip Spitta, *J.S. Bach* (New York: Dover, 1951), 240.

begin a single pitch softly, crescendo to a louder volume, and then return to the original dynamic level.

Numerous Baroque authors discuss the use of *messa di voce* as an expressive device. Its earliest usage was in Italian singing, though it soon became standard practice in virtually every European country, and became associated with nearly all solo instruments of the time. Caccini, in his *Le nuove musiche* (1601), described the practice as "the foundation of passion."[219] Other sources of the time give instructions for the practice of *messa di voce*. Domenico Mazzochi explains how to perform the dynamic ornament:

> The *messa di voce* [means] increasing the voice little by little in breath and tone together. . . . [In] the sustained notes one has first to increase the voice gently in spirit and not in sound, so, afterwards one has successively, little by little to go on dying away, and so soften down until it is reduced to the inaudible.[220]

In a thorough description of dynamic markings, German theorist and singer, Christoph Bernhard, also provides musical examples for the execution of *messa di voce*. He suggests the following rules:

> *Pianos* and *fortes* are either used on one note together, or on different notes following each other; in the first case on whole notes and half notes, and in the second case on short notes.
>
> On whole notes and half notes, *piano* is performed at the beginning, *forte* in the middle, and at the end *piano* is used once again. In this, be careful not to fall too suddenly from *piano* into *forte*.

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[219] Ellen T. Harris: 'Messa di voce,' *Grove Music Online* ed. L. Macy (Accessed 15 May 2005), http://www.grovemusic.com

[220] Domenico Mazzocchi, *Partitura dé madrigali* (1638), Preface, in Shrock, *Performance Practices*, 168.



[221]

The most important aspect of *messa di voce*, repeated in nearly all of the sources, lies in its softness at the beginning and the ending of the note. The increase in the volume is certainly to be understood in its relation to the overall softness of the ideal sound volume, as discussed above. Furthermore, unlike the common use of *crescendo* and *decrescendo* in modern-day performance, the timbre of the voice would have remained constant, not increasing in resonance and "ring." This practice was also supported by the use of the non-lowered laryngeal position throughout the era.

One can see from the above quotes, only a small sampling of the many related to volume in the Baroque era, that soft singing was admired and idealized, as was the use of *messa di voce* as an ornament. It is certain that energetic and passionate singing took place, although the evidence suggests that it was within the confines of appropriate decorum. The loud volumes of many contemporary era performances would likely have seemed unappealing and extreme to Baroque listeners, since balance, elegance, and grace was so highly valued.

Summary

1) Singing volumes in the Baroque era were guided by textual references.

2) Sweetness and a certain restraint was idealized in even passionate music.

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[221] Christoph Bernhard, *Von der Singe-Kunst oder Manier* (1649), in Shrock, *Performance Practices*, 169.

3) Balance of singers within the ensemble can be aided by the use of softer singing.

4) *Messa di voce* was employed extensively as an ornament throughout the Baroque era. It was executed on one pitch, beginning *piano*, with a gradual *crecscendo*, and a return to the original dynamic level.

Vibrato

From the numerous references regarding vibrato in the seventeenth and eighteenth centuries one can ascertain that its use was commonplace. The following chart lists many terms that mean vibrato, as they might have appeared during the Baroque era.

Old English:	Close shake, Sting
Latin:	Tremor Pressus
Italian:	Vibrato
French:	Aspiration, Balancement, Battement, Flattement, Langueur, Pincé, Plainte, Souspir, Tremblement mineur, Verre cassé
German:	Bebung, Schwebung[222]

However, the question that is often confronted by contemporary performers is whether vibrato was employed as an ornamental device or as a habitual practice, as taught by most vocal pedagogues today. Primary sources indicate that throughout the Baroque era, Italian, French, German, and English musicians advocate the use of vibrato to "sweeten" and "beautify" the tone of instruments and voices alike—as an ornamental device.

As was the case with many performance aspects of the Baroque era, vibrato was an element left to the discretion and good taste of the performer. Although not dictated nearly as clearly in treatises and instruction manuals as trills and other ornaments, for

[222] Robert Donington, *The Interpretation of Early Music* (London: Faber & Faber, 1989), 232.

example, much was written about vibrato usage and common practice. The following quotes give the reader insight into the Baroque era musician's understanding of vibrato usage, including its appropriateness and restraint from excess.

Pier Fancesco Tosi, *Opinioni de' cantori antichi e moderni* (1723):

> The instructor should teach his student to sustain notes so that the voice neither trembles nor wavers uncertainly. If at the beginning he uses for this purpose two measures of long notes, the improvement will be so much the greater. Otherwise, the desire of most beginners to keep the voice moving and the effort of steadily sustaining the voice cause the pupil to be unable to sustain the voice on one note, and thus he doubtless will acquire the bad habit of wavering back and forth, after the manner of these with the poorest of taste.[223]

Christopher Simpson, *Division-Violist*, (1659):

> Some also affect a Shake or Tremble with the Bow, like the Shaking-Stop of an Organ, but the frequent use thereof is not (in my opinion) much commendable. [224]

Marin Mersenne, *Harmonie Universelle* (1636), speaking of the most important qualities of a singing voice:

> A solid sostenuto without pitch-wobble; flexibility in passage-work; accurate intonation; sweetness and a certain harmoniousness, on which depends the charms which ravish the hearers, for voices which are hard do not please, however accurate they may be.[225]

> It is necessary for the muscles and the cartilages to be very responsive. . . . Those who make passages easily have a softer windpipe. . . . As to the hard and rigid voice, it acquires this vice from the hardness of the windpipe.[226]

The preceding quotes suggest that the degree of pitch fluctuation (amplitude) was considered important in the execution of Baroque vibrato. It is almost a certainty that

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[223] Johann Agricola, *Introduction to the Art of Singing*, trans. and ed. Julianne Baeird (Cambridge: Cambridge University Press, 1995), 84.

[224] Donington, *Interpretation*, 231.

[225] Ibid., 517.

[226] Ibid., 518.

with the non-lowered larynx position, the pitch fluctuation was more moderate than present-day vibrato standards, which can vary up to one-half step in pitch. Not only was the pitch fluctuation less, however, but there also would have been fewer numbers of vibrations per second (wavelength). For a graphic depiction of amplitude and wavelength, see figure 3.1 below. Figures 3.2 and 3.3, respectively, indicate the difference in conception between Baroque and present-day vibrato standards. The amplitude and wavelength samplings are drawn as a one second snapshot in time.

Figure 3.1 **Amplitude and Wavelength Diagram**

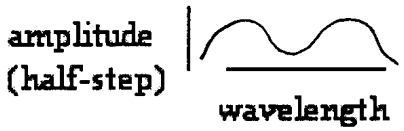
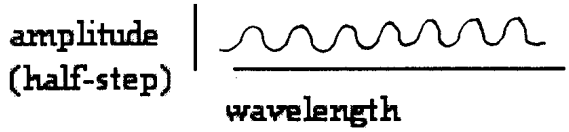


Figure 3.2 **Baroque era Vibrato (One second)**



Figure 3.3 **Present-day Vibrato (One second)**



Numerous other primary source quotes lead the modern performer to a deeper understanding of vibrato as it was employed as an ornament in the Baroque era.

Jacques Martin Hotteterre, *Principes de la Flûte Traversière ou Flûte Allemagne* (1707):

> One will not find these ornamentations indicated in every piece. In fact, usually they are only indicated in those pieces which teachers have written for their students. . . . In addition, it would be difficult to teach the student to recognize without fail all the places in the piece where ornaments should be used. The only thing that can be said in general is that the *Flatements* [vibrato ornaments] frequently are used on long notes, for instance, on whole notes, half notes, dotted notes, and so forth. . . . One can hardly provide rules for the usage of these ornaments. Taste and practice can contribute more than theories to correct usage thereof.[227]

Johann Mattheson, *Der vollkommene Capellmeister* (1739):

> The tremolo or Beben (vibrato) of the voice is the most gentle motion possible on a single definite note, in the production of which the main action occurs in the epiglottis of the throat, moving in a very soft way to moderate the breath, just as on instruments the soft movement of the fingertips without changing their positions can accomplish the same thing, especially on lutes, violins, and clavichords.
>
> One can indeed designate the places on which such a vibration or trembling should happen, but the actual manner in which it should be done cannot be taught by pencil and compass, but only by the ear.[228]

In his *Harmonie Universell* (1636), Mersenne discusses the performance of two contemporary violinists, Bacan and Lazarin: "They make the violin tone inimitable by certain 'tremblements' (vibrato) which enchants the spirit."[229] Mersenne continues his discussion of vibrato by indicating some appropriate locations where the vibrato should be used, even indicating the vibrato with the sign: $\mathcal{T}$.[230] The fact that Mersenne

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[227] Jochen Gärtner, *The Vibrato: With Particular Consideration Given to the Situation of the Flutist* (Regensburg: Gustav Bosse Verlag, 1981), 21.

[228] Ibid., 22.

[229] Ibid., 20.

[230] Ibid., 20.

indicates specific places in musical examples that vibrato should take place highlights the ornamental aspect of vibrato, since there would be no need for a sign if vibrato were used perpetually.

Finally, Christoph Bernhard, author of *Von der Singe-Kunst, oder Maniera* (1649), lists several characteristics considered indispensable for a natural style of singing. The first is associated with vibrato: "one, the concept of *fermo,* without the defect of *tremolo*, or vibrato." Bernhard further suggests that the vibrato is part of an ornament called *ardire*, including it not as a constant affect, but an ornament.[231]

Summary

1) Baroque era musicians employed vibrato as an element of singing. However, it was not employed habitually—with a constant rate and frequency fluctuation—rather, it was modified in accordance with dramatic intentions of the texts.

Pitch

Pitch Standards

Throughout the Baroque era, sources indicate that there were no standardized pitch levels. As in the Renaissance, pitch references were based primarily on localized customs, available instruments, and comfort to singers, all of which varied greatly from venue to venue and region to region. From Praetorius's early Baroque descriptions of *Cammer* and *Chor* pitch in Germany to Tosi's description of pitch variation throughout Italy, one can begin to appreciate the variety and necessity of pitch variation and

[231] Butt, *Music Education*, 70.

transposition to meet performance demands. However, historical statistics[232] indicate that a1 was approximately between 415 Hz and 425 Hz, or about one half-step below modern a1=440 Hz standards.

Praetorius discusses the matter of pitch thoroughly in his *Syntagma Musicum* (1619), and offers a great deal of insight about the variation between instruments and the variation of pitch between regions:

> At the outset it is to be made clear that the pitch of organs and other musical instruments frequently varies widely. This is because in earlier times it was not the practice to play all kinds of instruments together in ensemble, and thus instrument makers built wind instruments quite differently, tuning some high and others low; for certain instruments, such as the cornet, shawm and discant violin, sound fresher and better when constructed to a higher pitch, while instruments like trombones, bassoons, bassanelli, bumbardes and bass viols sound the more grave and splendid the lower they are pitched. Thus considerable difficulty is caused the director of music when organs, positives, harpsichords and wind instruments are not tuned to the same and proper pitch.
>
> In earlier times the choral pitch was one tone lower than now and this is still to be found on old organs and other wind instruments. But as time went on, the choral pitch was raised until it became as high as its present form in Italy, England and in the royal chapels of Germany. (However, the English tuning for instruments is somewhat lower, as may be seen from English cornets and shawms—or hobbys, as they are called there.)
>
> There are some persons who have presumed to raise our present pitch another semitone higher. Although it is not my place to criticize this, still in my estimation, such height of pitch is found to be very uncomfortable by singers, especially altos and tenors in their upper register. Thus the choral pitch ought justly to be left as it is, for even in its present form it is often found too high—and not by singers alone, but also by players of stringed instruments like viols da braccio and viols da gamba, lutes, pandoras and the like—for only exceptional strings can bear the tension required by this high level of pitch. And due to such tension, the strings often snap back in the middle of pieces and hang by loose and useless. To keep the strings in proper tuning, then, stringed instruments ordinarily must be tuned a tone lower, and then other instruments sounding with them must similarly be played a second lower. To be sure, this procedure is difficult for

[232] See Mendel, *Musical Pitch*.

> inexperienced instrumentalists; but playing a second lower greatly helps the singers in the execution of their parts.[233]

Praetorius demonstrates in his exposition that firm pitch standards did not exist in the Baroque era. Furthermore, he suggests that transposing the music to a lower pitch level is advantageous for singers, because it makes the ranges more manageable.

In Germany, during Praetorius's lifetime, the term *Chor-Ton* usually referred to pitch a major second above *Cammer-Ton*. The following diagram lists each pitch level and reference name, as was usually discussed during Praetorius's time and later, from highest to lowest.

> *Cornet-Ton*— apparently the same as
> *Chor-Ton*— a major second higher than
> *Cammer-Ton*— a minor second higher than
> *Tief Cammer-Ton* [234]

However, during the late Renaissance and early Baroque era the use of the term *Chor-Ton* was sometimes associated with a lower pitch than *Cammer-Ton*. In regions such as Prague, for example, the term *Cammer-Ton* was used to refer to the higher and *Chor-Ton* to the lower of the pitches. Praetorius unsuccessfully recommended the adoption of this usage of the terms in Germany. Mattheson confirms this use of terminology in his *Das neu-eröffnete Orchestre*, 1713. He says: "Now whether and why this or that tone is called a or b, Chamber, Choir, or Opera Pitch—this is basically of no consequence. Choir Pitch is 9 to 14 commas [i.e. a major second to a minor third] higher than opera or chamber pitch."[235]

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[233] Shrock, *Performance Practices*, 87.

[234] Arthur Mendel, "On the Pitches in Use in Bach's Time—I," *The Musical Quarterly*, 41, 3, (July, 1955): 338.

Pitch variation was limited not only to Germany. Pier Francesco Tosi, the famed castrato and teacher, recommends the following in his *Opinioni de' cantori antichi e moderni* (1723):

> The teacher should accustom the student to the pitch of Lombardy, and not to that of Rome, not only so that he may acquire and maintain the high notes but also to spare him the difficulties that high-pitched instruments may cause him later on. The forcing caused by overly high singing is just as annoying to the listener as it is to the singer. The teacher should keep this fact well in mind.[236]

Apparently, the pitch in Rome was higher than that of Lombardy. Since it was important to singers and teachers to maintain an unforced tone in singing, the lowered pitch was considered beneficial. This practice contributed to the overall sound ideals of the era. It is likely that the term *Mezzo Punto* was associated with the Roman pitch, while *Tuono Chorista* was associated with that of Lombardy.[237] Just as in Germany, the use of the terms and the actual pitch levels varied widely.

Georg Muffatt in his *Florilegium Secundum* (1698) also discussed variations of pitch standards in France. In a discussion of French pitch, he says:

> The pitch to which the French tune is ordinarily a tone, and for operas even a minor third, lower than German pitch (called Cornetton), which they find too high, too shrill, and too strained. If I were free to choose, and if another consideration were not an obstacle, I would follow the former, which in Germany is called the old *Chorton*, but employ slightly thicker strings, so that the sweetness does not lack liveliness.[238]

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[235] Ibid., 337.

[236] Baeird, *Introduction to the Art of Singing*, 82.

[237] Bruce Haynes, 'Pitch,' *Grove Music Online* ed. L. Macy (Accessed 2 March 2005), <www.grovemusic.com>

[238] Shrock, *Performance Practices*, 91.

One can clearly see that there was much variety in pitch and tuning standards of the Baroque era. Convoluted language, numerous instrumental variations, and localized traditions lead the present-day performer to the conclusion that pitch levels in the Baroque era were unstable and constantly adjusted depending upon region, performance venue, and comfort to singers. A common solution for modern era performances of Baroque repertoire is to perform at a pitch level of between a1=415 and 425 Hz, with period ensembles or modern instruments tuned to the lower standard. This practice of performing at approximately one half-step below a1=440 Hz gives the performers and listeners a more realistic experience of what the Baroque era pitch level would have been. Performed at today's pitch standards, much of the music of the Baroque era can seem strained, brittle, and uncomfortable for performers and listeners.

Vocal Ranges

Since a uniform pitch standard did not exist throughout the Baroque era, what determined the pitch levels for performance? The primary factors included comfort level for singers in their individual ranges, as described and suggested by composers of the time, and matching of vocal ranges to accompanying instrumental pitches. Georg Philipp Telemann, in his *Der Harmonische Gottesdienst* (1725-26), had several suggestions for composers of choral music with regard to ranges:

> The singing voices consist either of a high discant, marked with the clef  or of a low one with . With both, one will limit the range of the notes so that such notes will never go beyond the boundaries of the five lines, either upwards or downwards. Accordingly, the cantatas of the first clef can generally be sung by a discant or tenor but the latter [lower clef] by a low discant, high alto, low tenor or high bass, — the latter, however, might also be proper, to a great extent, for an

> ordinary alto or bass, and anyone who is not all too experienced in the upper clef may rewrite it in a clef he is able to handle.[239]

In an entry in his *Dictionnaire* (1703), Sebastien de Brossard clearly indicates the importance of employing comfortable vocal ranges for singers of various voice classifications. He says:

> I put the Italian phrase [*Transponendo una terza, una quarta, etc.*] at the start of the seventh motet of my *Prodromus Musicalis* to indicate that by transposing the basso-continuo a third or fourth lower this motet, which was composed for a counter-tenor, could be sung by a soprano or a tenor. Similarly, others can be found following that since one of the chief uses of transposition is to position the basso-continuo on such a degree that its highest note and lowest note do not bother or force the voices that must sing the higher or lower notes. This is only accomplished by transposing the basso-continuo higher or lower in the instruments.[240]

In addition to the admonitions of composers and teachers to regulate the ranges of singers, the practice of freely alternating/interchanging instruments and singers as needed in ensembles was common in the Baroque era. Writers of the time indicated the use of a principle known as *si placet*, which means "as you please." This principle, along with the practice of *colla parte* [with the parts] playing, governed the practice of substituting instruments for singers in choral ensembles, as well as determining what instruments would double certain choral compositions. Furthermore, singers would often transpose parts up or down the octave in order to place the pitches within their range. The following quotes lend insight into the *si placet* principle.

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[239] Shrock, *Performance Practices*, 21.

[240] Ibid., 93.

> Michael Praetorius, *Syntagma Musicum III* (1619), Chapter 7 "How Any Concerto and Motet May be Arranged . . .":
>
> One may let a boy sing the alto an octave higher which produces no disagreeable harmony. Sometimes it is also nice to listen to if the tenor, in some compositions, is similarly sung by a boy, one octave higher.[241]
>
> Georg Philipp Telemann, *Der Harmonische Gottesdienst* (1725-26), Preface:
>
> Should those who lack singers and who nevertheless wish to perform this work desire to use an instrument instead of a voice, the violin, oboe, flute traverse and Viola di Gamba (played an octave lower) are particularly suited for the high discant clef; for the low clef however the violin, viola, flute douce (an octave higher), bassoon and frequently the middle Chalumeau, etc.[242]

The preceding quotes, along with many others, provide evidence of a relatively free approach to the substitution of instruments and voices. In addition, composers advised that ranges be moderated for singers, so that no extremes were experienced. These facts should be considered, along with an understanding of the lower pitch standards discussed above, for a thorough comprehension of vocal ranges in the Baroque era.

Instrumental Pitch

Another aspect of pitch variation in the Baroque era was determined by the use of instruments playing with voices in a variety of formats, including *basso continuo*, *basso seguente*, and *colla parte*. One of the most important factors of Baroque era instrumental performance was the use of instruments in the *basso continuo* group. This group of instruments generally consisted of a bass producing instrument(s), and a chord producing

[241] Ibid., 19.

[242] Ibid., 21.

instrument(s). The chordal accompaniment would be improvised, or realized, over the bass line. Instruments associated with the continuo group included harpsichords, portatif organs, theorbos, lutes, along with cellos and double basses. Likewise, these same instruments would also have been responsible for following the lowest part of an ensemble piece, when no continuo part was suggested, in the practice of *basso seguente*. Since there was almost no *a cappella* choral music composed during the Baroque era, it was the pitch levels of these instruments that most directly affected the performance pitch of choral singers.

As discussed above, Baroque string instruments were softer than their modern counterparts. In addition, they were pitched at lower levels. The pitch of the instruments would not have been standard from venue to venue or region to region, although according to Mendel,[243] they would have been in the range of a half-step or so lower than modern standards (a1=440 Hz). The most important factor for tuning and setting pitches for these instruments was to tune to each other, probably using the keyboard or chord producing instrument for the standard reference. Several Baroque era writers speak to the issue of setting pitch or tuning instruments in reasonable ranges, regardless of notation. In Jean Rousseau's *Traité de la Viole* (1687), a discussion of how to tune the viol is enlightening:

> To tune them, when one is not obliged to adjust oneself to another Instrument, one must begin with *C Sol Ut*, which is the middle string, and raise it to a reasonable Pitch; so that the Top string is not strained, which would make it whistle under the Bow, and put it in danger of breaking; and also that the Sounds of the thick string can be easily heard and distinguished.[244]

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[243] Mendel, "Pitch."

[244] Shrock, *Performance Practices*, 91.

The reader can clearly see that the most important "obligation" is to tune to the other instruments in use, then, only to tune the middle string to a "reasonable" pitch, not a specific one. In another similar quotation, Alexander Malcolm suggests,

> The same Song may be begun indifferently at any Note, as will be necessary or at least very convenient for accommodating some Instruments to others, or these to the human Voice, when it is required that they accompany each other in Unison.[245]

Finally, James Grassineau, in his *Musical Dictionary* (1740), suggests that the use of clefs in music of the Baroque era is for reference of intervallic relationships rather than a strict governance of beginning pitch. He says,

> For the performance of one single piece, the *Cleffs* only serve for explaining the intervals in the lines and spaces; so that we need not regard what part of any greater system it is; but the first note may be taken high or low, as we please: for as the proper use of the scale is not to limit the absolute degree of tone, so the proper use of the signed Cleff is not to limit the pitch at which the first note of any piece is to be taken.[246]

This quote indicates that Baroque era musicians regarded the beginning pitches of compositions with flexibility.

The ideal modern-era performance situation is to have an ensemble of period instruments at one's disposal for the performance of Baroque era repertoire. However, since this is not frequently the case, it should be understood that the pitch level of instruments in general was at least one half-step lower than modern standards, and that the beginning pitch of the composition was flexible—taking into consideration the needs of the players and singers in the ensemble.

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[245] Alexander Malcolm, *A Treatise of Musick* (1721), in Shrock, *Performance Practices*, 94.

[246] Ibid., 94.

Summary

1) The most important factors determining pitch range in the Baroque era were localized pitch levels of basso continuo instruments, instrumental compatibility, and vocal ranges.
2) Pitch levels of most Baroque era instruments have been found to be pitched between approximately a1=415 Hz and a1=425 Hz, or about one half-step below the modern standard of a1=440 Hz.
3) Since beginning pitch levels were approached with some flexibility in the Baroque era, modern-day performers have the latitude to adjust the pitch levels of compositions, taking into consideration accompanying instruments and ranges of the ensemble.

Warm-ups

The following warm-ups are derived from J.S. Bach's motet, *Lobet den Hernn, alle Heiden* (Figure 3.1 below). Since it was understood in the Baroque era that instruments often accompanied choral voices during performance in a *colla parte* fashion, it might be beneficial to have the singers warm-up with a harpsichord or portatif organ, if available. If not, a piano may be substituted, as long as the pianist is sensitive to the same practices that the voices are seeking to achieve.

Figure 3.4 ***Lobet den Herrn, alle Heiden*** **(J.S. Bach)**



Translation:
Praise the Lord, all ye nations: praise Him, all ye people;
For God, so gracious and righteous, watcheth over us forevermore. Alleluja.

Timbre

Exercise 1.



* Adjust pitch within the range of a fourth downward for the comfort of singers.

Rationale:
1) The overall affect of the motet is joyful and exuberant. Therefore, the energy of the tone and consonants should reflect that mood within the confines of a vocalism that promotes a natural position of the larynx, as well as moderate resonance and volume. Remember that *forte* should be considered a relative volume, as discussed in depth above.

2) The consonant [K] should aid in producing an articulate, centered pitch. Maintain the focus and directness of pitch when singing the [L], ensuring that the consonant remains short and crisp, and that the eighth notes remain light and buoyant.

3) The conductor should listen for a pure, consistent [O] amongst all sections.

4) Maintain a natural larynx position throughout the entire range of the tenth, making sure not to slip into a romanticized production in the higher range.

Exercise 2.



* Ascend by half-steps for the range of a fifth.

Rationale:
1) Allow each section to sing the exercise individually, in order to promote a unified, cohesive timbre that is blended and balanced within the section. After each section has sung it individually, have the women perform it together; then have the men perform together. Finally, allow the sopranos to sing the exercise by themselves, followed by the altos, tenors, and basses, in succession, the next section entering on the final measure of the previous. Listen carefully to make sure the timbre, blend, and balance of each section are the same when they enter.

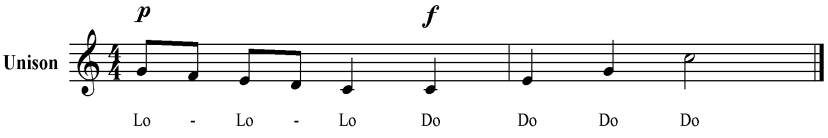
2) The eighth notes should be facile and unlabored, a natural by-product of a natural larynx position.

3) Homogeneity and blend of tone and text should be of primary concern.

4) The final syllable of the word “Alle” and “Heiden” should be weakened in order to achieve a sense of appropriate oratorical phrase shape. Since they are both weak textual syllables and weak musical beats, they should be sung more softly.

Volume

Exercise 3.



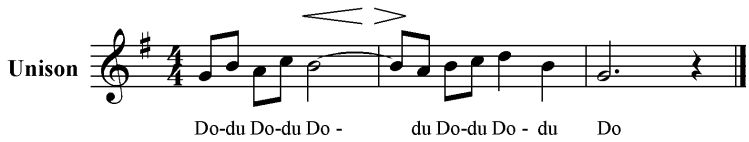
* Ascend and descend by half-steps within the range of a perfect fifth.

Rationale:
1) The change in volume from *p* to *f* in this exercise should take place without a change in timbre. In other words, the resonance and consistency of tone should be the same

whether loud or soft. This can be accomplished by an increase in breath pressure rather than with an increase in resonance or singers "ring." Again, consider the relative volume of forte, as discussed in-depth above. Singers need to be reminded of this phenomenon; otherwise, they fall naturally back into a twenty-first century approach to vocalism.

2) Listen to make sure that the upper notes in the exercise do not become goals in and of themselves, but part of the larger exercise. They should be of the same quality as the moving notes and the lower notes.

Exercise 4.



* Ascend and descend by half- steps within the range of a perfect fourth.

Rationale:
1) The *messa di voce* was employed frequently throughout the Baroque era as an ornamental device and can be employed for dynamic shadings and as a tool for singers to use when learning to adjust volume for appropriate historical vocalism. As before, maintain the same quality of timbre when increasing the volume, making sure that the contemporary approach to resonance and lowered larynx singing does not take precedence over the goal of sweetness and elegance.

Vibrato

Exercise 5.



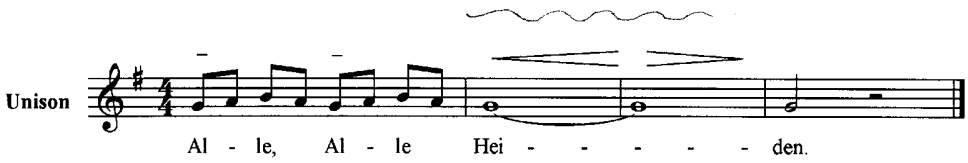
* Ascend by half-steps within the range of a perfect fifth.

Rationale:
1) The vibrato should be minimal and used as a goal-directed ornament, employed to "sweeten" longer notes that may also include a *messa di voce*. Vibrato should not likely be heard in the eighth notes.

2) The first half note in the exercise may include some vibrato as it is sustained. However, since it is not the climax of the phrase it is not the most important point to highlight. The third measure whole note should contain vibrato, increasing in proportion with the volume employed in the *messa di voce*.

3) Remember to deemphasize the second syllable of "lobet" and the second syllable of "heiden." It may assist the singers to speak the text: LO-bet alle HEI-den. Point out that the climax of the textual and musical phrase occurs on the word "Heiden."

Exercise 6.



* Ascend and descend by half-steps within the range of a perfect fifth.

Rationale:
1) As in the exercise above, the vibrato will increase the longer the note is held and the louder the note is sung. However, be sure to allow the vibrato to increase as a result of volume, not as a result of the manipulation of the larynx. The frequency fluctuation of the Baroque era vibrato was small in comparison to contemporary practices. Also, remember that the vibration rate was likely less than the modern standard of five to seven cycles per second.

2) Opening the [a] vowel (mouth position) slightly as it is sustained should assist in the *messa di voce* on the word "Heiden."

3) Finally, the *tenutos* on beats one and three should remind the singers that the important syllable of the word "alle" is the first syllable. Also, remember to deemphasize the final syllable of "heiden," in order to achieve an appropriate oratorical phrase shape.

Pitch

Exercise 7.

Experiment with moving the pitch of *Lobet den Herrn, alle Heiden* down ½ or 1 whole step in order to find the most comfortable range for the singers in the ensemble. It is not necessary for the performance pitch to be a pitch on the piano; it can be in between half-steps. If other instruments will be employed in the performance, however, they must be tuned carefully to ensure a compatible tuning with the choir. If harpsichord, organ, lute, or other Baroque continuo instruments will be used in the performance of the composition, it would be wise to spend adequate time rehearsing with the instruments in order to arrive at an appropriate pitch level for performance.

The use of an original instrument string quartet to double the voice parts is another performance option. This option would enhance the performance in many ways, since the construction of the instruments would contribute to the historical approach to vocalism. Whether a period ensemble or contemporary performing ensemble is used in the case of instruments, it is important to communicate the performance approach that the singers are

using to the instrumentalists so that the playing is compatible to the singing. An effective way to communicate the choir's performance approach is to have the choir model for the instrumentalists and also to have the choristers sing amongst the instrumentalists during rehearsals and performance.

Chapter 4

CLASSICAL ERA

The ideal qualities of singing in the Classical era were frequently described in primary sources as pure, sweet, elegant, and genteel. While larger public audiences gave way to larger performance venues, and innovations in instrument design—such as the piano-forte and Tourte bow in the later years of the era—led to increased expression by performers in general, restraint, elegance, and gracefulness continued to serve as guiding criteria in praiseworthy descriptions of singing. A vocalism that included combinations of sweetness and flexibility existed throughout the Classical era, which in turn enabled improvisatory skills necessary for the ornamentation considered an integral aspect of performance.

Timbre

Terminology

Writers of numerous primary sources throughout the Classical era described the ideal singing timbre in much the same way as in the Baroque era. The overriding quality praised in singing was a sweet timbre. All of the sources agree that qualities such as courseness, roughness, and robustness should be avoided.

For example, Giovanni Mancini, in his singing treatise of 1774, suggests the following about the vocal ideals in the Classical era:

> A voice that is robust, crude, and strident has no other need than to become sweetened and purified. If one should say to a youth who has a robust voice, "Give all the voice," surely he will not be able to correct his fault. Indeed, the fault will be made greater, because one cannot thus correct the already bad quality, but rather increase it. In this case, then,

> one ought to decrease strength to achieve sweetening, which is especially needed on high notes.[247]

Likewise, Domenico Corri in *The Singer's Preceptor* (1810) suggests the following requirements of good singing through the dialogue of "scholar" and "master:"

> Scholar: What are the requisites, or gifts, necessary for a good singer. [?]
>
> Master [Teacher]: First, a singer ought to have a good ear. . . . Secondly,—The voice,—this is capable of great improvement, and, like metal or stone, may be polished to a high degree of perfection; it is not the extent or compass, nor the body of voice, which alone will constitute a good singer, but its proper and skilful [sic] management;—good quality, or sweetness of voice, however, is a very desirable possession.[248]

It can be concluded from the above quotes, not unlike many others from the era, that the most admired qualities of singers were not volume or range, but sweetness and purity of tone.

Also of interest, and particulary revealing, is an investigation of the vocabulary that instrumentalists such as Johann Quantz employed to describe the ideal instrumental timbre in the Classical era. For example, he compares flute playing with the masculine qualities of singing in the chest voice:

> In general, the most pleasing tone quality on the flute is that which more nearly resembles a contralto than a soprano, or which imitates the chest tones of the human voice. You must strive as much as possible to acquire the tone quality of those flute players who know how to produce a clear, penetrating, thick, round, masculine, and in addition, pleasing sound from the instrument.

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[247] Giovanni Battista Mancini, *Pensieri, e riflessioni pratiche sopra il canto figurato* (1774), in Shrock, *Performance Practices in the Classical Era*, (Manuscript, 2004), 11.

[248] Domenico Corri, *The Singer's Preceptor* (1810), in Shrock, *Performance Practices*, 2004, 15.

> Much depends upon the flute itself, and whether its tone has the necessary similarity to the human voice. If it lacks this, no one can improve the tone quality, even with very adroit lips, just as no singer can make a poor natural voice beautiful.[249]

In order to comprehend the quote above fully, one must be able to think in a rather circular fashion. For instance, if one only considers Quantz' suggestion that the flute should resemble the chest voice of a contralto and that the quality of that sound should be "masculine," a wrong conclusion could be drawn. The Classical era concept of chest voice was more closely aligned with modern-day concepts of middle, or mixed, voice register. In today's society, it is doubtful that many people would describe the sound of a flute as masculine. However, if one considers the Classical era meaning of "thick" and "masculine" as quite a lot softer and more delicate than contemporary meanings, a conclusion can be drawn that can aid in understanding the ideally produced vocal sounds of the Classical era. Since we understand what a flute sounds like, we can use the reverse implications of the quote above in order to arrive at an appropriate chest voice sound for singers: it should be flute-like. More precisely, the ideal vocal timbre should be similar in volume and quality to that of a flute. Unlike modern era vocal timbre, which often sounds more like a reed instrument, the Classical era ideal encompassed a softer, more delicate standard.

Physiology and Vocalism

Differences existed in the physiological approach to Classical era vocalism as compared to earlier times. One important element of singing that was discussed

[249] Johann Joachim Quantz, *Versuch einer Anweisung die Flöte traversiere zu spielen* (1752), in Shrock, *Performance Practices*, 2004, 2.

frequently in the Classical era was the distinction between vocal registers, referred to as chest voice (*voce di petto*) and head voice (*voce di testa*), which was was often used interchangeably with the term *falsetto*. Unlike in the Baroque era when singers were encouraged to maintain the distinction between the chest voice and head voice—sometimes even altering pitch in order to maintain a comfortable range—Classical era singers were admonished to develop an evenness of sound quality between registers.

Numerous authors of treatises suggest that the chest and head ranges of a singer's voice should be imperceptibly linked, without a break between them. A few authors of treatises who include discussion of vocal registers include Giovanni Mancini,[250] Johann Agricola,[251] Friedrich Marpurg,[252] Johann Hiller,[253] Jean Paul Martini,[254] Bernardo Mengozzi,[255] and James Nares.[256] Italian, German, French, and English nationalities are represented here, and for the most part all concur as to the approach for healthy and

[250]Giovanni Battista Mancini, *Pensieri, e riflessioni pratiche sopra il canto figurato* (Vienna, 1774).

[251] Johann Agricola, *Anleitung zur Singekunst,* (Berlin, 1757).

[252] Friedrich Wilhelm Marpurg, *Anleitung zum Clavierspielen der schönen Ausübung der heutigen Zeit gemäss* (Berlin, 1755).

[253] Johann Adam Hiller, *Anweisung zum musikalisch-richtigen Gesange* (Leipzig, 1774).

[254] Jean Paul Martini, *Mélopée moderne; ou L'art du chant, réduit en principes* (Paris: Chez Naderman, 1792).

[255] Bernardo Mengozzi, *Méthode de chant du Conservatoire de Musique, contenant les principes du chant* (Paris, 1803).

[256] James Nares, *A concise and easy treatise on singing* (London: J. Preston, 1780).

artistic singing. For instance, James Nares in *A Treatise on Singing* (1780) clearly states the situation of the singer who has moved beyond the beginning stages of vocal training:

> I should have observed that, after the Scholar [student] has gained a good Intonation and some Management of his voice, the Master should make him acquainted with the Compass of his Voice, shewing him where his Voce di petto ends and where to cultivate the falsetto, or Voce di testa, and instruct him how they should be joined, so as to be imperceptible, without which the pleasing variety will be lost.[257]

Likewise, Giovanni Mancini suggests that "the great art of the singer consists in acquiring the ability to render imperceptible to the ear, the passing from the one register to the other."[258] He continues further by saying:

> In our time [1774] teachers wish to enlarge the range, and by forcing Nature they bring out from the throat even a larger number of tones. Thus, today, the tendency is to judge a singer's merits by the range of his voice. In my opinion, however, the worth of a voice will always depend upon its evenness of quality throughout the whole register, and perfect intonation. The strength of the medium and chest tones must also be equivalent to those of the head, in order to form an even register. The medium and low tones are naturally more homogeneous, sonorous, and pleasing, because they come from the chest, while the head tones are more difficult to perfect because they are more shrill. . . . Great care must be taken by the student to attach the high tones with the required sweetness and proportion, in order that he can command his entire range to perfection.[259]

Although not in exact agreement with Tosi (to whom much of his singing treatise is indebted) regarding the specific usage of chest and head voice, Johann Agricola suggests that joining all parts of the voice is advantageous, though it may not be possible

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[257] Owen Jander: 'Singing,' *Grove Music Online* ed. L. Macy (Accessed 4 April 2005), <http://www.grovemusic.com>

[258] Giovanni Mancini, *Pensieri, e riflessioni pratiche* (1774), in Philip Duey, *Bel Canto in its Golden Age: A Study of It's Teaching Concepts* (New York: King's Crown Press, 1951), 114.

[259] Ibid., 115.

for everyone. He says, "it is artistic and naturally advantageous to those whose voices sound equal throughout." Finally, Jean Paul Martini (1792) of France suggests:

> The great difficulty consists in making imperceptible the passage from the chest voice to the throat voice and from the throat voice to the head, in such a manner that these three voices sound as one, that is to say, all the tones in going through their area should have the same volume, the same quality and the same facility.[260]

While the change in the conception of evenness of sound quality between ranges differed from earlier times, there was no apparent change in the overall approach to vocal production of singers in the Classical era. It remains that singers in the Classical era continued to strive after sweet, pure, and clear timbre that was the result of a non-lowered larynx. Jean-Baptiste Bérard in his *L'art du Chant* (1755) describes explicitly the use of a raised larynx approach to singing in the upper registers:

> Observations teach that the complete larynx rises in high sounds, and that it descends in low sounds, and that its elevation and descent are in exact proportion to the types of sounds. M. Ferrein has stated that when the larynx rises, the cartilages to which the ends of the sound-bands are attached move away from each other and give to those bands degrees of tension proportionate to their elongation. . . . It follows from all this, and the experiments which I have made have taught me, that one can regard the movements of the larynx as signs of tension or of relaxation in the vocal cords, just as one can consider certain movements of the pegs of the viol or violin as signs of tension or relaxation in the strings of these instruments.[261]

Bérard's comments remind the modern-era reader that the concept of lowered larynx singing, which is part of nearly all standard teaching methods, is a product of a later era and was not employed in performances of the Classical era.

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[260] Jean Paul Martini, *Mélopée moderne, ou L'art du chant réduit en principes* (1792), in Philip Duey, *Bel Canto*, 122.

[261] Jean-Baptiste Bérard, *L'Art du Chant*, Trans. and ed. Sidney Murray (Milwaukee: Pro Musica Press, 1969), 55.

The later years of the Classical era were years of some transition with regard to long-held beliefs about vocal timbre and singing practices, however. For hundreds of years writers of singing manuals and treatises, as discussed in previous chapters, instructed singers to soften the voice as it ascended and strengthen it as it descended. William Jackson in his *Observations on the Present State of Music in London* (1791) complained that "instead of developing their voices so as to be soft at the top and full at the bottom, singers were achieving the opposite effect."[262] Also, Domenico Corri, author of *The Singer's Preceptor* (1810), may have been the first author to instruct that the voice should increase in volume as it ascended and decrease when descending.[263] Corri's instruction was not common in all treatises of the era, however. Other sources simply suggest that singers strive for an evenness of range, not loudness in the top and softness in the bottom parts of the voice. While the practice of increasing in volume as the range ascended may have been somewhat isolated in the latter years of the Classical era, it was a sign of things to come.

Instrument and Voice Compatibility

Throughout the Classical era instruments were commonly compared to the singing voice. Moreover, numerous treatises for violin, flute, and even keyboard instruments instructed players to strive for a timbre and style of playing that mimicked good singing. This fact leads the modern era reader to a deeper understanding of instrument and voice compatibility. Not only does this mean that instruments would have

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[262] Owen Jander: 'Singing,' *Grove Music Online* ed. L. Macy (Accessed 4 April 2005), <http://www.grovemusic.com>

[263] Ibid.

modeled their sounds after voices, but also that voices and instruments performing together in ensemble would have sounded quite homogeneous and compatible since vocal timbre was upheld as the ideal and all performers were striving toward the same timbral standards.

Both Tromlitz and Quantz, two of the most important writers of flute treatises in the Eighteenth century, went into great detail to describe good singing habits and to encourage flutists to imitate good singers. Tromlitz, for example, has this to say regarding timbre and intonation:

> Since tone is a principal component of good performance for instrumentalists as well as for singers, no effort at all should be spared to keep it as beautiful as one possibly can. Everyone knows that a hollow, dull, and wooden tone is not correct, and is very detrimental to good delivery. Of course, singers must use the voice that Nature has given them; but even the best voice can be spoiled by forcing it through the nose and between the teeth, or obstructing its normal passage through the throat and mouth. But if an instrumentalist has a bad tone, it is his own fault, for a good sound is entirely the result of his skill, although it is true that a great deal also depends on the instrument. A bad instrument cannot produce a good tone.
>
> I say: the only model on which an instrumentalist should form his tone is a beautiful human voice; and as far as I am concerned, a human voice that is beautiful is one that is bright, full and resonant, of masculine strength but not shrieking, soft but not hollow; in short, for me a beautiful voice is full of timbre, rounded, singing, soft, and flexible.
>
> Each instrument matches that voice with which it is most congruent: flute, oboe, and violin model themselves on a beautiful soprano and alto; viola, cello, and bassoon on a beautiful alto, tenor, and bass voice. Now since this tone quality is unquestionably to be found in its most perfect manifestation in the human form, so therefore the instrument that most closely approaches this tone must have the most perfect sound.[264]

[264] Johann Tromlitz, *Ausführlicher und gründlicher Unterricht die Flöte zu spielen* (1791), in Shrock, *Performance Practices*, 2004, 5.

Likewise, Quantz, in his *Versuch einer Anweisung die Flöte* (1752) describes the ideal qualities of a fine singing voice:

> The chief requirements of a good *singer* are that he have a good, clear, and pure voice, of uniform quality from top to bottom, a voice which has none of those major defects originating in the nose and throat, and which is neither hoarse nor muffled. . . . In addition, the singer must know how to join the falsetto to the chest voice in such a way that one does not perceive where the latter ends and the former begins. . . . He must have firmness and sureness of voice, so that he does not begin to tremble in a moderately long hold, or transform the agreeable sound of the human voice into the disagreeable shriek of a reed pipe when he wishes to strengthen his tone.[265]

Regarding compatibility of flutists and singers, Quantz has the following to say:

> Each instrumentalist must strive to execute that which is cantabile as a good singer executes it. The singer, on the other hand, must try in lively pieces to achieve the fire of good instrumentalists, as much as the voice is capable of it. . . . If a flutist has to play in concert with a vocal part, he must seek to match it as much as possible in tone quality and manner of execution. He must vary nothing except where imitations give the opportunity to do so.[266]

Leopold Mozart and Francesco Geminiani both offer violinists similar advice regarding the imitation of singing in their violin playing. Mozart, in his violin treatise says, "who is not aware that singing is at all times the aim of every instrumentalist, because one must always approximate to nature as nearly as possible."[267] Geminiani in *The Art of Playing the Violin* (1751) posits, "The Art of playing the violin consists in giving that instrument a tone that shall in a manner rival the most perfect human voice; and in executing every piece with

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[265] Johann Quantz, *Versuch einer Anweisung die Flöte traversiere zu spielen* (1752), in Shrock, *Performance Practices*, 2004, 20.

[266] Ibid., 3.

[267] Leopold Mozart, *Versuch einer gründlichen Violinschule* (1756), in Shrock, *Performance Practices*, 2004, 4.

exactness, propriety, and delicacy of expression according to the true intention of musick."[268]

Finally, C.P.E. Bach (1753) and Daniel Türk (1789) reveal the importance of the vocal model in two Classical era clavier treatises. Bach suggests that it is important for students to listen to good performances and accomplished musicians. Furthermore, he says,

> Above all, lose no opportunity to hear artistic singing. In so doing, the keyboardist will learn to think in terms of song. Indeed, it is a good practice to sing instrumental melodies in order to reach an understanding of their correct performance.[269]

Türk goes into great detail in describing a beautiful keyboard tone, relating it to singing. He suggests that an understanding of beautiful singing is extremely important for keyboard players. He recommends:

> A beautiful tone must be clear, full, supple, bright, and above all, agreeable; it follows that it should not be harsh at even the highest degree of loudness or unclear at a pianissimo. But since it is the purpose of music to express feelings of various types, then to these qualities of a beautiful tone must be added the expression of music's character. "The most beautiful tone" writes Sulzer, "is that tone which takes upon itself every mode of expression, and in all the shadings of *forte* and *piano* remains both clear and bright."
>
> The achievement of a beautiful and singing tone must be a matter of the most extreme importance for the clavichord player. In this regard, I would particularly advise those who still do not have a good tone to play a number of notes of long duration often, striking the keys with only moderate strength and pressing them down only as long as is necessary for the tone to reach its maximum strength. . . .

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[268] Francesco Geminiani, *The Art of Playing on the Violin* (1751), in Shrock, *Performance Practices*, 2004, 2.

[269] Carl Philipp Emanuel Bach, *Versuch über die wahre Art das Clavier zu spielen* (1753), in Shrock, *Performance Practices*, 2004, 3.

One accomplishes, through this practice, a very supple stroke, which is even required for maximum strength.[270]

Summary

1) A sweet, pure, clear timbre, devoid of coarseness or roughness, describes the ideal vocal timbre of the Classical era.

2) Classical era singers strove for evenness of quality throughout the range of the voice. The use of falsetto was admired. Moreover, the falsetto quality of the Classical era resembles the timbre of today's head voice, while the quality of the Classical era chest voice is similar to the modern-day concept of middle, or mixed register.

3) Instrumental treatises throughout the era recommend that players imitate the ideal singing timbre in their playing and strive for compatibility when playing with singers.

Volume

The volume of Classical era singing reinforced the ideal timbre. A sweet, pure, and clear timbre allowed for a moderated volume, always balanced and elegant. The quotes regarding timbre above lend insight about the appropriate volume ideals of the era, which were similar to the standards discussed in the Baroque era. The degrees of loudness with which music would have been sung and played in the Classical era were considerably less than in modern-era practices, since extremes of sound had not yet entered the ears or consciousness of musicians or listeners. That is not to say that loud

[270] Daniel Gottlieb Türk, *Clavierschule, oder Anweisung zum Clavierspielen für Lehrer und Lernende* (1789), in Shrock, *Performance Practices*, 2004, 5.

sounds were not employed during the Classical era, only that the degrees of volume were certainly less than our contemporary ones. For example, the description of a very large orchestra below gives insight into the soft ideals of the time:

> Although 377 stringed instruments accompanied the single voice [of a soloist singing in Handel festivals held in Westminster Abbey at the end of the 18th century], such was the lightness of the effect, that they did not overpower, or incommode it. From the great extent of the surface from which sounds emanated, they were diffused through the atmosphere, so as to completely fill it. No single instrument was heard, but all were blended together in the softest showers of harmony.[271]

Even if the most sensitive musicians of today's professional orchestras were employed in an ensemble of 377 players, it would be difficult to imagine a single soloist being heard clearly or having the orchestra's "effect" described as light and soft.

Primary sources are not the only evidence that present-day musicians have to assist in determining volume levels of the Classical era. Numerous examples of instruments constructed in the Classical era exist today and can be used as models of tone production. In general, all of the instruments have a softer sound, incapable of producing the strength of sound with which modern-era instruments play. More specific information regarding instrumental capabilities will be discussed below.

Voices

As seen in the timbral descriptions above, idealized voices were sweet, tender, pure, and clear. An understanding of appropriate volume levels is directly linked to comprehension of the ideal timbre. For instance, since so many sources contain

[271] César Bombet, *Vies de Haydn, de Mozart et de Métastase* (1817), in Shrock, *Performance Practices*, 2004, 15.

descriptions of the ideal sweet timbre, one begins to understand that in order to achieve this timbre the volume of sound must be moderate. Frequent descriptions of sweet timbre were accompanied by descriptions associated with soft singing. Charles Burney, in one of his many travels, expresses his dismay for loud, raucous sounds that he heard in Naples in 1770: "the soprano forced the high notes in a false direction till they went to ones brain and the base singer was as rough as a mastiff, whose barking he seemed to imitate."[272] In another performance in Naples, Burney gives further indication of his dislike for coarse, loud sounds:

> The 1st air, after a smart *sinfonia* and chorus, was sung by an inoffensive tenor—then another by a soprano not quite so, after which a 3rd air by a base voice, the direct contrary of inoffensive, such a bawling stentor [shouter] with a throat so inflexible sure never was heard before. The divisions were so rough and so strongly marked they became quite grotesk [sic.] If it had not been for the serious effect his performance had on the melancholy audience no one could possibly have supposed it to be serious—a solo on the coarsest double base that ever was played on would have been soft music to it.[273]

The most interesting section of the preceding quote is the final comment by Burney, which puts into perspective to what extent soft volumes were regarded in the Classical era.

The many descriptions of falsetto singing and blending of registers throughout the range of the voice in Classical era writings also lead the modern-era musician to a better understanding of volume standards of the eighteenth century. Singers were reminded frequently not to sing in *voce di petto* (chest voice) in the upper range, rather, to join it with the *voce di testa* (head voice) in order to create an evenness of quality throughout

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[272] Charles Burney, *The Present State of Music in France and Italy, or the Journal of a Tour through those Countries* (1770), in Shrock, *Performance Practices*, 2004, 9.

[273] Ibid., 10.

the voice. Giusto Tenducci, in his singing treatise *Instruction of Mr. Tenducci to his Scholars* (1782), clearly states this practice:

> Never force the Voice in order to extend its compass in the *Voce di petto* [natural voice] upwards, but rather cultivate the *Voce di testa* [head voice] in what is called *Falsetto* in order to join it well and imperceptibly to the *Voce di petta*. [If this is not done, there is the] fear of incurring the disagreeable Habit of singing in the Throat or through the nose—unpardonable Faults in a Singer.[274]

Giovanni Mancini also offers suggestions for dealing with the upper range of the voice in his *Pensieri, e riflessioni pratiche sopra il canto figurato* (1774):

> The high voice is more difficult to master [than the low voice] because it is often strident by nature. Consequently, the student ought not to neglect to treat the high portion of the voice with due sweetness. Great care must be taken by the student to attack the high notes with the required sweetness and proportion in order that he can command his entire range to perfection.[275]

Since many sources describe each register as being similar in volume and quality, one can ascertain that the volume of the chest voice in the Classical era was related closely to the volume levels of the falsetto voice. The descriptions of Quantz and Tromlitz (see Timbre above), in their flute treatises, suggest that the tone of well-produced flute tone should correspond to the chest voice of a contralto singer. By using the flute as a reference, one might arrive at an appropriate volume level for singers in repertoire from the Classical era.

Finally, as was the case in earlier eras, singers continued to use a non-lowered larynx vocal production. The use of a lowered larynx, which produces louder, richer,

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[274] Giusto Tenducci, *Instruction of Mr Tenducci to his Scholars* (1782), in Shrock, *Performance Practices*, 2004, 20.

[275] Giovanni Battista Mancini, *Pensieri, e riflessioni pratiche sopra il canto figurato* (1774), in Shrock, *Performance Practices*, 2004, 11.

more resonant vocalism, was a product of the late Romantic era. Repertoire of the Classical era should be approached with the concept of a more restrained, softer, less resonant vocalism.

Instruments

Innovations in instrument design, including the piano-forte and Tourte bow, led to increased dynamic ranges, albeit still moderate compared to modern-day levels. The advent of the piano-forte led to a somewhat louder keyboard sound than was possible with Classical era harpsichords. However, the piano-forte was designed with a soft ideal in mind, characterized by a light action and delicate sound, supporting the flexibility of dynamics and delicate touch called for by composers' many small-scale articulation marks. Also, the key bed of the late eighteenth century piano was shallower, the string tension less, and the action lighter than those of a modern instrument, all combining to produce a delicate sound and to enable the pianist to play quickly and lightly.[276]

Likewise, Tourte bows came into use around 1785. As opposed to the convex design of Baroque bows, the style of this bow was concave and usually employed more hair in its construction, along with a ferule to keep the bow strings straighter. The construction of string instruments, in general, began to evolve as well. The neck began to be tilted back and the strings became longer for more volume capabilities. Gut strings were most commonly employed, although later in the era, metal-wound strings came into use. The new Tourte bow did not supplant the Baroque (convex) bow. The old bows continued to be used throughout the era, side by side with newer designs.

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[276] Janet K. Page: 'Performing Practice: 1750—1800,' *Grove Music Online* ed. L. Macy (Accessed 14 April 2005), <http://www.grovemusic.com>

These innovations in instrument design, while allowing for louder playing, did not change the high regard that writers of the era held for soft and sweet sounds. Numerous quotes attest to highly praised performances, which often mention the softness of playing on keyboard and string instruments. For example, Andreas Streicher in his *Bemerkungen über das Spielen, Stimmen und Erhalten der Fortepiano* (1801) suggests the gentleness with which a great pianist should play the piano-forte:

> A true musical artist . . . knows how to permit his instrument to express the noble sentiments befitting the gentleness or melancholy of the *adagio*. If his sentiments are good—familiar with the action of his instrument and capable of communicating profound feelings, he will know how to make his notes flow like oil and not creep along. His *piano* [soft volume] is so prepared that it *must* hold our attention. For the expression of sorrow, he never plays in a shrill or coarse manner, but rather expresses it gently, because sorrow, if it is beautified and nobly expressed, arouses in each listener, as in the observer, then, the opposite feeling.[277]

In a subsequent section of Streicher's remarks on the piano-forte, he discusses the attributes of a great pianist. He reiterates how important it is for a performer to be able to perform softly:

> In fast as well as slow passages, *his piano or pianissimo* is *always proper.* He knows that *when light notes are* produced *with the utmost exactness and certainty, this and this alone affords the listener the greatest delight,* so that he has no doubt as to what he has heard. *"Bravo," "beautiful," "excellent"* reward the pure feeling of the player immediately. [278]

In a similar manner, Giuseppe Tartini, the famed violinist and teacher of the Classical era, suggested a soft and delicate approach to playing the violin. In a letter to one of his students, Signora Lombardini, Tartini suggests the following approach to playing:

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[277] Shrock, *Performance Practices*, 2004, 325.

[278] Ibid., 15.

> Your principal practice and study should, at present, be confined to the use and power of the bow, in order to make yourself entirely mistress in the execution and expression of whatever can be played or sung, within the compass and ability of your instrument. Your first study, therefore, should be the true manner of holding, balancing, and pressing the bow lightly, but steadily, upon the strings, in such manner as that it shall seem to breathe the first tone it gives, which must proceed from the friction of the string, and not from percussion, as by a blow given with a hammer upon it. This depends on laying the bow lightly upon the strings, at the first contact, and on gently pressing it afterwards, which, if done gradually, can scarce have too much force given to it, because, if the tone is begun with delicacy, there is little danger of rendering it afterwards either coarse or harsh.[279]

Just as in the case of playing the piano artistically, Tartini suggests that delicacy, lightness, and softness are ideal attributes of Classical era string playing. These sources, taken along with the vocal sources above paint a picture of the soft sound volumes that were idealized during the eighteenth and early nineteenth centuries.

Messa di Voce

The use of *messa di voce* as an expressive device continued throughout the Classical era. For a complete definition of *messa di voce*, refer to Chapter Three. Although not specifically considered an element of volume, its use as a crescendo-decrescendo effect on single notes relates enough to merit mention here.

Numerous writers of Classical era sources comment on the use of *messa di voce*, or "placing of the voice." Many instrumental treatises, including those by Leopold Mozart,[280] C.P.E. Bach,[281] Daniel Türk,[282] Johann Quantz,[283] Johann Tromlitz,[284] and

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[279] Giuseppe Tartini, *Lettera del defonto Signor Giuseppe Tartini alla Signora Maddalena Lombardini* (1770) in Shrock, *Performance Practices*, 2004, 9.

[280] Leopold Mozart, *Versuch einer gründlichen Violinschule* (Augsburg, 1756).

[281] C.P.E. Bach, *Versuch über die wahre Art das Clavier zu spielen (*Berlin, 1753).

Francesco Geminiani,[285] include specific instruction on beginning a single pitch softly, following it with a crescendo, and allowing it to decay to its original volume.

Singing treatises by Johann Agricola, Giovanni Mancini, Giusto Tenducci, and Domenico Corri also list *messa di voce* as a requisite in artistic singing. For example, Johann Agricola says:

> Practicing the crescendo and decrescendo [*messa di voce*] when sustaining longer notes extends the benefits to singing in general. A basic rule of good taste is that every note regardless of its length should be given a crescendo and decrescendo. . . . From the very beginning, then, an aspiring singer becomes conditioned when sustaining all appropriate notes to make the crescendo and decrescendo, with the result that it becomes fluent and all the easier.[286]

Agricola goes so far as to say that every note, regardless of its length should receive some sort of crescendo-decrescendo. It was certainly the case that any note longer than a half note received the treatment of a *messa di voce*. Remember, that in the process of getting louder, the peak of the crescendo should be approached with appropriate limitations, as discussed above. Overly resonant and rich vocalism was not part of the Classical era singer's expressive vocabulary.

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[282] Daniel Türk, *Clavierschule, oder Anweisung zum Clavierspielen für Lehrer und Lernende* (Leipzig, 1789).

[283] Johann Quantz, *Versuch einer Anweisung die Flöte traversiere zu spielen* (Berlin, 1752).

[284] Johann Tromlitz, *Ausführlicher und gründlicher Unterricht die Flöte zu spielen* (Leipzig, 1791).

[285] Francesco Geminiani, *The Art of Playing on the Violin* (London, 1751).

[286] Johann Agricola, *Anleitung zur Singekunst* (Berlin, 1757), in Shrock, *Performance Practices*, 2004, 112.

Metric Accentuation

Another aspect of volume in the Classical era was inextricably linked to metric accentuation. Metric accentuation refers to the regular patterns of stress and duration of certain notes in performance, resulting in louder and longer pitches on strong beats and softer and shorter pitches on weak beats. Meter signatures in the Classical era suggested that certain notes should be accented, while others should be unaccented, or de-emphasized, depending upon their place in the metric scheme.

As a general rule, notes on strong beats receive greater emphasis and duration than notes on weak beats, which receive no emphasis and shorter duration. The relative amount of stress and length a note should contain is called *quantitas intrinsecas*, or intrinsic quality. Johann Scheibe in his *Uber di Musikalische Composition* (1745) details the practice of discerning which notes should receive more emphasis:

> When we play, sing, or only listen to music our own feeling tells us that when the notes of the same outward appearance or outward size are considered or weighted one against another, though they seem to be of equal duration, they are, or they give the impression of being either long or short, even though they are two notes of entirely equal value or content. We must therefore examine this circumstance and unequal intrinsic size, this so-called Quantitatem intrinsecam which has a great influence, especially on melody, and through it on harmony. It is particularly in vocal music that it is important that we learn to weigh the notes one against another.[287]

Notes that are considered of greater importance due to their intrinsic quality include the first note of a couplet, the longer note of a dotted couplet, the first note of a measure, the third note of a measure in 4/4, and the notes that begin subdivisions of a beat. Türk (1789) explains strong and weak beats:

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[287] Johann Scheibe, *Uber di Musikalische Composition* (1745), in Donald Lee Trott, "Patterns of Accentuation in the Classical Style as Supported by Primary Sources" (D.M.A. Dissertation, The University of Oklahoma, 1984), 45.

> Every meter has strong and weak beats, although according to their external value or duration, they are equal to each other. However, more emphasis (internal value) is given to one than to the other. Strong beats are also said to be internally long, or are called struck or accented beats.[288]

In all duple meters, the downbeat receives the greatest emphasis, with the alternating beats receiving an emphasis greater than the other beats. For example, beats one and three are stronger than beats two and four in 4/4 time. However, beat three is generally less strong than beat one. The downbeat receives the greatest accent in triple meters, while subsequent beats are de-emphasized. Furthermore, subdivisions of beats in both duple and triple meters receive even less emphasis.

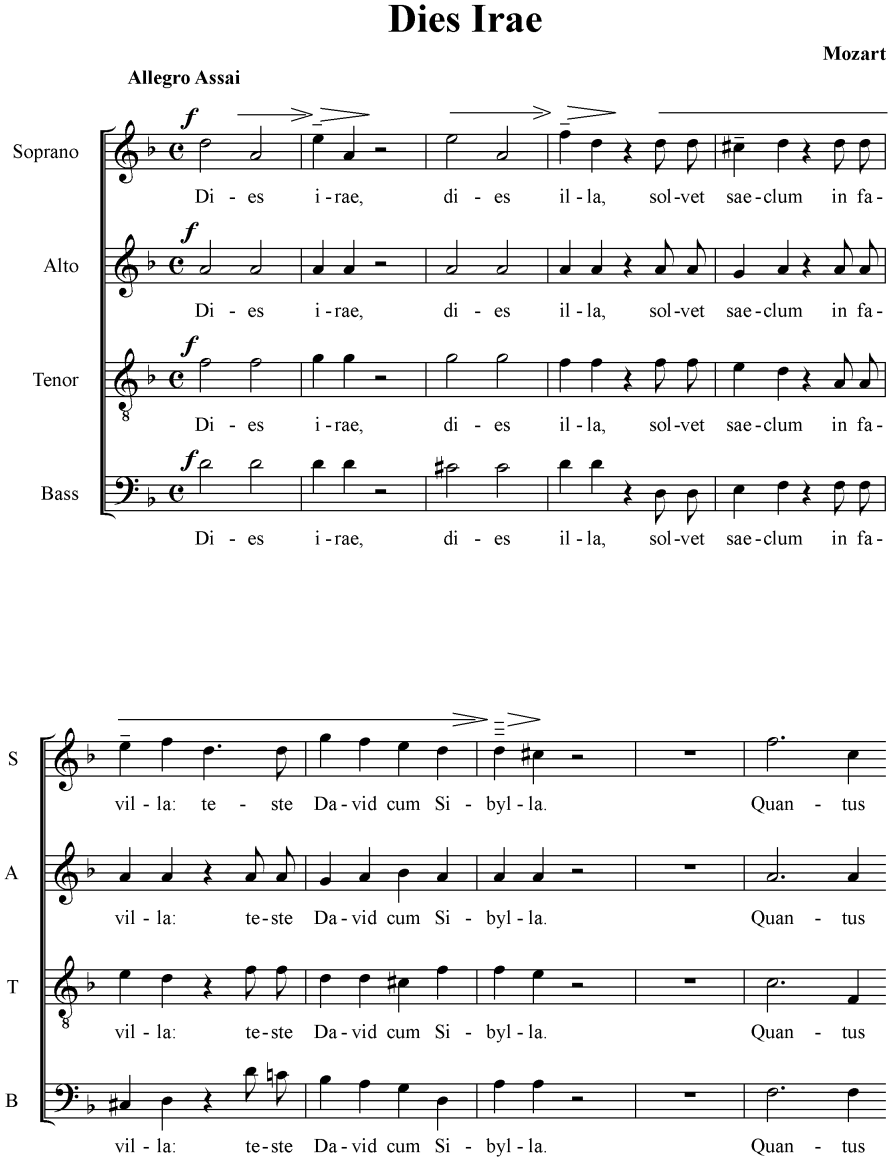
Metric accentuation was not a prescription for equality of stress in every measure, however. Several factors contributed to the various weight or emphasis of beats in each measure: melodic structure, harmonic function, and text declamation (oratorical phrase shape). For example, as a musical phrase reaches a climax, the *second* beat of that measure may be more emphasized than the first beat in the first measure of the phrase. Depending upon the textual scansion, melodic shape, and harmonic nature of individual phrases, amounts of emphasis vary. Composers usually sought to match the natural word inflection of the texts they set to the melodic and harmonic structure in a way that promoted an oratorical phrase shape. Performers would have sought to perform numerous gradations of syllabic stress within the overall context of larger phrase shapes.

The following musical example clarifies the nature of metric accentuation and oratorical phrase shape.

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[288] Daniel Türk, *Klavierschule* (1789), trans. Raymond Haggh (Lincoln: University of Nebraska Press, 1982), 90.

Figure 4.1 Metric Accentuation and Oratory Diagram (Mozart's *Dies Irae*)



It is not uncommon in performances of the "Dies Irae" from Mozart's *Requiem* to hear choirs emphasize the downbeat of each measure with equal stress, resulting in a predictable and unmusical experience. This is not an ideal performance characteristic and should be avoided. Textually, the phrase shape climaxes in measure eight with the word "sibylla." Moreover, the oratorical phrase shape is supported by the harmonic structure of

the first eight measures. All of the musical momentum in the opening measures drives the phrase to the half cadence on the downbeat of measure eight. The tenuto markings in Figure 4.1 suggest points of stress, while the arrows indicate phrase direction. The downbeat of measure three is emphasized because it is a strong beat in the measure. However, it is not as strong as the downbeat of measure eight, due to the latter's position in the measure and the phrase. It is important that the *micro* structure of notes within the measure (metric accentuation) be understood within the *macro* structure of phrase shape and direction (oratory). An understanding of metric accentuation and oratorical phrase shape assists singers in achieving historical vocalism by providing an appropriate framework within which vocal sounds can be produced.

Summary

1) Soft volumes were idealized for singers and instrumentalists in the Classical era. Loud dynamic markings should be considered within the appropriate context of the overriding elegant, balanced, and sweet timbral ideals of the age.
2) *Messa di voce* was an important expressive device, employed frequently in all vocal music of the Classical era.
3) Metric accentuation and oratorical phrase shape guided the loudness and softness within musical phrases.

Vibrato

The use of vibrato in the Classical era was common, although not as a persistent device employed on every pitch. Numerous writers suggested its common use during the era, including Leopold Mozart, Johann Agricola, Pierre Baillot, Johann Quantz, C.P.E. Bach, Tartini, and many others. A few quotes follow which indicate the general use of vibrato during the era.

Leopold Mozart has a great deal to say regarding the use of vibrato in his *Versuch einer gründlichen Violinschule* (1756). He suggests that the use of vibrato comes from nature itself and recommends that it be employed by instrumentalists and singers alike:

> The tremolo is an ornament which arises out of nature itself. It can effectively be used not only by good instrumentalists, but also by trained singers, especially on long notes. One's own nature is the best teacher thereof. For if we strike a slack string or a bell, so we hear after the stroke a certain wave-like vibration of the tone. This trembling sound we call the tremolo.[289]

Johann Friedrich Agricola in his *Anleitung zur Singkunst* (1758) suggests that vibrato is one of the "essential ornaments for performers." He continues by saying,

> The vibrato on one note—which is achieved on stringed instruments by rocking the fingertip back and forth on the same note, making the pitch neither higher nor lower, but gently beating it—is also an ornament that in singing is especially effective on long sustained notes, particularly when applied towards the end of such notes. It is quite impossible to express the vibrato in musical notation. It is more easily grasped with the help of oral instruction, but not all throats are capable of this type of execution.[290]

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[289] Gärtner, *The Vibrato*, 23.

[290] Leopold Mozart, *A Treatise on the Fundamental Principles of Violin Playing*, trans. Editha Knocker, (London: Oxford University Press, 1948), 203.

Johann Quantz says, "If one has a long note to hold out either for a half measure or an entire measure, which the Italians call *messa di voce*, one must produce a vibrato by using the finger on the hole which is open one hole separated from the fingered note."[291]

While many writers of the time suggested that singers and players learn to employ vibrato as part of their expressive capabilities, they also warned against its overuse. Its use was ornamental, much like in the Baroque era, and generally limited to longer notes. Furthermore, the rate at which the pitch fluctuated (wavelength) was slower, and the pitch variance (amplitude) less than modern practices of vibrato. Leopold Mozart provides possibly the most thorough collection of information about vibrato usage in the Classical era. Regarding the constant use of vibrato, Mozart says:

> Since the tremolo [vibrato] does not sound purely on one pitch, but rather sounds "hovering," it would be a mistake to play every note with the tremolo. There are indeed certain players who constantly shake on every note as though they had a constant fever. One should only use the tremolo in those spots where nature itself would use it. . . .Therefore, one can decorate any final note or also any other long, held note with the tremolo.[292]

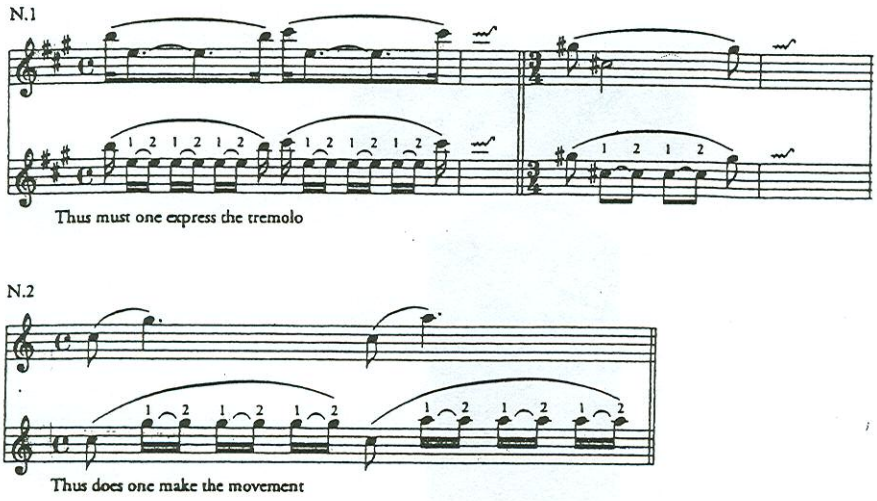
The ornamental usage of vibrato in the Classical era is evidenced by the inclusion of specific pedagogical notation in primary sources, which informs performers of where and how to incorporate vibrato. Mozart's violin treatise is an excellent example of this type of instruction manual. He provides examples of where vibrato should be employed and different types of vibrato that exist. Below (Figure 4.2) are three musical examples where Mozart suggests that sustained notes should include the use of vibrato.

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[291] Gärtner, *The Vibrato*, 23.

[292] Leopold Mozart, *A Treatise on the Fundamental Principles of Violin Playing*, trans. Editha Knocker, (London: Oxford University Press, 1948), 203.

Figure 4.2 **Leopold Mozart's Vibrato Instruction**



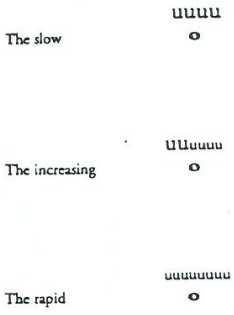
293

As one can see, the vibrato is indicated with the numbers 1 and 2, and is slower than generally employed in the modern era.

Also in his violin treatise, Mozart offers suggestions for the number of oscillations to be made on a specific note. Figure 4.3 below suggests the use of a "slow," an "increasing," and a "rapid" vibrato. Mozart seems to imply that the slower vibrato is used for more passionate and loud singing and playing, while the increasing and rapid vibrato is employed during less passionate music, or during the decay, as occurs with most sounds naturally.

[293] Leopold Mozart, in Clive Brown, *Classical and Romantic Performing Practice: 1750—1900* (New York: Oxford University Press), 547.

Figure 4.3 **Leopold Mozart's Vibrato Instruction**



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Classical era vibrato should be understood within the framework of the soft and light vocal production that was idealized in the Classical era. Also, as discussed above, the use of the non-lowered larynx, which enabled a soft, light vocalism, contributed to a minimized vibrato, both in amplitude and frequency.

Summary

1) Vibrato was employed as an ornamental device throughout the Classical era.
2) Vibrato was usually employed on long notes (half notes, whole notes), and was slower when the volume was loud and faster when the volume was soft.
3) Classical era vibrato differed from modern concepts of vibrato in that its wavelength (numbers of beats per second) and amplitude (pitch variance) were less.

Pitch

Pitch was not standardized throughout the Classical era, although it had certainly become more uniform than in previous times. The pitch level of performances varied depending upon location, instrumental construction, and singers' abilities and ranges.

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[294] Ibid., 546.

Unlike the Renaissance era, when pitch varied as much as four half-steps above and below a1= 440 Hz, pitch standards in the Classical era began to approach modern-era standards by ranging from a1= 405 Hz to 438 Hz.[295] Alexander Ellis in his *On the History of Musical Pitch* (1880) narrows the range of Classical era pitches even further, saying that the standard deviation was between a1= 415 Hz and 430 Hz—only between a quarter and half step below modern-day standards. The following chart provides part of his evidence:

> Gottfried Silbermann's famous 1754 organ in Dresden – 415 Hz
> George Frideric Handel's tuning fork – 422.5 Hz
> Mozart's pianos in 1780 – 421.6 Hz
> Franz Anton von Weber's tuning fork – 424.1 Hz
> The Dresden Orchestra from 1815-1821 – 423 Hz
> The Grand Opera in Paris in 1810 – 423 Hz
> The Italian Opera in Paris in 1823 – 424.2 Hz
> The London Philharmonic from 1813-1828 – 423.7 Hz[296]

It is not surprising that pitch levels began to approach more uniform standards in an age when performers traveled more and more. To accommodate varying pitches that the musicians encountered, wind and brass players employed numerous bits and crooks to help adjust to localized standards, while strings easily tuned up or down to meet pitch demands. Johann Altenberg, in his *Versuch einer Anleitung zur heroisch-musikalischen Trompeter-und Pauker-Kunst* (1795), discusses the use of pitch altering devices that were used frequently:

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[295] Based on the investigation of hundreds of Classical woodwind instruments from various countries, in Bruce Haynes, *A History of Performing Pitch* (Lanham: Scarecrow Press, 2002), 302.

[296] Alexander Ellis, *Studies in the History of Musical Pitch* (Amsterdam: Frits Knuf, 1968), 51.

[291] Johann Altemberg, *Versuch einer Anleitung zur heroisch-musikalischen Trompeter-und Pauker-Kunst* (1795), in Shrock *Performance Practices*, 2004, 33.

> The so-called shanks are straight little brass tubes that lower the pitch of the trumpet. If one puts several of them attached to one another, the pitch will be still lower. Since the trumpet would be uncomfortable to hold if the tuning bit were too long, the longest ones are wound in the shape of a circle or bent into a curve, for which reason they are also called crooks. . . . The tuning bits and crooks are as varied as they are necessary and useful, differing partly in their size and length, partly, too, according to their use and effect. There are some that lower the pitch of the instrument by a whole tone, a half tone, a quarter tone, or I daresay even less, while [there are] some that lower it by two tones, a tone and a half, or a whole tone.[297]

Likewise, Johann Tromlitz in his flute treatise of 1791 suggests techniques for the flutist to adapt to localized pitch standards. He says:

> While the pitch of all places is not the same, but sometimes varies up to a semitone higher or lower, it is necessary to have several middle joints correctly graduated higher or lower, in order to be able to play in tune everywhere. To be sure, this is not easily done with a flute having three middle joints. If the three middle joints are very close to one another, they do not cover a sufficient range; while if they are made farther apart in order to be able to tune higher or lower, they are not always just right.[298]

Numerous other sources from the Classical era discuss how pitch standards varied from location to location and venue to venue. Johann Quantz in his *Versuch einer Anweisung die Flöte traversiere zu spielen* (1752) suggests the following about the varying pitch levels throughout Europe in the early Classical era.

> The pitch regularly used for tuning in an orchestra has always varied considerably according to the time and place. The disagreeable choir pitch prevailed in Germany for several centuries, as the old organs prove. Other instruments, such as violins, double basses, trombones, recorders, shawms, bombards, trumpets, clarinets, &c., were also made to conform to it. But after the French had transformed the German cross-pipe into the transverse flute, the shawm into the oboe, and the bombard into the bassoon, using their lower and more agreeable pitch, the high choir pitch began in Germany to be supplanted by the chamber pitch, as is demonstrated by some of the most famous new organs. At the present time the Venetian pitch is the highest; it is almost the same as our old choir pitch.

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[292] Johann Tromlitz, *Ausführlicher und gründlicher Unterricht die Flöte zu spielen* (1791), in Shrock, *Performance Practices*, 2004, 33.

> The Roman pitch of about twenty years ago was low, and was equal to that of Paris. At present, however, the Parisian pitch is beginning almost to equal that of Venice.
>
> The diversity of pitches used for tuning is most detrimental to music in general. In vocal music it produces the inconvenience that singers performing in a place where low tuning is used are hardly able to make use of arias that were written for them in a place where a high pitch was employed, or vice versa. For this reason it is much to be hoped that a single pitch for tuning may be introduced at all places. It is undeniable that the high pitch is much more penetrating than the low one; on the other hand, it is much less pleasing, moving, and majestic. I do not wish to argue for the very low French chamber pitch, although it is the most advantageous for the transverse flute, the oboe, the bassoon, and some other instruments; but neither can I approve of the very high Venetian pitch, since in it the wind instruments sound much too disagreeable. Therefore I consider the best pitch to be the so-called German *A* chamber pitch, which is a minor third lower than the old choir pitch. It is neither too low nor too high, but the mean between the French and the Venetian; and in it both the stringed and the wind instruments can produce their proper effect.[299]

Pitch variation was certainly not limited only to instruments. Since most of the vocal music of the Classical era was accompanied, it follows that choral and vocal parts must have adjusted to localized pitch standards and instrumental capabilities. For instance, Domenico Corri in his singing treatise (1810) says that "singers ought to measure the extent [range] of the Song with the extent of the Voice and pitch the key accordingly, for every Composition is not calculated for everyone's ability."[300] Louis Spohr also suggests that there was flexibility with regards to beginning pitches in Classical era vocal music. In an entry from his Parisian musical diary of 1820, Spohr says:

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[299] Johann Quantz, *Versuch einer Anweisung die Flöte traversiere zu spielen* (1752) in Shrock, *Performance Practices*, 2004, 32.

[300] Domenico Corri, *The Singer's Preceptor* (1810), in Shrock, *Performance Practices*, 2004, 34.

> We have visited the Italian Opera several times and have had much artistic pleasure there. Yesterday, at long last, we saw *Don Giovanni*, which had been absent from the repertoire for some time. . . . Only two numbers prompted much applause, and it was expended on the singers rather than the composer.
>
> These two numbers, each of which had to be repeated, were the duet between Don Giovanni and Zerlina, "La ci darem la mano," and Don Giovanni's Champagne aria. The first was transposed a half-tone up, to B-flat, and the latter raised a whole tone, both because of the weakness of Herr [Manuel] Garcia's lower register.[301]

How did these facts affect choral singers of the Classical era? According to Spohr and other writers of the era, the pitch standards were flexible enough to be altered for performance demands. Likewise, instruments would have supported a flexible approach to pitch. For instance, the comfortable range of singers would have been a primary concern. If a comfortable pitch range was determined, the other elements of idealized Classical era vocalism could more easily be achieved.

Summary

1) Classical era pitch standards ranged from between a1= 415 Hz. to a1= 430 Hz., or between a quarter and a half step below the modern era pitch standard of a1= 440 Hz.
2) Pitch standards varied from locale to locale and venue to venue, necessitating the use of tuning crooks and bits for wind and brass instrument, as well as flexibility on the part of other instrumentalists and singers.
3) Singers had the latitude to adjust pitch within a half to a whole step in order to accommodate a comfortable range.

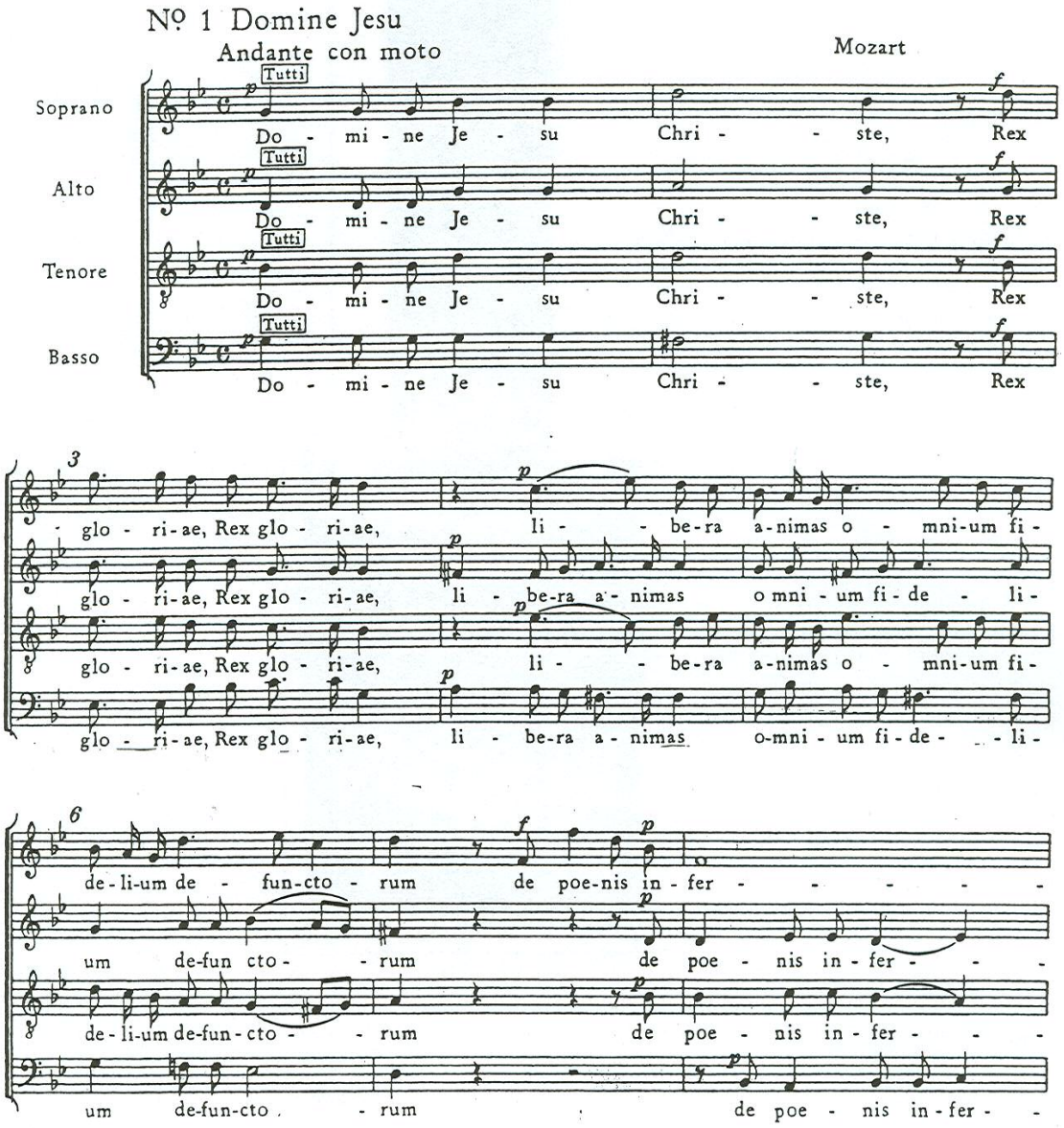
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[301] Louis Spohr, *Selbstbiographie* (1860-1861), in Shrock, *Performance Practices*, 2004, 34.

Warm-ups

The following warm-ups are derived from Movement Four (*Domine Jesu Christe*) of Wolfgang Amadeus Mozart's *Requiem*, K.626 (Figure 4.4 below). In order for singers to become comfortable with the performance pitch level, the pitch level of the orchestra should be known prior to rehearsing the repertoire. Whatever pitch is chosen, the warm-ups should be based on the same standard.

Figure 4.4 ***Domine Jesu Christe* (W.A. Mozart)**



Translation:
Lord Jesus Christ, King of Glory, liberate the souls of all the faithful departed from the pains of hell and from the deep pit;

Deliver them from the mouth of the lion; let not hell swallow them up, let them not fall into darkness:

But let Michael, the holy standard-bearer, bring them into the holy light, which once thou promised to Abraham and to his seed.

Timbre

Exercise 1.



* Ascend by half-steps within a comfortable range for singers.

Rationale:
1) Strive for evenness and balance throughout the range of the exercise, making sure that the quality of the voices does not change at the *passagio* [break from chest to head register]. This will likely entail singing the lower pitches with a softer, more delicate vocalism in order to aid the smooth transition into the head voice.

2) The octave skips in m.2 should not sound dissimilar. The upper notes should be sung with the same vocal production as the lower tones, without falling into a "higher = louder" mentality. Furthermore, singers should maintain a natural/non-lowered larynx position throughout the entire exercise.

3) The conductor should listen for pure, consistent, and matching vowels throughout the exercise.

4) Make sure that the second syllable of the word "Christe" is de-emphasized. It might be helpful to have the students read the textual phrase in the following manner: Domine Chri-ste. The accent of the syllable "Chri" is not as important as the de-emphasis of the syllable "ste". The scansion of the musical and textual phrase moves to the downbeat of measure two. The practice of singing the oratorical shape of the line should be reiterated often. Refer to the discussion of metric accentuation and oratorical phrase shape under "Volume" above.

Exercise 2.



Rationale:
1) The extreme leaps in this exercise are drawn from m.21 of the movement. A simple, light vocalism makes this type of passage manageable. Be sure that as the pitches ascend the singers maintain the same natural, un-lowered position of the larynx. Furthermore, maintain an evenness of volume and vocal quality between upper and lower registers.

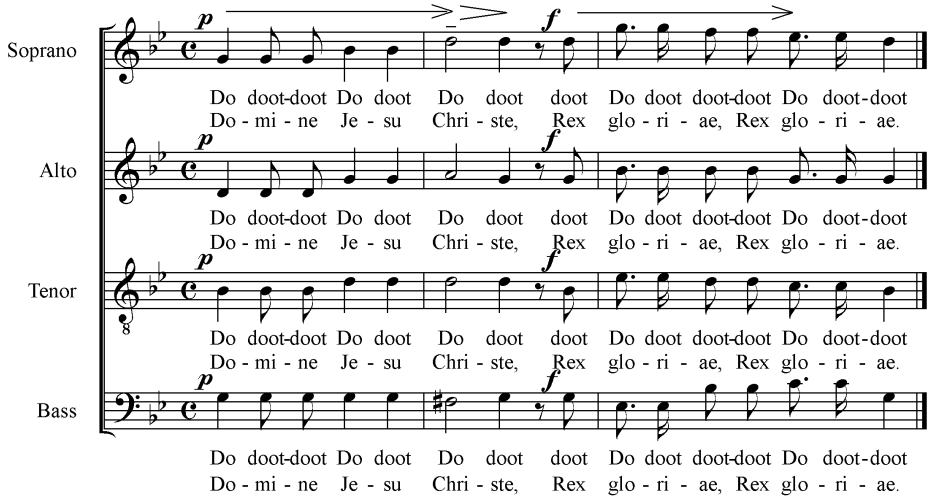
2) Speak the text first, in this manner: Ne absorbeat eas tartarus, ne cadant in obscurum. The phrase should be spoken with momentum moving to the first syllable of "tartarus" and the second syllable of "obscurum."

3) Notice that the arrows above the exercise indicate that the phrase scansion moves to the downbeat of m.2, then moves again to the downbeat of m.3. The first arrival point is not as important as the second, and should be emphasized by the length and strength of the respective pitches.

4) Be sure that the second and fourth beats (weak beats) are not as strong as beats one and three (strong beats). It is important that the singers do not sing note-to-note, in an unmusical fashion, but rather sing with the appropriate oratorical phrase shape.

Volume

Exercise 3.

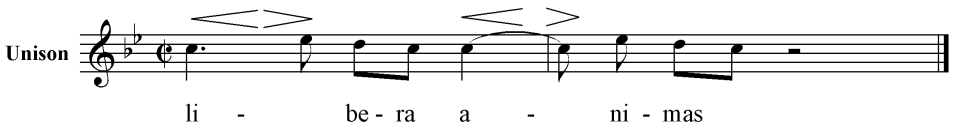


Rationale:
1) The overall affect of the movement reflects the awe and mystery of the text. Therefore, the energy of the tone and consonants should reflect that mood within the confines of a vocalism that promotes a natural position of the larynx, as well as moderate resonance and volume. The dynamic contrasts in the exercise represent only *piano* to *forte*, just like the music itself. Remember that *forte* should be considered a relative volume, as discussed in depth above. Strive to maintain the same vocal quality between the upper ranges and lower ranges of the voice. Resist the urge to slip into a lowered larynx vocalism in the upper register—simply maintain the evenness of tone from exercise no.1.

2) Employ the use of the syllables "Do" and "doot" prior to introducing the text. The syllables are to encourage an appropriate metric accentuation. Notice that "Do" corresponds to strong beats, while "doot" corresponds to weak beats. If one so chooses, the use of the words "long" and "short" could be employed instead. The arrows should help direct the oratorical phrase shape. Notice that the phrase scans to the downbeat of the second measure, then to the climax of the phrase on the third beat of measure three. It is most important that the second syllable of "Chri-ste" is de-emphasized, along with the second and third syllables of "glo-ri-ae," so that an appropriate oratorical phrase shape is achieved.

3) Homogeneity and blend of tone and clarity of text should be of primary concern.

<u>Exercise 4.</u>

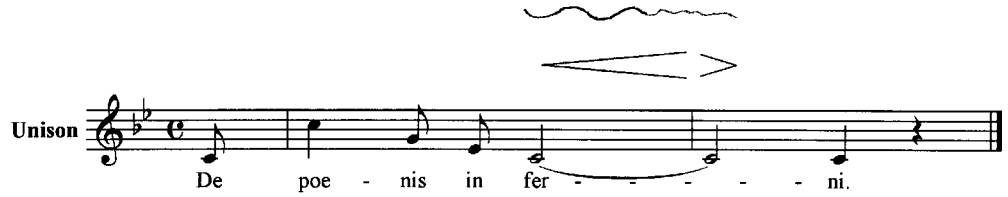


* Ascend and descend by half-steps within a comfortable range for singers.

Rationale:
1) The *messa di voce* was employed frequently throughout the Classical era as an ornamental device and can be employed for dynamic shadings and as a tool for singers to use when learning to adjust volume for appropriate historical vocalism. As before, maintain the same quality of timbre when increasing the volume, making sure that the contemporary approach to resonance and lowered larynx singing does not interfere with the goal of sweetness and elegance.

Vibrato

Exercise 5.



* Ascend by half-steps within a comfortable range for singers.

Rationale:
1) The vibrato should be minimal and used as a goal-directed ornament, employed to "sweeten" longer notes that often may include a *messa di voce*. The squiggly line indicates a possible vibrato pattern that could be employed in this musical section (m.10-14). Based on the primary sources discussed above, the wavelength (vibration frequency) is usually longer and the amplitude (oscillation distance) slower on loud notes. "As in nature," according to Leopold Mozart, the vibrato becomes more rapid during the decay of pitch.

2) Maintain the same timbre and resonance as the vibrato increases, insisting that the tone does not become thick and heavy. Be sure to allow the vibrato to increase and decrease as a result of volume, not as a result of the manipulation of the larynx—which should remain in an un-lowered, natural position.

Exercise 6.



Rationale:
1) Same as above.

Pitch

Exercise 7.

The performing pitch of most Classical era repertoire will be decided by the instruments available for the instrumental ensemble. For example, if a Classical era orchestra is available for performance of the *Requiem*, the pitch would be determined by their tuning standards, generally a= 415 Hz. However, if a contemporary orchestra will be performing it, the conductor has few options since the clarinets (or basset horns) cannot be adjusted down.

Chapter 5

ROMANTIC ERA

Singing was a dominant factor in the cultural life of the Romantic era. Not only did opera continue to advance throughout the nineteenth century, but choral music held an increasingly higher place in the cultural landscape of the era. This fact is evidenced by the numerous amateur choral societies which were founded and which flourished during the nineteenth century. Choral societies in England, Austria, Germany, and France provided opportunities for many people to sing, as well as for compositions from such composers as Schubert, Mendelssohn, Brahms, and Bruckner. Two important examples from this time include the London Concert Choir and the Berlin Singakademie (founded in the late 18th century). The large numbers of amateur choral societies aided the establishment of choral festivals where talented choirs were showcased, adjudication took place, and new compositions were premiered.

As in previous eras, highly cultivated amateurs continued to study music privately, as well as perform in ensembles. No doubt, these amateurs were influenced by the sweeping performance trends of the Romantic era, which were often heard at the local opera house and in touring performances. In addition to the advances in instrument design (discussed below), more scientific and scholarly research into voice science affected singing in the Romantic era. Discussions of singing in primary sources became more precise, including anatomical descriptions of the vocal cords, tract, support mechanism, and acoustical phenomena not before mentioned.

While it is often assumed that vocalism changed dramatically during the Romantic era, it will be seen that composers and teachers alike advocated older

techniques of singing alongside newer techniques. For example, Rossini explicitly stated his discomfort in hearing the chest voice carried into high registers. Likewise, Manuel Garcia, father of modern vocal pedagogy, advocated the use of older vocal techniques alongside newer, more powerful ones. However, the newer vocal techniques described by Garcia are not the same as techniques employed today—especially in regards to volume. The following pages will detail how Romantic era vocalism varied from previous eras.

Timbre

There were changes in approach and attitude toward timbre in the Romantic era. Orchestral and choral ensembles outsized most of those in previous eras, and would have, therefore, been louder. Furthermore, instruments were undergoing developments which expanded their expressive ranges. Specifically, string instruments were being built with metal strings that accommodated greater tension and produced more resonance. Woodwind and brass instruments began to be produced with larger bores for louder volume capabilities, while pianos were framed with metal and fitted with heavier hammers, thus also producing a fuller tone.

Singing evolved in similar manners. One of the most easily recognized changes in nineteenth century vocal music is the classification of new categories of voices such as the *tenore robusto*, "Verdi baritone," and "dramatic soprano." The new classifications reflected society's interest for weightier, louder singing timbres. Furthermore, the ranges of voice parts in the nineteenth century became increasingly wider. These trends in vocal music correspond directly to more overt expression in Romantic art and literature, which valued the individual over the institution and passion over logic or reason. However, it

should be emphasized that, as in all historical eras, change occurred incrementally. Romantic era vocal production and resulting timbres were not so very different from those in the late Classical era. Present-day recordings that employ period instruments of the nineteenth century confirm this. Likewise, singing treatises by Garcia and other writers of the Romantic era are not too dissimilar from earlier ones. Sounds became a bit louder as the years progressed.

Gilbert-Louis Duprez's chest voice high C, in Rossini's *Guillaume Tell* in 1837, seems to be one of the first indications (or at least, most notorious) of a major change in vocal timbre. It was nearly mid-century and the accepted timbre for voices in their high register was still the light, cultivated, *voce di testa*, so valued in the Classical era. Rossini offers a poignant account of his reaction to Duprez's high C in the following quote:

> Duprez [Gilbert-Louis Duprez (1806-1896), who debuted as Arnold in Guillaume Tell in 1837 and was popular for his so-called chest tone high C] was the first one to think of chafing the Parisians' ears by disgorging in *Guillaume Tell* that chest-tone C of which I had never dreamed. Nourrit [a leading tenor at the Paris Opéra] had been satisfied with a head-tone C, which was what was required. Then, during my stay in Paris in 1837 [really 1843], just after Duprez's resounding debut in *Guillaume Tell*, the impetuous tenor came to see me to invite me to hear him at the Opéra. "You come to see me instead,:" I told him. "You will produce your C for me alone, and I'll be more than flattered." I was staying with my friend Troupenas. Duprez hastened to come. With Troupenas present, he sang for me—magnificently, I must admit—several fragments of my opera. At the approach of the "*Suivez-moi*," I experienced the kind of anxious discomfort that some people feel when they know that a cannon is about to be shot off. Finally, he burst forth with the C! Zounds, what an uproar! I rose from the piano and rushed to a virtrine filled with very delicate Venetian glass that decorated Troupenas' salon. "Nothing broken," I exclaimed, "That's wonderful!" Duprez appeared enchanted by my remark, which he took for a compliment in my style. "Well, then, Maître, tell me sincerely, does my C please you?" "Very sincerely, what pleases me most about your C is that it is over, and that I am no longer in danger of hearing it. I don't like unnatural effects. It strikes my Italian ear as having a strident timbre, like a capon squawking as its throat is slit. You are a very great artist, a true new creator of the role of Arnold. Why in the devil abase your talent by using that humbug?" "Because," Duprez answered, "Opéra

> subscribers are accustomed to it now; that C is my great success . . .” “Well, would you like an even greater success? Unload them two at a time.”[302]

Rossini was obviously not in favor of such a “squawking” timbre in the upper register. He says specifically in the quote above that what is “required” is a head tone C. Since Rossini continued to place great demands on singers with many coloratura passages in his operas, it is certain that he would have expected a vocal timbre more similar to earlier described vocalisms which favored clarity, flexibility, and sweetness.

Isaac Nathan in his *Musurgia vocalis* (1836) suggests the following about the timbre of the upper register of the voice:

> The greatest care must be paid to these remarks, in the cultivation of the higher tones of the voice: for as the natural compass of the *voce di petto*, of either denomination seldom extends beyond 8, 10 or 12 notes, all others are properly artificial, and must be assimilated to the original by the above method—any attempt to supersede which, by forcing the chest-notes, will certainly be attended by the ruin of the singer, and notes so acquired being harsh, are incapable of coloring, and liable to disappear altogether. The rule experience pronounces infallible is this: when the singer after having cultivated the lower tones, (which form the basis and give the character to his voice) arrives at the *break* or meeting of the registers *di petto* and *di testa*, let him proceed in the *feigned* voice alone; let him increase its power by swelling, and let him gradually unite it with the chest voice rather by its own enlarged volume than by any exertion of the latter—thus affected, the junction will be imperceptible, and once gained will never be lost. It is only by voices so formed, that the higher effects of the heart can be produced—or that the qualities so often lauded be realized.
>
> Many persons, who do not appreciate the beauty of a judicious management of the *falsetto*, depreciate altogether the use of it: there are undoubtedly instances where it is not to be tolerated—the indulgence of it, for example, would be against all good taste and judgment in energetic passages, such as “Sound an Alarm”—particularly if displayed upon the last word—we should in that case certainly feel but little terror at an alarm announced to us by such an effeminate sound. . . . There are innumerable instances where the falsetto may in the like

[302] Giacomo Rossini, in Shrock, *Performance Practices in the Classical Era*, 2004, 23.

> manner be exercised to great advantage; hence it is the abuse of the falsetto, not the judicious use of it that should be depreciated.[303]

Nathan praises the use of the falsetto, while at the same time suggesting that there are instances in which employing louder, fuller sounds in the top of the range are acceptable, such as the high A in "Sound an Alarm." The Rossini and Nathan illustrations paint a picture of the changing attitudes and approach toward singing timbre in the Romantic era.

Terminology

For roughly three hundred years the terminology associated with the ideal singing tone suggested lightness, flexibility, clarity, and sweetness. The Romantic era witnessed a change. Compare the following quotes by Wolfgang Amadeus Mozart and Giuseppe Verdi, written within fifty years of each other. They offer a sense of the variation in aesthetic approach to vocal production as it changed from the older, more flexible technique to the newer, more sonorous and somber technique.

W.A. Mozart, in a letter to his father, said:

> Passions, whether violent or not, must never be expressed in such a way as to excite disgust, and as music, even in the most terrible situations, must never offend the ear, but must please the hearer, or in other words must never cease to be music.[304]

Verdi, less than a half century later, said:

> Tadolini sings to perfection, and I don't wish Lady Macbeth really to *sing* at all. Tadolini was a marvelous, clear, brilliant, *powerful* voice. . . . And these two numbers (the duet between Lady Macbeth and Macbeth and the sleep-walking

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[303] Isaac Nathan, in Shrock, *Performance Practices*, 2004, 23.

[304] George Newton, *Sonority in Singing*: *An Historical Essay* (New York: Vantage Press), 96.

> scene) absolutely must not be *sung*: they must be acted and declaimed with a very *hollow voice*, *veiled*. (emphasis mine)[305]

Verdi's comments suggest that the new demands placed on singers were not entirely for the purpose of beautiful singing, but rather for expression and, therefore, variation in timbre. Notice that he uses *powerful*, *brilliant*, *hollow*, and *veiled* to describe the vocalism. Timbre—which includes the many possibilities of strong and weak emphases, bright and dark sounds, as well as the entire palate of soft and loud dynamics (discussed below)—became the most important aspect of singing and communicating extra-musical feeling in the Romantic era; this stood in contrast to the flexible displays of virtuosity and ornamentation that were so vital in previous eras. The dramatic quality and quantity of voice became more important than the beauty of production and clarity of textual declamation. This particular situation led Rossini to state, "alas, we have lost our Bel Canto."[306]

It was with some degree of frustration to listeners and writers during the Romantic era that the vocalism began to change. Henry Chorley, a renowned music critic with much influence, recollects a short history of Italian tenor singers in 1861:

> Fourteen years ago we were little used to the coarse and stentorian bawling which the Italian tenors have of late affected. The newcomer, naturally anxious to recommend himself by the arts which had delighted his own people, seemed to become more and more violent in proportion as the "sensation" failed to be excited. But he piled up the agony, forte on forte, in vain. That so much noise should be received so coolly was somewhat whimsical, bitter disappointment though it must have been to one misled by home raptures. Alas! I already look back to Signor Fraschini as a moderate, if not a temperate, Italian tenor, when

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[305] Ibid., 96.

[306] Owen Jander/Ellen T. Harris: 'Singing,' *Grove Music Online* ed. L. Macy (Accessed 5 May 2005), <http://www.grovemusic.com>

> compared with many who have since made the ears of right-minded persons suffer.[307]

While it is often tenors who are targeted with the brunt of negative comments regarding the change in vocalism from writers of the era, they were not the only singers involved in the vocal paradigm shift. All voices began to sing with more resonance, volume, and strength. Chorley also recollects a performance by a soprano who he critiques harshly:

> *Ernani* was spiritedly performed. The heroine, Mme. Rita Borio, was, in every sense of the word, a *stout* singer, with a *robust* voice—a lady not in the least afraid of the *violent* use to which the latest Italian maestro forces his heroines [referring to Verdi], but able to *scream* in time, and to *shout* with breath enough to carry through the most *animated* and *vehement* movement of those devised by him. (emphasis mine)[308]

In order to more fully explore the variation from older to newer techniques, it may also be helpful to compare accounts of a singer who was trained in the older vocal style with a singer who was advancing the new powerful vocal approach. The first account is by Earl of Mount Edcumbe in 1834. He discusses hearing Angelica Catalani, one of the most respected female singers of the time. She was known for her flexible technique and natural voice production, which made passagework simple and easy leaps accessible. He says:

> Her throat seems endued (as has been remarked by medical men) with a power of expansion and muscular motion by no means usual. . . . Its agility in divisions, running up and down the scale in semi-tones, and its compass in jumping over two octaves at once, are equally astonishing. . . . Her excessive love of ornament [spoils] every simple air.[309]

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[307] Henry Chorley, in George Newton, *Sonority in Singing*, 99.

[308] Ibid., 99.

[309] Earl Mount Edgcumbe, in George Newton, *Sonority in Singing,* 74.

The second account suggests the adoption of the new, heavier technique. Singers who employed this newer vocal mechanism could not produce the same agile *passaggi* once considered the hallmark of any accomplished singer. Henry Chorley describes the tenor Donzelli around 1825:

> He had one of the most mellifluous low tenor voices ever heard—a voice which had never by practice been made sufficiently flexible to execute Signor Rossini's operas as they are written out, but who even in this respect was accomplished and finished, if compared with the violent persons who have succeeded him in Italy, each one louder and less available than his predecessor. The volume of Donzelli's rich and sonorous voice was real, not forced. When he gave out his high notes there was no misgiving as to the peril of his blood-vessels; and hence his reign on the Italian stage was thrice as long as that of any of the worse-endowed, worse-trained folk who have since adopted the career of forcible tenors.[310]

Donzelli was obviously incapable of managing Rossini's florid passagework. However, according to Chorley, he was still more flexible than many who followed. Furthermore, Chorley's use of the term "forcible tenors" refers to the new style of extending the chest voice as high as possible, rather than shifting into falsetto or a lighter weight mixture, which had been the practice for centuries.

The terminology used to describe these performances lead the present-day performer to an understanding of the change that took place in the vocalism of singers during the Romantic era. The accepted light, lyrical vocalism evolved into a production that was more resonant, louder, and more powerful.

Physiology and Vocalism

For the first time in the history of singing, scientific and theoretical discovery affected vocal performance, practice, and pedagogy in a direct manner. For example,

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[310] Henry Chorley, *Thirty Years Musical Recollections*, in George Newton, *Sonority in Singing*, 76.

discussions of singing became more precise, including anatomical descriptions of the vocal tract and precise directions for the achievement of specific sounds.

Manuel Garcia II and August Panseron offer two of the first complete descriptions of the anatomical workings of the vocal mechanism. Panseron, in 1849, writes:

> Of all the theories that have been published on the subject of how the voice is produced, the following appears to be the most simple and rational. The air forced through the lungs at will, in breaking through the lips of the glottis, produces the sonorous undulations which are modified by the pharynx, the tongue, the lips, the internal nasal apertures, in short, by all the vocal apparatus. The production of the vocal sound and its different modifications would then be the result of the glottis being more or less open, according to the contraction or relaxation of the lips of the glottis, or vocal chords.[311]

Garcia writes in 1855:

> The inferior ligaments at the bottom of the larynx form exclusively the voice, whatever may be its register or its intensity; for they alone vibrate at the bottom of the larynx. . . . By the compressions and expansions of the air, or the successive and regular explosions which it produces in passing through the glottis, sound is produced.[312]

These definitions have changed very little, even until the present time.

The most important contributor of vocal treatises in the nineteenth century is Manuel Garcia II, who is credited with introducing phonatory anatomy and physiology into his writing and teaching. His writings, including *Traité complet de l'art du chant* (1840) and *Mémoire sur la voix humaine* (1841), detailing his observations in military hospitals in France, along with his invention of the laryngoscope in 1855, settled his position as the most important scientific singing researcher of the Romantic era. His

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[311] Brent Monahan, *The Art of Singing* (Metuchen: The Scarecrow Press, 1978), 73.

[312] Ibid., 73.

contributions provided a bedrock of research on which nearly all singing treatises that followed reflected.

As in previous centuries, writers of the Romantic era discuss the various regions of the voice, or voice registers, and continue to suggest that a smooth transition should be made between each. While there is not uniform agreement as to the exact number of registers, most writers agree that there are at least three, including chest, falsetto, and head registers.[313] Writers often suggest descending vocalization during practice in order to blend the registers and avoid "breaks" in the tone. An example of the downward practice model is illustrated in Thomas Cooke's method for blending registers, found in his *Singing Simplified* (1828):

> There is in almost every voice one note between the natural (or lower) and feigned (or upper) voices, the production of which is infinitely less certain than that of any other. . . . The best mode of blending . . . to be that of endeavoring to strengthen the note alluded to in the feigned and so to soften it in the natural voice, to accomplish which, the pupil should commence gently with that note in the feigned tone and gradually swell into the natural voice.[314]

New ground was broken in vocal pedagogy in 1840 when the *Gazette Médicale de Paris* published an article entitled, "Report on a New Kind of Singing Voice," written by two French doctors. A section of the article reads:

> The art of music has been enriched recently by a new kind of voice, whose discovery introduces a new element in the problem of phonation, and seems to be bound to bring about a fundamental change in the execution and study of singing. . . . When in 1837 a celebrated singer introduced it on our foremost lyric stage, it attracted the general attention at once, and curiosity was all the more strongly excited because this type of voice, unknown until then, was a new

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[313] See Manuel Garcia II, *Hints on Singing* (1861), in Monahan, *The Art of Singing*, 105.

[314] Thomas Cooke, *Singing Simplified* (1828), in Monahan, *The Art of Singing*, 159.

> acquisition by the artist who was using it. How had the vocal organ, previously piping and expressionless, been modified to this extent?[315]

The doctors were referring to Duprez's high C in chest voice, discussed in detail above. They go on to call the expressionless voice an "ordinary or white voice," while they call the other "darkened voice."[316] In the following year, Manuel Garcia II, in his *Traité complet sur l'Art du Chant* (1840), detailed the qualities of the techniques outlined by the French doctors, describing them as clear timbre and somber timbre.

Garcia suggests that the clear timbre gives brilliance to the chest register, while the somber timbre gives more roundness to tones in the chest register. Furthermore, he says that the singer can achieve greater volumes with the somber timbre. Garcia also points to specific operatic passages that were sung in clear timbre by an older generation of singers, including his father, Manuel Garcia I. In order to achieve the clear timbre, Garcia suggests consciously maintaining a high position of the larynx as the voice ascends. In contrast, somber timbre is achieved by lowering the larynx as the voice ascends, creating a darker, more powerful sound. Garcia goes on to say:

> The capacity of the vocal cords to vibrate, the dimensions of the larynx, the thorax, the lungs, the pharyngeal, buccal and nasal cavities, the disposition of these cavities to resonate, constitute the absolute power of the voice of an individual. . . . The singer, in order to dominate the material difficulties of his art, must have a thorough knowledge of the mechanism of all these pieces to the point of isolating or combining their action according to the need.[317]

It must be said that Garcia neither advocated a constantly lowered larynx position in

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[315] George Newton, *Sonority in Singing*, 87.

[316] Ibid., 87.

[317] Berton Coffin, *Historical Vocal Pedagogy Classics* (Metuchen: The Scarecrow Press, 1989), 24.

singing nor a predominately somber timbre. Rather, he suggested the use of both clear and somber techniques as a means of achieving dynamic possibilities, and to meet the musical demands "according to the need."

Another author of the early Romantic era who speaks on the issue of the raised larynx is Isaac Nathan in his *Musurgia Vocalis* (1836). His treatise is more backward looking than Garcia's, reflecting a similar approach to teachers such as Jean-Baptiste Bérard nearly one hundred years before. Nathan suggests:

> [The larynx] is distinctly seen rising in the production of high tones and descending in low tones. For the purpose, therefore, of effecting the greatest possible elevation of this organ, we almost involuntarily throw back the head in great efforts of singing.[318]

Writings such as those included above clearly delineate the use of two different vocalisms and suggest that earlier eras employed the clear timbre, while Romantic era singers were experimenting with the possibilities of the more powerful, somber timbre. Before Garcia's treatise, there is no treatise that discusses the use of somber timbre or one that provides directions for its achievement.[319] Interestingly, after Garcia, hardly any mention is made of clear timbre. While Garcia is not directly responsible for the practice of either vocalism, he provides a point of reference in the history of singing that looks both forward and backward, and provides insight for the understanding of earlier and later practices.

In conclusion, other scientific investigations during the Romantic era, such as those in the field of acoustics, provided discoveries that paved the way for changes in vocal timbre and resonance. For instance, as the nineteenth century progressed, the

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[318] Newton, *Sonority in Singing*, 62.

[319] Ibid., 89.

subject of resonance began to be included in singing treatises. In part, the fascination with resonance came from scientific research, especially that of Hermann Helmholtz, whose *Die Lehre von den Tonempfindungen* (1863) was the first treatise to investigate the "Singer's Formant." The singer's formant is an overtone vibration in the region of 3000 Hz, which gives the voice "ring" and carrying power. This type of resonance developed throughout the Romantic era, partly out of the necessity for singers to be heard above larger orchestras which were playing increasingly thick orchestrations.

Summary

1) The chest voice began to be employed in higher ranges with more power and volume, as opposed to earlier eras.
2) The lowered larynx voice production provided louder, more powerful and more expressive capabilities for singers.
3) Resonance, or singer's ring, began to be discussed by acousticians and implemented by performers. Louder sounds were not just louder in volume, but also greater in intensity, due to the increase in resonance.

Volume

Volume levels during the nineteenth century became louder than any previous period in history. Several reasons account for this phenomenon, including: more noise in general due to the Industrial Revolution; new approaches to vocal timbre; and larger performance ensembles and performance venues.

The levels of sound experienced by individuals in everyday life became higher and more intense throughout the century. Manufacturing and factory jobs where machines were employed became commonplace. Furthermore, steamships and railroads were common by the middle of the era, creating more background noise, as well as louder references for sound in general. Although these facts led to a widening difference in volumes of the Romantic era as compared to earlier eras, the volumes were neither as intense nor constant as the everyday noises and loud volumes experienced by the modern-era musician.

Rarely do the writings of the Romantic era offer specific volume-related suggestions. Recommendations, however, are made for the use of varied dynamics and expressive shadings in singing. For example, Louis Lablache, in his *Méthode de chant* (1860), says:

> In order to phrase well, it is not enough to comprehend and unfold the musical meaning; it is still necessary to give each phrase, to each member, a suitable coloring. Light and shade constitute the principal element of expression; and the artist who does not know how to put a variety of color into his singing will always be commonplace and cold. . . . Too much application, then, cannot be bestowed upon the facility of producing at will, forte and piano, and of passing gradually from one to another.[320]

The new lowered larynx vocalism, discussed in detail above, provided the opportunity for louder singing than had existed in previous eras. Treatises throughout the nineteenth century discuss the goal of giving power and volume to the voice. Lablache, in a discussion of *messa di voce*, says:

> The practice of scales with the swell is the most useful exercise which can be performed for good singing. By this means, one corrects the faults of the voice,

[320] Louis Lablache, in Monahan, *The Art of Singing*, 165.

> gives firmness to it, increases its power, and acquires the flexibility which is indispensable for colouring the melody.[321]

Sweet and sensitive goals began to be replaced with powerful and robust displays of virtuosity. These goals certainly carried over into the area of choral singing, allowing for greater dynamic variations and for choral ensembles to be heard in performances with large orchestral forces in increasingly larger performances spaces.

Large numbers of singers often participated in choirs during the Romantic era. Festival choirs and premieres of oratorios were important social events, and performers often numbered in the hundreds. For instance, the premiere of Hector Berlioz's *Requiem* included a chorus of 210 singers and 190 orchestral players.[322] It was possible, according to the composer, to include even more performers:

> The numbers indicated are only relative. If space permit [sic] the Chorus may be doubled or tripled and the orchestra may be proportionally increased. But in the event of an exceptionally large chorus, say 700 to 800 voices, the entire chorus should only be used for the Dies Irae, the Tuba Mirum and the Lacrymosa, the rest of the movements being restricted to 400 voices.[323]

Obviously, Berlioz considered it a distinct possibility to have an "exceptionally large chorus." He seems to indicate by his restriction to *only* 400 voices in the less dramatic movements that an average size chorus might be that large.

Richard Wagner details a performance of his *Liebesmahl der Apostel*, his only choral work, with the Dresden Glee Club:

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[321] Ibid., 170.

[322] Hector Berlioz, *New Edition of the Complete Works*, in Ronald Bruce Mayhall, "Tempo fluctuation in the Romantic era as revealed by nineteenth century sources and applied to selected choral compositions" (D.M.A. diss., University of Oklahoma, 1990).

[323] Ibid.

> When . . . twelve hundred singers from all parts of Saxony gathered around me in the Frauenkirche, where the performance took place, I was astonished at the comparatively feeble effect produced upon my ear by this colossal human tangle of sounds. The conclusion which I arrived at was that these enormous choral undertakings are folly, and I never again felt inclined to repeat the experiment. The members of the Dresden Glee Club were merchants, government officials and other professional men who displayed a not unfamiliar blend of charm and philistinism: they had more taste for any kind of convivial entertainment than for music.[324]

While twelve hundred singers seem outlandish by present-day standards, it was certainly not the largest performance account on record. A German Choral Festival in Nürnberg in 1861 climaxed in a performance of a Reichardt composition by 5,300 amateur vocalists from all across Germany.[325]

These large performance forces, growing out of the late Classical era and festival choirs performing Handel oratorios, display a divergence from the smaller, more chamber-like conception of earlier eras. Likewise, composers began to exploit the grand scale for which they could compose. The compositions that were conceived for large chorus and orchestra in the nineteenth century are many. Just a few include Beethoven's *Ninth Symphony*, Berlioz's *Requiem*, Verdi's *Requiem*, Mendelssohn's *Elijah*, and Brahms' *German Requiem*. The list could extend for several pages. These large-scale compositions, calling for hundreds of singers and players, equated to louder volumes than performances in the Classical or Baroque eras.

In addition to the growth of ensemble sizes in general, instrumental developments contributed to changes in the Romantic era concept of volume. Since choirs and

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[324] Percy Young, *The Choral Tradition* (New York: W.W. Norton and Company, 1962), 239.

[325] Theodore Albrecht, "Anton Bruckner and the Liedertafel Movement." *American Choral Review*, 22,1:12.

orchestras often performed together in large-scale compositions of the Romantic era, sound ideals evolved simultaneously. The addition of instruments such as the piccolo, english horn, contrabassoon, and new bass brass instruments, enhanced the symphonic palette of the orchestra and created highly dynamic capabilities. Modifications were also made to string instruments during the era: necks and fingerboards were lengthened, bridges heightened, and metal strings employed for the purpose of louder volumes. Likewise, pianos began to be encased by metal frames, fitted with heavier hammers, and strung with wires at greater tension, all of which allowed for wider expressive possibilities. All of these instrumental modifications would have been synthesized into the volume capabilities of choral ensembles, thereby enabling more sound production to maintain equality in performance.

These developments in instrument design and the increase in ensemble size corresponded to the development of the concert series, larger audiences, and growth in the size of performance venues. While discussing the "problems" with the state of singing in the middle of the nineteenth century, Hector Berlioz suggests that the primary issue is the excessive size of theaters. He goes on to say:

> Another consequence of the extreme size of the hall in the lyric theaters, a consequence of which I gave a glimpse a moment ago when I reminded the reader of the use of the bass drum, has been the introduction of all the auxiliary instruments of the ordinary orchestra. And this abuse carried now to its utmost limits, while it ruins the power of the orchestra itself, has contributed not a little to introducing the deplorable system of singing by exciting these singers to fight violently with the orchestra in the production of sounds.[326]

Berlioz makes an important point with regard to the balance of singers and instruments in performance together. Since it would have proven difficult for singers to

[326] Hector Berlioz, *À travers chants* (1862), in MacClintock, *Readings*, 428.

project over the sound of large orchestras, the employment of new vocalizations—including more resonance, lowered larynxes, and richer overtones (singer's formant)—were realized as much by necessity as by aesthetic ideals. However, it should be remembered that choirs were often placed in front of orchestras in these gargantuan performances. Further, it should be cautioned that singers were often criticized for constant loud singing, and praised for the use of loud singing at appropriate moments. Artistic sensibilities were not discarded simply because singers could sing louder than in previous times. These facts should assist the present-day performer in choosing a judicious use of loud and soft volumes, rather than singing at a constantly loud level.

Summary

1) The new lowered larynx vocal technique allowed for greater volume in Romantic era vocal music.
2) Larger choral ensembles, often numbering in the hundreds, most likely created louder sounds than ensembles of previous centuries. However, rather than forcing their voices above the sounds of a large orchestra, choirs were often placed in front of the orchestra to aid in maintaining an appropriate balance.

Vibrato

The terminology employed to indicate vibrato in the Romantic era was similar to earlier eras. Terms such as *tremolo*, *bebung*, *tremblement*, shake, etc. were common. Furthermore, primary sources from the Romantic era indicate an attitude toward vibrato

that was similar to earlier eras. Specifically, vibrato was considered to be an ornament to the ideal tone. The conception that more powerful, resonant singing was always accompanied by more rapid or pervasive vibrato is inaccurate. It remains that the new approach to vocal timbre (lowered larynx) did, in fact, enhance the possibility for heavier vibrato. Numerous writers, however, indicate that the vibrato should be employed as an ornamental tool, as opposed to a perpetual and concomitant element of vocalism and instrumental playing techniques.

Manuel Garcia II suggests that vibrato be used only to enhance particularly dramatic musical moments:

> The tremolo should be used only to portray the feelings which, in real life, move us profoundly: the anguish of seeing someone who is dear to us in imminent danger, the tears which certain movements of anger or of vengeance draw from us, etc. Even in these circumstances, the use of it should be regulated with taste and moderation: as soon as one exaggerates the expression or the length of it, it becomes tiresome and awkward. Outside of the special cases which we have just indicated, it is necessary to guard against altering in any way the security of the sound, for the repeated use of the tremolo makes the voice tremulous. The artist who has contracted this intolerable fault becomes incapable of phrasing any kind of sustained song. It is thus that some beautiful voices have been lost to the art.[327]

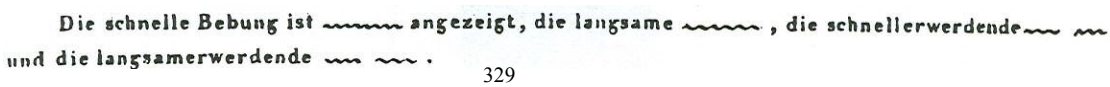
Other Romantic era writers illustrate views that were similar to those of Leopold Mozart in their writings about vibrato. For example, Louis Spohr, in his *Violinshcule* (1832), says the following:

> Additional forms of ornamentation include the Bebung (vibrato), and the changing of fingers on a single note. When a singer sings with passionate feeling or increases the power of his voice to the utmost, so we can notice a vibrating of his voice which resembles the vibration of a sharply struck bell. The violinist is able . . . to imitate this vibration. . . . The movement [of the hand], however, may not be too strong, and any variation from the purity of the note should be hardly audible to the ear. In older compositions we find the Bebung occasionally

[327] Manuel Garcia II, *A Complete Treatise on the Art of Singing*: *Part Two*, trans. and ed. Donald V. Paschke (New York: Da Capo Press, 1975), 150.

> specified by a row of dots . . . or the word tremolo. In new works its use is totally left up to the player. He should guard against using it too often or in the wrong place. It should be used only in the most passionate spots and for the powerful delineation of all notes indicated with *fz* or >. It can also be used to enliven and intensify long notes. If a note has a crescendo from piano to forte, it has a beautiful effect if the Bebung begins slowly and then speeds up in proportion to the increasing loudness. It also has a good effect to begin the Bebung fast and then gradually become slower, particularly on a loud note that ends with a dimuendo. In this way we can divide the vibrato into four types:
>
> 1. The fast type, on strongly accented notes
> 2. The slower type, on solemn notes in impassioned lyrical passages
> 3. The accelerating type on notes with a crescendo
> 4. The decelerating type on long notes with a dimuendo.
>
> The two last types are difficult and require much practice . . . to avoid a sudden jerky transition.[328]

Spohr adds a fourth variant to Leopold Mozart's three types of vibrato: the type which begins fast and then becomes slower. He characterizes the various vibrato types with wavy lines, just as Mozart did a century before:



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Spohr also discusses the use of vibrato as it relates to ensemble playing. He suggests that vibrato is an element of solo embellishment, and he insists that only when the player "has a decided solo part, and the other instruments merely accompany, can he be allowed to embellish in the ordinary manner of solo pieces."[330] Moreover, he emphasizes that the string player in the orchestra should abstain from "everything appertaining to the embellishment of solo playing which, if transferred to the orchestra,

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[328] Gärtner, *The Vibrato*, 30.

[329] Ibid., 31.

[330] Clive Brown, *Classical and Romantic Performing Practices*, 553.

would destroy all unity of performance."[331] This particular quote has direct bearing on important choral ensemble issues. It must be remembered that a great deal of Romantic era repertoire for choirs is unaccompanied and requires a highly developed sense of intonation and balance for its successful performance. As Spohr points out, excessive vibrato destroys unity.

Other writers commented that vibrato should be employed sparingly. For example, Anton Bernhard Fürstenau, the German flute virtuoso and author of *Die Kunst des Flötenspiels* (1834), discusses vibrato in the following way:

> If this technique is to be used appropriately, there has to be a sincere, self-aware, deep emotion connected with it; and it may not appear as simple superficial imitation of the voice, in which case it would be ridiculous, since an instrument in such cases can only approximate the actual charm and attraction of the human voice. By no means should it be used everywhere, even in a piece of music in which numerous places of passionate emotion occur; rather, only there where the emotion expresses itself most clearly. When there are repeated such places of this sort, then only use the vibrato for one or two places; all too easily the frequent use of this technique can appear as sickly sentimentality, and the continuous use thereof can become a miserable whining, which has, of course, a highly unpleasant effect. If the Bebung is to be aesthetically successful without fail, it must be limited to a single note, with three or four vibrating pulses only, and only on the notes which represent the culmination of the passionate feelings of the piece. A more sustained Bebung than this is difficult to carry out well; depending on the circumstances, the effect of the brief Bebung can be significantly heightened by associating it with a crescendo or sforzato.[332]

Likewise, Pierre Baillot in his *L'art du violon* (1834) prescribes vibrato for only nine notes among dozens in an excerpt by Giovanni Battista Viotti. The example is valuable because it is descriptive as well as prescriptive in its suggestion of vibrato as an

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[331] Ibid., 553.

[332] Gärtner, *The Vibrato*, 33.

ornamental practice.[333] Similarly, Charles de Bériot in his *Méthode de violin* (1858) suggests:

> Vibrato is an accomplishment with the artist who knows how to use it with effect and to abstain from it when that is necessary: but it becomes a fault when too frequently employed. This habit, involuntarily acquired, degenerates into a bad shake or nervous trembling which cannot afterwards be overcome and which produces a fatiguing monotony. The voice of the singer, like the fine quality of tone in the violinist, is impaired by this great fault. The evil is the more dangerous from the fact that it is increased by the natural emotion which takes possession of the performer when he appears in public. In artistic execution there is true emotion only when the artist gives himself up to it. . . . Whether he be singer or violinist with the artist who is governed by the desire to produce an effect, vibrato is nothing but a convulsive moment which destroys strict intonation, and thus becomes a ridiculous exaggeration. We must, then, employ vibrato only when the dramatic action compels it: but the artist should not become fond of having this dangerous quality, which he must only use with the greatest moderation.[334]

The very first tutor devoted solely to vibrato, written in 1900 by Archibald Saunders, recommends the limited use of vibrato. He suggests that "violinists should avoid its use altogether in rapid runs and bear in mind that good violin tone is possible without employment of this fascinating embellishment."[335] Likewise, Joseph Joachim (1831—1907), in his three volume violin method of 1905 says, "A tasteful violinist with healthy sensibilities will always consider the straight tone as the basic sound and only use the vibrato where the demands of the expression indicate so with an inner necessity."[336]

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[333] Mark Katz, "The Phonograph Effect: The Influence of Recording on Listener, Performer, Composer, 1900-1940" (Ph.d. Diss., University of Michigan, 1999), 118.

[334] Clive Brown, *Classical and Romantic Performing Practices*, 532.

[335] Archibald Saunders, *A Practical Course in Vibrato for Violinists* (London: Lavender Publishing, 1900), 7.

[336] Gärtner, *The Vibrato*, 36.

A fascinating study by Mark Katz in 1999, entitled "The Phonograph Effect," reveals discoveries that assist in understanding vibrato usage in the late nineteenth century. He reports that on recordings prior to 1910 "vibrato is slight, and used only to decorate melodically important notes."[337] He discusses in great detail important recordings left by two renowned violinists who performed throughout the second half of the nineteenth century: Joseph Joachim and Pablo de Saraste.

> Joachim was considered serious, profound, intellectual, and one for whom technical matters were merely a means to artistic ennoblement. Sarasate was admired for his elegance, suavity, his "silken" or "silvery" tone and perfection of technique. Yet for all their differences, they shared a conservative approach to vibrato.
>
> Joachim preached against the overuse of the technique [vibrato], and we can hear that he followed his own advice. In his 1903 recording of the Adagio from Bach's Sonata in G minor he vibrates slightly on some of the sustained tones and applies a few quick shakes to some of the highest notes in each phrase, but most of even the longer notes are played straight. While a more lively vibrato might be expected from his performances of Romantic music, the old style prevails on his 1903 disc of Brahms's Hungarian Dance No.1. In the first 24 measures he vibrates infrequently and often for only a fraction of a note's duration. Vibrato did not define Joachim's sound; it was a means to various ends, whether to distinguish repeated pitches or to intensify the high point of a melody.[338]

Katz goes on to say:

> Most violinists perform Sarasate's often intensely expressive works with a generous vibrato. Yet this approach departs from Sarasate's own practice. On a 1904 recording of his Zigeunerweisen he plays the dramatic opening phrase with almost no vibrato, something no modern violinist would do. Over the whole of the work he adds a few quick bursts to relatively short notes, applying a slower, wavering vibration to some of the longer ones. Though he tends to vibrate a bit more than Joachim, he too plays whole phrases straight, frequently using vibrato on only a portion of a note. Moreover, Sarasate occasionally plays long, high notes without a hint of vibrato, even when contemporary taste would have

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[337] Mark Katz, "The Phonograph Effect," 121.

[338] Ibid., 122.

allowed some vibration. Perhaps he cultivated this practice to highlight the purity of his tone.[339]

Katz's research indicates that persistent use of vibrato in violin playing did not begin to take place until the 1920s. Although his research deals specifically with violin vibrato, vocal vibrato likely followed a similar trend; all evidence from the numerous and varied sources from throughout the era indicate a similar evolution. Early twentieth-century recordings of singers reveal a consistent pattern. For example, recordings of Adelina Patti, an international opera icon, reveal an approach to vibrato consistent with that of the violinists just mentioned. Likewise, the recordings support the statements by Verdi in 1877, which praise her as "an artist by nature, so perfect that perhaps there has never been her equal. [She has] a marvelous voice, a very pure style of singing . . . with a charm and naturalness which no one else has."[340] Furthermore, she was commended by Alberto Bach in 1883 for her "judicious refusal to sing with vibrato, despite the growing trend."[341] Finally, other recordings of famous opera singers from the late 19th century, such as Fernando de Lucia and Gemma Bellincioni, suggest that the vibrato was quicker and narrower than present day manifestations of vibrato, and were generally not employed pervasively on every pitch.[342]

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[339] Ibid., 122.

[340] Giuseppe Verdi, in J.F. Cone, *Adelina Patti Queen of Hearts*, (Portland: Amadeus Press, 1993), 129.

[341] Howard Mayer Brown, *Performance Practice After 1600*, 453.

[342] Ibid., 453.

Summary

1) Vibrato continued to be seen as an ornament throughout the Romantic era, employed for particularly dramatic moments.
2) The new, lowered larynx vocal technique that became prevalent in the Romantic era allowed for more vibrato than in previous eras. However, written resources and recorded evidence demonstrate that narrower and less frequent vibrato was employed in the nineteenth century as compared to the present day.

Pitch

Standards of pitch during the Romantic era began to approximate those of the present day. Unlike earlier centuries, when a short travel between performance venues might have meant a variation in pitch levels up to a minor third, depending upon the location, nineteenth century performers began to experience some standardization in performance pitch levels. Variations were usually less than a quarter step between performance venues throughout Europe. This is evidenced by research which indicates that, with the exception of various older organs, pitch standards began to approach today's standard of a1= 440 Hz by the middle of the nineteenth century. Woodwind instruments from the era indicate that instrument makers from France, Italy, Germany, and England, predominately pitched their instruments between a1= 420 Hz and a1= 445 Hz in the early part of the century, with an evolution towards standardization of a1= 435

to a1= 445 during the second half of the century. [343]

Pitch, in general, rose during the first quarter of the nineteenth century. For instance, since the rise of pitch in use at the Paris Opéra became unbearable to some singers around 1825, leading to the "premature loss of their talent,"[344] the pitch was lowered to what was thought to be standard around the year 1780. Based on tuning forks and instruments made during the earlier period, the performance standard was set at around a1= 413. After much money was spent on older, lower instruments (called by one German writer "an expensive semitone!"),[345] the pitch was raised to its previous level of a1= 434 within four years. It remained at this level for the rest of the era.

The variations in performance pitch caused concern to musicians of the time. "In an age that valued standards and universality, keystones of the Industrial Revolution,"[346] pitch standardization became a primary goal throughout Europe. As a result, international deliberations took place to discuss pitch in 1834, 1858, 1862, and 1885.

Germany organized the first Congress to discuss the standardization of pitch. Headed by J.H. Scheibler, who had invented a pitch measuring device that consisted of 52 tuning forks calibrated 4 Hz apart, the Stuttgart meetings resulted in a proposal for the standardization of pitch at a1= 440 Hz.[347] This level was chosen because it was the mean

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[343] Bruce Haynes, *A History of Performing Pitch: The Story of "A"* (Lanham: The Scarecrow Press, 2002), 326.

[344] Ibid., 330.

[345] Ibid., 332.

[346] Ibid., 344.

[347] Ibid., 349.

pitch of Viennese grand pianos of the time. The French Commission, appointed by the French government to establish a uniform musical pitch in 1858, found that tuning forks from throughout Europe averaged around a1= 445 Hz. The French deliberations resulted in a standard pitch called the *diapason normal*, often called French Pitch: a1= 435 Hz. In theory, the diapason normal became the standard for most performance ensembles throughout Europe in the latter part of the Romantic era. In practice, however, performing pitch continued to fluctuate moderately, sometimes lower, but usually higher than a1= 435 Hz. Vienna's Pitch Conference in 1885 included representatives from various countries, and reaffirmed France's diapason normal as Europe's pitch standard. Furthermore, the conference suggested the use of a mechanical device instead of the traditional oboe "A" for ensemble tuning.[348]

Even with nationally sanctioned meetings to determine pitch standards, some problems persisted. For example, Julius Stockhausen wrote Ferdinand Hiller in Cologne, complaining that other conductors had not yet lowered their pitches to the diapason normal as Cologne had done in 1860. He refused to sing with other orchestras, preferring to tune the piano to his choice of pitch, because the orchestras were pitched too high.[349] Likewise in Italy, Verdi complained:

> Don't you remember the strong opposition presented by the whole orchestra and by the two chief conductors two years ago, when I proposed adopting the normal diapason [pitch] of Paris? And oddly enough, to come to an agreement with me they proposed splitting the difference, which was the most absurd thing in the world.[350]

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[348] Ibid., 352.

[349] Ibid., 354.

[350] Giuseppi Verdi, "Letter to Cesarino De Sanctis," (1871), in Ruth Halle Rowen, *Music Through Sources and Documents*, 273.

While these quotes indicate that there were still minor fluctuations in pitch from region to region and venue to venue, Romantic musicians began to appreciate more stabilized pitch levels than had occurred at any time in the history of music.

Summary

1) The pitch at which composers wrote compositions began to connote more precisely the pitch at which they should be performed, as opposed to earlier times when the written pitch and performance pitch often varied widely.
2) Pitch fluctuated between a1= 420-445 Hz, generally a1= 435-440 Hz.
3) Since some variation in pitch standards did exist, performers are at liberty to adjust the pitch within a half-step up or down to accommodate successful performance. While this is more difficult in accompanied works, it is especially useful in the performance of unaccompanied choral music from the era—allowing an ensemble to discover the key that best suits the vocal ranges of singers as well as the character of the music.

Warm-ups

The following warm-ups are derived from Johannes Brahms' *Verlorene Jugend*, op.104, no. 4. The part song is a setting of a Bohemian poem by August Wenzig. The overall affect of the poem is dark, as the speaker laments his fleeting life and questions why he did not savor the days of his youth. Brahms clearly delineates the change in character between the first statement questioning "where have the days gone so soon," which is in D minor, and the second statement, which so sweetly recalls "youth, precious youth," in D Major. The vocal character of the choir should respond to the dramatic nature of Brahms' musical setting.

Figure 5.1 ***Verlorene Jugend*** **(Johannes Brahms)**



Translation:
They raged on the mountains, stormed around the forest—
Days of my youth, where have they gone so soon?

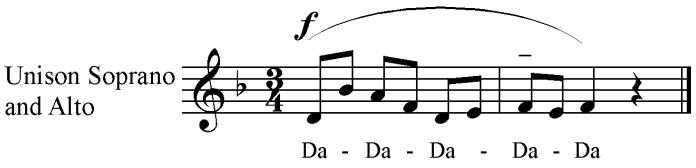
Youth, precious youth has fled away.
O sweet youth, how careless I was!

I lost you, unfortunately, like a stone
someone tosses away into the torrent.

Even though the stone may turn around in the deep stream,
I know that youth does not do the same.

Timbre

Exercise 1.



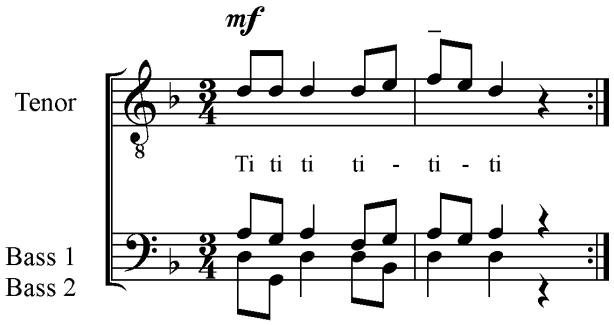
* Ascend by half-steps within a comfortable range for singers.

Rationale:
1) Sopranos and altos begin this part song with a duet over the steady rhythmic and harmonic underpinnings of the men's voices. Sopranos and altos should strive to achieve the same rich timbre in this exercise. This exercise should employ resonance and volume, with limited vibrato, enough to distinguish the solo parts from the men's parts, with energy that conveys the "rage" of the text.

2) Be sure that the phrase does not become pedantic and choppy. Rather, it should be energetic and resonant, always within the confines of Brahms' melodic phrase shape. *Tenuto* markings have been placed in the exercise to assist in identifying arrival points within the overall phrase shape.

3) The conductor should listen for pure, consistent, and matching vowels throughout the exercise.

Exercise 2.



[repeat on all vowels i e a o u]

Rationale:

1) The men's parts at the beginning of *Verlorene Jugend* are relegated to an accompanying role. The timbre of their voices should be somewhat less resonant, bright, and ringing than the women's parts. The timbre should, however, be consistent amongst the men's parts. The short chordal exercise provides an opportunity to focus on listening for matching timbres.

2) The exploded [T] preceding each vowel should enhance the clarity of each chord. The attack should begin precisely at the same time in each voice part. This improves diction as well as tuning.

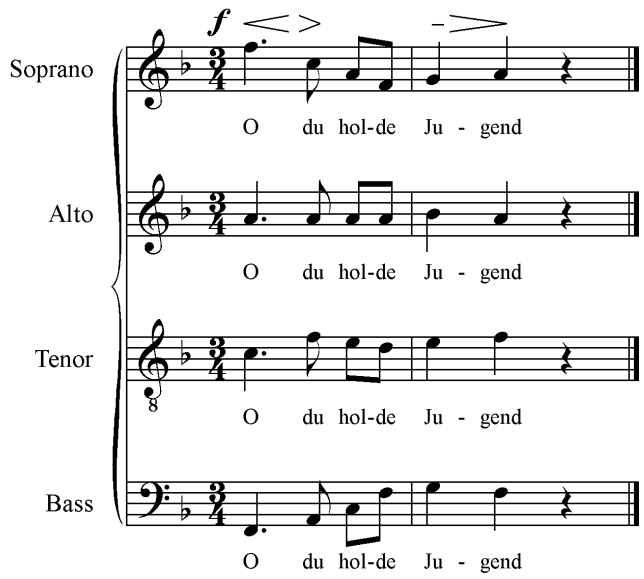
Volume

Exercise 3.



Rationale:
1) This exercise should be sung in a very homogeneous and blended manner. The timbre should be consistent amongst all voices, with less resonance and volume than the first two exercises. The musical material is drawn from measure 12 of the composition. At this point, all voices enter together for the first time. Furthermore, the style is now strictly homophonic and in D major, reflecting a sentimental and pensive remembrance of earlier times.

Exercise 4.



Rationale:
1) The *forte* dynamic that begins this exercise should be sung with a rounded, supported, vibrant tone. Since it is not the climax of the phrase, however, it should not receive the most weight. The first syllable of the word "Jugend" should receive the most weight.

2) *Messa di voce* was still a very important element of volume expression in the Romantic era. Any note sustained longer than an eighth note would likely have received some type of *messa di voce* treatment, especially in a slow tempo. Work for consistency between individual voices in each *messa di voce*. Also, consider the context of each messa di voce, or where they are located in the phrase, in order to determine the appropriate amount of crescendo and decrescendo. Finally, during the crescendo, some degree of resonance can be employed. Strive for the achievement of the same resonance in each voice part in order to maintain balance between individual voices and sections.

Vibrato

Exercise 5.



* Ascend by half-steps within a comfortable range for singers.

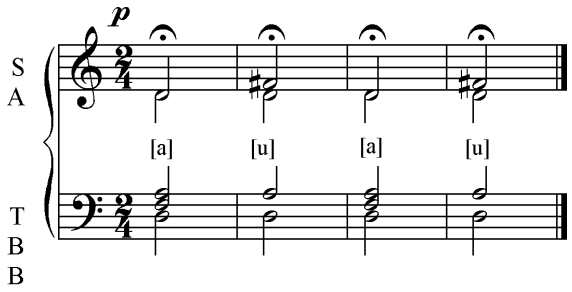
Rationale:
1) Based on the primary sources discussed above, the vibrato should be performed as a goal-directed ornament, employed to enhance longer notes that often may include a *messa di voce*. The squiggly line indicates a possible vibrato pattern that could be employed in this musical example.

Exercise 6.

1) Repeat the exercise above at varying volume levels, experimenting with the various amounts of vibrato that may be employed. The vibrato should, like volume, be sung in context. For example, in a loud musical passage, there will likely be more vibrato than in a soft passage. If a conductor chooses to accept excessive vibrato from the ensemble, it will be difficult to hear the appropriate phrase shape take form.

Pitch

Exercise 7.



Rationale:
1) This exercise addresses the tuning issues that may be encountered in measures 11/12. Although only the baritone and soprano parts move, the sonority change is of great importance. Any tuning problems may be solved before the rehearsal of the repertoire begins.

2) Be sure that the D major chord tunes immediately on the attack of the pitch. Ask the singers to think the new sonority before singing the chord.

3) Notice that the exercise is marked *piano*. When rehearsing for tuning purposes it is nearly always beneficial to rehearse quietly. Ears and minds are more engaged at softer dynamic levels.

Exercise 8.

Since *Verlorene Jugend* is not part of a larger cycle, the pitch may be adjusted slightly up or down. For instance, if it is found that D minor is not tuning well for the choir, it may be decided to attempt the piece in adjacent half-step key areas. Furthermore, it may be that the best pitch is *between* adjacent half-step key areas.

Chapter 6

CONTEMPORARY ERA

The Contemporary era has witnessed more change at a more rapid pace than past eras. An age of rapid communication, travel, and commerce, the "information age" has flourished with technological advances in nearly every field. Technology has affected musicians of the Contemporary era in ways quite unlike past eras. In a very fundamental way, history has become easier to record. For example, Contemporary era composers have been able to document performance practice beyond written accounts alone. Performers can actually hear the intentions of modern-day composers through many media, including computerized, digital, tape, and record form. No such aid to performance practices existed prior to the twentieth century. Furthermore, recordings have become a device relied upon heavily by performers, both as an aid to learning, as well as an aid to hearing performance practices of performers and composers from within the era. The widespread availability of recording devices and recordings has also made it possible for musicians worldwide to experience performances from various regions of the globe. As a result, audience and listener expectations have evolved. For instance, performers at the beginning of the twentieth century sought to convey a general impression of a composition to an audience that might rarely have heard the composition again. Increasingly higher standards of competence and accuracy came to be expected by audiences and performers in later years of the era, expectations enhanced by the development of sophisticated recording and editing techniques.[351]

[351] Robert Philip: 'Performing Practice,' *Grove Music Online* ed. L. Macy (Accessed 1 July 2005), <http://www.grovemusic.com>

Inquiry into scientific principles discovered about singing during the nineteenth century has become standard practice by performers and teachers in present times. Every conceivable component of singing has received scholarly investigation, resulting in treatises on breathing, resonance, vibrato, timbre, expression, and a host of other topics. Singing pedagogies throughout the era have often been based on scientific research—if not directly, indirectly—due to continuing research into acoustics and voice science. These advances have made singers, in general, more knowledgeable about their instruments than singers of past eras.

Another development that has taken place during the Contemporary era is an ever widening gap between "classical" music and "popular" music forms. This schism has been precipitated in part by technology, including amplified sound, the recording industry, and mass media. In general, vocal trends of classical singers during the Contemporary era have continued to develop as an extension of nineteenth century practices, while singers of popular genres such as rock, jazz, folk, and gospel music have developed different techniques, many aided by electronic amplification. In addition, world music and multi-cultural studies have broadened the possibilities of vocal practices. That is not to say that classical singing has remained confined to traditional practices. For instance, many *avante garde* compositions call for *sprechstimme* (speak-singing), controlled shouts, and screams. Some recent compositions even call for at-will overtone singing.

Choral ensembles have varied considerably in their approach to vocalism in the Contemporary era. From straight-tone traditions to rich, sonorous, soloistic choral singing, choirs during the first fifty years of the era were often distinguished by a distinct

"sound," or choral tone. This is in contrast with the past, since sources from previous centuries do not reveal that individual choirs were identified by a distinct sound, recognizable from other ensembles. In more recent years, however, choral tone has become more similar than dissimilar, with choirs often singing with comparable timbral characteristics. This is due, at least in part, to more standardization in voice pedagogy, the availability of recordings, growing national choral organizations (such as the American Choral Directors Association, Chorus America, and the International Federation of Choral Music), and simplified global communications and travel. The amalgamation of choral tone is not entirely a positive trend. While the overall ability levels of choirs may be improving in modern times, an employment of appropriate historical vocalism is often found lacking in performances of varied historical repertoire.

Timbre

Contemporary era trends in timbral production among classical musicians have followed the path begun in the nineteenth century. Louder, heavier, and more resonant production has become the dominant characteristic of instrumental and singing timbres, with the exception of the few specialized early music ensembles and soloists that have become part of the musical fabric of modern times. Most teachers of singing in current times teach a lowered larynx vocal production that encourages great amounts of resonance, volume, and vibrato. Furthermore, changes in attitude during the early twentieth century gave way to vibrato being considered a standard element of timbre. This is in direct contrast to centuries of thought that distinguished vibrato as an element of expression.

Modifications in instrument design during the Contemporary era have provided for greater resonance and volume in solo and ensemble playing. For example, in the early part of the twentieth century, string players began employing all metal strings in order to increase volume and resonance from their instruments, albeit with some advantages in responsiveness and more stable tuning. Metal flutes became the norm, replacing wooden flutes except in authentic period performances. Furthermore, brass instruments continue to be developed with wider bores, capable of producing extremely loud volumes. Likewise, pianos, in contrast to their nineteenth century cousins, have become powerful instruments capable of symphonic volumes, rich with color and brightness.

Terminology

Writings about singing during the Contemporary era reveal that timbral ideals are similar to those established in the late nineteenth century. Resonance, volume, power, and equality of registers have been goals of most voice teachers throughout the era. The general trend has been for singers to develop richer, darker, louder, and more dramatic voices.

These dramatic timbres have catered to audiences that expect increasingly more direct and exaggerated stimuli for entertainment. Telephone, television, radio, and, in more recent years, computers have provided listeners more control of their entertainment sources. Trends seem to indicate that bigger, louder, and more dramatic sounds appeal to the majority of consumers.

Physiology and Vocalism

Physiological function of the vocal mechanism and vocal health have been at the forefront of Contemporary era singing research. Numerous sources indicate that good singing is not only achieving an appropriate aural aesthetic, but that it is equally important for singers to acquire the physiological and scientific understanding to replicate the desired vocal timbre as an automatic reflex. For example, the preface to Frank Miller's *Vocal Art-Science and Its Application* (1917) states, "neither art nor science alone suffices, but that art must be achieved through strict adherence to scientific rules."[352] Pasqual Marafioti goes further in his *New Art of Singing* (1925), suggesting,

> Every art has its origin, to a greater or less degree, in some science. . . . There can be no voice without a functioning vocal apparatus, the physiological activity of which gives origin not only to the voice, but to the correct mechanism of its production, which establishes the scientific foundation of singing.[353]

These continuing scientific investigations build upon foundations laid by early voice scientists such as Manuel Garcia II[354] and Hermann Helmholtz.[355]

As a continuance of trends from the late nineteenth century, many voice teachers in the Contemporary era have taught and are teaching students to employ a lowered larynx technique as the only healthy vocal production. This pedagogy values rich, sonorous, and loud timbres. While common, this pedagogical approach is generally employed without regard for the era in which the performance repertoire was composed.

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[352] Brent Monahan, *The Art of Singing: A Compendium of Thoughts on Singing Published Between 1777 and 1927* (Metuchen: The Scarecrow Press, 1978), 15.

[353] Ibid., 15.

[354] See Chapter 5 for a full discussion.

[355] See Chapter 5 for a full discussion.

Numerous examples of this lowered larynx approach exist in the literature. For example, Giovanni Battista Lamperti (1905) opposes a high larynx vocal production, saying, "when the larynx is held high, the pharynx is unduly contracted, and the so-called 'throaty' tone results."[356] David Taylor, an early twentieth century American voice teacher, suggests:

> Only one muscular action has ever been defined by which the throat might be "opened." That is, the lowering of the larynx and the raising of the soft palate. . . . The power of the voice is developed by singing with the larynx low in the throat.[357]

Nearly eighty years later, most voice teachers use the same imagery and terminology to teach their students: openness in the throat, with the soft palate raised, encourages a lowered larynx position. Richard Miller, author of *The Structure of Singing* (1996), provides a thoroughly detailed discussion of the larynx and its myriad parts. His seventeen-page description of the larynx is evidence of the scientific method that has continued to evolve in the field of singing.[358] Although the research is more thorough, naming all the component parts of the larynx, it acknowledges the same basic concepts for achieving a "healthy" and "acceptable" timbre as Taylor eighty years before.

As the lowered larynx position has become a standard pedagogical focus, so too has the idea that vibrato (discussed in detail below) and resonance are concomitant elements of timbre. Once viewed as a means of expression, the Contemporary era has come to view these elements as quality determinants in timbral production. For example,

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[356] Monahan, *The Art of Singing*, 91.

[357] Ibid., 91.

[358] Richard Miller, *The Structure of Singing: System and Art in Vocal Technique* (New York: Schirmer Books, 1996), 241-258.

Floyd Muckey, in *The Natural Method of Voice Production in Speech and Song* (1915) suggests:

> Resonance is the most important factor in voice production. It furnishes to the voice volume and quality, and emphasizes its loudness. To rely on resonance rather than on force is essential for producing a big and pleasing voice.[359]

Likewise, Thomas Fillebrown in *Resonance in Singing and Speaking* (1911) says, "The quality of tone depends on the form of the vibrations . . . and to give it some special quality, is the work of the resonator."[360] He continues, saying,

> The vocal cords alone cannot make music any more than can the lips of the cornet player apart from his instrument. The tone produced by the vibrations alone of the two very small bands must, in the nature of things, be very feeble.[361]

William Vennard, in his landmark vocal pedagogy book, *Singing: The Mechanism and the Technic*,[362] includes an entire chapter on resonance. Several concepts that are important to most current voice pedagogies are clearly described in this chapter, including: the singer's formant, the open throat, and the lowered larynx. Of these concepts, Vennard spends the majority of his discussion on the lowered larynx. He asserts:

> In most animals, and in most untrained singers, phonation is always initiated with a general tightening process and an elevation of the larynx. . . . But the tone produced is poor. . . . Studies of professional singers (Frommhold, Hoppe, Husson, Ruth) show that they keep their voice boxes low and near the backbone.[363]

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[359] Monahan, *The Art of Singing*, 104.

[360] Ibid., 104.

[361] Ibid., 104.

[362] William Vennard, *Singing: The Mechanism and the Technic* (New York, Carl Fischer, Inc., 1967).

[363] Vennard, *Singing*, 108.

He also suggests that the larynx must remain low, with the student "conscious of its position, because it is a clear indication of how nearly the intrinsic musculature has achieved independence of the extrinsic."[364] Vennard's concepts of vocal physiology and vocalism have been held as standards among vocal pedagogues for the last fifty years.

Choral Timbre

Timbre in choral ensembles has been greatly influenced by the general trends of vocal pedagogy and scientific research, especially in recent times. Stephen Hart, in a study of recurrent trends in conducting textbooks from 1939 to 1995, discusses various approaches to choral timbre. He suggests that the writers are divided into two groups: those who focus on the development of solo singers in the choral ensemble and those who focus on the development of the choral "instrument." Those who are focused on the development of solo singers recommend a full, resonant, rich voice production—akin to Contemporary era voice teacher approaches. Conversely, those who focus on the development of the choral instrument are most concerned with blend and balance, which is often achieved by employing less vibrato and singing with diminished volume and resonance.

Chapter one of the present study[365] outlined six schools of choral singing identified by Howard Swan in *Choral Conducting: A Symposium*[366]. Two of the choirs

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[364] Ibid., 109.

[365] See Chapter One, 3-6.

[366] Harold A. Decker and Julius Herford, *Choral Conducting Symposium*, 2nd ed. (Englewood Cliffs, N.J.: Prentice Hall, 1988).

discussed by Swan represent the two approaches to choral timbres suggested by Hart in his research: Westminster Choir College and St. Olaf choirs. Both choirs were extremely influential in the 1930s and 40s. John Finley Williamson, the conductor of the Westminster Choir, required choir members to sing with a full, rich, and resonant production, allowing a choir of soloists to develop their full singing potential. Conversely, F. Melius Christiansen, director of St. Olaf choirs, strove for straight tone singing in order to achieve masterful blend and balance in the performance of a cappella choral music.

These two ensembles epitomize the approach to choral timbre in the Contemporary era. Rather than flexibly adjusting ensemble timbre to meet the demands of varied historical repertoire, many conductors have insisted on a tone that meets their aesthetic preconceptions for beautiful choral singing. For example, choral conducting textbooks have acknowledged a dichotomy between many conductors' intentions and composers' intentions.[367] Some conductors view the printed score as an object that must be correctly presented—as the composer intended—while others believe composers' ideas must be interpreted freely, allowing for free artistic license and individual expression.

Brock McElheran, in *Conducting Technique* (1966), suggests that interpretation can be viewed as a continuum between historical objectivity and modern subjectivity. He lists seven points on the scale:

1. Re-create conditions of first performance as accurately as possible.

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[367] Stephen Hart, *Evolution of Thought and Recurrent Ideas in Choral Conducting Books and Secondary Music Education Texts Published in English from 1939 to 1995* (Ph.D. Dissertation, University of Colorado, 1996), 8.

2. Re-create a performance the composer probably would have considered ideal in his own day.
3. Follow composer's intentions where practical—harpsichord if available, but modern bow, vibrato, etc.
4. Give the type of performance you feel the composer would have wanted if he had had your group and hall.
5. Give the type of performance you feel the composer would want if he were alive today.
6. Use your musicological knowledge to decide what the composer probably wanted, and select or reject his ideas at will in building your own performance.
7. Use the printed notes as a source material for your own creative ability, using full modern resources.[368]

Writings prior to McElheran suggest the adoption of one philosophical approach or the other. However, McElheran contends that artistic success can be achieved by approaching the process from different points on the philosophical continuum, depending upon conductors' individual biases. By and large, McElheran's contention has survived until the present day. Choral timbre is sometimes approached as an element of performance practice, depending upon a conductor's understanding of musicology, and at other times as an element of interpretation and artistic license. However, the latter is the more prevalent practice.

Summary

1) More resonance, volume, and richness have characterized singing and instrumental timbres in the Contemporary era. The lowered larynx approach to singing has been codified by numerous writers, and has become embedded in the pedagogical approach of most voice teachers.

[368] Brock McElheran, *Conducting Technique* (London: Oxford University Press, 1966), 102.

2) Two approaches to choral timbre have been evidenced: the goal of achieving individual singers' vocal progress and the goal of achieving musical mastery via the "choral instrument."

Volume

Volumes within the Contemporary era have grown to very loud levels. These volumes are generally unrelated to the era in which the performance repertoire was composed; it is common for music from every era to be performed with a similar volume. This phenomenon is indirectly a result of technological advances in amplification, recording, and mass media. For example, it has only been within the past one hundred years that individual listeners could control the volume at which they hear recorded performances. This direct control on volume levels of recordings seems to have had an effect on the acceptable volume levels in public performance. Since amplification and direct control of recordings was unavailable in past eras, listeners were unaware of the possibilities to which volume extremes could be taken. That is to say, psychologically, the Contemporary era mindset has often proved to be one of extremes.

In addition to the influence that the technologies of amplification, recordings, and mass media have had on volume levels in the Contemporary era, advances in transportation and communication have also impacted ambient noise levels to a great degree. For instance, noise pollution is everywhere. Since the 1960s investigators have been studying the dangers of noise pollution from traffic, airplanes, industry, railroads, construction, and numerous consumer products. These studies have resulted in

widespread legislation to decrease noise pollution, especially from airplane and highway traffic. Despite these efforts, noise seems to grow exponentially from year to year.

These increases in ambient noise levels affect the psychological expectations of musical audiences and performers in subconscious, but very real, ways. For example, listeners are so desensitized to sound that it is often difficult for them to focus for any length of time during concerts. Likewise, this desensitization is evident when adjustments in volume do not achieve a desired psychological effect such as surprise, passion, or energy.

The question is sometimes raised in musical circles: are the extreme volumes of the past century attributed to composers or performers? It is true that composers within the past one hundred fifty years began employing the use of extreme dynamic ranges, such as *ffff* and *pppp*, to more accurately convey musical expression. One reason for the employment of these extreme dynamics is the fact that performers, with advances in instrument making and playing/singing techniques, have become capable of more volume. More importantly, greater ranges in dynamics were used to create greater expression—one of the hallmarks of the Romantic era. Composers from the Baroque era, conversely, were satisfied with a single *p* or *f*, if at all, in part because they understood the limitations of instruments for which they were composing. Furthermore, it was the convention of the time to leave expressive dynamics to performers. And, to be sure, the levels of the *piano* and *forte* of the Baroque were worlds removed from today's conception of the same dynamic markings.

One illustration of the extreme levels of volume in the present-day orchestra is

found in a recent New York Times article.[369] James Oestreich details the numerous harmful effects of extreme volume levels at which orchestra members must often perform. General research concludes that sound at the level of 85 decibels can cause some hearing damage, while prolonged exposure is certain to cause hearing loss. According to Oestreich, a typical orchestra frequently plays in the 90 to 100 decibel range, and certain brass and percussion instruments can play as loud as 130 to 140 decibels. Plexiglass screens and structural risers have been implemented in numerous orchestras to protect those players nearest those instruments that play at such extreme levels. Recently, in the adoption of more stringent control of outlandish volumes, the European Union imposed a regulation to limit the exposure of orchestral players to an average of 87 decibels per week.[370]

While Contemporary era performance practices of orchestras and choirs have tended to err on the loud side of things—often in an attempt to meet audience expectations—it is certain that not all composers have intended their music to be performed at such extremes. Various musical movements within the Contemporary era have espoused certain aesthetic values that imply a softer volume level. For example, music of Impressionistic and Neo-Classic styles call for softer volumes than music of Expressionistic or Neo-Romantic styles. Also, different compositions by a single composer call for varied approaches to volume. Stravinsky's *The Rite of Spring* is very different than the *Mass* in this respect. Dynamic markings in Contemporary era scores give more guidance than markings from past eras. However, the markings must be

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[369] James Oestreich, "The Shushing of the Symphony," *The New York Times*, 11 (January 2004): 1.

[370] Ibid, 1.

considered in the context of the entire composition and what is known about the compositional/performance trends of the composer.

It is equally important for contemporary performers to realize the difference between the levels that have been achieved in the past one hundred years and the volume levels of previous centuries. Music from the Renaissance should be performed at a volume level considerably softer than much of the music from contemporary times. Volume ranges are considerable today and performances vary from quite soft to those that are quite loud. Some modern-day works clearly call for a Romantic era conception of volume, while others call for a clearly restrained approach. While there are few specific writings to be found in Contemporary era sources concerning volume, it is certain that volume should be carefully considered in an informed, historically guided interpretation.

Summary

1) Volume levels have reached extreme levels during the last one hundred years, due in part to instrument design, ambient noise levels, increased technology, the recording industry, amplification, and consumers' direct control of mass media.
2) Volume levels of performing ensembles do not always accurately reflect the intentions of composers. Rather, volumes are generally performed loudly in order to achieve the level of psychological expectation that consumers have come to expect. Discernment concerning the compositional style and era of the performance repertoire should be employed in order to achieve a historically guided approach to volume.

Vibrato

Sources from throughout the Contemporary era reveal an evolving attitude toward vibrato. Many writers from the first several decades of the twentieth century indicate that vibrato was viewed as an element of expression. Sources frequently recommend that singers and instrumentalists employ a judicious use of the ornament. Consider the following quotes.

Jane Rush, *The Human Voice* (1900):

> The presence of the tremulous voice is for the purpose of emotional expression. The tremor of the second and wider intervals, expresses states of exultation, mirth, pride haughtiness, sneer, derision and contempt. The tremor of a semitone expresses suffering, grief, tenderness and supplication.[371]

James Winram, "Violin Playing and Violin Adjustment" (1908):

> [Vibrato] should be judiciously used at all times, as it is quite possible to have too much of a good thing. Beethoven's music will sound lovely with very little close shake, or if preferred with none at all; whereas Wagner's will gain rather than lose by its introduction. The character of the music must be taken into consideration, and good taste will surely be sufficient guide.[372]

Anonymous British Author, "The Everlasting Vibrato" (1908):

> [The vibrato is a] lovely adjunct to the violinist's equipment. [Objecting to its overuse, he described the hands of violinists] like jelly on a plate of a nervous waiter.[373]

Henry Stuart Kirkland, *Expression in Singing* (1916):

> As a general rule, pure tone should be used but there are emotions for the expression of which pure tone seems inadequate, and often inappropriate. Those

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[371] Jacob Kwalwasser, "The Vibrato," in *Contributions of Voice Research to Singing*, ed. John Large (Houston: College-Hill Press, 1980), 224.

[372] Clive Brown, *Performing Practice*, 533.

[373] Anonymous, "The Everlasting Vibrato," *Strad* 17 in Katz, *The Phonograph Effect*, 199

emotions are more clearly suggested, more strongly impressed on the hearer by a quality more or less breathy, because the actual experiencing of these feelings induces such a quality in speech. In many passages indicative of eagerness, surprise, apprehension, dread and terror this will be found true.[374]

Eugene Gruenberg, *Violin Teaching and Violin Study* (1919):

Many players make a totally unwarranted use of the vibrato, inasmuch as they keep it up uninterruptedly.[375]

Leopold Auer, *Violin Playing as I Teach It* (1921):

The excessive use of vibrato is a habit for which I have no tolerance, and I always fight against it when I observe it in my pupils—though often, I must admit, without success.[376]

Thomas Edison, *American Magazine* (1921):

The number of waves varies from two to twelve per second. When at the latter rate, the chitterlings can just be heard and are not very objectionable. If this defect could be eliminated, nothing would exceed the beauty of the human voice, but until this is done, there will only be a few singers in a century who can emit pure notes in all registers.[377]

Luisa Tetrazzini, *How to Sing* (1923):

I am not going to attempt a catalogue of all faults which are possible, but name just a few: faulty intonation, faulty phrasing, imperfectly attacking notes, scooping up to notes, digging or arriving at a note from a semitone beneath it, singing out of tune and the tremolo. All of these faults are unforgivable, but the last two are crimes.[378]

Lilli Lehman, *How to Sing* (1924):

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[374] Jacob Kwalwasser, "The Vibrato," 224.

[375] Katz, *The Phonograph Effect*, 120.

[376] Ibid., 120.

[377] Ibid., 223.

[378] Ibid., 223.

> Even the vibrato to which full voices are prone, should be nipped in the bud, for gradually the tremolo and later something even worse, is developed from it. Life can be infused into the tone by means of vowel mixing, a way that will do no harm.[379]

All of the quotes express the view that musicians in the early years of the Contemporary era were quite conservative about vibrato usage. It was considered an ornament to be used as an expressive device. Violin and voice teachers alike warned of its abuse and overuse. Likewise, the sentiments expressed by the writers reveal that perpetual vibrato was not being practiced.

A 1929 article published in *The Scientific Monthly* discussed the importance of "The Vibrato in Celebrated Voices."[380] The author, Milton Metfessel, made several important observations with the use of photography equipment which was able to capture vibrations of sound recordings. He concluded that ninety-five percent of the tones produced by "celebrated," that is, famous voices of the time, included continuous vibrato. Some of the singers included in the study are Enrico Caruso, Amelita Galli-Curci, Fyodor Chaliapin, John McCormack, and Louise Homer.

He goes on to point out that the investigators in the study considered vibrato as part of the timbral production of a voice, as opposed to an element of expression. For example, when a vibrato was uneven or intermittent, the observers determined that the voice production suffered. He says:

> It became evident that they were judging the vibrato not as tone fluctuation but as tone quality. Voice teachers have accounted for good tone quality in terms of

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[379] Jacob Kwalwasser, "The Vibrato," 222.

[380] Milton Metfessel, "The Vibrato in Celebrated Voices," *The Scientific Monthly*, 28, 3 (March 1929): 217-219.

> resonance in the cavities of the head, but here was a tone quality which was due to variations in the tenseness of the vocal cords.[381]

This is one of the first accounts in which vibrato is discussed as a coordinated element of vocal timbre. Past sources always indicated that vibrato was part of expression, not production.

Another important writer on the subject of vibrato in the Contemporary era is Jacob Kwalwasser. His research, entitled "The Vibrato,"[382] indicates that tone placement affects the amount of vibrato in singers' voices. For instance, he discovered that the nasal placement results in the smallest production of vibrato, while the throaty, covered tone placement reveals the most vibrato. Additionally, his research indicates that darker vowels tend to produce somewhat more vibrato than brighter vowels. These findings support other writings of the time that suggest more vibrato usage. Considering that during the late Romantic and early Contemporary eras singers were continually striving for more volume and resonance through a lowered larynx technique, vibrato would certainly have increased.

As the Contemporary era progressed, increasingly more scientific studies advanced the field of vocal pedagogy and voice science. A pioneer in research and teaching was William Vennard. His voice pedagogy textbook, *Singing: The Mechanism and the Technic*,[383] was first published in 1949 and continues to be a standard reference for researchers, teachers, and students alike. In the 1967 edition of his book, Vennard

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[381] Ibid., 219.

[382] Jacob Kwalwasser, "The Vibrato," 226.

[383] William Vennard, *Singing: The Mechanism and the Technic*.

discusses vibrato in a chapter entitled "coordination." The topic of vibrato occupies over half of the chapter. Coordination is described as the fusion of all the various mechanistic acts of singing, simultaneously achieved for an artistic purpose. He suggests that "the main purpose of the [voice] lesson time is to practice the coordination of the vocal act."[384] He suggests that "normal" vibrato can be achieved by synthesizing proper breath support, resonance, and maintaining a balance of naturally occurring nerve impulses. Also, he cites Metfessel's research regarding "celebrated voices," and indicates that a "good singer tries to have his vibrato come out even for each beat."[385] In other words, the number of cycles per second are similar.

Vennard also points out that "overloading the larynx, either by trying for too much volume or a pitch too high for the register adjustment, may cause the vibrato to bog down and become irregular."[386] Furthermore, as a result, "opera singers have more rapid vibrati than concert singers, as a rule. . . . [A] singer's rate decreases in concert where he does not have to compete in volume with a sixty-piece orchestra."[387]

In his discussion of vibrato, Vennard also correlates increased resonance with increased vibrato. As said above, timbre began to be understood as a combination of color, resonance, and vibrato. After a discussion of the "singer's formant" (the overtone frequencies heard around 2800 Hz), Vennard suggests, "it is almost impossible to sing

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[384] Ibid., 191.

[385] Ibid., 197.

[386] Ibid., 196.

[387] Ibid., 196.

loudly without vibrato." Conversely, he asserts, "vibrato tends to disappear in soft tones."[388]

Vennard also discusses vibrato in ensembles, asserting that the "straight tone can only be acquired at the expense of quality."[389] He goes on to suggest that the straight tone usage in choirs was influenced by several factors: microphone recordings, music education philosophies, intonation concerns, and musicological arguments. Vennard acknowledges the musicological rationale as a "stronger argument" for the use of limited vibrato than any other reason.[390] He concludes that straight tone singing creates a weak tone that cannot be improved, and that its use limits the development of the individual singer.

The most influential vocal pedagogy textbook of recent years is Richard Miller's *The Structure of Singing* (1996).[391] An entire chapter of his book is devoted to the discussion of vibrato, entitled "Vibrancy in Singing." His discussion of vibrato summarizes the generally held opinion that vibrato is an element of timbre, not a distinct element of expression. For instance, he says:

> A valuable pedagogy device lies in developing awareness of vibrancy as a constant and desirable characteristic of vocal timbre. If a common character of vibrancy does not exist throughout all the notes and syllables of a vocal phrase, legato is not possible.[392]

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[388] Ibid., 205.

[389] Ibid., 205.

[390] Ibid., 207.

[391] Richard Miller, *The Structure of Singing: System and Art in Vocal Technique* (New York: Schirmer Books, 1996).

[392] Ibid., 186.

He continues, "if vibrato frequencies are slow on one pitch, to be followed by a quicker vibrato rate on the subsequent pitch, then totally absent in the next, the quality of the sound will appear uneven."[393]

Just like Vennard fifty years earlier, Miller stresses the use of a "coordinated" vocal technique, saying:

> Although the exact relationships of the individual parts of this . . . [vocal] mechanism vary from one voice to another, and although no specific energy level can be designated for each pitch or each amplitude level in singing, we can rely on the vibrato rate itself to inform us precisely when the right ratios of activity among the parts of this vocal machine are in operation. More than any other audible aspect of vocal timbre, vibrato rate is an indicator of either free or inefficient vocal production. A proper vibrato is a sign of a healthy, well-produced singing voice.[394]

As Metfessel concluded earlier in the century, Miller also suggests that "the ear does not register pitch fluctuations of vibrato as pitch alteration but as part of vocal timbre. . . . Vibrato is part of vocal timbre and is not determined by the rhythmic character of the musical passage."[395] He continues: "A too-slow or a too-rapid vibrato rate is an indication of unhealthy function."[396] As the long-time editor of the National Association of Teachers of Singing Journal, Miller's opinions have been widespread and extremely influential. His somewhat subjective sentiments generally convey the opinions of voice teachers in current times.

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[393] Ibid., 186.

[394] Ibid., 187.

[395] Ibid., 194.

[396] Ibid., 196.

Summary

1) Sources indicate that vibrato was considered an element of expression in the early years of the Contemporary era.

2) It was not until the middle of the twentieth century that vibrato began to be viewed as a concomitant element of timbre.

3) Present-day voice teachers most often teach a continual use of vibrato as part of a "coordinated" approach to singing.

Pitch

Pitch standards in the Contemporary era have adjusted only slightly from those of the Romantic era. During the early years of the twentieth century, the written standard continued to be the *diapason normal* (a1=440 Hz). "Although adopted by the American Federation of Musicians in 1917, the international standard of a1=440 Hz was first proposed by the International Standardizing Organization in May 1939 and finally accepted by the 1953 acoustical committee of the International Organization for Normalization."[397]

While a1=440 Hz continues to be the standard for pitch, some musicians contend that performance pitch is noticeably higher. Arthur Mendel suggested in 1965:

> My own experience in tuning an electronic organ to be used as a continuo instrument with orchestra, in the late 1940's and early 50's, showed me that New York orchestra musicians could with difficulty be induced to tune their instruments to a'=440, but that if the organ were tuned to that pitch it would in the course of performance be flat as compared with the other instruments. If, on the other hand, I tuned the organ to a'=443-4, this difficulty disappeared.[398]

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[397] Bruce Haynes, *A History of Performing Pitch*, 361.

[398] Ibid., 362.

Likewise, Charles McCracken, a professional bassoonist, suggests that pitch has continued to rise in orchestras. He contends:

> Over the years there's been a combination of pitch rising and my reeds getting bigger to meet the challenge of greater projection for orchestral playing. But I've had to switch to a shorter bocal [crook] to match the rising pitch. . . . I find that in New York freelance playing, generally the pitch is on the high side. We tune to 440, but we rarely play at 440.[399]

During the early years of the twentieth century, organizations dedicated to the study of early music began to flourish, focusing members on period instruments and musicological aspects of music from previous eras. The result has been a segment of performers who are privy to the use of appropriate pitch levels, usually performed on or with authentic instruments. For music of the Renaissance, Baroque, and Classical eras, they often tune down to A1=415-20 Hz (approximately a half-step lower) in order to approximate historical tunings and appropriate historical timbres. For music of the nineteenth century, they strive to achieve historical tunings by using instruments from the Romantic era or tuning contemporary instruments to the *diapason normal* (A1=435 Hz).

Summary

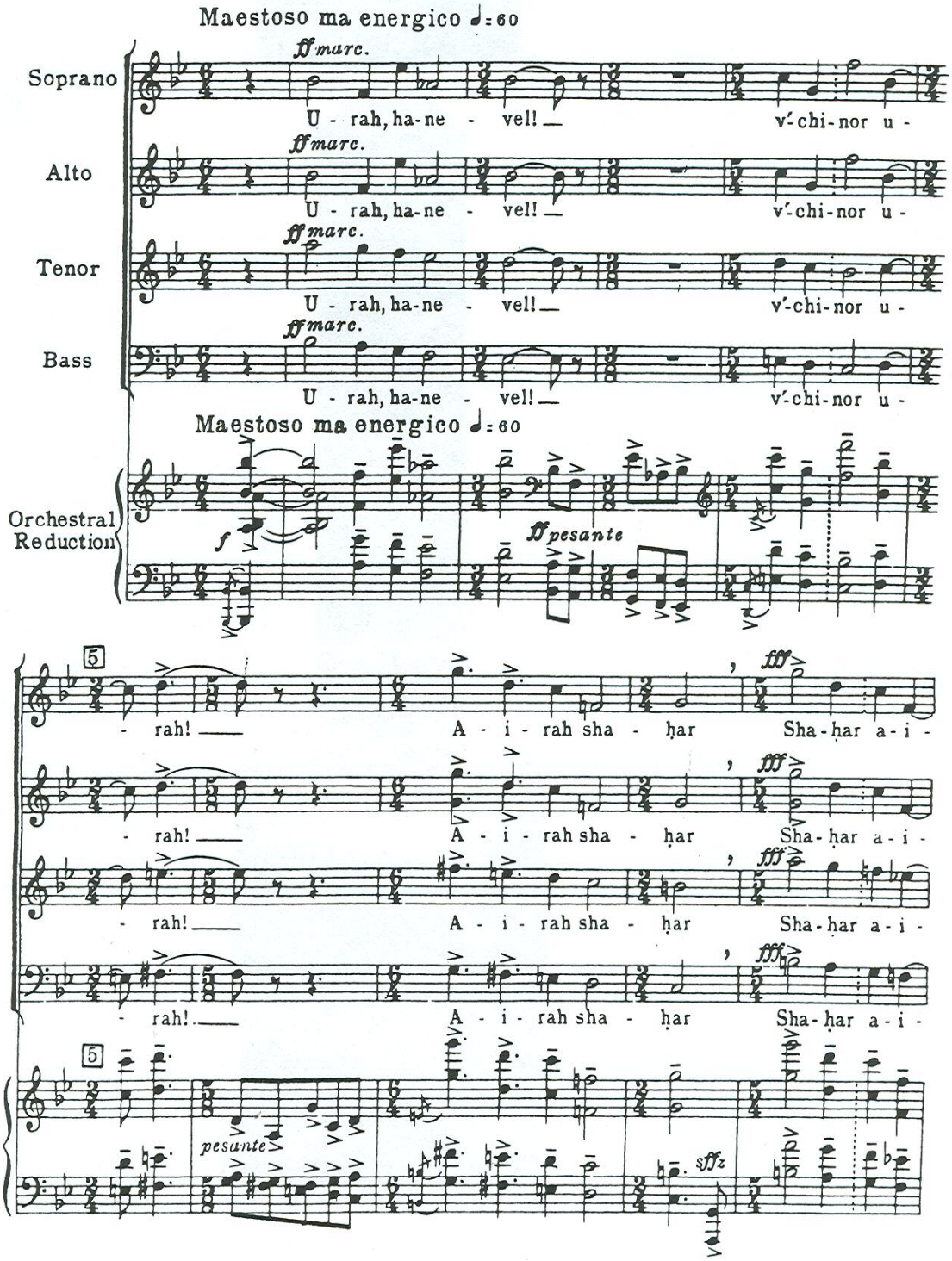
1) The pitch standard of a1=440 Hz was first proposed in 1939, giving way to widespread international consistency of pitch levels not previously known.
2) Historically informed musicians frequently perform compositions from previous eras with authentic instruments and at lowered pitch levels. Renaissance, Baroque, and Classical era pitches are usually adjusted down by a half-step (a1=415-420 Hz), while music of the Romantic era is often adjusted to a1=435 Hz.

[399] Ibid., 363.

Warm-ups

The following warm-ups are derived from the first movement of Leonard Bernstein's *Chichester Psalms*. The movement begins as an "awakening" of the dawn, followed by a dance-like setting of Psalm 100—all accompanied by orchestra or organ, harp, and percussion. Bernstein's dramatic setting of the text should be reflected in the character of vocalism sung by the choir.

Figure 6.1 ***Chichester Psalms*, Movement I (Leonard Bernstein)**



Translation:

Psalm 108, verse 2

Urah, hanevel, v'chinor!	Awake, psaltery and harp!
A-irah shahar!	I will rouse the dawn!

Psalm 100, entire

Hariu l'Adonai kol haarets.	Make a joyful noise unto the Lord all ye lands.
Iv'du et Adonai b'simha.	Serve the Lord with gladness.
Bo-u l'fanav bir'nanah.	Come before his presence with singing.
D'u ki Adonai Hu Elohim.	Know ye that the Lord, He is God.
Hu asanu, v'lo anahnu.	It is He that hath made us, and not we ourselves
Amo v'tson mar'ito.	We are His people and the sheep of His pasture.
Bo-u sh'arav b'todah,	Enter into His gates with thanksgiving,
Hatseirotav bit'hilah,	And into His courts with praise.
Hodu lo, bar'chu sh'mo.	Be thankful unto Him, and bless His name.
Ki tov Adonai, l'olam has'do,	For the Lord is good, His mercy is everlasting.
V'ad dor vador emunato.	And His truth endureth to all generations.

Timbre

Exercise 1.



* Ascend by half-steps within a comfortable range for singers.

Rationale:
1) By employing the nasal French words “bien” and “bon” singers will achieve a bright, resonant, and focused tone necessary for achieving the dramatic character of the opening measures of the movement. Increased volume will result, necessary to balance the instrumental forces. The nasality of the French words should not be overdone, only employed as a means of achieving a healthy resonance for an intense and dramatic timbre. For a model of the appropriate timbre, listen to the trumpets or the trumpet stop on the organ with which the ensemble is performing.

2) The vowels [e] and [o] should be employed after a rich, resonant timbre is achieved. Bright resonance should continue to be employed in the vowels. If it is difficult for

singers to sing the vowels with enough resonance, alternate between French syllables and IPA vowels.

Exercise 2.



* Ascend and descend by half-steps within a comfortable range for singers.

Rationale:
1) Singers should strive to achieve the same timbre from exercise one when singing the Hebrew in this exercise.

2) Allow the singers to use their hands to feel the sinus cavities on either side of their nose. There should be a slight buzzing sensation. This tactile approach may assist those singers who have difficulty achieving a fully resonant tone.

3) Remember that in order to sing the accents as indicated there must be some decay of sound between the first two pitches. The tone cannot remain consistent. There must be a bit of decrescendo and space between the two pitches.

Volume

Exercise 3.

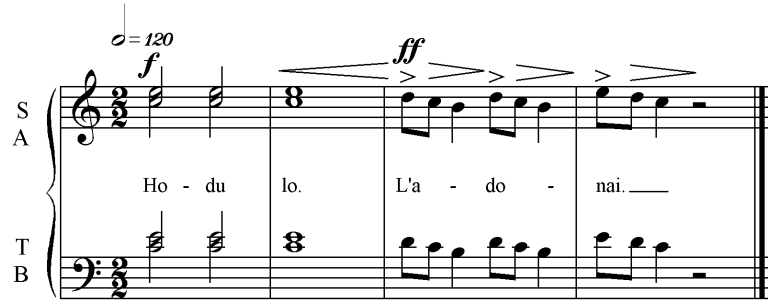


* Ascend and descend by half-steps within a comfortable range for singers.

Rationale:
1) The tenors are high in their range. Therefore, the volume of the other voices must be adjusted to match the tenors. Specifically, listen carefully for equality of timbre and volume amongst all parts.

2) Be sure not to strain to sing “louder” in this exercise. Rather, rely on the resonance achieved above to control the volume. Think of the voice as a trumpet, projected in a fanfare-like way, as opposed to being pushed by musculature to achieve volume. Loud, “woofy” volumes are not the appropriate timbre and are incompatible. Strive to achieve a timbre akin to the trumpets in the orchestra.

Exercise 4.



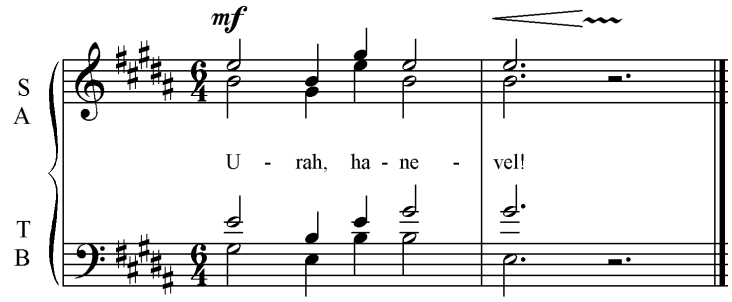
* Ascend and descend by half-steps within the appropriate range for singers.

Rationale:
1) The timbre of the static chords in the opening measures of the movement is going to be richer, more resonant, and louder than the dance-like sections of the movement. Therefore, rehearse the appropriate opening measure timbre in measures one and two of the warm-up and the appropriate dance-like timbre in the quicker moving eighth note passage (mm.3-4)

2) Measures 3 and 4, while still fortissimo, cannot be sung as loudly or resonant as the opening measures because the clarity of the moving notes will suffer. A good effect may be achieved by singing the accented beats loudly, followed by a decrescendo of the pitches that follow.

Vibrato

Exercise 5.



* Ascend and descend by half-steps within the appropriate range for singers.

Rationale:
1) In the opening measures of the movement the vibrato can be quite free. That is not to say, however, that it can remain unchecked. Conversely, it should be rehearsed to achieve uniformity and the most appropriate phrase shape. The vibrato should remain somewhat small until the crescendo in measure two of the exercise, when it should be employed to assist in the increase of intensity.

2) Be sure that the vibrato does not negatively affect the tuning of the chords in the exercise. Any instability in pitch might be attributed to a vibrato that is too wide.

Exercise 6.



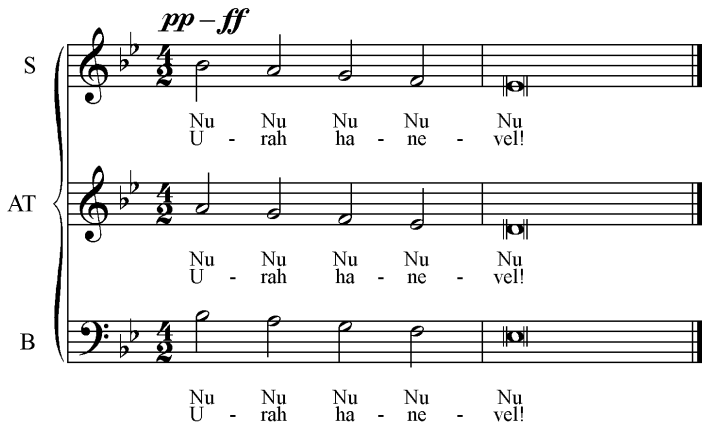
* Ascend and descend by half-steps within the appropriate range for singers.

Rationale:
1) This exercise is based on the musical material from measure 11-13 of movement I. The character is entirely different than the dramatic opening measures, and should be reflected in timbre, volume, and vibrato rates. The playful, light, and buoyant character reflects a vibrato that is minimized.

2) The vibrato should be related to the overall phrase shape. If there is any noticeable vibrato, it will be at the climax of the oratorical and musical phrase: the downbeat of measure three. Since the dynamic marking and character of the music suggest a softer vocalism, this should be supported by the employment of less vibrato.

Pitch

Exercise 7.



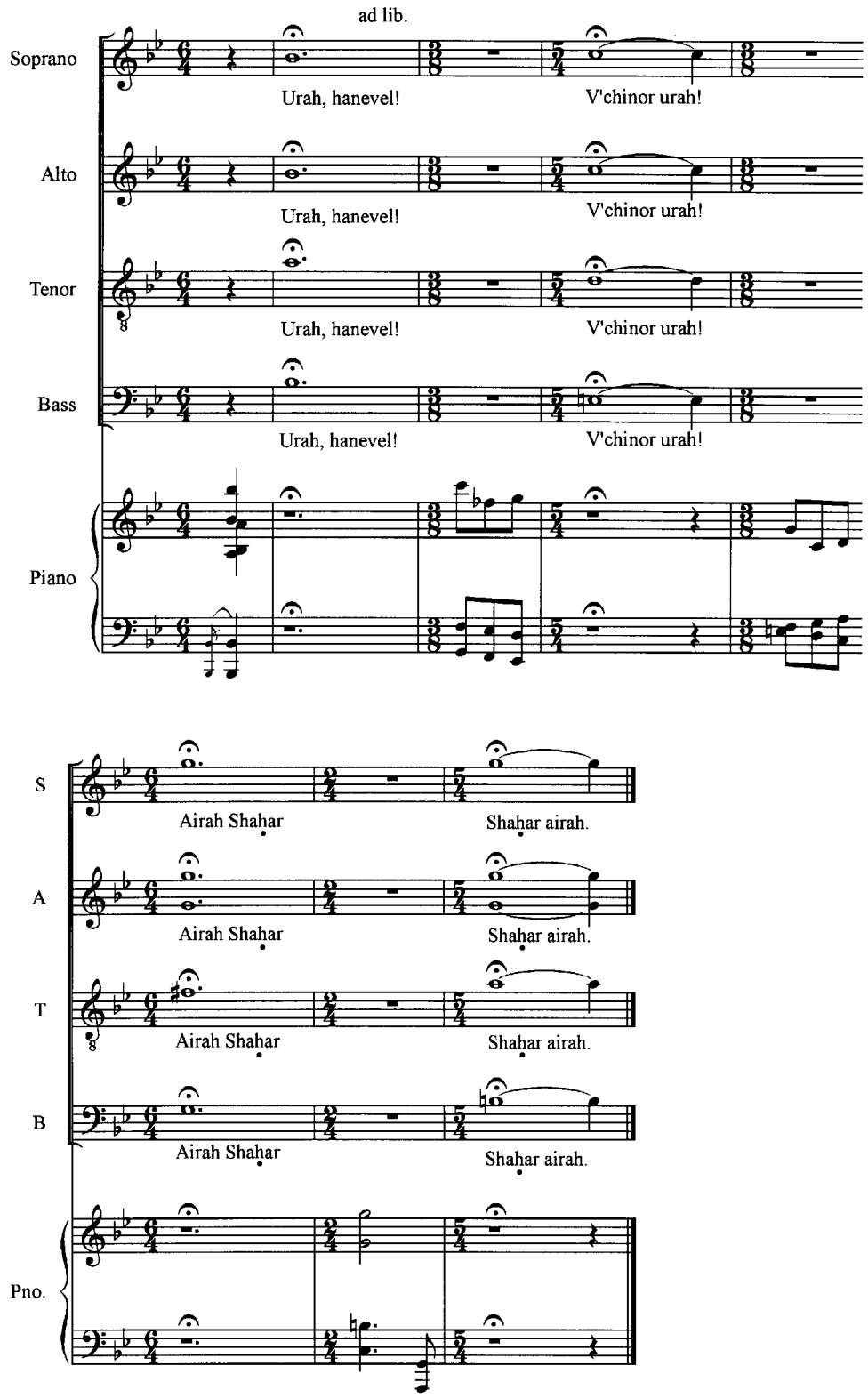
* Ascend or descend by half-steps within the appropriate range for singers.

Rationale:
1) In order to assist in the achievement of sensitive tuning of difficult intervals in the opening measures of the movement, this exercise focuses on a dissonant scalar passage. It should first be sung pianissimo, on the neutral syllable [Nu], allowing the singers an opportunity to listen carefully.

2) Once the pitches are securely in the singers' ears, the dynamic level may be increased while continuing to sing the neutral syllable [Nu].

3) Only after the singers have achieved success in maintaining an appropriate timbre and tuning should the text be introduced.

Exercise 8.


ad lib.
Soprano
Urah, hanevel!
V'chinor urah!
Alto
Urah, hanevel!
V'chinor urah!
Tenor
Urah, hanevel!
V'chinor urah!
Bass
Urah, hanevel!
V'chinor urah!
Piano
S
Airah Shahar
Shahar airah.
A
Airah Shahar
Shahar airah.
T
Airah Shahar
Shahar airah.
B
Airah Shahar
Shahar airah.
Pno.

Rationale:
1) The opening measures of this movement provide several difficult entrances for singers. This exercise is designed to assist with those specific moments. After the piano introductory chord and/or pitches, the singers should chant the Hebrew on the pitches notated in the exercise. It may prove beneficial to vary the rate of chant delivery.

2) It should be a goal to sing the correct pitches immediately upon the vocal attack. Strive to achieve cohesion of timbre, volume, vibrato, and pitch in this exercise.

3) This exercise is also a good example of efficient rehearsal strategy. The major difficulty of finding the pitches at each new phrase is isolated by using the lead-in accompaniment from directly before each vocal entrance. Since the pitches after the entrance are not the primary problem, they are not sung.

CONCLUSION

This document has sought to provide the evidence necessary to determine historically appropriate timbre, volume, vibrato, and pitch when performing music from the High Renaissance through Contemporary eras. Through analysis of primary source writings, ideals of vocal production from each era have been identified. It is hoped that singers who achieve an appropriate historically guided vocalism will better understand and appreciate the music of each era.

The document has also sought to provide a model for warm-up design and implementation that will aid the accomplishment of historically guided vocalism. Since it has been proven that warm-up exercises drawn from performance repertoire are more efficient and effective than generic exercises,[400] all warm-up examples have been designed to reflect certain characteristics of the repertoire upon which they are based. I believe that carefully and thoughtfully designed warm-ups are an effective means of teaching vocal technique and historically guided vocalism as combined elements without placing the hierarchy of one element above the other.

Ultimately, the choir that sings musically and with an appropriate sense of style—including timbre, volume, vibrato, and pitch in addition to articulation and ornaments—is far more successful than a choir that sings only beautiful sounds. It is our responsibility to guide students to appreciate the choral music of each era through rehearsals and performances that encourage healthy, beautiful, and historically guided vocalism.

[400] Coker, "Choral Warm-up Exercises as a Key to Teaching."

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