

UNIVERSITY OF OKLAHOMA

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THE CHEST VOICE FUNCTION IN THE CLASSICALLY TRAINED SOPRANO:
A SURVEY OF SELECTED VOCAL PEDAGOGY TREATISES FROM THE
SEVENTEENTH CENTURY THROUGH THE TWENTIETH CENTURY AND
RECORDING ANALYSIS FROM 1900 TO THE PRESENT WITH DISCUSSION OF
THE IMPLICATIONS FOR THE MODERN VOCAL PEDAGOGUE

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ABSTRACT

The purpose of this research is to document the use of chest voice in sound recordings of sopranos from the early 1900s through the twentieth century and to survey the vocal pedagogy informing performance practice of chest voice throughout the twentieth century. The research includes a survey of the chest voice in vocal pedagogy treatises from the seventeenth century through the twentieth century, and the performance practice of singers throughout the twentieth century in regard to the use of chest voice. The research also includes recording practices as they pertain to the different time periods of sound recordings used in this study. Three singers from each recording era are documented in regard to their rise to fame, voice teachers, training, use of chest voice in recordings, and approach to singing. Three arias will be used to trace the use of chest voice throughout the different eras of recorded history to document changes in style and approach to chest voice singing. The arias are “Una voce poco fa” from Rossini’s *Il Barbiere di Siviglia*, “Salce, Salce” from Verdi’s *Otello*, and “Air des bijoux” (The Jewel Song) from Gounod’s *Faust*. The views about the use of chest voice over the past four hundred years inform the modern vocal pedagogue in regard to the changes in methodology, ideology, and practice due to the advances in vocal science and technology used to explore the voice and its function. However, until the beginning of sound recording the only form of documented historical performance lay in the opinions of critics and those who wrote about the performers of their day. In the research of this document the archival recordings provide the impetus for comparing vocal pedagogy instruction with performance practice in the use of chest voice.

CHAPTER 1

NEED FOR THE STUDY

Many vocal pedagogues have written about the function of the voice in both the low and high registers. However, the public archival examples of singing through audio recordings have been largely ignored. Music has been recorded on wax and tin cylinders from 1877 to late 1880s through 1920s, and then through magnetic tape technology in the 1930s and 1940s, and, finally, through digital recordings in the late 1980s.¹ The early recordings provide a wealth of information regarding how vocalists dealt with challenging repertoire and negotiating through registers in classical singing. The recordings in the first part of the twentieth century are of live performances without any sort of enhancement or editing, and as recording equipment advanced, so did the quality of the recordings themselves. With the advent of analog and digital recording equipment the quality of the musical experience increased. This study focuses on examples of soprano operatic literature throughout the history of audio recordings, the application of chest voice in the lower ranges of the voice, and the vocal pedagogy that informed performance practices throughout the twentieth century.

PURPOSE OF THE STUDY

The study includes a pedagogical analysis of the use of chest voice in soprano operatic singing from the early 1900s to the present. The selected sopranos and repertoire serve as samples from each era of available recordings. The document

¹ David J. Steffen, *From Edison to Marconi: The First Thirty Years of Recorded Music*, (MacFarland: Jefferson, North Carolina), 27-28.

provides vocal pedagogues with an historical retrospective illustrating how the evolution of vocal pedagogy has affected the perception and use of the chest voice in soprano operatic literature and performance. The selection process of the performers and repertoire is based on soprano literature containing the lower part of the range that requires the use of chest voice and available recordings of the selected literature throughout recorded history.

SCOPE AND LIMITATIONS OF THE STUDY

The proposed study provides a survey of selected vocal pedagogy treatises and the change in the perception and practice in using the chest register in soprano operatic literature as documented through audio recordings that have been preserved since the early 1900s. Primary sources include original treatises of vocal pedagogy, original recordings, biographies, and autobiographies.

Current vocal science research published in scholarly peer-reviewed journals is also used to support the practice of vocal pedagogy and sound recording technology, as well as biographical information of the singers, including teachers and coaches, and information about the performing venue. In this research the voice type is limited to sopranos, including, but not limited to, lyric, coloratura, mezzo, and dramatic voice types. The study does not address societal issues or changes in popular culture that may have influenced the use of the female chest voice in singing or speaking.

DESIGN FOR THE STUDY

The scope and method determined for the research project begins with four different eras of recording from the early 1900s through the end of the twentieth century. A sampling of two or three sopranos from each recording era will be analyzed regarding their use of the chest voice in performance.

The analysis consists of several different components. The first component is data regarding the actual recording including the year of recording, recording label, recording method and sound quality. The second component concerns vocal pedagogy and vocal science. This information includes a classification of the type of soprano, whether lyric, coloratura, mezzo, etc., and the treatment of the lower, or chest, register as analyzed by listening to the recording. The third component includes biographical information regarding voice teachers of the artists and a synopsis of her career, popularity, and success. Each listening sample is entered on the table followed by a narrative about the recording, historical data, and biographical information.

SURVEY OF RELATED LITERATURE

The review includes literature related to the history of the recording industry and its advances, vocal pedagogy methods as they relate to the chest voice register, and biographical information about the artists that will likely be included in this study. This review is intended to connect all three of these topics to demonstrate how each one informs the other as they relate to an audio history and the perception and application of vocal pedagogy from the early 1900s to the present.

Vocalists and Recordings

The Grand Tradition by J.B. Steane contains a history of singers and recordings from 1900 to 1970. In his book, Steane provides photographs of famous opera singers, biographical information about singers and famous recording pioneers, anecdotes about different artists, and a wealth of information about the culture of each era. The book itself is divided into three specific time periods. Each time period is marked by recording methods, playback machines and the singers who were most popular as recording artists during that specific time. Steane names the first period “The Golden Legend: Pre-electrical Recording 1900-1925”² and refers to the burgeoning recording industry and the Gramophone. The first part also includes a discussion of what he believes to be the five greatest singers of this time period. The list includes sopranos Adelina Patti and Nellie Melba who are important soprano opera artists for this study. Several other singers and their biographical information are mentioned in this section

² J.B. Steane, *The Grand Tradition* (London: Duckworth, 1978), 14.

which will shape the study of the famous singers of the first part of the twentieth century.

The second section covers the electrical recording age from 1925 to 1950. Interestingly, Steane calls the second part “Decline and Survival”³ to indicate the decline in the recording and marketing of singers. It seems the public and publishers were more interested in instrumental music and conductors, rather than in the artistry of singers. Nonetheless, there were singers who were recorded during this electrical recording age, such as Lily Pons, who was one of the more recorded artists from 1925 to 1950. Steane concedes that the recording industry itself was lacking in electrical equipment that was advanced enough to make a high-quality recording of the voice. However, the recording does not lie and reveals both the brilliant and the not-so-brilliant. This type of information is invaluable to this study as one of its principle aims is to document how vocal pedagogy methods are documented in the recorded medium.⁴

Section three of Steane’s book entitled, “Renaissance,”⁵ focuses on 1950 through 1970. The term *Renaissance* is well chosen for the Long-Playing (LP) record of this era which afforded more music to be included in a single recording. For example, Wagner’s *Die Meistersinger*, the first full-length opera to be offered in recorded form to the public, debuted in 1952. This new Long-Playing technology would offer music to the public as never before, and would also advance the careers of opera singers in an unparalleled manner.⁶

³J.B. Steane, *The Grand Tradition*, 152.

⁴Ibid, 153.

⁵Ibid, 324.

Great Opera Singers of the Twentieth Century by Donald Blair contains biographical information on opera singers from the twentieth century. The information for each singer is approximately one page in length and includes a photograph. Included in many of the biographies is the name of the performer's voice teacher. This publication is meant to be used in conjunction with recordings held in the Library of Congress.⁷ In 2004, Clyde T. McCants published, *American Opera Singers and Their recordings* in which he lists performers along with a lengthy biography, discography of recitals and full operas. Both of these resources will be essential in placing singers with teachers and schools of vocal pedagogy as the analysis will include both aspects of the chosen vocalists.

Voices: Singers and Critics by J.B. Steane provide excellent biographical details about singers, their careers, and their vocal instructors. Steane's book is also valuable for understanding the voice of the critic during the burgeoning careers of American Opera singers. These critics are important in understanding society, the rise and fall of popularity in medium of opera, and the performers.⁸ *The American Opera Singer* by Peter G. Davis also details biographical information, quotes from performers and traces the lives and careers of famous American opera singers.⁹

The Cambridge Companion to Recorded Music by Nicholas Cook, Eric Clarke, Daniel Leech-Wilkinson, and John Rink is a collection of essays analyzing performance practices with microphones, sound engineering, development of recording technologies and methods for analyzing recordings. Of particular interest to this study is chapter

⁷Donald Blair, *Great Opera Singers of the Twentieth Century*, (New York: The Edwin Mellen Press, 1991), 1-5.

⁸J.B. Steane, *Voices: Singers and Critics*, (Portland, Oregon: Amadeus Press, 1993), 209.

⁹Peter G. Davis, *The American Opera Singer*, (New York: Doubleday, 1997), 82.

nine, “Methods for Analyzing Music.” This chapter seeks to give the reader “a better understanding of them [recordings] as culturally meaningful objects.”¹⁰ Nicholas Cook, the author of this chapter, further asserts that

Recordings are a largely untapped resource for the writing of music history, the focus of which has up to now been overwhelmingly on scores, and recent technological developments have opened up new ways of working with recordings – ways that make it much easier than before to manipulate them, in the sense that we are used to manipulating books and other written sources.¹¹

Throughout the chapter, Cook continues to describe analyzing recordings by simply listening and taking note of differences in sounds and nuances of the voice or instrument. Cook also states with the technology of digital recording it is easier to maneuver material throughout the recording to compare differences and similarities.¹²

Library of Congress will serve as an integral part of the research for this document for early recordings and supporting materials. In addition to a treasure trove of recorded singers from the early 1900s the collection also includes digitized resources such as the *The Victrola Book of Opera* which began in 1919 and continued through the 1970s. *The Victrola Book of Opera* includes photographs of famous singers and opera houses. Also, the book gives a synopsis of the operas and the listing of roles and voice types. The digital collection of opera singers in the Library of Congress includes the years of 1900-1929. For sources beyond the scope of the Library of Congress the research turns to library holdings of recordings, Inter-Library Loan and personal collections.¹³

¹⁰Nicholas Cook, Eric Clarke, Daniel Leech-Wilkinson and John Rink, *The Cambridge Companion to Recorded Music*, (Cambridge: Cambridge University Press, 2009), 221.

¹¹Ibid, 221.

¹²Ibid, 222.

¹³“National Jukebox,” *Library of Congress* n.pag. *Library of Congress*, Database. 09 Dec 2012.

Vocal Pedagogy

The Complete Treatise on the Art of Singing by Manuel Garcia II, edited and translated by Donald V. Paschke, is in two volumes. The first volume deals with the science of vocal pedagogy in the nineteenth century including explanations of the voices of men and women, resonance, registration, breathing, and quality of voice. Following this section, Garcia II gives examples of vocal exercise for specific desired outcomes in the voice. The chapter on registration and the blending of registers is the most significant to this study as the information contained in this chapter will inform performance practices for the first half of the twentieth century in regard to chest register. The second volume is a handbook for performance practices as taught by Manuel Garcia II. It is noted that Garcia was a master teacher and produced gifted vocal artists who became famous in the nineteenth century. Not only did he have a grasp on the beauty of singing, but he also knew the science of singing as much as he possibly could, given the technological limitations of his era.¹⁴ Many of the pedagogical observations continue to be used in voice studios today.

The Historic Italian School's Method for Breath Management and Registration in Singing and Its Effect on Laryngeal Posture by John U. Weinel offers an extensive narrative on vocal pedagogy from the *Bel Canto* era of the nineteenth century and the teaching of registration in singing. Weinel describes the teachings of moving throughout the voice from chest register to head register and the breath management required throughout the extent of the range with ease and comfort. However, he asserts that this type of teaching also causes an unnaturally low laryngeal position which is not optimum

¹⁴ Manuel Garcia II and Donald V. Paschke, trans. and ed, *A Complete Treatise on the Art of Singing: Part One*. (New York: Da Capo Press, 1975), 67.

for the entire range of a singer's voice. This dissertation is helpful in regard to the historical value of comparing nineteenth and twentieth century vocal pedagogy, both the differences and similarities. While the aesthetic of singing in pure chest was not desirable in the eighteenth and nineteenth centuries, it is often employed in twentieth century performance practice. Vocal scientists and pedagogues have made dramatic advances in gathering physiological information that gives the singer a better understanding of the voice, its components and the function of the vocal folds.¹⁵

Mathilde Marchesi: A Study of Her Life and Work in Vocal Pedagogy, Including Historical and Modern Implications by Joanna Craik provides a significant look into the life of one of the most famous voice teachers of the late nineteenth century and early twentieth century.¹⁶ Mathilde Marchesi studied voice with Manuel Garcia II and was known to have taught some of the greatest soprano singers of the early twentieth century. The thesis is divided into two sections with the first section containing biographical information about Marchesi and the second section detailing her vocal techniques and pedagogy. Included in her biographical information are the names of three of her most famous students, one of which will be a subject of research for this document, Nellie Melba. Melba was one of the most well-known performers of the early twentieth century with performing credits such as Covent Garden in London and the Metropolitan Opera in New York City.

¹⁵John U. Weinel, "The Historic Italian School's Method for Breath Management and Registration in Singing and its Effect on Laryngeal Posture" (D.M.A. diss., University of Houston, 2011), 13-51.

¹⁶Joanna Craik, "Mathilde Marchesi: A Study of Her Life and Work in Vocal Pedagogy, Including Historical and Modern Implications" (master's thesis, Florida Atlantic University, 2011), 21-77.

However, there are some explanations of the way vocal sounds are produced that were not accurate. Garcia's explanations, or theories, would later be proven to be wrong when William Vennard published his book, *Singing: The Mechanism and the Technics*. Vennard transformed the world of vocal pedagogy with his scientific research and documentation of the vocal mechanism. His book was, and still is, used as a text book for university vocal pedagogy courses across the United States and gives illustrations of functioning vocal folds with documentation of the vocal mechanism during singing.¹⁷ Vennard's groundbreaking discoveries would cause many to reject the long-held views Garcia II and the Bel Canto style. The reaction in the vocal music community was extreme. Bel Canto singing dominated vocal pedagogy until Vennard's book was published in 1967 and even at that point, Vennard's science was not readily accepted. There is much to be gained from the writings of *both* Garcia II and Vennard. These two pedagogical resources will be most important to the research of this document and will serve as the bedrock for understanding why singers in the early to mid-twentieth century produced vocal sound as they did.

National Schools of Singing by Richard Miller outlines English, French, German and Italian techniques of singing. Miller divides the particular methods into specific technical features of each national school and gives specific details as to how the techniques were taught.¹⁸ The different singing schools are important components when doing research on the biographical information of the singers chosen for analysis,

¹⁷William Vennard, *Singing: The Mechanism and the Technic*, Fifth ed., (New York: Carl Fischer, 1968), 107-114.

¹⁸Richard Miller, *National Schools of Singing*, (Lanham, Maryland: The Scarecrow Press, Ltd., 1997), 45.

the teachers with which they studied, and the singing schools to which they prescribed.¹⁹

Richard Miller would write his own vocal pedagogy book in 1986 entitled *The Structure of Singing* in which he uses his own scientific research and years of experience in teaching. While the entire book is helpful in vocal pedagogy, the interest in Miller's book for this study is the section on chest voice. The section is very short, in fact, only one page. This is telling as to the lack of acceptance of the use of chest voice in the mid to late twentieth century.²⁰

Historical Vocal Pedagogy Classics by Berton Coffin compares and contrasts various aspects of the pedagogical methods of Manuel Garcia I, and Manuel Garcia II, in addition to Mathilde Marchesi, who was a German voice teacher who had studied with Manuel Garcia II. Coffin also includes synopses of the techniques and teachings of other pedagogues, including Francesco Lamperti, William Shakespeare and Lilli Lehmann. Coffin's book is a valuable resource in building a basis of pedagogy from the seventeenth century to the present.²¹

James Stark's book, *Bel Canto: A History of Vocal Pedagogy* contains an historical perspective of the bel canto style with an analysis of the strengths and weaknesses of the pedagogy. Stark also surveys the modern views on each point of bel canto vocal pedagogy, including registration, breath, and vibrato. Understanding the

¹⁹Ibid, 64.

²⁰Richard Miller, *The Structure of Singing*, (New York: Schirmer Books, 1986), 136.

²¹Berton Coffin, *Historical Vocal Pedagogy Classics*, (London: Scarecrow Press, Inc.), 19, 31.

former with the current is imperative as the research spans roughly three hundred years of vocal pedagogy and one hundred years of audio recording.²²

Your Voice: An Inside View by Scott McCoy is used in many colleges and universities as the vocal pedagogy textbook of choice. Dr. McCoy uses the latest technology, science and vocal techniques in explaining the function of all aspects of the voice. The illustrations and explanations of each section are excellent and very useful for this document. Additionally, Dr. McCoy has included a DVD containing PowerPoint presentations and video recordings of vocal folds while students are singing.²³

Classical Training for Musical Theater Singing: Registration Issues in the Female Voice by Tamara Gavrielle Hardesty provides a comprehensive overview of the historical female voice types in musical theater as well as the vocal requirements to be a musical theater singer. She also addresses research conducted in voice science dealing with vocal registers and issues that arise with musical theater singers. Although this document does not include musical theater repertoire this dissertation is helpful in identifying specific issues with registration in the female voice and how vocal pedagogues have dealt with the lower register throughout history.²⁴

Laryngeal Muscle Activity and Vocal Fold Adduction During Chest, Chest mix, He admix, and Head Registers in Females by Karen Ann Kochis-Jennings, Eileen M. Finnegan, Henry T. Hoffman and Sanyukta Jaïswal explains the science of what occurs in the larynx when the vocal folds adduct to sing in the chest register, or any type of

²²James Stark, *Bel Canto: A History of Vocal Pedagogy*, (Toronto: University of Toronto Press, 2008), 58.

²³Scott McCoy. *Your Voice: An Inside View*. Princeton: Inside View Press, 2004.

²⁴Tamara Gavrielle Hardesty, "Classical Training for Musical Theater Singing: Registration Issues in the Female Voice" (D.M.A. diss., University of Connecticut, 2009), 22.

mix of head and chest. The study uses a strobe designed to examine the vocal folds while a patient is singing. During this process, the recording is slowed to see the minute physical changes occurring in the throat. It is during this process that data is collected regarding the function of the vocal folds, the laryngeal position and how the surrounding cartilages, muscles, and tissues behave during adduction and phonation.²⁵ The study concludes the laryngeal muscles and vocal fold adduction were more engaged during chest singing, thereby offering more control to the singer.²⁶ This article illustrates how far the science of vocal pedagogy has come since Manuel Garcia II and William Vennard in their scientific study of the mechanism of the voice.

Listener Perception of the Effect of Abdominal Kinematic Directives on Respiratory Behavior in Female Classical Singing by Sally Collyer, Dianna T. Kenney, and Michaele Archer provides an explanation of breath management and the benefits of training in good breath management skills. In the body of the article the authors describe how breath management helps singers by providing support and stamina. The most significant part about this article for the research of this document is portion about listening to understand how the breath is working in an individual student. The model for listening in Dr. Collyer's article is helpful for listening to archival recordings and assessing chest voice patterns in individual singing. It was determined in Dr. Collyer's research that both the performance and quality of the voice should be included in determining the "standard of singing".²⁷

²⁵Karen Ann Kochis-Jennings, Eileen M. Finnegan, Henry T. Hoffman, and Sanyukta Jaïswal. "Laryngeal Muscle Activity and Vocal Fold Adduction During Chest, Chestmix, Headmix, and Head Registers in Females," *Journal of Voice* (November 2010): 183-190.

²⁶Ibid, 192.

²⁷Sally Collyer, Dianna T. Kenney, and Michaele Archer. "Listener Perception of the Effect of Abdominal Kinematic Directives on Respiratory Behavior in Female Classical Singing," *Journal of Voice* (2009): 18.

Perspectives on Belting and Belting Pedagogy: A Comparison of Teachers of Classical Students, teachers of Nonclassical Voice Students and Music Theater singers by Frank Wayne Ragsdale offers a compilation of views from classical and non-classical voice teachers regarding chest voice and belting based on a series of interviews. This dissertation speaks to the changes in vocal pedagogy and the acceptance of the chest register as a valid point of beginning when teaching voice. Again, this document does not address belting or musical theater pedagogy or literature. However, the resource of interviews of current vocal pedagogues in the area of registration is pertinent to this study.²⁸

In 2003-2004, *The Journal of Singing* published a series of articles entitled “The Female Chest Voice.” The first article, written by Jeanette LoVetri, wrote concerning the function of the chest voice as it relates to scientific data. Additionally, LoVetri speaks to the positive uses of the chest voice in classical singing, as well as, the negatives of decreasing the head voice if the chest range is extended without also extending the higher ranges. She also addresses the need for classical vocal teachers to understand that belting is synonymous with chest voice.²⁹

The second article in the *Journal of Singing* series, “Female Chest Voice,” was written by Gwenellyn Leonard, Freda Herseth, and Robert T. Sataloff. The authors explore the usage and function of the chest voice in classical singing. Recommendations are given to begin training of the chest voice in the early years of vocal training while vocalizing the entire range of the voice throughout the head

²⁸Frank Wayne Ragsdale, “Perspectives on Belting and Belting Pedagogy: A Comparison of Teachers of Classical Voice Students, Teachers of Non-Classical Voice Students and Music Theater Singers” (D.M.A. diss., University of Miami, 2004), 15-29.

²⁹Jeanette LoVetri, “Female Chest Voice.” *The Journal of Singing* 60, 2 (Nov/Dec 2003): 163-164.

register. In particular, Gwenelwyn Leonard and Freda Herseth believe students should strengthen the chest voice in the lower register as a means of expression and use of vocal color.³⁰

Recording Technology

In *Recorded Music in American Life*, William Howland Kenney writes his perspective on the history of recording in America from 1890 to 1945. While this book does not provide new information on technology, it does give a unique perspective on the recording company, *His Master's Voice* or *HMV* and the *The Victor Talking Machine*.³¹ Also, Kenney writes an important chapter on women in recorded sound.³² In chapter three Kenney details the history of how the companies were formed and what kind of business decisions would drive the popularity of phonographs in the homes of middle-class families.³³ In chapter 5, Kenney outlines the importance of women in recorded music from 1890-1930. While white men dominated the business side of the phonograph and recording industry, the main consumers were housewives seeking to elevate their standing through culture and education. The recordings on the phonograph were marketed to the housewife seeking to understand singing and opera. Kenney also states that the phonograph “relieved”³⁴ housewives of the duty of providing music in the

³⁰Gwenelwyn Leonard, Freda Herseth and Robert T. Sataloff. “Female Chest Voice.” *The Journal of Singing* 60, 4 (March/April 2004):370-372.

³¹William Howland Kenney, *Recorded Music in American Life: The Phonograph and Popular Memory*. (New York: Oxford University Press, 1999), 44.

³²Ibid. 88.

³³Ibid. 90.

³⁴Ibid. 89-90.

home themselves since they could simply put a record on the phonograph and provide culture for their children.³⁵

In her article, “Perception of Music Performance on Historical and Modern Commercial Recordings,” Renee Timmers documents listener responses to older and newer recordings of *Die junge Nonne* by Franz Schubert. The recordings are selected from the early 1900s through the last half of the twentieth century. Each listener was asked to rate the quality of the recording, the presence of emotion in the performance and the use of dynamics in each specific recording. The study revealed the modern listeners struggled to relate to older recordings due to their lack of dynamic change and inability to capture emotion in the performance as opposed to later recordings.³⁶

Perfecting Sound Forever by Greg Milner outlines three different types of recording: Acoustic/Electrical, Analog, and Digital. Milner’s book describes how each type of recording is accomplished and what the technology offered. While the book is not focused on music as much as it is about the recording process, the information about the art of recording and the response of the public is important to this study. The book also provides insight into recording company executives and the role they played in the early part of the recording industry.³⁷

Music, Sound and Technology in America edited by Timothy D. Taylor, Mark Katz, and Tony Grajeda³⁸ provides a retrospective of sound recording with the phonograph, in cinema and, radio. While sound in cinema does not have a particular

³⁵Ibid, 89-90.

³⁶Renee Timmers, “Perception of Music Performance in Historical and Modern Commercial Recordings,” *The Journal of the Acoustical Society of America* 122, No. 5 (November 2007): 2873-2882.

³⁷Greg Milner, *Perfecting Sound Forever*, (New York: Faber and Faber, Inc., 2009), 37.

³⁸Timothy D. Taylor, Mark Katz, Tony Grajeda, *Music, Sound and Technology in America*, (Durham: Duke University Press, 2012), 29.

bearing on this study, some items will pertain, such as singing done in movies and the audience response.³⁹ Of particular interest are the first and last sections of the book on the phonograph and radio. The first section includes historical information about the influence the phonograph had on society and bringing music into the living rooms of the American home. Further, chapters 23 and 24 detail the process in the recording studio, and in chapters twenty seven and twenty eight the editors write of the effect of the phonograph on music education.⁴⁰ The final section in the book discusses radio. In particular, chapters 101 through 105 speak to music on the radio and the listener's response. The information in these chapters would be specifically dealing with live recordings of the singing voice and the unique challenges of speed in recording as well as ambient noise.⁴¹

Recording and Reality: The Musical Subject by Leon Botstein details an editorial on the textbook on the history of music by Christopher H. Gibbs. Botstein believes that the culture has turned to recordings alone to understand the meaning and experience of music. Even though textbooks provide written music, biographies and other pertinent information, he believes that music has been relegated to CD's, Mp3 players and the like. Botstein concedes that recordings are the way we understand different perceptions, interpretations, and historical performance practice. He states that the culture of the twenty-first century is one of aural learning and evaluation without a complete understanding of written music. While this article does not speak directly to

³⁹ Ibid, 149-153.

⁴⁰ Timothy D. Taylor, Mark Katz, Tony Grajeda, *Music, Sound and Technology in America*, 84-103.

⁴¹ Ibid, 301-309.

actual recordings or even specific music there are valuable points used in this research in regard to cultural changes and social mores of the current age in which we live.⁴²

Perception of Recorded Singing Voice Quality and Expertise: Cognitive Linguistics and Acoustic Approaches by Séverine Morange, Danièle Dubois and Jen-Marc Fontaine provides scientific data proving the necessity of re-mastering archival recordings to gain the best aesthetic preservation as possible. The research centers on the response of an audience to the different sounds of a recording of a portion of a song recorded by Caruso that was digitally remixed and transferred to a CD. The article documents the response of thirty-two subjects who are either younger than 30 or older than 60. The subjects listened to eleven different levels of remixing of the same Caruso recording and then they responded with their aesthetic opinions. Some of the subjects were professional acousticians or musicians and others were simply people who enjoyed listening to music. This research provides those who preserve recordings essential information as to what different groups of people are listening for and what they consider as an appropriate re-mastering of an archival recording.⁴³ For the purpose of this study, the digitally re-mastered recordings used from the Library of Congress are significant in listening for the function of the chest voice in early recordings.

Underwriting History: The Role of Sound Recording Collectors in Shaping the Historical Record, by Lisa Hooper, Head Music and Media Librarian at Tulane University in New Orleans, who made this presentation at The Association for Recorded Sound Collections 45th Annual Conference in 2011. In her paper, Dr. Hooper

⁴² Leon Botstein, "Recording and Reality: The Musical Subject," *Musical Quarterly* (March 19, 2012): 1.

⁴³ Séverine Morange, Danièle Dubois and Jean-Marc Fontaine, "Perception of Recorded Singing Voice Quality and Expertise: Cognitive Linguistics and Acoustic Approaches," *Journal of Voice* (2008): 450-455.

asserts that those who collect recordings are offering researchers tools that shape our remembrance of times past. In fact, she feels so strongly about the importance of private collectors as a part of preserving the historical evidence of our culture that she admonishes those collectors to take very seriously the art of collecting as a preservation of all parts of history, whether mainstream, or otherwise. While the article speaks mainly to the traditions of New Orleans, it is also applicable to the medium of vocal pedagogy and the history of vocal pedagogy and methodology that are found in archival recordings.⁴⁴

⁴⁴Lisa Hooper, "Underwriting History: The Role of Sound Recording Collectors in Shaping the Historical Record." Stanford: *ARSC Journal* XLII, (2011): 43-49.

CHAPTER 2

A HISTORY OF THE PEDAGOGY OF CHEST VOICE IN TREATISES FROM THE SEVENTEENTH CENTURY THROUGH THE TWENTIETH CENTURY

The human singing voice and how it works has perplexed scientists and vocal pedagogues for centuries. It was during the late sixteenth century that the subject of chest voice began to be addressed. Lodovico Zacconi, from Italy, and Dominico Cerone, from Spain, were among the first to declare that the voice was made up of two registers: chest and head.⁴⁵ According to early pedagogues the voice was limited to these registers, and, although the prevailing thought of the time was to blend these two registers, very little explanation, or instruction, was given on how and where to blend. Structured vocal teaching evolved as composers began to write music for the solo singer. Although the dates are not hard and fast, an increase in writings from vocal pedagogues during the late sixteenth century and early seventeenth century detail the need for studying the fundamentals of music, vocal production, and performance.⁴⁶

The seventeenth century is considered to be the time period when the Bel Canto style of teaching and singing began. The essence of Bel Canto singing is to produce beautiful singing through the most natural means possible by allowing the body and voice to work in tandem with one another.⁴⁷ Not only was it important to keep the voice free of unnecessary stress and strain, it was also important to train the whole musician in proper musical instruction. Part of this instruction included training the ear

⁴⁵ James Stark. *Bel Canto: A History of Vocal Pedagogy*, (Toronto: University of Toronto Press, 1999), 58-59.

⁴⁶ *Ibid.*, 61-62.

⁴⁷ Paul T. Kingstedt. *Common Sense in Vocal Pedagogy by the Early Italian Masters*, (Ann Arbor, Michigan: Edwards Brothers, Inc., 1949), 4-5.

and understanding the basic functions of music, sonority, and natural vocal production.⁴⁸ An important part of musical and vocal instruction was the use of Guido d'Arezzo's solfeggio system to train the singer's ear for singing accurate pitches for exercises, and ultimately for performing with flawless tuning. It was only after students had mastered ear training that they moved to vocal technique. It is not surprising, then, that the vocal masters of this period treated the blending of registers with such care as to not to disrupt the free and natural production of the voice. In fact, these pedagogues regarded the *passagio*, or break in the voice, as a very weak, distasteful part of the singing voice that needed to be corrected, and shouldn't even be approached unless a person had several years of training.⁴⁹ The chest voice was not dismissed in the Bel Canto vocal technique, but rather celebrated as the robust and natural voice. A singer was considered to be highly trained if able to master the chest register beyond the normal range.⁵⁰ However, composers didn't often write music for the soprano voice that included more than one or two notes that would descend into the chest register as it was not guaranteed that a singer had the facility of voice to blend the registers with success. The chest voice was used to sing louder passages, and the head voice was used for higher tessituras and florid passages. In early vocal training these feats of vocal gymnastics were kept in the confines of vocal exercises and training because it was during the exercises that a student began to understand, and experience, the different parts of the voice and how they could be utilized and blended.⁵¹

⁴⁸ Paul T. Kingstedt. *Common Sense in Vocal Pedagogy by the Early Italian Masters*, 4-5.

⁴⁹ *Ibid*, 5.

⁵⁰ *Ibid*, 5-6.

⁵¹ *Ibid*, 9.

The teaching of the Bel Canto technique was in full swing by the late seventeenth century, and into the eighteenth century. Pedagogues and performers such as Pier Tosi and Giovanni Battista Mancini, both of whom were Castrati tenors, wrote their own treatises on singing. Tosi mainly wrote his treatise for Castrati sopranos. While the male soprano voice principally utilized the head voice, there were still two distinct registers that could be identified as chest and head.⁵² However, the chest voice was never as strong as the chest voice of a female soprano, male tenor, or bass. The ultimate goal in producing a beautiful sound in singing was to unify the registers to the point that there was no detectable break between them. In this way, the voice would maintain its beauty and would also have the necessary strength for the performer to navigate through the range of the music with ease.⁵³

Mancini and Tosi taught in the same vein regarding two registers of the singing voice. Mancini wrote about singers who were adept at singing in the chest voice alone without ever entering the head voice. He seemed to almost envy such a person because the chest voice was considered to be the natural, strong voice, and the head voice, the weaker. Mancini admonished the two registers needed to be unified in order to offer the most even production of sound. However, he, like Tosi, did not offer any real solutions or exercises on how to make this happen.⁵⁴ In fact, out of the entire treatise, Mancini only devoted two pages to the importance of unifying the registers.

While the two-register theory was widely accepted, Tosi and Mancini had their critics. An English translator of Tosi's manuscript, named Galliard, added his own footnote that would disagree sharply with Tosi's theory. The translator stated that he

⁵² James Stark, *Bel Canto: A History of Vocal Pedagogy*, 60.

⁵³ Ibid.

⁵⁴ Ibid, 62.

believed there were three registers; chest, head, and falsetto. While there were other critics, the practice of singing in two registers held throughout the seventeenth century, and most of the eighteenth century.⁵⁵ The landscape of vocal pedagogy began to change by the end of the eighteenth century with the acceptance and implementation of the three register model for women's voices and the two register model for men.⁵⁶ However, the question remained about how to unify the entire vocal mechanism itself, and early pedagogical writings do not consider mixing the two registers at any point in the range.

In the early nineteenth century Manuel Garcia II, son of the famous tenor, Manuel Garcia I, left his father's music conservatory to join the French Army in 1830 after his singing voice had been damaged through an unfortunate attempt to sing with a larger sound than the capability of his voice. When Garcia II returned from his military stint in Algeria he was assigned to military hospitals. During his service in the military hospital he became a student of the physiology of the voice, and familiarized himself with medical descriptions pertaining to anatomy of the voice.⁵⁷ He studied the medical writings of Johann Müller and would describe the difference between the function of the vocal folds during falsetto, or head voice, and chest voice. He determined the difference between the two types of vocal production was the amount of the vocal fold that was phonating. In the head voice only the top edges of the vocal folds were phonating, whereas, during the use of chest voice the entire length of the chord would phonate, thereby offering a stronger sound. Studying the physiology of the voice would

⁵⁵ James Stark, *Bel Canto: A History of Vocal Pedagogy*, 64.

⁵⁶ *Ibid*, 67.

⁵⁷ Manuel Garcia II and Donald V. Paschke, trans. and ed. *A Complete Treatise on the Art of Singing, Part Two*. (New York: Da Capo Press, 1975), vi.

provide a greater understanding of the vocal instrument, its possibilities, and its limitations.

With newfound scientific information, and Garcia's own research conducted while he was a medic in a military hospital, he began to piece together a picture of what was happening in the larynx while they were singing. Garcia developed the first laryngoscope to look at the vocal folds while they were producing sound. He created an instrument with a mirror on the end of a small metal rod that was bent to the exact angle to provide a clear look at the vocal folds during phonation. Not only did Garcia make an important contribution to vocal study, he made a contribution to the medical community as well. The knowledge Garcia gleaned from his research would set the stage for pedagogical principles, some of which continue to be used in the twenty-first century. In the end, Manuel Garcia II subscribed to the two register model. He would describe the chest register as the range that contained the lower notes that used the entire length of the vocal fold. His definition of the head register differed from his predecessors in that he believed there were two distinct functions in the head register; head, and falsetto. The head voice would be used to a certain point, and then when the notes got higher, the falsetto would become the natural function of the vocal folds.⁵⁸

In volume one of his treatise, *A Complete Treatise on the Art of Singing*, Garcia gave explicit instructions on how to access the chest voice, exercises to use to strengthen the chest voice and how to utilize this function in singing throughout the range of the lower voice before employing head voice. Garcia believed that any action that created unnatural squeezing, lifting, holding, or other type of constriction would not

⁵⁸ James Stark, *Bel Canto: A History of Vocal Pedagogy*, 68-69.

allow the voice to flow freely. In this way, he held to the Bel Canto style of singing that relied on the natural function of the voice, breath, and body.⁵⁹

The nineteenth century baritone, Julius Stockhausen, who studied with Manuel Garcia, also wrote his own book entitled *A Method of Singing*. Stockhausen speaks specifically to the difficulty of assigning names and ranges to the different registers in the female voice. He comments that even though a person may not know what to call the different sounds and resonances of the voice, there are differences that need to be addressed. He advocates the three register model in women's voices and the two register belief for male voices. Stockhausen references another vocal pedagogue by the name of Battaille when he agrees with his assertion that the entire width of the vocal fold is used for the production of chest voice.⁶⁰

Garcia trained many famous singers and vocal pedagogues, which made his methodology ubiquitous throughout the nineteenth century, and into the first half of the twentieth century. It wouldn't be until the research and publication of William Vennard's *Singing: The Mechanism and the Technic* in 1949, and subsequent revisions through 1967 that solid documentation of new scientific methods, techniques, and ways of measuring acoustics for the voice would emerge.

William Vennard was a professor of voice, and chairman of the voice department, at The University of Southern California. His scientific research was groundbreaking in the areas of measuring sounds made by the human voice during phonation, detailing the physiology of the voice, and entire body, used in the production

⁵⁹ Manuel Garcia. *A Complete Treatise on the Art of Singing: Part One Complete and Unabridged*. Edited and Translated by Donald V. Pashke, (New York: Da Capo Press, 1984), 43-45.

⁶⁰ Stephen Austin. "Stockhausen's Method of Singing." *Journal of Singing*. Vol. 65, No. 3. January/February 2009, 361.

of sound. Through the use of a Fastax camera, Vennard was able to record vocal fold activity on film in real time, and then later, slow motion to show the different functions of the vocal folds. Vennard provided information regarding acoustics of the voice, breathing, registration, resonance, vowels, and articulation. His book is extremely scientific and goes into great detail in regard to muscles, ligaments, and skeletal features of the vocal mechanism. Realistically, Vennard's book is meant for the voice teacher to learn as much as they can about the physiology of the voice in order to understand how to teach their students in a comprehensive manner.⁶¹

In his chapter on registration, Vennard goes into detail about the chest voice, calling it "the heavy mechanism."⁶² His term, *heavy mechanism* refers to phonation of the entire length of the vocal fold and the sound quality of the range in the lower notes. If the muscles attached to the vocal folds, called the *vocalis* muscles, are relaxed the sound of the chest voice is not brassy or loud. However, if the *vocalis* muscles are constricted the sound becomes louder and stronger. Using the chest voice in a stronger, more constricted manner increases the risk of the registers becoming very distinct without any blending. Vennard offers his views of registration and states that, ideally, there should be only one register that is completely unified without any breaks in the voice. He goes on to say that the "realistic approach"⁶³ is to separate the registers into three separate parts that include the chest, head, and falsetto with passages, or *passagio*, between each registers that offer a blend between register changes.⁶⁴ Vennard gives exercises to approach the chest voice and speaks to the difficulty in the soprano voice of

⁶¹ William Vennard. *Singing: The mechanism and the Technic*, (New York: Carl Fischer, 1967), 1.

⁶² Ibid, 66.

⁶³ Ibid, 69.

⁶⁴ Ibid, 70.

finding the middle voice, or the mix of chest and head, in order to provide smooth transitions and give power to the middle voice. Vennard, like Garcia II, offers suggestions to help students and teachers know how to unify the registers by detailing practical information and exercises to help achieve this goal.⁶⁵ The technology available to William Vennard allowed him to take pictures and x-rays while students were singing. This technology offered the first tangible scientific documentation of how the vocal folds function in the different registers. Vennard's important contribution to vocal science allowed others to expand upon his research and discover new ways of measuring the different sounds of the voice.

In 1986, Richard Miller wrote his book, *The Structure of Singing*. In his book he speaks of the systematic approach to singing, both scientifically and artistically. Miller's writings about the chest voice focus on the use of what he calls the "chest mix"⁶⁶ as the most viable sound for a soprano with a large voice stating that they would not have to use open chest to reach the lower range and the desired timbre.⁶⁷ Also, he states that it is usually a light, lyric soprano that has difficulty with the chest mix, and tends to use open chest to reach the lower notes. Miller offers several exercises to work on the lower register in a chest mix from starting in head and descending downward in a five-note pattern with the final note being in chest mix. As a clear advocate of chest mix, Miller warns that the open chest sound should not be used above the *primo passagio* (Eb-4) in any female voice.⁶⁸ In contrast to his predecessors, Richard Miller takes into account the different sizes of instruments in female voices and the approach

⁶⁵ William Vennard. *Singing: The mechanism and the technic*, 72-73.

⁶⁶ Richard Miller. *The Structure of Singing*. (New York: Schirmer Books, 1986), 136.

⁶⁷ *Ibid*, 136-137.

⁶⁸ *Ibid*, 136.

to the use of chest voice in these different types of female voices. Although, Miller does not advocate the use of open chest in any female voice because he believes it sounds too much like a male voice.⁶⁹

The 1997 publication of Miller's book, *National Schools of Singing: English, French, German, and Italian Techniques of Singing Revisited*, Miller's book provides documentation of specific techniques of each school, including breath management, vowel placement, vibrato, and laryngeal position. Important to this study is the part devoted to the use of chest voice in each National School. Miller describes the German technique as never using the "open chest," which is the brassy quality he says produces sounds that identify with the male voice. The Italian and French schools prefer a chest/head mix for the entire lower register, while the English school never uses chest voice in either the open or mixed choice.⁷⁰ Miller continues his observation that most female voices can sing all of the range, except the lowest notes, without ever going into chest voice. However, Miller asserts that the female voice can reach the lowest notes by using chest voice if they are singing a descending scale into the lowest part of the voice, and they have practiced this technique regularly.⁷¹ Miller's description of chest voice pedagogy from the National Schools seems to fall in line with the pedagogical writings preceding the middle of the twentieth century. However, with the advent of advanced technology the landscape of how chest voice is viewed changes dramatically toward the end of the twentieth century.

Dr. James C. McKinney, one of William Vennard's protégé's, and the editor for the *Journal of Singing* for a number of years, wrote of the disparity of terminology

⁶⁹ Richard Miller. *National Schools of Singing*, (London: Scarecrow Press, 1997), 129-130.

⁷⁰ *Ibid.*, 129.

⁷¹ *Ibid.*, 130.

when referring to the registers of the voice. McKinney stated that the terms *chest voice* and *head voice* were “unfortunate”⁷² since both terms spoke to a sensation rather than a full understanding of the function of the vocal folds when a singer sings throughout the registers. He believed the sensations conjured by singing in the low to high registers were related to resonance, and not the registers themselves. Therefore, issues perceived as register unification problems were, according to McKinney, resonance issues.⁷³

Dr. Scott McCoy concurs with Dr. McKinney stating that “Historical register names are typically derived from sensation, not function.”⁷⁴ Thus, the function of the chest voice is termed *Thyroarytenoid-Dominant Production (TDP)*,⁷⁵ and for the head voice the correct functional term is *Cricothyroid-Dominant Production (CDP)*.⁷⁶ These terms are more accurate when describing the function of the vocal folds, the surrounding anatomy, and what parts of the vocal mechanism are being used than the terms “chest” or “head” voice. The importance of understanding the function rather than the sensation is perhaps most significant to the voice teacher in assessing vocal issues including constriction, laryngeal position, resonance, insufficient mix of TDP and CDP when going from one pure function to another, and over-all health of vocal function.

One of the most important contributors to vocal science for both the medical community and the musical community has been The Voice Foundation. The Voice Foundation was founded by Dr. Wilber James Gould in 1969 as a means to bring all

⁷² James C. McKinney. *The Diagnosis and Correction of Vocal Faults*, (Nashville, TN: Genevov Publishing, 1994), 94.

⁷³ Ibid, 94.

⁷⁴ Scot McCoy, DMA. *Your Voice: An Inside View*, (Princeton, NJ: Inside View Press, 2004), 65.

⁷⁵ Ibid.

⁷⁶ Ibid.

vocal specialists together to share information within the larger discipline of the study of the voice. Professionals from medicine, speech pathologists, voice teachers, and singers meet annually to discuss new research and application of vocal science in every aspect of vocal health. In 1989, Dr. Robert Sataloff became the leader of the Voice Foundation, and has maintained the important contribution of the foundation to vocal science and vocal pedagogy.⁷⁷ In their publication, *Journal of Voice*, the Voice Foundation has created opportunities for scientists, vocal pedagogues, and performers to publish research as it relates to pathology, vocal production in singing, and vocal science providing a thorough body of work relating to all aspects of the voice. Within the *Journal of Voice* many articles have been written in reference to the chest voice, or thyroarytenoid function. Two researchers from Finland presented an article in the *Journal of Voice* in 1995 that measured the chest voice vibration with sophisticated laboratory equipment used to measure sound waves. In this study, the researchers documented the change in a female voice starting from a light head voice and descending to a light chest voice. The sound waves became increasingly stronger and wider as the voice descended into the lower range as expected when more of the vocal fold is being used. Since the thyroarytenoid and cricothyroid functions can be measured in sound waves and are documented from visual sources as well, the use of the entire length of the vocal fold and the comprehensive term, *thyroarytenoid function*, is widely accepted by scientists and vocal pedagogues alike.

Toward the end of the twentieth century and the beginning of the twenty-first century most vocal pedagogues do agree on one thing: there are different registers and

⁷⁷ The Voice Foundation.
http://www.voicefoundation.org/index.php?option=com_content&view=article&id=220&Itemid=29.
Retrieved 04/02/13.

one can be named *chest* and one can be named *head*, which is where we began in the late sixteenth century. Beyond the terminology, current scientific data tells us the function of the chest voice uses the entire length of the vocal fold to sound the lowest notes of any female range, and the full range of a male voice until he changes to falsetto. To access the head register, one must employ less and less of the thyroarytenoid function while utilizing more of the cricothyroid function in order to reach the higher notes with ease and freedom, thereby creating a mix between the main registers. Vocal stroboscopes and laryngoscopes have become very sophisticated in the twenty-first century. The ability to increase, or decrease, speed with film recorded in real time has provided scientists and vocal pedagogues with a greater understanding of the function of the larynx, vocal folds, and surrounding cartilages during the act of singing.

However, questions remain as to when to employ the chest voice and how much open chest or chest/head mix to use by sopranos when the lower range is employed in classical literature. Some would argue that the brassy, open chest sound is not appropriate for classical soprano literature, even if the range extends into the chest register (G3-C4). However, it is considered unmusical, or even inappropriate, to sing the soprano aria, “Come Scoglio,” from Mozart’s *Così fan Tutte*, without the A3 being sung in a full, brassy chest voice.⁷⁸ From the vocal treatises of the eighteenth century it seems logical to assume that the sopranos of that time also sang the A3 with an open chest voice on that one note since the chest voice was considered the natural, preferred voice of the time.

⁷⁸ Freda Herseth. “Female Chest Voice.” *Journal of Singing* 60, no.4 (March/April 2004), 369.

Women's voices have changed over the past twenty-five years, according to Jeannette LoVetri, a vocal pedagogue in New York City. She explains that women in the United States used to speak in head voice as a rule, but over time, that has changed and women now speak in a chest-dominant voice in every day conversation. LoVetri, in part, attributes this to the popularization of rock music in the 1960s and the increasing volume with which music is generally played in today's society. She remarks that famous opera stars from the early 1900s would not be able to make it in the opera arena today because voices of the late twentieth and early twenty-first centuries have had to become so much bigger, and heavier, to compete with large halls and orchestral accompaniment.⁷⁹ Overall, the increased decibels in amplification have caused the opera singer to carry the chest voice higher than ever before in an effort to be heard. According to Dr. Sheila Allen, vocal pedagogue from Texas Christian University, carrying the chest voice up into the mid-range can have devastating results. She suggests working the chest voice into the middle range by descending into the chest voice instead of carrying the chest voice upward.⁸⁰

In conclusion, technology has provided the modern vocal pedagogue with a plethora of knowledge about the functionality of the vocal folds, acoustics, and sound waves. What technology hasn't been able to pinpoint is where, and how, a singer should, or shouldn't, use the chest voice function. These types of questions are left up to the singer and teacher to decide for each individual voice. Each female voice has their own set of unique strengths and weaknesses; therefore, the approach to singing for

⁷⁹ Jeannette LoVetri. "Female Chest Voice." *Journal of Singing* 60, no. 2 (Nov/Dec 2003), 161.

⁸⁰ Sheila Allen. "Female Chest Voice." *Journal of Singing* 60, no. 3 (Jan/Feb 2004), 268.

each voice must take into consideration the size, timbre, and range in order to facilitate healthy singing.

CHAPTER 3

A VIEW OF THE USE OF THE CHEST VOICE AS DISCOVERED IN RECORDINGS OF PERFORMERS

INTRODUCTION

Throughout the history of recorded music a host of performers and their performances are frozen in time leaving a legacy of yesteryear for us to enjoy. These recordings are a window into the past, but more than that, they are archival examples of how singing has progressed through the ages as perceptions have been changed, shaped, and molded by the prevailing pedagogy and culture in each period. In this chapter a sampling of recorded arias from Verdi's *Otello*, Rossini's *Barbiere di Siviglia*, and Gounod's *Faust* will be explored from the early 1900s through the end of the twentieth century. Three performers from each era of recording will be documented as to their treatment of chest voice, their teachers, and significant contributions made to the recorded history of singing. The performers were based on the availability of recordings of the chosen arias, and the arias were chosen because the melodic line descended into the range in the soprano voice that necessitates the use of chest voice.

THE GOLDEN AGE OF RECORDING 1900-1920

Vocalists from the early 1900s were provided the opportunity that no other performer had been afforded before, the ability to hear their own voices from recordings. This phenomenon held a great deal of promise for the performer as well as the listening public. While early recordings were somewhat primitive compared to the

recordings of the twenty-first century, they held a remarkable likeness to the live performance of the day. Sopranos were not recorded until circa 1907 because the technology could not capture the full range of overtones from higher-pitched voices. However, when the technology was sophisticated enough to capture the whole range of the soprano voice, with its overtones, it was a magnificent feat for the burgeoning recording industry. The recording process in the early 1900s, referred to as “acoustic recording,”⁸¹ was not an easy process. Yvonne de Tregville, an American coloratura soprano, writes in an article published in *Musician* in 1916 that recording a song involves much more than simply performing in front of an audience. In fact, she complains that the operator tells her to sing as if she were giving a public performance; the problem, she says, is that there is no audience, only herself, a tin horn, and the operator!⁸² The frustration with the process of recording in the early 1900s was not uncommon. The make-shift recording studio consisted of one chair behind a curtain with a tin horn on a table for the singer; the instrumentalists had to sit on chairs with rollers in order to roll closer to the horn for a crescendo, and roll back from the horn for a decrescendo. Tin horns of different sizes would stick through a wall in order to capture different timbres of the instruments. The operators would record the sound to molded wax cylinders through the tin horns, and immediately play the recording back to the musicians.⁸³ Yvonne de Tregville was particularly enamored with this process, and commented, “After watching him [the operator] place this cylinder on an ordinary

⁸¹ Greg Milner, *Perfecting Sound Forever*, (New York: Faber and Faber, Inc., 2009), 55.

⁸² Timothy D. Taylor, Mark Katz, and Tony Grajeda, eds., *Music, Sound, and Technology In America*, (Durham: Duke University Press, 2012), 85-86.

⁸³ *Ibid.*, 86-87.

phonograph, I experienced that peculiar sensation of hearing my own voice.”⁸⁴ She continues documenting her experience stating the voice sounds the same on the phonograph as it does to your own ear, with the exception of the head voice. She says the head voice sounds very different on the phonograph than it sounds “in your own throat.”⁸⁵

Out of the many soprano performers in the early 1900s, there are a few that stand out in recording history that allow us to hear not only the quality of their instrument, but a window into their vocal technique. Nellie Melba, Luisa Tetrazzini, and Amelita Galli-Curci are three of the most famous and most recorded sopranos of the early twentieth century.

Nellie Melba

Australian Soprano Nellie Melba (1861-1931) was recognized as one of the great “madames”⁸⁶ of opera and recital performances. The social elite regarded her, along with Luisa Tetrazzini and Amelita Galli-Curci, as a vocal artist that raised the level of art by her magnificent vocal ability. In fact, one newspaper billed one of Melba’s concerts “The musical event of the year.”⁸⁷ Although Nellie Melba was the first Australian to become a world-wide sensation in classical music, her career led her to London to perform with the acclaimed Royal Opera at Covent Garden. After time spent in Paris studying voice with Mathilda Marchesi and making a reputation as a fine singer, she moved to London and was quickly placed in leading opera roles at Covent

⁸⁴ Ibid., 87.

⁸⁵ Taylor, Katz, and Grajeda, eds., *Music, Sound, and Technology In America*, 86.

⁸⁶ J.B. Steane, *Voices: Singers and Critics* (Portland, Oregon: Amadeus Press, 1993), 9.

⁸⁷ Ibid.

Garden.⁸⁸ Melba's technique was based on the Bel Canto method of singing which focused on the pure sounds of the head voice and the pure, open chest voice. The two registers were treated separately. By this time in vocal pedagogy practice, the two registers were considered viable options for singers in which to sing for any given musical expression. However, it was difficult to blend the two registers, and voice teachers were not sure how to achieve unity in the voice. So, the two registers were typically not mixed through the passagio causing distinct and abrupt breaks between the chest and head registers.

Melba's voice on the 1910 recording of "Salce, Salce" from Verdi's *Otello* is clear and easily understood. Recordings in the early 1900s from the Victor Company were made on cylinders that were created from a wax. A stylus was used made grooves in the wax to record the sound, but the wax was not durable and could not be reliable after only a few uses. Melba's 1910 recording has excess noise from the cylinder that is rather loud and a bit distracting. The instrumentation is sparse with instrumentalists consisting of two violins, one oboe, one flute, one cello, one double bass, and possibly one clarinet. Each person playing an instrument, or singing, was positioned in front of a cone which would capture the sound and be transferred by stylus directly to the cylinder. On the 1910 recording, you can hear Nellie Melba's clear, beautiful head voice throughout higher range of the aria. However, in m. 15 (See Appendix B) the open chest sound is fully engaged on E4, F4, and C4, and then again in mm. 28 and 29, even though the range does not necessitate the use of the full thyroarytenoid function. One critic stated about one of Melba's performances, "how common it sounded when

⁸⁸ Ibid.

she forced her lower notes up to F(4) and even G (4) from the chest register.”⁸⁹

Speaking of the aria “Salce, Salce” or “Willow Song” from *Otello*, J. B. Steane writes:

Then in the willow song from *Otello*, where the call is again for delicacy, she has a very ugly way of doing the octave leap on ‘cantiamo’: the high note is approached swoopingly and emerges with a chesty fullness that is completely out of character.⁹⁰

The chest sound in the upper register is clearly unappealing to the critic who heard Melba’s interpretation of Verdi’s “Willow Song” from *Otello*. However, in keeping with her training, there were only two choices: head and chest. In her interpretation, she clearly chose to use chest voice in the higher register for her own expression of the text. The part of her voice the critics find so distasteful is at a point in the aria where the emotion is very strong: (mm.47-50, Appendix B) Desdemona (Otello’s wife) is speaking to her maid (Emilia) about her husband’s strange mood. Otello is acting so strangely that Desdemona fears for her life. As Melba interprets this emotional text she employs more of the chest voice in the mid to upper part of her range.⁹¹ Finally, toward the end of the aria, Desdemona is so distraught that she yells out to her maid, Emilia, on a high B5. In the 1910 recording, Nellie Melba uses a chest-dominant sound at this point that sounds very harsh and strident.⁹² While it is unusual and a bit dangerous to carry the chest voice to the higher pitches, it is, nonetheless, the interpretation of the text by the performer that dictates the performance of an aria.

⁸⁹ J.B. Steane, *The Grand Tradition*, (London: Gerald Duckworth & Co., Ltd., 1978), 37.

⁹⁰ Ibid.

⁹¹ Library of Congress, *National Jukebox*, <http://www.loc.gov/jukebox/search/results?q=Nellie%20Melba%5C%2C%20Salce>, retrieved May 10, 2013.

⁹² Ibid.

Luisa Tetrazzini

In contrast to Nellie Melba's use of chest voice in the upper register, Luisa Tetrazzini (1871-1940), a famous Italian soprano of the early twentieth century, predominantly uses head voice in her 1911 recording of the aria "Una voce poco fa" from Rossini's *Barber of Seville*. On rare occasions, Tetrazzini ventures into the lower register at which time she employs the full, open chest sound. Tetrazzini sings an ascending cadenza when the vocal line is written as a descending line moving to the G-sharp³ (m. 71, Appendix B) and avoids that part of the range entirely. Tetrazzini was born in Florence, Italy, and would debut her first opera role in October, 1890 at the Teatro Pagliano in Florence when the leading soprano for Meyerbeer's opera *L'Africana* fell ill and could not perform. Tetrazzini's performance was extraordinarily well received by the audience as they would show her in a standing ovation.⁹³

Luisa Tetrazzini studied voice with her sister, Eva, who was an accomplished singer in her own right. Luisa's career would take her from Florence to Buenos Aires, Argentina, Mexico City, Havana, Cuba, and across Europe before finally coming to America. Tetrazzini caught the attention of a man by the name of William H. Leahy who was an impresario for the Tivoli Opera House in San Francisco, California. Leahy offered her twice what they were paying her in Mexico City if she would come to San Francisco immediately. Tetrazzini knew if she agreed to the proposal her fellow performers would be left alone to make-do without her. She told Leahy if he wanted

⁹³ Charles Neilson Gattey, *Luisa Tetrazzini the Florentine Nightingale*. (Hants, England: Scolar Press, 1995), 3-4.

her he would have to hire the entire cast. Leahy agreed and she debuted at the Tivoli on January 22, 1905.⁹⁴

Tetrazzini wrote a brief treatise on singing that outlined her vocal technique and philosophy on the voice. She discussed in her treatise that the most important part of singing is breath control no matter where you are singing in the register.⁹⁵ In the section of her book regarding the registers of the voice Luisa Tetrazzini names the two areas of the voice as the head voice and the middle register. She writes about blending the registers and that the middle voice is synonymous with chest voice.

Luisa Tetrazzini states:

In the high register the head voice, or voice which vibrates in the head cavities, should be used chiefly. The middle register requires palatal resonance, and the first notes of the head register and the last ones of the middle register require a judicious blending of both. The middle can be dragged up to the high notes, but always at the cost first of the beauty of the voice and then of the voice itself, for no organ can stand being used wrongly for a long time.⁹⁶

One wonders if Tetrazzini had heard Nellie Melba, either in person or on a recording, to note that you should never carry the weight of the middle voice into the high register. Although Tetrazzini's vocal technique was not described in scientific terms as Garcia II might have done, it is nonetheless an impressive document in regard to the explanation in her own words about her technique and vocal philosophy.

Her philosophy of the head voice being the dominant sound in the soprano voice would play out in her 1911 recording of "Una voce poco fa." However, whether or not you call the sound in the lower register the middle or chest register is a matter of

⁹⁴ Ibid., 41-42.

⁹⁵ Luisa Tetrazzini and Enrico Caruso, *The Art of Singing*, (New York: Dover Publications, Inc., 1975), 10-11.

⁹⁶ Tetrazzini and Caruso, *The Art of Singing*, 21.

semantics. The recording is in extremely good condition and the noise of the stylus is kept to a minimum.⁹⁷ When Tetrzzini begins with the opening musical statement of the aria she does, indeed, descend into what she terms middle voice, but she sings with open chest on pitches E4, D4, and middle-C (m. 25, Appendix B). The beauty of the voice is evident throughout the aria as she soars to B5 in the final cadenza of the aria. Tetrzzini soars to the highest notes with ease and negotiates runs, trills, and staccato passages with amazing precision and beauty. However, the chest voice sound is forced and does not come into line with the rest of the voice. As for her philosophy of blending the two registers she does not accomplish this in the 1911 recording of “Una voce poco fa”: the two registers are very distinct. And, she does not follow her own observation that the head voice begins on middle-C.⁹⁸

Amelita Galli-Curci

Amelita Galli-Curci was an Italian born soprano who studied piano until a family friend, Pietro Mascagni, told her she should give up the piano, because her skill was no better than one hundred other pianists, and to focus on her singing. She did not consider herself a singer at all and was taken aback by his comment. In fact, she told Mascagni, “But I have a very little voice,”⁹⁹ to which he replied, “You have the quality – quite unusual – and that is the one requisite for singing. One can study all one’s life and never be a singer unless the voice is there.”¹⁰⁰ She agreed to try.

⁹⁷ Library of Congress, *National Juke Box*, <http://www.loc.gov/jukebox/recordings/detail/id/2175>. Retrieved May, 13, 2013.

⁹⁸ Library of Congress, *National Juke Box*.

⁹⁹ C.E. Le Massena, *Galli-Curci’s Life of Song*, (Beverly Hills, CA: Monitor Book Company, Inc., 1978), 17.

¹⁰⁰ *Ibid.*, 17.

Galli-Curci listened to the nightingale sing and marveled at the beauty of the tone of the bird. She thought if the bird could sing then, so could she. Galli-Curci knew that she possessed something the bird didn't and that was the ability to learn and discern. When she heard the nightingale she tried to mimic its ease of singing and the flexibility to move from one pitch to another. Her parents were not supportive of her decision to follow after a career in singing. Her father thought it strange to leave the piano, which she had already learned, to pursue something she knew nothing about. Her mother did not want her to have the life of a stage personality, or a public performer.¹⁰¹

Despite her parents' protest, Amelita Galli-Curci knew she loved singing and set out to find a teacher. After she sat in on some lessons of teachers close by, she decided she would just teach herself. She read Garcia's treatise and also availed herself to techniques of other singers such as Lilli Lehmann and Malibran Viardot. Galli-Curci finally adopted an amalgamation of the techniques of Garcia and Lehmann.¹⁰² As she studied and read, she began to develop her own way of singing coached by her grandmother, who was also an opera singer.¹⁰³ In 1906, Galli-Curci was hired in her first paid public performance in Trani, Italy, for the Lyric Carnival Season. She was to play the part of Gilda from *Rigoletto* for three months. She opened to unprecedented approval from the Trani audiences and was an overnight success.¹⁰⁴

Galli-Curci made the typical opera circuit: Milan, Paris, and other cities in Europe, as well as Buenos Aires, Mexico City, and Havana. Her American debut was

¹⁰¹ Ibid., 20-21.

¹⁰² Le Massena, *Galli-Curci's Life of Song*, 21.

¹⁰³ Ibid., 22-23.

¹⁰⁴ Ibid., 37.

in Chicago where she again played Gilda from *Rigoletto*. She was a relative unknown, except for those who had been fortunate to have heard her in venues in Europe, South America, or Cuba. After her great success in Chicago, Galli-Curci's career was entirely spent in the United States. She recorded with Victor Records and her recordings were distributed throughout the world affording her a worldwide following.¹⁰⁵

In her 1917 recording of "Una voce poco fa" she displays great beauty in the voice, as well as a plethora of vocal acrobatics in added cadenzas. By this time, the sound was recorded on a disc rather than a wax cylinder, so the quality of the recording is very good with little noise from the stylus. The instrumentation is sparse with only one instrument on each part, and there is an addition of a tuba to this instrumentation which is not heard on the other recordings. Of the three sopranos studied, Galli-Curci uses chest voice the least of all of them. She blends the registers very well and only uses an open chest voice on D4, C-sharp4, and B3 (m. 25, Appendix B). At one point in the aria the melodic line leaps between C5 and D4 followed by a leap from B4 to E4 (m. 21, Appendix B) in which Galli-Curci goes from head voice to open chest each time the line leaps downward. Also, she, like the others avoid the low G-sharp3 (m. 71, Appendix B) by taking the cadenza upward away from the lower register.

The examples used for this time period provide a rich history of recorded singers, in particular, sopranos. The recording techniques, instrumentation, and choice of repertoire document the history of the recording phenomenon in the early twentieth century. While each singer brings unique giftedness to the recording project, the vocal pedagogy of the early 1900s is represented in this recorded history with the two

¹⁰⁵ Michael Scott, *The Record of Singing*, (New York: Homes & Meier Publishers, Inc., 1979), 86-87.

registers firmly divided without blending. Although, Tetrizzini spoke of blending the registers in her treatise, she was unable to achieve that blend.

ELECTRICAL RECORDINGS AND LONG-PLAYING RECORDS 1920-1980

The invention of microphones brought dramatic change to the world of recorded music. After microphones, large orchestral works could be recorded. Because microphones could be placed anywhere in the room, all forty pieces could play and be heard as a unit without having to sit in front of a cone to be recorded. Classical orchestral recordings became increasingly popular, somewhat overshadowing the popularity of vocal recordings of classical music. As technology improved, and advances were made, the recording process became increasingly easier, and the quality of sound for the finished product also improved. The limitations of acoustic recordings were evident in that the instrumental accompaniment to the human voice was often muddled, distorted, or flat, in terms of resonance and overtones.¹⁰⁶ Microphones allowed music to be recorded in large concert halls with precision, while also capturing overtones and ambient sound in the room as well.¹⁰⁷

Rosa Ponselle

One of the most acclaimed artists during the electrical recording period was Rosa Ponselle. Ponselle was the first American soprano to begin her career in America, having never gone outside the United States to study, perform, or get her start in

¹⁰⁶ Milner, *Perfecting Sound Forever*, 53.

¹⁰⁷ *Ibid.*, 54-55.

singing.¹⁰⁸ She was born in Meridian, Connecticut in 1897 to immigrant parents who came to America from Naples, Italy. Although the Ponzillos were not a musical family, Rosa's mother saw to it that her children were exposed to great musical experiences as well as lessons in voice and piano. Rosa grew up going to concerts and recitals of the great singers in the early twentieth century, such as Nellie Melba and Luisa Tetrazzini.¹⁰⁹ Rosa and her sister, Carmela, both studied voice with a local voice teacher named Anna Ryan. When Rosa was eleven, Carmela, who was twenty-one, moved to New York to begin her performing career. Carmela came home for a visit in 1912 and heard her sister sing in the local dime store. She was so impressed with Rosa's improvement and growth that she took her to New York for her manager to hear her sing. At that time, vaudeville sister acts were popular, so Carmela's manager decided to give them a break, even though he had misgivings regarding Rosa's weight. It seems Rosa was a more full-figured girl than the manager thought the public would accept.¹¹⁰ After the manager heard her sing he remarked that he didn't care how "fat"¹¹¹ she was, he wanted to hire her! In just four days the sisters were performing under the billing, "Those Tailored Italian Girls."¹¹² The Ponzillo sisters sang opera arias as well as popular songs in their act, but both of them ultimately wanted to be on the opera stage. Carmela never sang in opera, but Rosa was hired by the Metropolitan Opera in 1925 to perform three to four nights a week. There were vocal issues for Rosa to overcome as a serious opera performer since she had never had any formal training. She had not learned any soprano opera roles, and she had a stigma as a vaudeville

¹⁰⁸ Michael Scott, *The Record Of Singing*, (New York: Holmes and Meier Publishers, Inc., 1979), 148.

¹⁰⁹ Peter G. Davis, *The American Opera Singer*, (New York: Doubleday, 1997), 264.

¹¹⁰ *Ibid.*, 266-7.

¹¹¹ *Ibid.*, 268.

¹¹² *Ibid.*

performer. It was in the beginning of her time at the Met when the management suggested she change her last name to Ponselle so she wouldn't continue to be associated with the Ponzillo Sister's vaudeville act.¹¹³

Although Rosa Ponselle had a beautiful voice, she could not articulate how she sang, or what happened in the voice while she was singing. When asked to write an essay for a book on singing she wrote,

First of all, I regard singing as a mental operation—that is, the art of singing. For the girl who is a student of opera in the higher sense, mechanical exercises cannot be well advised, because vocal mechanics do not enter into singing as an art.”¹¹⁴

She went on to say of William Thornton, the Impresario, “All that I may have gained in the way of voice production and flexibility, singing poise and tone development, I owe to him.”¹¹⁵ Though she did not use technical terms when describing how to sing, whatever she knew, or had gleaned from others, worked for her. The strength of her voice may well be attributed to her years on the vaudeville stage and her ability to use her voice to communicate art.

In her 1924 recording of “Salce, Salce” from Verdi's *Otello* Rosa Ponselle provides an exquisite performance of this dramatic aria. The orchestra is larger than those of the early 1900s and the ambient reverberation of a large room is evident in the recording and quality is remarkable on this recorded disc. Ponselle's voice is rich in color and much larger and dramatic than sopranos of the early twentieth-century. The registers in her voice are completely blended with slight adjustments for a more chest dominant sound on C4 in measure 16. She only uses pure head voice when she sings

¹¹³ Ibid., 270.

¹¹⁴ Davis, *The American Opera Singer*, 270.

¹¹⁵ Ibid.

pianissimo on the “Salce” (m. 32, Appendix B) and until that moment, the voice is full, strong, and holds a generous mix of thyroarytenoid and cricothyroid function throughout the range. This type of singing is unusual for the time period since mixing the registers will not be discussed academically until William Vennard in the late 1940s. Ponselle was not formally trained and would not have had the benefit of knowing, or understanding the terms of the head voice or chest voice. However, the lack of formal training did not keep her from learning from those around her. In her memoir she stated:

But I wasn't a perfect singer—and this is where I learned a great deal from Nino Romani. Even though I was what you might call a “natural,” I had a tendency to sing very high notes (say, B natural, the high C, and the high D flat) incorrectly. Because I was essentially untrained (I had never had an actual voice lesson in my life), I tended to sing high notes a bit too brightly, not knowing how to “cover” them.¹¹⁶

Despite her lack of training, Rosa Ponselle was a natural in the area of vocal production.¹¹⁷ Perhaps the cause for her dramatic voice was due to her time spent in vaudeville, or because she listened intently to the great sopranos who came before her. No matter the reason, Ponselle was able to unify the registers when famous sopranos before her were unable to do so.

Conchita Supervia

As Ponselle was making her way at the Metropolitan Opera in New York City, a gifted mezzo-soprano was making a name for herself in Spain. Nothing is known of her performances prior to the 1910 engagement

¹¹⁶ Davis, *The American Opera Singer*, 271.

¹¹⁷ *Ibid.*

with a European touring cast performing the opera *Los Amantes de Tereul* by Tomás Bretón in South America. Described as a lyric mezzo soprano, Supervia had a mixed career of disasters and successes. She made only two appearances in America, both were at Chicago Grand Opera in Bizet's *Carmen*. Conchita Supervia's career would remain largely in London at Covent Garden with brief appearances in South American venues. It is not known with whom Supervia studied, nor is it known how she received the honor of performing with the great opera houses of Chicago Grand Opera and London's Covent Garden. However, it is known that she was supported by many ardent admirers, both in the public and among her colleagues. Her musical influence came from growing up in Spain and also the European model of Bel Canto singing during the first half of the twentieth century.¹¹⁸

One of Conchita Supervia's crowning achievements was the recording of "Una voce poco fa" in 1927. A London critic stated that she had three voices in one. Not only did she possess a strong chest voice, but she also had a lyric quality to her voice.¹¹⁹ She sang in open chest voice in the lower registers, and sailed into the head voice on the runs and trills. The recording sounds as if it is in a large room or concert hall with a full orchestra for Supervia's accompaniment. The recording is clear with no noise from the stylus and is recorded on a flat disc. She sings the aria in the original key of E Major instead of the normal F Major usually used for mezzo-sopranos. She uses open chest for every note on or below F4, for example, measures 15-16 and 28-29 (Appendix B).

¹¹⁸ Michael Scott, *The Record of Singing*, (New York: Holmes & Meier Publishers, Inc., 1979), 110.

¹¹⁹ J. B. Steane, *Voices: Singers and Critics*, (Portland, Oregon: Amadeus Press, 1993), 39.

One of the most pronounced features of Supervia's voice was her vibrato. She had a distinctive "rattle"¹²⁰ that sounded throughout her entire range.¹²¹ In the head voice the vibrato is light and even beautiful, but in the chest voice the vibrato is harsh and heavy making it very difficult to appreciate. Conchita Supervia's voice was defined by her use of chest voice and her vibrato more than any other female singer in the 1920s and 1930s, although it is not known where she learned how to use the chest voice, or where to employ the chest voice in an aria, she had quite a following of admirers who felt her voice and performing ability were of a higher quality than other singers of the day. Supervia died in 1936 at the age of forty-one.¹²² J.B. Steane states in his book, *Voices: Singers and Critics*,

When a strong chest-voice flavours the whole production, as with Supervia and also Horne and Agnes Baltsa, there is always a high risk that the break between registers, even if sealed during training, will come apart after some years of singing.¹²³

Maria Callas

Later, in the 1940s and 1950s, electrical recordings became even more sophisticated in recording capability and quality. While much of the electrical recordings from the late 1920s through the 1940s were of symphonic music, recordings of singers began to re-emerge in the late 1940s and early 1950s. One of the most recorded female artists in the early 1950s was Maria Callas. Callas was not only considered one of the greatest opera singers of the mid-twentieth century, but she was also considered one of the best actresses on the opera stage during that time. Maria

¹²⁰ J.B. Steane, *The Grand Tradition*, (London: Gerald Duckworth & Co., Ltd., 1974), 267.

¹²¹ *Ibid.*, 268-269.

¹²² J.B. Steane, *Voices: Singers and Critics*, 39-40

¹²³ Anne Edwards, *Maria Callas: An Intimate Biography*, (New York: St. Martin's Press, 2001), 8.

Callas was born in New York City to Greek immigrant parents.¹²⁴ When Maria was seven years old her mother heard her singing to some records being played on their old phonograph. Maria's voice was very pretty and her mother felt like she had some talent. Her sister was already taking piano lessons from a downstairs neighbor in their apartment building and so her mother asked the teacher to teach both girls at the same time for an extra twenty-five cents. The teacher agreed and both Maria and her sister began their musical training. Maria's mother would teach her how to sing as she would spend hours at the piano with Maria forcing her into a coloratura range.¹²⁵ Maria Callas would lament later in life:

....I did have this voice and [my mother] pushed me into a career. I, too, was considered a sort of infant prodigy...As things turned out, I can't complain. But to load a child so early with responsibility is something there should be a law against.¹²⁶

The part about her career that Maria Callas would not lament was the great success and fame her singing brought her. Although her mother tried to live out her dreams of fame vicariously through her daughter, the gift that Maria possessed to interpret an aria was unequaled by any other performer of her time. Her voice was sometimes harsh and heavy, but when she sang in her upper register the voice was light and beautiful.

Maria's mother would only let her sing and study classical soprano literature and when she was twelve years old she had the female lead in her school production of Gilbert and Sullivan's *Mikado*. It was during this performance that Maria was set apart from her classmates and her mother began pushing harder than ever for her to make her career in public performance. She secured a chance to sing on a radio talent show by

¹²⁴ Ibid., 8-9.

¹²⁵ Anne Edwards, *Maria Callas: An Intimate Biography*, 12-13.

¹²⁶ Ibid., 13.

auditioning with “Un bel di” from *Madame Butterfly*. When she sang for the radio show she sang “A Heart That’s Free” and her sister accompanied her on the piano. Maria won second place, received fifty dollars, and a wristwatch.

In 1936, against her husband’s wishes, Maria’s mother took she, and her older daughter, back to Greece to receive, what her mother deemed proper musical education and training. Although their father would write to the girls, Maria’s mother told them that their father abandoned them.¹²⁷

When Maria was fourteen, she was accepted into the studio of Madame Maria Trivella at the National Conservatory in Athens, Greece, and began a strict course of vocal study. Even though the entrance age for the conservatory was sixteen, Maria’s mother altered the printed date of birth on the birth certificate and she was accepted into the conservatory on a full scholarship. At the Conservatory, Maria studied with Trivella until her acceptance into the Athens Conservatory in 1939 at which time she would study with the famous Spanish soprano, Elvira de Hidalgo.¹²⁸

Maria Callas had a flair for drama in her voice and her acting ability. Her teacher, de Hildago recalls, “But there was an innate drama, musicianship and a certain individuality in her voice that moved me deeply. In fact, I shed a tear or two and turned away so that she could not see me.”¹²⁹ Elvira de Hildago continued to give Maria music that stretched her voice, and sometimes, pushed her into literature too difficult for the sixteen-year-old to handle. De Hildago started working with Maria on breath control, stamina, and increasing her range. Both of Maria’s teachers relied on her dramatic ability to carry roles that she was too young to play. However, Maria seemed to be

¹²⁷ Edwards, *Maria Callas: An Intimate Biography*, 17-18.

¹²⁸ *Ibid.*, 29-30.

¹²⁹ *Ibid.*, 30.

willing, and excited about the challenges put before her. She had great success at the Athens Conservatory playing Angelica in a performance of *Suor Angelica* in 1940, which won her a position in the Greek National Theater in Athens as a chorus member.¹³⁰ Her association with the Greek National Theater would afford her opportunities to perform as a soloist in several operas.

There is little doubt as to what kind of vocal method she was taught by both Trivella, and de Hildago since the prevailing vocal technique in Europe was that of Manuel Garcia II, or Bel Canto, and it is confirmed through her own words. Callas would later say of her technique:

Bel canto...is a method of singing, a sort of strait-jacket you must put on. You learn how to approach a note, not to attack it, how to form a legato, how to create a mood, how to breathe so that there is a feeling of only a beginning and an ending.¹³¹

Maria would end her study and performance career in Athens at the age of eighteen. She boarded a ship for America to find her father and seek her fame and fortune on the American opera stage.¹³²

When Maria Callas disembarked from the ship in New York harbor, her father was waiting for her. He had read in the newspaper that a ship was coming in bringing some Americans who had been caught in Europe during the war, but were now making their way back home. Mr. Callas called the ship liner and asked for a roster and found Maria's name among those scheduled to arrive. She lived with her father and got reacquainted with him while she went to auditions and tried to get her name out in the musical community as much as possible. Her big break came when a man by the name

¹³⁰ Edwards, *Maria Callas: An Intimate Biography*, 40-41.

¹³¹ *Ibid.*, 52.

¹³² *Ibid.*, 53.

of Edward Johnson, who was in charge of the Saturday afternoon radio broadcasts from The Metropolitan Opera, remembered he had received Maria's résumé some months earlier after hearing her sing in Greece. Many European singers had been detained in Europe during the war which left a great need for singers to fill the roles cast at The Met. Maria was offered the role of Leonore in Beethoven's *Fidelio*, but felt like the role was not for her, and turned it down. In 1946, a friend of hers, Eddie Bargarozzy, was working to get money for the Chicago Civic Opera Company. When he finally did get the money raised, he cast Maria in the leading role in *Turandot*. The opera was never performed because Bargarozzy went bankrupt before they could make the presentation.¹³³

There was no singing contract or engagement on the horizon in the states for Maria Callas. A friend of Maria's who was also on the roster of Chicago Civic Opera, Rossi-Lemeni, bass, had been hired to sing in the opera *La Gioconda* in the production at the Arena di Verona summer festival in Italy. He recommended the director listen to Maria Callas for the role of *Gioconda*. Zantella, the director, agreed to hear her sing. He was impressed and said she was just the type of voice they were seeking.¹³⁴ Callas spent the last part of the 1940s performing in Europe and in 1951 she debuted at La Scala.¹³⁵ It would be three more years before her 1954 American debut at the Lyric Opera of Chicago playing the role of *Norma*. Finally, she sang at the Metropolitan Opera in 1956.¹³⁶

¹³³ Edwards, *Maria Callas: An Intimate Biography*, 63-4.

¹³⁴ *Ibid.*, 66-67.

¹³⁵ *Ibid.*, 68.

¹³⁶ J.B. Steane, *Voices: Singers and Critics*, (Portland, Oregon: Amadeus Press, 1993), 154.

In the 1955 studio recording of “Una voce poco fa” Callas delivers her signature dramatic performance. Some have called her a dramatic coloratura soprano because of the richness of the voice paired with the range and flexibility in the higher register.¹³⁷ In the 1955 recording Callas sings with a full orchestra in Watford Town Hall in Hertfordshire, England,¹³⁸ which is evidenced by the size of the orchestra, and the ambient reverberation in the room.¹³⁹ The voice is strong, rich, and full in the mid-range into the chest voice. Callas mixes head voice and chest voice in the lower part of the range, C-sharp4-F4 (m. 36-37, Appendix B), but uses full, open chest voice when singing B3 (m. 25, Appendix B) and below. When the melodic line descends to G-sharp3 (m. 71, Appendix B) Callas sings with open chest, but with the slightest amount of head voice as to not become too heavy in the vocal mechanism. Her interpretation of “Una voce poco fa” has an unusual blend of vocal strength in the middle and chest range, and lightness into the higher register. She blends the registers very well without any obvious break between head and chest, which is what Manuel Garcia II spoke about in his treatise.¹⁴⁰ Garcia stated that it was optimum to blend the two registers as soon as possible acquiescing that only a few singers were actually born with the ability to blend the registers without extensive practice.¹⁴¹ Callas may very well have been one of the few who were born with this ability.

Long playing records were an extension of the electronic era of recorded music. Electrical recording became more sophisticated with quality microphones, magnetic

¹³⁷ Davis, *The American Opera Singer*, 482.

¹³⁸ Maria Callas, *Lyric and Coloratura Arias*, Liner Notes, Philharmonic Orchestra dir. Tulio Serafin, EMI Classics: 6, CD, 1955.

¹³⁹ Ibid.

¹⁴⁰ Garcia, Part One, 50-51.

¹⁴¹ Ibid.

tape recording, and better recording equipment. It is no wonder that the musical experience was enhanced and more enjoyable during the years between 1950 and 1980.

Anna Moffo

One of the leading sopranos at the Metropolitan Opera in the 1960s and 1970s was American singer, Anna Moffo. Moffo was born in Pennsylvania and completed her undergraduate degree in voice at the Curtis Institute.¹⁴² She then received a Fulbright Scholarship to study abroad.¹⁴³ Being from Italian descent, Anna decided to go to Italy on her scholarship to study voice. After she arrived in Italy she began to study with a vocal coach, Luigi Ricci, and a voice instructor named Mercedes Llopert.¹⁴⁴ After an extensive career in Europe, she would make her debut in the United States singing Mimi in *La Bohème* at Chicago Lyric Opera. Her Metropolitan Opera debut would come in 1959 where she played the role of Violetta in *La Traviata*.¹⁴⁵ It was while Anna was at the Curtis Institute that people would not only notice her talent, but her beauty, as well. When she auditioned for the Philadelphia Orchestra Young Artist Auditions, Eugene Ormandy said, “It is impossible for anyone that beautiful to sing, so I closed my eyes and she won on merit.”¹⁴⁶ While in Italy Anna was not only engaged in opera productions, but television as well. Her Italian television debut was in a production of *Madame Butterfly* in 1956.¹⁴⁷

¹⁴² Davis, *The American Opera Singer*, 465.

¹⁴³ Ibid.

¹⁴⁴ Ibid.

¹⁴⁵ Clyde T. McCants, *American Opera Singers and Their Recordings*, (Jefferson, North Carolina: McFarland & Company, Inc., 2004), 173.

¹⁴⁶ Davis, *The American Opera Singer*, 465.

¹⁴⁷ Ibid.

Moffo married a man named Lafranchi who became her agent. Their marriage was tumultuous as Lafranchi pushed his wife into more and more singing engagements. Moffo was still in her early thirties, but singing heavy, dramatic roles for which her voice was not yet ready. The rigorous travel and performance schedule began to take a toll on her voice. Also, her marriage was failing because she and her husband were never together. By the time Moffo reached forty years old, her voice was a “wreck”.¹⁴⁸ With her voice and marriage failing, Anna divorced Lafranchi in 1972, but remarried in 1974 to RCA’s chairman, Robert Sarnoff.¹⁴⁹ By the late 1970s Anna Moffo’s career as an opera singer was over. Her voice was tired, fatigued, and injured. She started working with the medical doctor, and voice teacher, Beverly Johnson.¹⁵⁰ Johnson would say:

It’s just that somebody along the way forgot to tell her that you can’t run a Rolls-Royce without gas in it. Anna had one of the really naturally beautiful voices, like Tebaldi. But she never had any true physiological technique to fall back on. She had no breath support; there was no resonance in the middle and lower voice. Only air coming out. So what we’ve been trying to do for the past two years is wash away the crud and build up her stamina. A singer, like an athlete, has to have every workable muscle trained.¹⁵¹

Although her career was not long, for a moment in time she had one of the most beautiful voices to sing on the opera stage.

Anna Moffo’s 1960 recording of “Air des bijoux” or “The Jewel Song” from Verdi’s *Faust*, was one of her shining moments. In this recording, her voice is clear, beautiful, and strong. When the melodic line leaps from an F-sharp4 (m. 54-55, Appendix B) to a B3, Moffo’s voice is completely balanced between the head and chest

¹⁴⁸ Davis, *The American Opera Singer*, 467.

¹⁴⁹ Ibid.

¹⁵⁰ Ibid.

¹⁵¹ Ibid., 468.

voice. While the B3 is strong, it is not sung in open chest. The mix of head and chest voice is uncanny and shows no sign of any break between the registers. The middle part of the voice is rich and full while she sings the higher notes with lightness, ease, and purity.¹⁵² Anna Moffo was a promising young singer. Perhaps one of the greatest tragedies is when the career of a singer is cut short because of not caring for the instrument, and although Anna Moffo's career ended sadly, she continues to be considered an excellent singer and performer in the 1960s.

Beverly Sills

Many of the greatest talents in American opera history had careers from the 1960s through 1980s. One of the more famous singers was a coloratura soprano named Beverly Sills. Sills was born and raised in New York City and lived an idyllic life.¹⁵³ She began to perform on the radio at the age of four, and her mother afforded her every opportunity to sing, dance, or dialogue with local radio personalities and producers.¹⁵⁴ Beverly soon became a regular on the local radio program, *The Capital Hour*, and sang on commercials for several different products. She began to earn her own money and with the money she had saved she bought a Baldwin piano.¹⁵⁵ Sill's mother was told to start giving her singing lessons and since she had seen an ad in a magazine for a voice teacher, she thought she would contact the teacher. The voice teacher Beverly would start studying with was Estelle Liebling. Estelle Liebling was a famous voice teacher

¹⁵² Anna Moffo, *Arias from Faust, La Bohème, Dinorah, Carman, Semiramide, Turandot, and Lakmé*, RCA Victor, CD, 1998.

¹⁵³ Beverly Sills and Lawrence Lindeman, *Beverly: An Autobiography*, (New York: Bantam Books, 1987), 1-3.

¹⁵⁴ *Ibid.*, 8-10.

¹⁵⁵ Edwards, *Maria Callas: An Intimate Biography*, 15.

and had been credited with coaching Amelita Galli-Curci through a difficult time with her voice.¹⁵⁶ Estelle Liebling was a pupil of Mathilda Marchesi and taught in the vocal technique of Manuel Garcia II.¹⁵⁷ At the age of fifteen, Beverly went on a tour of the eastern and mid-western parts of the United States with a travelling group put together by J.J. Shubert. Shubert was known for his Broadway successes and asked Beverly to tour with his Gilbert and Sullivan show. With her mother's encouragement, and her father's dismay, Beverly went on the road for a two month stint.¹⁵⁸

By the time Beverly graduated from high school and could start college she was already on her way to becoming an opera star. She opted to go straight into her singing career and skip going to college. One of the first auditions Sills went to was in Baltimore for the title role in the opera *Norma*. Beverly went to audition for the artistic director, which happened to be Rosa Ponselle. She and Miss Ponselle met and worked together for a few hours. After they had worked Rosa Ponselle told Beverly Sills that the role of *Manon* was hers.¹⁵⁹ In 1953 Sills sang for the Gaetano Merola of the San Francisco Opera Company. Merola signed her to for the fall opera season where she would debut in the role of Helen of Troy in *Mefistofele* by Boito, followed by the role of Donna Elvira in *Don Giovanni* by Mozart.¹⁶⁰ When Beverly arrived in California she was taken to the Merola home where she found a large group of mourners. Gaetano Merola had passed away the night before while conducting *Madame Butterfly*.¹⁶¹ Kurt Adler became the artistic director for the San Francisco Opera after Merola's death.

¹⁵⁶ Davis, *The American Opera Singer*, 490.

¹⁵⁷ Sills and Lindeman, *Beverly: An Autobiography*, 21.

¹⁵⁸ *Ibid.*, 29-30.

¹⁵⁹ *Ibid.*, 66-67.

¹⁶⁰ Sills and Lindeman, *Beverly: An Autobiography*, 61-62.

¹⁶¹ *Ibid.*, 70.

Sills and Adler had a falling out which resulted in Sills not being asked to sing at the San Francisco Opera for over eighteen years. Eventually, the two talked out their differences and Sills appeared in the title role of *Manon* at the San Francisco Opera in 1971.¹⁶²

In 1955, Beverly Sills would sign a contract with New York City Opera to play the role of Rosalinda in Strauss's *Die Fledermaus*.¹⁶³ She opened to rave reviews from Harold C. Schonberg of *The New York Times*. He said, "City Opera had added an accomplished singing actress to its roster."¹⁶⁴ Sills stayed on the roster of New York City Opera for the next twenty-four years until her final performance in 1979. Immediately following her retirement Sills took over the financially challenged New York City Opera as the General Manager until her full retirement in 1989.¹⁶⁵

Three years before her retirement Sills performed with the New York City Opera as Rosina in *Il Barbiere di Siviglia (The Barber of Seville)*, which was broadcast on television by the "Live from Lincoln Center" series. The opera aired in 1976 and was released on video cassette in 1992. Although Sills was toward the end of her career she delivered a magnificent performance in this coloratura soprano role. Her voice is a bit heavy in the middle section, but the high notes are light, pure head voice, and negotiated very well. The only time in the entire aria where Sills goes into open chest voice is when the melodic line descends to G-sharp3 (m. 71, Appendix B) as she puts out a harsh sounding note that would rival any contralto or mezzo-soprano. The notes of B3 to F4 are sung in a head/chest mix with the head voice being the dominant

¹⁶² Ibid., 72.

¹⁶³ Ibid., 80.

¹⁶⁴ Ibid.

¹⁶⁵ Davis, *The American Opera Singer*, 497.

sound.¹⁶⁶ Beverly Sills was adept at blending the registers throughout her entire vocal range. Perhaps this was due, in part, to her experience in commercial music and singing different genres of music.

Leontyne Price

While Beverly Sills was carving out her career with the New York City Opera, Leontyne Price was beginning her career in New York City, also. Price is a soprano in the company of the other great sopranos during the time of long-playing records. Leontyne was recognized by a wealthy woman in the community named Elizabeth Chisholm as having a unique singing talent. Mrs. Chisholm had the means to assist Price financially and paid for her voice lessons.¹⁶⁷ When the time came for Leontyne to think about college, Mrs. Chisholm provided the money for her to go to The Julliard School where Price studied with Florence Page Kimball.¹⁶⁸ While studying at Julliard she was cast in Verdi's *Falstaff* where Robert Breen, a prominent New York City producer, heard her sing. He asked if she would consider singing the part of Bess in Gershwin's *Porgy and Bess* in a world tour. She signed on with the company and toured with them for two years. Upon her return from the tour, Price was presented on NBC in a televised production of *Tosca* in 1955, which led to her eventual appearance at the San Francisco Opera, and ultimately the Metropolitan Opera.¹⁶⁹ Leontyne was African-American and although the race barrier in American opera had been broken by Marian Anderson, Price started performing during the civil rights movement which

¹⁶⁶ Beverly Sills, *Il Barbiere di Siviglia*, Video, New York City Opera Orchestra dir. Sarah Caldwell, "Live from Lincoln Center", Broadcast, 1976, Pub. 1992.

¹⁶⁷ Peter G. Davis, *The American Opera Singer*, (New York: Doubleday, 1997), 514.

¹⁶⁸ Ibid.

¹⁶⁹ Peter G. Davis, *The American Opera Singer*, 515.

carried with it the pressure for Price to succeed, and accept whatever was offered to her.¹⁷⁰ In a 1973 interview Price would say:

My career was simultaneous with the opening of civil rights. Whenever there was any copy about me, all the attention was as an artist, what I had as ability got shoveled under because all the attention was on racial connotations. I didn't have time to fight back as an artist except to be prepared and do my work and take that space because I was the only person allowed the opportunity. That is what it meant to be black then...If you get in the door, you have to accept and almost gobble everything that comes with it. With it, in my case, was pressure.¹⁷¹

Leontyne overcame the pressure by concentrating on her career becoming one of the most famous opera singers of the twentieth-century. She debuted at the Metropolitan Opera in 1961 in the role of Leonore in *Il Traviatore*.¹⁷² The audience was so impressed with her performance they gave her a forty-two minute ovation.¹⁷³ Her voice was rich, full, and vibrant earning her the rare voice classification of Spinto Soprano. A Spinto soprano is typically a large voice that has a quality resembling a ring, or spin, adding to the vitality, warmth, and uniqueness of the sound.

All the qualities of a Spinto soprano are found in the 1965 recording of "Salce, Salce" from Verdi's *Otello*. The voice is in top form as she negotiates sweeping melodic lines and exacting portamentos leaving her performance with little room for critique. The recording itself is a studio recording made with full orchestra, and although there is no information of where the recording took place, the space sounds like a large hall with ambient reverberation in the room.¹⁷⁴

¹⁷⁰ Clyde T. McCants, *American Opera Singers and Their Recordings*, 223.

¹⁷¹ Davis, *The American Opera Singer*, 516.

¹⁷² Donald S. Blair, *Great Opera Singers of the Twentieth Century 1927-1990*, (Lewiston, New York: The Edwin Mellen Press), 25.

¹⁷³ Davis, *The American Opera Singer*, 513.

¹⁷⁴ Leontyne Price, *Leontyne Price: The Prima Dona Collection*, BMG/RCA Classics, 09026-61236-2 (1965-1979), CD, Disc 1, 1992.

Price sings in a balanced mix of head and chest in the middle voice and, in this recording, does not use full chest at any time. The lowest sounding note in the aria is C-sharp4 (m. 16, Appendix B), which is in the passagio between chest voice and head voice for most soprano voices. In early recordings, sopranos would use full chest on the C-sharp4. However, Price negotiates this difficult note with a chest/head mix without losing any volume, vibrancy, or vitality in the voice, and without having any break between the registers.¹⁷⁵

By the 1960s a new type of vocal pedagogy was established. Vennard's research had enlightened vocal pedagogues as to how the voice truly worked and what it could accomplish in blending the registers. The progression of vocal pedagogy concepts are well documented through the recordings of sopranos from the 1960s through the 1980s. The evolution of vocal pedagogy was making its mark on performance practice in the mid-1900s. The singers during this period of the twentieth century blend the registers quite well without the abrupt change from chest to head voice as was documented in the recordings from the early 1900s.

¹⁷⁵ Leontyne Price, *Leontyne Price: The Prima Dona Collection*, BMG/RCA Classics, 09026-61236-2 (1965-1979), CD, Disc 1, 1992.

DIGITAL RECORDINGS

The use of digital recording took its place in the early 1990s when the capability of computers could read a compact disc with accuracy and speed. The change may or may not have been noticed by the music listener, but the impact in the way sounds are stored and reproduced was significant. The ease of a compact disc or MP3 player gave consumers access to thousands of files stored in a small device and became common place, ultimately replacing cassette tapes and vinyl records. It is during this metamorphosis of sound recording and reproduction that three important opera singers take the stage: Kathleen Battle, Angela Gheorghiu, and Renée Fleming. While the biographical information on Kathleen Battle and Angela Gheorghiu is limited the contribution to recorded history and performance in relation to these singers is significant.

Kathleen Battle

The beginning career of Kathleen Battle was filled with promise as she prepared herself for a life in opera. Early in her career Battle's voice was often referred to as a soubrette soprano voice, which means light, bright, and small. However, as she grew as an artist her voice became larger with added warmth to her tone.¹⁷⁶ Later in her career she would be described as a Lyric Coloratura because of her range and flexibility in the upper register.¹⁷⁷ Battle was born in Portsmouth, Ohio as the youngest in a family of seven children.¹⁷⁸ Kathleen went to college at the Cincinnati Conservatory where she

¹⁷⁶ J. B. Steane, *Voices: Singers and Critics*, 6.

¹⁷⁷ Clyde T. McCants, *American Opera Singers and Their Recordings*, 31.

¹⁷⁸ Livia Franke, *Kathleen Battle: American Soprano*, (New York: Gareth Stevens Publishing, 2010), 6.

studied with Richard Baus. Upon graduation began teaching public school music to fourth through sixth graders.¹⁷⁹ She kept singing and performed with different orchestras, then, with the urging of a friend, she auditioned for Michigan Opera Theater and made her opera debut as Rosina in *Il Barbiere di Siviglia* in 1975. Kathleen Battle's career would rise rapidly as the following year she would make her New York debut at New York City Opera playing Susanna in *Le Nozze di Figaro*, and in 1977 she sang her first leading role at the Metropolitan Opera as the Shepherd in *Tannhäuser*.¹⁸⁰

Battle enjoyed a plethora of roles at The Met, Covent Garden, and other opera houses worldwide. She also had an extensive recording career. She was a favorite of the conductor James Levine and recorded several CDs with him as her director. Kathleen Battle rose to fame quickly and by the early 1980s had secured her place on the opera stage with the potential for a long, successful career. However, she began treating her colleagues and the crew in a disrespectful manner, which resulted in a termination of her association with the Metropolitan Opera Company. Although Kathleen Battle had a perilous end to her career at the Metropolitan Opera, her achievements and accomplishments play an important part of the advancement of music, opera performances, and serve as an important contribution to the study of the blending of chest and head register. Her recordings are a reminder of her talent and her dedication to the art and craft of singing.¹⁸¹

One of Battle's greatest recordings was a DVD of her 1991 performance of Rosina in *Il Barbiere di Siviglia*. In the opening act she enters the stage with energy and enthusiasm singing "Una voce poco fa." Her voice is clear while she negotiates

¹⁷⁹ Ibid., 10.

¹⁸⁰ Clyde T. McCants, *American Opera Singers and Their Recordings*, 31.

¹⁸¹ McCants, *American Opera Singers and Their Recordings*,

through difficult runs and cadenzas all the while singing with clarity and accuracy. Battle sings the descending line to the G-sharp³ (m. 71, Appendix B), but never sings in chest voice. In fact, she does not mix any chest voice in with the low pitch, which makes it difficult to hear and is not in line with the rest of the quality of the voice. At other points in the aria (mm. 38, 66, 67, Appendix B) where there are opportunities to sing chest voice in the lower register she avoids the notes by singing an ascending cadenza away from the lower notes. Even without the power of the chest voice mixed with head voice the performance is remarkable.¹⁸² The lack of use of the thyroarytenoid function of the voice in this performance by Kathleen Battle detracts from the over-all performance of and leaves the lower register without vitality or vibrancy.

Angela Gheorghiu

A different type of opera diva began to emerge toward the end of the twentieth century into the beginning of the twenty-first century, opera divas who wanted to be involved in artistic decisions having to do with casting, staging, and set design. Angela Gheorghiu was an opera singer who enjoyed every aspect of the creative process in opera production. She would be involved in every aspect of the opera performance. Gheorghiu was born in Romania and she enjoyed classical music her entire childhood. In fact, she would remark in an interview that she and her sister would pretend to be opera singers and would act out opera scenes for fun.¹⁸³ At the age of fourteen Angela moved to Bucharest to go to high school at George Enescu Lyceum where she would

¹⁸² Gioacchino Rossini, *Il Barbiere di Siviglia*, Kathleen Battle, Deutsche Grammophon, DVD, 435 735 2, 1991.

¹⁸³ John Allison, "Angela Gheorghiu," *Opera News* 61, no. 13, 24-26.

study in a liberal arts environment that included vocal study.¹⁸⁴ While studying at the Lyceum the atmosphere was of strict study of all subjects. Gheorghiu did not mind the rigid schedule and expectations since she pushed herself more than any teacher could.¹⁸⁵ She studied with a voice teacher named Mia Barbu and credits her with her musical discipline, technique, and vocal beauty.¹⁸⁶ When Angela finished at the George Enescu Lyceum she went to the Bucharest Academy of Music for her final schooling in voice. When she graduated from the Academy she was twenty-three years old and ready to make her mark in opera performance. She had always known she wanted to be an opera singer and now she had finished the training to accomplish her goal.¹⁸⁷ While she would have several auditions with houses such as Covent Garden and the Vienna State Opera, not until 1992 would she perform outside of Romania. She went straight from the stage in Romania in 1992 to London's Covent Garden singing the role of Zerlina in *Don Giovanni*. She felt like the role of Zerlina did not suit her vocally and would push for more dramatic roles such as Mimi in *La Bohème*. She would get her chance that same year to sing Mimi in her Metropolitan Opera debut. Her prize role came in 1994 when she was cast in the Covent Garden's production of *La Traviata* in the role of Violetta. This performance was televised and all who watched were impressed with her voice and her ability to communicate the character to the audience.¹⁸⁸ An Italia critic spoke of Gheorghiu's voice after her debut at La Scala singing Violetta in their production of *La Traviata* and said, "Gheorghiu sings the way they used to sing in

¹⁸⁴ Ibid., 24.

¹⁸⁵ John Allison, "Angela Gheorghiu", 25.

¹⁸⁶ Ibid., 24-26.

¹⁸⁷ Ibid., 25.

¹⁸⁸ Ibid., 26.

provincial opera houses a long time ago and she acts like the diva she believes herself to be: with hysteria.”¹⁸⁹

Gheorghiu believes in hard work and does not want to work with anyone who doesn't share that same work ethic. She stated in an interview in 2008,

I'm not just going have my fee. A performance for me, it's a part of me. It's a ritual – starting with solfeggio, starting with rehearsal, starting with doing my languages, my makeup – everything: After each performance a part of my blood is there, but in a real way.¹⁹⁰

An astute business woman, Gheorghiu also works to find new opera material and has commissioned two new opera works for herself, one opera on the subject of Bonnie and Clyde and the other on the subject of Draculetta.¹⁹¹

Angela Gheorghiu's voice has a richness and warmth that many opera singers have a difficult time achieving. In her 1997 studio recording of Gounod's 'Air des bijoux,' the voice is even in tone and in the registration. Nothing is known of the technique she was taught in Romania, but the absence of chest voice in the lower register is significant. When she sings the B3 or C-sharp4 (m. 38) her voice is barely audible as she is singing only in head voice. However, the power in the middle and high part of the voice sounds as if it has a significant amount of thyroarytenoid function mixed with the head voice.¹⁹² Normally, this type of singing would not be optimal, but her voice seems able to withstand the heavy mechanism in the middle range. She possesses a certain vibrancy in her voice, which makes for a pleasant color in the tone.

¹⁸⁹ Angela Gheorghiu, "Angela Gheorghiu," *Opera News* 73, no. 6, (Dec. 2008): 16.

¹⁹⁰ *Ibid.*, 16-17.

¹⁹¹ *Ibid.*, 17.

¹⁹² Angela Gheorghiu, *Angela Gheorghiu: Arias*, Orchestra del Teatro di Torino, dir. John Mauceri, CD, 8, The Decca Record Company, Ltd., London, 1996.

Renée Fleming

Of the successful sopranos in the late 1990s into the twenty-first century that have consistently delivered fine performances, Renée Fleming would be at the top of that list. Fleming came from a musical family with both parents being music teachers. Her father taught high school music while her mother was an opera singer and taught at the collegiate level. She grew up outside of Rochester, New York listening to her parents sing operatic literature in their home along with hearing fine singers on the radio and record player.¹⁹³ After starring in a few school musicals and singing in some local music organizations, Renée decided she wanted to major in music in college. She auditioned for several colleges and universities before deciding on The Crane School of Music in Potsdam, New York. The decision to go to The Crane School of Music was due to the amount of scholarship they offered her. It was the only place she could afford to go, but it would turn out to be the best place for her to attend and receive some much needed personal attention in the area of performing.¹⁹⁴ She studied with Patricia Misslin at the Crane School and by her own admission she began her music education with a plethora of vocal issues. Fleming said her teacher did not let any issue go unnoticed. If it was wrong, she fixed the problem then, and there. Pat Misslin worked with Renée centering her technique on “resonance, focus, and placing the voice.”¹⁹⁵ Renée learned a great deal from Pat, but as she was graduating with her undergraduate degree Pat told her she needed to study with other teachers. She recommended Renée continue her education by auditioning for graduate school at Eastman School of Music,

¹⁹³ Renée Fleming, *The Inner Voice: The Making of a Singer*, (New York: Penguin Group, 2004), 2-4.

¹⁹⁴ *Ibid.*, 15.

¹⁹⁵ *Ibid.*, 17.

and reluctantly, Renée auditioned, was accepted, and went to work on her master's degree in voice.¹⁹⁶ While at Eastman Fleming studied with John Maloy where she learned how to audition, learn opera roles, and work on her technique. In 1983 she spent the summer after her first year of graduate school in Aspen, which would be the first of many summers spent there with all the experiences working together for Renée Fleming to hone her craft of singing and acting in opera. When she finished her masters at Eastman she auditioned for the Julliard Opera Center, which was an apprentice program for students who had finished a graduate degree. This time would prove to be a momentous time in Renée's life as she would study with world famous coaches, live in the center of New York City, and work with the famed teacher, Beverly Johnson. Fleming credits Beverly with much of the correcting of the technical faults in her voice.¹⁹⁷ Renée had a chance to go to Germany on a Fulbright scholarship, and she took the opportunity to study abroad with Arleen Augér.¹⁹⁸

After her year of study in Germany, Fleming came home to New York City to begin auditioning. She auditioned for several opera companies, but no one cast her in any roles. She began to prepare for her Met audition, even though the first Met audition years before had gone badly. In 1988 she auditioned again and won.¹⁹⁹ After she won the Met audition, she continued to be overlooked by the Metropolitan. In the meantime, Fleming began to perform with Houston Grand Opera, Royal Opera in London, and the Geneva Opera. She would not make her debut at the Metropolitan Opera until 1991

¹⁹⁶ Ibid., 28-29.

¹⁹⁷ Ibid., 36.

¹⁹⁸ Ibid., 46.

¹⁹⁹ Ibid., 76.

when she stepped in as a cover for Felicity Lott as the Countess in *Le Nozze di Figaro*.²⁰⁰

Renée Fleming would also enjoy an extensive recording career recording over thirty-five CDs and over a dozen DVDs of full opera performances.²⁰¹ In her 1997 studio recording of great opera scenes she included “Mi Parea”, “Salce, Salce”, and “Ave Maria” from Verdi’s *Otello*. In this recording, Fleming exhibits excellent control and beauty while providing an emotional delivery of this dramatic text. Her voice is blended well in the lower register, but goes into open chest on C-shapr4 (m. 38). As stated before, the C-shapr4 for a soprano is a difficult area of the voice as it is the passaggio between the chest and head voice. Fleming negotiates this passaggio well with no apparent break in the voice and goes back into full head voice in the next phrase.²⁰²

Fleming describes her technique in the following passage from her book:

Ideally, an opera singer will maintain an enormous amount of focus in the mask while using the rest of the resonance areas as well. The trick is going up and down and blending them all. I always imagine that the voice is a tapestry, and that as one thread goes up, different threads are woven in. coming back down, those threads are woven back out and others threads are pulled through. What that creates is evenness in the tapestry, up and down, in length and breadth.²⁰³

Fleming’s technique does not fail her in this recording of “Salce, Salce”. The resonance of the voice is present throughout the aria and provides the weaving of the tapestry she refers to in the balance of both the head and chest registers. The seamless flow of the voice between registers makes for a compelling performance.

²⁰⁰ Fleming, *The Inner Voice: The Making of a Singer*, 89.

²⁰¹ Clyde T. McCants, *American Opera Singers and Their Recordings*, (Jefferson, North Carolina: McFarland & Company, Inc., 2004), 70.

²⁰² Renée Fleming, *Renée Fleming: Signatures Great Opera Scenes*, London Symphony Orchestra, Sir Georg Solti, dir. CD, 4, London: The Decca Record Company, 1997.

²⁰³ Fleming, *The Inner Voice: The Making of a Singer*, 18.

CONCLUSIONS

Vocal pedagogy in the early twentieth-century was highly influenced by the treatise written by Manuel Garcia II in the nineteenth-century. The writings of vocal pedagogues from the seventeenth and eighteenth-centuries spoke about the need to blend the chest and head registers, but were unable to instruct students in achieving a unified voice between the two. Manuel Garcia II also spoke about blending the registers and provided exercises to aid the singer in creating a unified sound from chest voice into head voice by mixing them together.

The early twentieth century recordings reveal the challenge vocalists experienced in putting the concept of blended registers into practice. The vocal technique of Nellie Melba, Luisa Tetrazzini, and Amelita Galli-Curci in the recorded performances substantiated the issues presented by Garcia II in nineteenth-century treatise. All three vocalists used open chest voice at F-sharp⁴, F⁴ and below when a blended sound would have been a healthier approach and more pleasing to the ear. The abrupt shift from chest to head, or head to chest, creates a less than desirable outcome in performance. Perhaps Luisa Tetrazzini was correct in avoiding the G-sharp³ (m. 71, Appendix B) in “Una voce poco fa” because it would have resulted in a shift in the continuity of the vocal line.

Nineteenth-century vocal pedagogy would prevail until the late 1940s when William Vennard began his research in vocal production by looking at the vocal folds with a laryngoscope and taking pictures with the Fastax camera. His groundbreaking images of functioning vocal folds in real time were astounding and gave the voice teacher valuable information about how the voice worked. In recordings we hear the

shift toward blending the registers in the 1940s and 1950s with Rosa Ponselle and Maria Callas. However, Conchita Supervia's use of chest voice was reminiscent of the seventeenth-century pedagogy of Mancini in regard to his statement that the chest voice was the preferred natural voice. The break in Supervia's voice was even more evident than that of any other vocalist from the mid-twentieth century.

By the 1960s we no longer heard the breaks in the voice from chest to head. Indeed, the registers were more blended, the vocal gestures less exaggerated, and the sound more pleasing to the ear. Anna Moffo, Leontyne Price, and Beverly Sills had perfected unifying the registers and provided a beautifully blended sound. However, it would continue to be necessary to employ the full thyroarytenoid function (open chest) of the vocal folds on the lowest pitches in the range (C-sharp4, C4 and below) to provide the strength necessary to hear the pitches in the varied melodic lines. Although Anna Moffo's career was cut short by her vocal issues, Beverly Sills and Leontyne Price would enjoy long careers in opera leaving a legacy of performances that are still appreciated today.

With the blending of the head and chest register the distinct break in the voice was eliminated. However, over time the blending registers created another issue in regard to experiencing the distinction of the head and chest registers apart from blending. A heaviness of the voice in the upper range began to emerge in the 1960s. The beautiful head voice of singers from the early 1900s was lost as vocalists carried the chest dominant sound upward in the range and has only continued to worsen into the twenty-first century. The heavy mechanism used in singing today creates tension, tuning issues, and a slow vibrato.

Technology began to change rapidly in the 1960s into the last decade of the twentieth century. The advent of magnetic tape provided editors and sound engineers with the power to change reality. If a sound was not up to par, they would splice, or re-record over the affected part to make it appear flawless and perfect. When computers and digital technology were invented the changes were even more profound. In fact, in the digital age it was as simple as turning a knob to change from an under-pitch performance to a perfectly tuned performance.

Vocal pedagogy would continue its transformation as laryngoscopes and video cameras that were no bigger than the head of a pin threaded through the nose down into the throat revealed functions of the voice and surrounding anatomy that had never been seen or known. Toward the end of the twentieth-century the blending of the registers continued. In the voices of Kathleen Battle, Angela Gheorghiu, and Renée Fleming the blend is so well executed that the detection of the change from chest to head is almost completely undetectable. The function of both the thyroarytenoid and the cricothyroid has much more understanding in today's modern vocal pedagogy. Culture also plays a role in how women's voices would change from the light head voice in the beginning of the twentieth-century to a more blended, stronger sound in the middle to late part of the twentieth-century. However, the cultural issues of the female changing voice are not included in this study.

The preserved recordings throughout the twentieth-century provide a history of the use of chest voice in the soprano literature and the changes that occurred over time as our knowledge of the voice increased. Through the recordings the evidence suggests the early writings in vocal pedagogy informed the performer how to sing. As science

progressed and more reliable information was documented, the change in singing indicated the acceptance of the new pedagogical information. In the end, a recording is still just a shadow of the real experience of hearing a live performance. However, a recording tells us much more than just the sound of a beautiful singer. The recorded information provides historical documentation of cultural influences, societal norms, and performance practices in the twentieth-century. The evidence of the use of chest voice maps perfectly onto the pedagogical changes heard in recordings and strongly suggests that voice science and pedagogy has an impact on performance practice.

In many ways the advances in recording technology have given the listening public sounds that seem to be pure and more life-like than being in the room during a live performance. However, because of the lack of technology and ability to change the raw, uncut recordings of the early twentieth century, the early recordings provide a more truthful and honest snapshot of what concert goers would have heard in a live performance. It is necessary, then, to not rely on recordings alone to be the extent of our musical experience. Since the digital age can change the reality of what happens in the recording studio and make the imperfect, perfect, then we must encourage listening to live performances in order to complete the musical experience.

IMPLICATIONS FOR THE MODERN VOCAL PEDAGOGUE

The different registers in the human singing voice have been a source of bewilderment and angst since the beginning of vocal pedagogy. The questions have been numerous throughout the centuries: How many different registers are there in the human voice? Do we keep them separate, or do we blend them? Should women only sing in head voice? These questions still plague singers in the twenty-first century. Add to the confusion the cultural changes in singing and you end up with a mixed bag of ideas and applications.

From the early treatises of Mancini and Garcia II we find the vocal register dilemma was the same as it is for twenty-first century pedagogues. Research from the late twentieth century and the first decade of the twenty-first century show the vocal mechanism through scientific apparatus giving clear pictures of the vocal function and anatomy. These advances in science have given proof as to how the voice functions in both the chest and head registers. Although science does not tell us how to teach a student how to blend the two registers to offer a unified vocal sound, it does give us the tools to understand how the voice works.

For instance, if we know that the full length of the vocal fold is used in the lower registers (thyroarytenoid) and only the edges of the vocal folds (cricothyroid) are used in head voice, then we know that blending the registers must happen somewhere between the full length and the top edges of the vocal folds. Perhaps the clearest explanation in the vocal pedagogy literature comes from W. Stephen Smith, voice teacher at Northwestern University in Evanston, Illinois. In his book, *The Naked Voice*, Smith discusses how he approaches unifying the registers. He states that when you sing

in any part of the voice you must make each tone the lightest mechanism it can be to achieve unity between all the registers.²⁰⁴

In seventeenth-century vocal pedagogy treatises the discussion about the chest voice was brief as they tried to explain how to deal with the lower sounds in the voice. Early pedagogues did not understand how to blend the registers and would advise that, while it was optimum to blend the registers, it took dedication and years of training to be able to unify the registers with success. When Manuel Garcia, II wrote his nineteenth-century treatise on the voice he, too, discussed the difficulty in unifying the registers of the voice and offered exercises to achieve the blend of the chest and head registers. The discussion continues into the twenty-first century among vocal pedagogues. Scientifically, we are able to see much more than the pedagogues of the seventeenth through the middle of the twentieth century. However, the way to achieve unity of the registers in the voice is somewhat of an individual journey. Voice teachers can suggest, instruct, enlighten, and teach technique to a student, but the voice student is the one who has the sensations in the mechanism to tell them if it is working, or not. The onus is upon the vocal pedagogue to learn as much about the function of the vocal folds, the vocal mechanism itself, breath management, and how the body works to achieve the most efficient, beautiful vocal production possible.

The information we can glean from the long history of singers and their sound recordings is the understanding of the cultures of different eras and what was driving their performance. We can learn more about the head voice from the early twentieth century, and we can learn more about the blending of the registers from the middle to

²⁰⁴ W. Stephen Smith, *The Naked Voice*, (New York: Oxford University Press, 2007), 100.

the late twentieth century. All of the information is valuable in gaining tools to teach a healthy, balanced, unified vocal production.

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Appendix A - Vocalists

| Kathleen Battle (1948-) | |
|--|--|
| Year | 1991 |
| Title of Aria | <i>Una voce poco fa</i> |
| Composer | Rossini |
| Opera | Il Barbiere di Siviglia |
| Duration | |
| Recording Label | Deutsche Grammophon 435 735 2 1991 |
| Recording Method | Electronic – Ambient sound in the Hall of The Metropolitan Opera House |
| Sound Quality | Excellent |
| Accompaniment (Orchestra/Piano) | Orchestral |
| Location of Recording (if known) | The Metropolitan Opera |
| Voice Type | Lyric Coloratura Soprano |
| Treatment of Lower Register (Chest Singing) | Head/Chest blend with no real open chest sound, even in the lowest part of the range. |
| Voice Teacher, (if Known) | Richard Bans, Cincinnati Conservatory of Music |
| Career of Artist | Battle debuted in the Michigan Opera production of <i>Il Barbiere di Siviglia</i> in 1975. She debuted at the New York City Opera in 1976, and then at the Metropolitan Opera in 1977. |

| Maria Callas (1923-19770) | |
|--|---|
| Year | 1955 |
| Title of Aria | <i>Una voce poco fa</i> |
| Composer | Gioacchino Rossini |
| Duration | |
| Opera | Il Barbiere di Siviglia |
| Recording Label | EMI |
| Recording Method | Electronic – In studio |
| Sound Quality | Excellent |
| Accompaniment (Orchestra/Piano) | Orchestral |
| Location of Recording (if known) | In Studio |
| Voice Type | Dramatic Coloratura |
| Treatment of Lower Register (Chest Singing) | Head/Chest Mix in lower register – head dominant in chest voice |
| Voice Teacher, (if Known) | Elvira de Hildago – Spanish prima dona who turned to teacher in her mid-forties. |
| Career of Artist | Maria Callas had an extensive career in Europe, South America, and England. She would appear in America in the Lyric Opera of Chicago only twice. Callas also made several recordings, some of operas and others in studio of varied opera arias. |

| Renée Fleming (1959-) | |
|--|---|
| Year | 1997 |
| Title of Aria | <i>Willow Song with Ave Maria</i> |
| Composer | Verdi |
| Duration | 16:05 |
| Opera | <i>Otello</i> |
| Recording Label | London Records, a division of Polygram Records, New York |
| Recording Method | In Studio – Digital/Electronic |
| Sound Quality | Excellent |
| Type of Accompaniment (Orchestra/Piano) | Orchestral – London Symphony Orchestra |
| Location of Recording (if known) | Henry Wood Hall, London |
| Voice Type | Lyric Soprano |
| Treatment of Lower Register (Chest Singing) | Blended registers, singing with a more open chest on middle-C than any other part of the middle to lower range |
| Voice Teacher, (if Known) | Patricia Misslin, Crane School of Music; John Maloy, Eastman; Beverly Johnson, Julliard; Arlene Augér |
| Career of Artist | Had a Julliard Opera Center Apprenticeship performing in NYC, performed in Germany, Covent Garden, Houston Grand Opera. Metropolitan Opera debut, 1991. |

| Amelita Galli-Curci (1882-1963) | |
|--|---|
| Year | 1917 |
| Title of Aria | <i>Una voce poco fa</i> |
| Composer | Gioacchoni Rossini |
| Duration | 4:19 |
| Opera | <i>Il Barbiere di Siviglia</i> |
| Recording Label | Victor 6130 |
| Recording Method | Cylinder - |
| Sound Quality | Good |
| Accompaniment (Orchestra/Piano) | Orchestral – small, individual instruments. No more than one on each part. |
| Location of Recording (if known) | Camden, New Jersey |
| Voice Type | Soprano |
| Treatment of Lower Register (Chest Singing) | Open Chest Middle-C and below – noticeable break between chest and head register, but mixed until middle-C |
| Voice Teacher, (if Known) | Largely self-taught. She listened to the birds sing and tried to imitate a Nightingale. Listened to Lilli Lehmann and Malibran Viarot to hear good singing. She took a lesson or two from Estelle Liebling, who was a student of Mathilda Marchesi |
| Career of Artist | Her first singing engagement was with the Lyric Carnival Season in Trani, Italy. From there she sang in Milan, Buenos Aries, Mexico City, Europe and Cuba. She made her American debut in Chicago and she stayed in America, although her recordings were distributed throughout the world. |

| Angela Gheorghiu (1965-) | |
|--|---|
| Year | 1996 |
| Title of Aria | <i>Air des bijoux</i> |
| Composer | Gounod |
| Duration | 4:57 |
| Opera | <i>Faust</i> |
| Recording Label | The Decca Record Company – London |
| Recording Method | Digital - Electronic |
| Sound Quality | Excellent |
| Accompaniment (Orchestra/Piano) | Orchestral – Directed by John Mauceri – Orchestra e coro del Teatro Regio di Torino |
| Location of Recording (if known) | Teatro Regio di Torino |
| Voice Type | Lyric Soprano |
| Treatment of Lower Register (Chest Singing) | Gheorghiu has a very rich voice and uses the thyroarytenoid function somewhat in the entirety of the mid-range. However, when the notes below F4 are used, she uses more head, almost to the point you cannot hear her above the orchestra. |
| Voice Teacher, (if Known) | Mia Barbu – Bucharest School |
| Career of Artist | When she graduated from the Lycenum, she auditioned at Covent Garden and was accepted. She was twenty-three at the time. From London, her career skyrocketed and she made her debut in America in 1992. |

| Nellie Melba (1861-1931) | |
|--|---|
| Year | 1910 |
| Title of Aria | <i>Salce, Salce</i> |
| Composer | Verdi |
| Duration | 4:10 |
| Opera | <i>Otello</i> |
| Recording Label | Victor 88148 |
| Recording Method | Cylinder |
| Sound Quality | Good/Scratchy, but certainly audible |
| Accompaniment (Orchestra/Piano) | Orchestral – Victor Orchestra |
| Location of Recording (if known) | Camden, New Jersey |
| Voice Type | Soprano |
| Treatment of Lower Register (Chest Singing) | Head voice until G4 to C4, then full, open chest. She was trained in the Bel Canto Style. Two distinct registers. |
| Voice Teacher, (if Known) | Mathilda Marchesi, Paris |
| Career of Artist | Nellie Melba started her career at the Royal Opera House at Covent Garden. She also spent time in Paris studying, but spent her time performing in London and the US. |

| Anna Moffo (1932-2006)] | |
|--|--|
| Year | 1960 |
| Title of Aria | <i>Air des bijoux</i> |
| Composer | Gounod |
| Duration | 5:29 |
| Opera | <i>Faust</i> |
| Recording Label | RCA/Victor (BMG) |
| Recording Method | Electrical, live recording |
| Sound Quality | Excellent |
| Accompaniment (Orchestra/Piano) | Orchestral |
| Location of Recording (if known) | Symphonic Hall |
| Voice Type | Electronic |
| Treatment of Lower Register (Chest Singing) | Completely blended – No noticeable break between head and chest. Chest and head voice are mixed in the lower register. |
| Voice Teacher, (if Known) | Studied at Curtis Institute, in Europe, studied with Luigi Ricci |
| Career of Artist | Went to Germany on a Fulbright scholarship and studied with Luigi Ricci. Upon her return to America, she got a role with Chicago Lyric Opera and then in 1959 debuted at the Metropolitan Opera. |

| Rosa Ponselle (1897-1981) | |
|--|--|
| Year | 1924 |
| Title of Aria | <i>Salce, Salce</i> |
| Composer | Verdi |
| Duration | 4:31 |
| Opera | <i>Otello</i> |
| Recording Label | Victor Recordings |
| Recording Method | Flat Disc, electronic recording |
| Sound Quality | Good |
| Type of Accompaniment (Orchestra/Piano) | Orchestral – larger than most on early recordings, but not full orchestra. |
| Location of Recording (if known) | Not known – in a large room because of the reverberant sound. |
| Voice Type | Lyric Soprano |
| Treatment of Lower Register (Chest Singing) | Completely balanced sound. Only uses open chest on C4, before that, she mixes head voice and chest voice equally. |
| Voice Teacher, (if Known) | Anna Ryan-childhood piano/voice teacher, no formal training as an adult. |
| Career of Artist | Ponselle started out in Vaudeville, but always longed for the opera stage. Her parlay into opera came in 1925 when she was hired by the Metropolitan Opera to sing 3-4 times a week. This is where she changed her name from Ponzillo to Ponselle. |

| Leontyne Price (1927-) | |
|--|--|
| Year | 1965 |
| Title of Aria | <i>Salce, Salce</i> |
| Composer | Verdi |
| Duration | 10:03 |
| Opera | <i>Otello</i> |
| Recording Label | RCA/Victor |
| Recording Method | Electronic |
| Sound Quality | Excellent |
| Type of Accompaniment (Orchestra/Piano) | Orchestral |
| Location of Recording (if known) | In Studio |
| Voice Type | Lyric Soprano |
| Treatment of Lower Register (Chest Singing) | In the lower registers, C4 and below, Price uses a chest dominant mix. |
| Voice Teacher, (if Known) | Florence Paige Kimball – Julliard School |
| Career of Artist | Price had an extensive career in Europe, but also toured the US with J.J. Shubert's touring production of Porgy and Bess. She debuted at the Metropolitan Opera in 1961. |

| Beverly Sills (1929-2007) | |
|--|--|
| Year | 1975 |
| Title of Aria | <i>Una voce poco fa</i> |
| Composer | Gioacchino Rossini |
| Duration | 6:14 |
| Opera | <i>Il Barbiere di Siviglia</i> |
| Recording Label | EMI |
| Recording Method | Electronic – Studio |
| Sound Quality | Excellent |
| Accompaniment (Orchestra/Piano) | Orchestral – London Symphony, James Levine, director |
| Location of Recording (if known) | Live Performance – Lincoln Center. Full orchestra |
| Voice Type | Lyric coloratura |
| Treatment of Lower Register (Chest Singing) | In the lower register, G#3, Sills uses full, open chest. On the pitches below F4, she uses a mix of head and chest. There are moments when the break between head and chest are very apparent. |
| Voice Teacher, (if Known) | Estelle Liebling |
| Career of Artist | Sills began her career as a child singer/actress in New York City. She began studying with Liebling and gained notoriety in NYC. She auditioned for San Francisco Opera and was signed to perform in 1953. In 1953 she signed a contract to sing at New York City Opera. She also performed at the Metropolitan Opera. When she retired from singing in 1979, she became the manager of the New York City Opera. |

| Conchita Supervia (1895-1936) | |
|--|--|
| Year | 1927 |
| Aria | <i>Una voce poco fa</i> |
| Composer | Gioacchino Rossini |
| Duration | 6:28 |
| Opera | <i>Il Barbiere di Siviglia</i> |
| Recording Label | Victor |
| Recording Method | Electronic |
| Sound Quality | Good |
| Type of Accompaniment (Orchestra/Piano) | Orchestral – smaller than full |
| Location of Recording (if known) | Recorded in Paris, likely in studio, not a live performance |
| Voice Type | Coloratura Soprano |
| Treatment of Lower Register (Chest Singing) | Supervia's voice was defined by her use of chest voice. She sang in chest voice more than she did in head voice. The recording of <i>Una voce poco fa</i> is no different. She uses full, open chest on every note F4 and below. |
| Voice Teacher, (if Known) | Not known |
| Career of Artist | She performed in her native Spain, Buenos Aires and London. She was not received well in America and only performed twice for Chicago Lyric Theater. Her career centered in London at Covent Garden. |

| Luisa Tetrazzini (1871-1940) | |
|--|--|
| Year | 1911 |
| Aria | <i>Una voce poco fa</i> |
| Composer | Gioacchino Rossini |
| Duration | 4:04 |
| Opera | <i>Il Barbiere di Siviglia</i> |
| Recording Label | Victor |
| Recording Method | Cylinder-Wax |
| Sound Quality | Fair – noise from the cylinder and stylus |
| Type of Accompaniment (Orchestra/Piano) | Modified Orchestral |
| Location of Recording (if known) | Camden, New Jersey |
| Voice Type | Soprano |
| Treatment of Lower Register (Chest Singing) | She only ventures into the chest voice on C4 and E4. She avoids the G#3 altogether. |
| Voice Teacher, (if Known) | Studied with her sister Eva, no other teachers mentioned. |
| Career of Artist | Tetrazzini sang in Europe, Argentina, Mexico and Cuba. She caught the attention of William H. Leahy, impresario for the Tivoli Opera House in San Francisco. He offered her a position in his opera house. She accepted, but only if he would hire the entire cast of the show she was performing in at the time. He agreed. |

Appendix B – Arias

“Una voce poco fa”

24

io lo so, ma nol di - rò, tra la la la, tra la la la. tra
know right well, but may not tell: tra la la la, tra la la la, tra

brillantissimo.

pp *f*

la la la, tra la la la, tra la la la, la, la la la la la, tra la!
la la la, tra la la la, tra la la la, la, la la la la la, tra la!

ff *ff*

ff

Detailed description: This system contains the first two systems of the vocal score. The first system features a vocal line with lyrics and a piano accompaniment. The piano part starts with a piano (*pp*) dynamic and includes a forte (*f*) section. The second system continues the vocal line with 'la la la' repetitions and includes a fortissimo (*ff*) dynamic marking.

Una voce poco fa.
(IL BARBIERE DI SIVIGLIA)

Andante. ROSSINI.

Piano. *f* *pp* *f* *4* *p dolce.* *5*

6. 7

Detailed description: This system contains the piano introduction for 'Una voce poco fa'. It is marked 'Andante' and 'Piano'. The score includes dynamic markings such as *f*, *pp*, and *p dolce.*, as well as articulation like trills (*tr.*) and fingerings (1-5). The piece is by Rossini.

12727

8 9

Rosina

U - na
Though his

10 11 *p* 12 13 14

vo - ce po - co fà, quì nel cor mi ri - suo - nò, il mio cor... fe - ri - to è
voice was breath'd a - far, to this heart is sent a - thro'; lit - tle heart, how weak you

p 15 16 17 18 19

già, e Lin - dor fu che il pia - gò, sì, Lin - do - ro mio sa -
are that a song could thrill you so! Yes, be - fore us melts each

20 21 22 23

rà, lo giu - ra - i, la vin - ce - rò, sì, Lin - do - ro mio sa -
bar, I have sworn it, no frag - ile vow; yes, be - fore us melts each

p 24 25 26 27

rà. lo giu - ra - i, la vin - ce - rò!
 bar, I have sworn it, no frag - ile vow!

p 28 29 *p* 30

Il tu - tor ri - cu - se - rà, io lin - gegno aguz - ze -
 All my guardian's plan to mar, I a woman's wit will

31 32

rò, ai - la fin s'ac - che - te - rà, e con - tentajo re - ste -
 show, héll consent, when wed we are, then with bliss my soul shall

33 34

rò, sí, Lin - do - ro mio sa - rà, lo giu -
 glow; I and Lin - dor break each bar, hear me

35 *f* 36 *p* 37

ra - i, la vin - ce - rò, sí, Lin - do - ro mio sa -
 swear it, no frag - ile vow; I and Lin - dor break each

38 39 *f* 40

rà, lo giu - ra - i, la vin - ce - rò. *Allegro moderato.*
 bar, hear me — swear it, no frag - ile vow. *dolce.*

pp 41 42 43 44
 45 46 47
 48 49 50
 51 52 53
 54 55 *pp* 56
 57 58 59 60

do - ci - le son ri - spet - to - sa, so - nub - bi -
 kind - ly love be - stow cor - rec - tion in gen - tle

Io so - no
 On me should

dien - te, dol - ce a - mo - ro - sa, mi la - scio
breath - ing of - fond af - fec - tion, no leaf so

61 62 63

reg - ge - re, mi la - scio reg - ge - re, mi fo gui - dar, mi - fo - gui -
pli - a - ble, no leaf so pli - a - ble a - dorns the field, a - dorns the

64 65 66

dar; ma se mi toc - ca - no dov'è il mio de - bo - le, sa - rò u - na
field; but if cold ty - ran - ny's rude blast as - sail - eth me, it falls most

67 68 69

vi - pe - ra - sa - rò, e cen - to trap - po - le, pri - ma di
im - po - tent, - it - falls; no measure fail - eth me to gain the

70 71 72

ce - de - re, fa - rò gio - ear, - fa - rò gio - ear; e cen - to
vic - to - ry, I nev - er yield, - I - nev - er - yield; no measure

73 74 75

“Salce, Salce”

226

dim. ed allarg. *morendo* **Andante mosso** $\text{♩} = 84$

quel - la can - ti - le - na.
maid I too must sing it.

dim. ed allarg. *pp* *p*

4 5 6 7 8

pp

“Pian - gea can - tan - do nel - l'er - ma lan - da,
“The poor soul sat pi - ning, a - lone and lone - ly

9 *ppp* 10 11 12 13

come una voce lontana
ppp

— pian - gea la me - sta. O Sal - ce!
— there on the des' - late strand. Sing wil - low,

14 *ppp* 15 *morendo* 17 18

12727

137

Sal - ce! Sal - ce! Se - dea chi -
 wil - low, wil - low! Up - on her

nan - do sul sen la - te - sta!
 bo - som her head in - cli - ning,

portando la voce

Sal - ce! Sal - ce! Sal - ce!
 Wil - low, wil - low, wil - low!

dim *ppp*

(come un eco)

Can - tia - mol can - tia - mol
 Sing heigh - ho, sing - heigh - ho!

dolce *più piano*

12727

con accento

il Sal - ce fu - ne - bre sa - rà la mia ghir - lan -
 Sing all a green, green wil - low shall be my gar -

40 41 42 *pp* 43 *pp*

parlante

da. Af - fret - ta - ti;
 land." Pri - thee dis - patch,

44 *dolce* 45 46 47 48

fra po - cogiunge O - tel - lo. una corda sola fino al segno *
 a - non will come O - tel - lo. *ben legato*

49 50 *pp*

"Scor - ea - noi ri - vi fra le zol - le in
 "The fresh - stream ran by her, where the rush - es

legato

"The Jewel Song"

134

The Jewel Song
(FAUST)

English version by
H.T. Chorley and Dr. Th. Baker
Allegretto $\text{♩} = 50$

GOUNOD

quet-te?
long-er?

leggiere 1 2 3 *cresc.* 4 5

Ah!
Ah!

6 7 8 *f* 9 10 *dim.* 11

Je ris de me voir Si belle en ce mi-roir,
the joy past compare, These jew-els bright to wear!

12 *pp* 13 14 15 *leggiere* 16

Ah! je ris de me voir Si belle en ce mi-roir... Est-ce
Ah! the joy past compare, These jew-els bright to wear! Is it

17 18 19 20 *cresc.*

toi, Mar-gue-ri-te, Est-ce toi?
thou, Mar-gue-ri-te, is it thou?

22 23 24 25

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Ré-ponds-moi, ré-ponds-moi, ré-ponds, ré-ponds, ré-ponds
Now re - ply, now re - ply! Tell me, tell me, tell me

cresc. 26 27 *dim.* 28

vi - te! Non! non! ce n'est plus toi!..
tru - ly. No, no! this is not I!

dolce *p* 29 30 31 32 33

non... non, Ce n'est plus ton vi - sa - ge; C'est la
No, sure - ly en - chantment is o'er - me! Some king's

cresc. 34 35 36 *dim.* 37 38

fil - - le d'un roi, C'est la
daugh - - ter I spy, some king's

39 40 41 42

fil - - le d'un roi! Ce n'est plus
daugh - - ter I spy, This is not

43 44 45 *cresc.* 46

toi, Ce n'est plus toi, C'est la fil - le d'un roi, Qu'on sa -
 I, this is not I, Some king's daughter I spy, All are

lue au pas - sa - ge! Ah s'il é - tait i - ci!
 bend-ing be - fore me! Ah, might it on - ly be!

rit. *a tempo*
 S'il me vo - vait ainsi! Comme u - ne de-moi-sel - le
 Were he but here to see! Now as a roy - al la - dy

Il me trou - ve - rait bel - le, Ah!
 He would in - deed a - dore me! Ah!

— Comme u - ne de - moi - selle Il me trou - ve - rait bel - le,
 For as a roy - al la - dy he would now a - dore me,